

# Key Causes of Disputes in the Pakistani Construction Industry– Assessment of Trends from the Viewpoint of Contractors

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Disputes arising out of several types of claims have become an inherent feature of the construction industry. An overabundance of studies have been undertaken to identify the causes of disputes so as to determine the most appropriate prevention and resolution strategies because construction claims are considered to be one of the most disruptive and unpleasant events of a project which contributes to delaying a project and/or increasing its costs. In such cases, finishing a project on schedule becomes a difficult task to accomplish in the already uncertain, complex, multiparty, and dynamic environment of construction projects. This study is limited to the determination of the causes of disputes as perceived by the contractors in the construction sector of Pakistan so as to pave way for better and informed selection of dispute resolution strategies. Based on literature review of relevant secondary data in the area of construction claims and disputes, a simple survey exercise was initiated targeting the contractors operating in the local construction sector. After data analysis of the responses obtained, the study concluded that Inadequate Design Documentation, Unrealistic Tender Pricing, Inappropriate Contract Type, Exaggerated Claims are the top most causes of disputes in the Pakistani construction industry.

**Keywords:** Causes of Disputes, Claims, Dispute Resolution Strategies, Severity and Frequency of disputes

## Introduction

Construction disputes happen fairly often; they are a reality on every construction project and could happen at any point in time during the design or construction phase of the project (Hall 2002). Construction disputes vary in nature, size and complexity, but they all have a common thread; they are costly both in terms of time and money and are often accompanied with the destruction of individual and good working relationships. Indeed, it is this tendency to destroy relationships and increase time and cost of construction projects, that has provoked a common interest of researchers in different countries to understand the nature of the causes of construction disputes in order to formulate measures to prevent or minimize their occurrence or resolve them swiftly, efficiently and in a cost effective manner if they happen (Assah-Kissiedu, M. et. al. 2010). Construction disputes, when not resolved in a timely manner, become very expensive – in terms of finances, personnel, time, and opportunity costs. The visible expenses (e.g., attorneys, expert witnesses, the dispute resolution process itself) alone are significant. The less visible costs (e.g., company resources assigned to the dispute, lost business opportunities) and the intangible costs (e.g., damage to business relationships, potential value lost due to inefficient dispute resolution) are also considerable, although difficult or impossible to quantify. Respected professionals estimate that construction litigation expenditures in the United States have increased at an average rate of 10 percent per year during 1988-1998, and now total nearly \$5 billion annually (Michel 1998) and cited by (Peña-Mora et. al. 2003). (Lowe and Leiringer 2006) describe disputes as being the source of possible time and cost overrun and possible adversarial relationships between the different parties. This is not welcome to either Owner or Contractor.

## Literature Review

There are confusion among construction professionals about the differences between conflict and dispute, and these terms have been used interchangeably especially in the construction industry (Acharya et al., 2006). However, according to Fenn et al. (1997) conflict and dispute are two distinct notations. Conflict exists wherever there is

incompatibility of interest. Conflict can be managed, possibly to the extent of preventing a dispute resulting from the conflict. On the other hand, disputes are one of the main factors which prevent the successful completion of the construction project.

A number of studies on causes of disputes on construction projects internationally were reviewed. The studies identified various causes of disputes that formed the basis for the questionnaire of this study. The prominent researches are discussed next.

(Poh 2005) reported that disputes in the construction industry in Malaysia are attributable to actions or inactions by all parties. Some of these causes include incompleteness of drawings and specifications, design and specification oversights, poor management and supervision of projects, failure to provide design information in a timely manner and underestimation of the cost of the works. While (Levy 2007) reported that the principal reasons for misunderstandings leading to disputes on construction projects in the USA were:

- Plans and specifications containing errors, omissions and ambiguities or which lack proper degree of co-ordination;
- Incomplete or inaccurate responses or non-responses to questions or resolutions of problems presented by one party in the contract to another party in the contract;
- The inadequate administration of responsibilities by the client, architect/engineer, contractor, subcontractors, or suppliers;
- An unwillingness or inability to comply with the intent of the contract or to adhere to industry standards in the performance of work;
- Site conditions which differ materially from those described in the contract documents;
- Unforeseen subsurface conditions;
- The uncovering of existing building conditions, which differ materially from those indicated in the contract drawings situations that occur primarily during rehabilitation or renovation work;
- Extra work or change order work;
- Breaches of contract by either party in the contract;
- Disruptions, delays or acceleration to the work that creates any deviation from the initial baseline schedule
- Inadequate financial strength on the part of the client, contractor or subcontractor.

Similarly, (Soekimo et.al. 2007) studied the causes of disputes on construction projects in Indonesia and grouped the causes into the following categories:

- External conditions (26.79%);
- Change of drawings document (21.43%);
- Condition of the field (19.64%);
- Change of technical specifications (16.07%);
- Others (e.g., cost estimates, professional ethics and licensing) (16.07%)

Other researchers such as (Kumaraswamy 1997) argued that these factors could be categorized into three broad causes: external factors, contract, and project teams. Consistent with this opinion, others (Vorster 1993) and (Mitropoulos and Howell 2001) have similarly classified them under project uncertainty, process problems and people issues. These studies are used to amalgamate various causes of disputes into broad headings which can then be addressed as a single entity.

## **Research Scope and Objectives**

The study aims to assess the key causes of disputes in terms of their severity and frequency of occurrence from the contractor's perspective in the local construction. The study is undertaken for quantification of the causes of disputes on the basis of frequency of occurrence and severity of impact if a dispute occurs, as perceived by the contractors in the Pakistani construction sector so as to pave way for better and informed decision making.

## Research Methodology

The research methodology is briefly outlined in Figure 1.

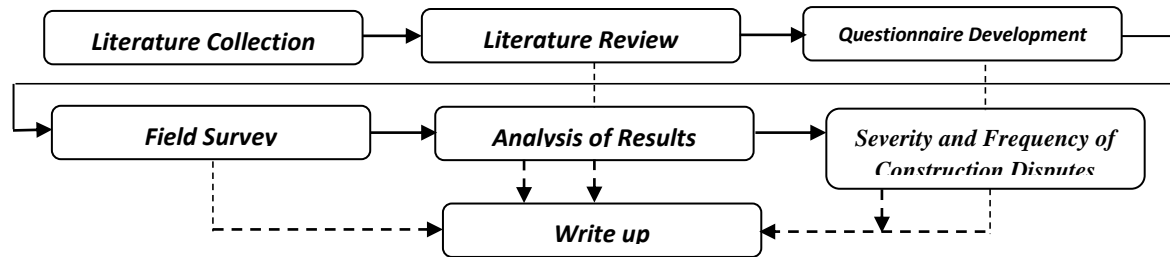


Figure 1: Methodology Flowchart

The general methodology of this study relies largely on the survey questionnaire responses which were collected from the contractors of various categories as per the categorization of Pakistan Engineering Council (PEC). The questionnaire prepared for the survey was formulated by screening and comprehending the relevant literatures in the area of Construction Claims and Disputes. In order to aid the gathering of data through primary source it was vital that a thorough literature review is initially conducted to identify the various causes of disputes in the construction industry from an international perspective. Prior relevant research and books form the major part of secondary data source. The study involves qualitative analysis of the responses from the survey process.

### Questionnaire Structure

The questionnaire for this study dealt with the quantification of each of the cause of dispute in terms of frequency of occurrence and severity if it occurs. The following major categories along with the number of cause for each type of dispute are as follows: 1. Construction Related (10 Causes), 2. Financial/Economical Related (05 Causes), 3. Management Related (09 Causes), 4. Contract Related (07 Causes). The respondents were asked to rate the Frequency and severity of each cause of dispute on a 5 point Likert Scale with 1 being the least Severe/Frequent and 5 being the Most Severe/Frequent. The response obtained helped the authors to establish Frequency Index (F.I) and Severity Index (S.I)

### Sample Size

(Baker 1998) reported that statistically reliable conclusions can be obtained from a sample size of 20 or more. Also (Stoker 1985) (cited by Strydom and De Vos, 1998, p.192) suggested that for a population size of thirty (30), at least twenty (24) constituting 80%, ought to be the sample size. Nevertheless, the questionnaire was sent to all the contractors short listed. The summary of response rate is summarized in Table1.

Table 1  
Survey Response Summary

Total Questionnaires Distributed	Questionnaires Returned	Valid Responses	Percentage of Valid Responses
70	58	45	64%

### Analysis and Discussion

The responses that have been received from the primary data collection have been used to establish Frequency Index (F.I) & Severity Index (S.I). The indicator values have been used to develop bar charts. The bar chart comprises of

Frequency Index (F.I) and Severity Index (S.I) of each of the causes of disputes for respective major category as described in questionnaire section. The analysis and discussion is presented in succeeding sub-sections.

### Construction Related Causes of Disputes

All of the planning, designing is translated into a physical entity through execution. And it is why the construction phase of a project is usually the most troublesome for project participants. The problems are exaggerated more due to vastly differing practices among different project participants. This section addresses the the severity, frequency of those causes of disputes which are attributable to execution phase of a project. Figure 2, represents the severity and frequency of Construction Related Causes of Disputes based on the analysis of the responses obtained.

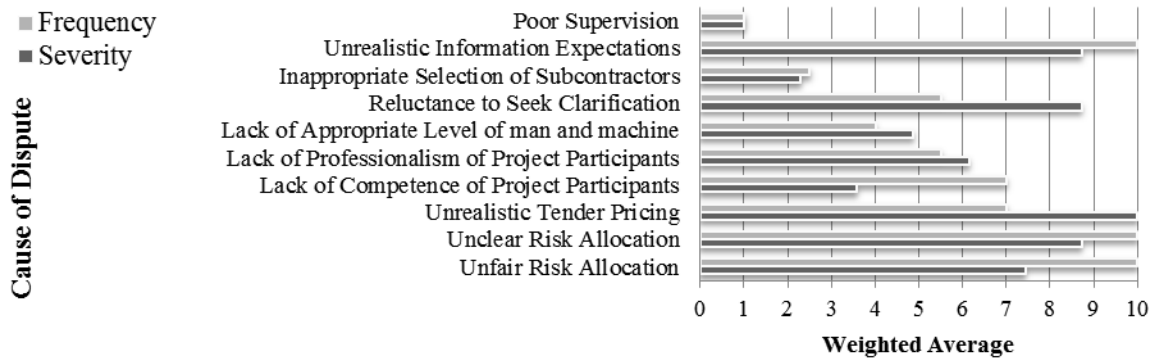


Figure 2: Construction Related Causes of Disputes (Severity & Frequency)

The analysis of the responses for construction related causes of disputes depict that all of the respondents were said that “Unrealistic information expectations”, “Unclear Risk Allocation” and “Unfair Risk Allocation” are those causes that are occurring most frequently and contributing in arising of disputes in the projects, their severity is also very high. Whereas “Unrealistic Tender Pricing” is the most severe cause of dispute in their projects, described by all of the respondents. ‘Reluctance to seek clarification’ is also very severe in nature although it’s not very frequent in its occurrence, according to majority of the respondents. Other remaining causes of disputes are not significantly contributing in the projects in terms of their frequency and severity. As per the prioritization rule discussed above, Figure 1 provides an understanding to filter the most and the least treacherous causes of disputes relative to all others in the Construction Related Causes of Disputes group. Consequently, “Unrealistic Tender Pricing” has been found to be the most and “Poor Supervision.” is the least treacherous causes of disputes respectively, as perceived by the contractors operating in the local construction sector.

### Financial/Economical Causes of Disputes

Finance is one of the most important aspects of business management. In the context of construction business, "Project finance" refers to the financing of the project that is dependent on the project cash's flows for repayment as defined by the contractual relationships within each project whereas the financial function plays a significant role in ensuring that company objectives are compatible with its resources. For this reason the disputes have a monetary trait attached to it and it is of such magnitude which none of the project participant is ever ready to absorb. This section addresses the the severity, frequency of those causes of disputes which are attributable to finance function of a project. Figure 3, represents the severity and frequency of Financial/Economical Related Causes of Disputes based on the analysis of the responses obtained.

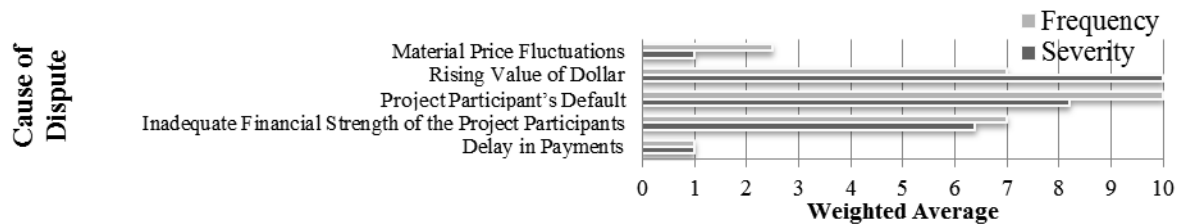
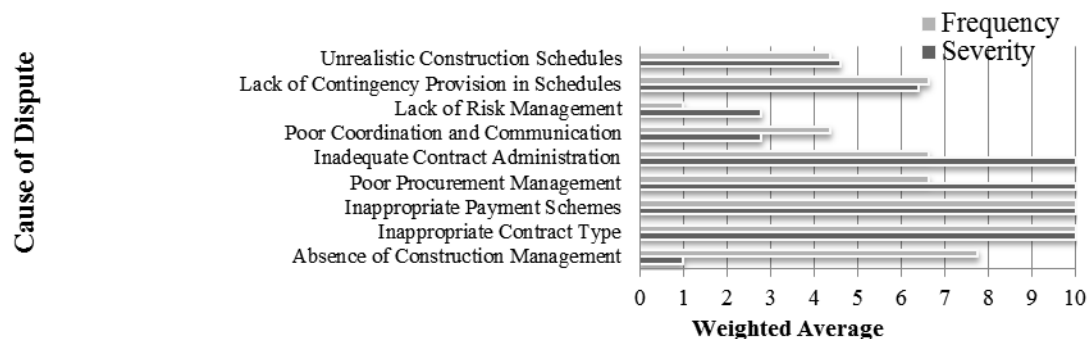


Figure 3: Financial/Economical Causes of Disputes (Severity & Frequency)

The analysis of financial/economical causes of disputes elaborate that all of the respondents perceived that “Project Participant’s Default” is the most frequent cause of dispute and “Rising Value of Dollar” is the most severe cause of dispute in their projects, also their severity and frequency is respectively significantly high. Whereas “Inadequate Financial Strength of the Project Participants” is also very severe and frequent cause of dispute in their projects, described by most of the respondents. “Material Price Fluctuations” and “Delay in Payments” are not significantly contributing in the projects in terms of their frequency and severity. With reference to the prioritization rule discussed above, “Rising Value of Dollar” has been found to be the most and “Delay in Payments” is the least treacherous causes of disputes respectively, as perceived by the contractors operating in the local construction sector.

### *Management Related Causes of Disputes*

Effective management of projects is becoming increasingly important for any type of organization to remain competitive in today’s dynamic business environment due to pressure of globalization. Through application of construction management tools and techniques and observing a sound project management system, majority of the causes of disputes can be avoided thereby reducing the chances that any dispute arises in the first place and if such thing come about it does not escalate to such a level that it is converted into a major conflict or breach of contract. In this section relevant causes of disputes attributable to the management function of a project are evaluated on the basis of severity, frequency of occurrence. Figure 4, represents the severity and frequency of Management Related Causes of Disputes based on the analysis of the responses obtained.



*Figure 4: Management Related Causes of Disputes (Severity & Frequency)*

The analysis of the management related causes of disputes depict that all of the respondents were of the view that “Inappropriate Payment Schemes” and “Inappropriate contract type” are those causes that are occurring most frequently and also are of most severe in nature to contribute in the causation of disputes in the projects. Whereas “Inadequate contract administration” and “Poor procurement management” are the most severe causes of disputes in their projects, but they are not occurring very frequently, described by all of the respondents. ‘Absence of construction management’ is also very frequent in nature although it’s not very severe in impact, according to majority of the respondents. Other remaining causes of disputes are moderately contributing in the projects in terms of their frequency and severity. From the basis of the prioritization rule discussed, “Inappropriate Contract Type” has been found to be the most and “Absence of Construction Management” is the least treacherous causes of disputes respectively, as perceived by the contractors operating in the local construction sector.

### *Contract Related Causes of Disputes*

The business environment is full of agreements between businesses and individuals and construction is no exception. While oral agreements can be used is is more appropriate to opt for formal written contracts when engaging in operations. Written contracts provide individuals and businesses with a legal document stating the expectations of both parties and how negative situations will be resolved. Contracts also are legally enforceable in a court of law. Contracts often represent a tool that companies use to safeguard their resources. If there are some flaws in the formulation of contract documents, ambiguous language of the contract can be a cause of dispute. These causes and many others relevant to the domain of contract have a very high potential to be the source of diverse types disputes. In this section relevant causes of disputes attributable to the contract are evaluated on the basis of severity, frequency of occurrence Figure 5, represents the severity and frequency of Contract Related Causes of Disputes based on the analysis of the responses obtained.

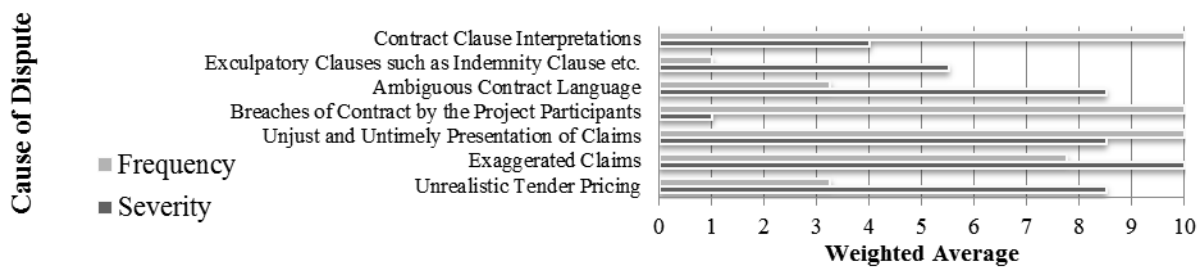


Figure 5: Contract Related Causes of Disputes (Severity & Frequency)

The analysis of the contract related causes of disputes illustrates that all of the respondents were pointing out that “Contract Clause Interpretations”, “Breaches of Contract by the Project Participants”, “Unjust and Untimely Presentation of Claims” and “Exaggerated Claims” are those causes that are occurring most frequently to contribute in the occurrence of disputes in the projects. On the other hand “Ambiguous Contract Language”, “Unjust and Untimely Presentation of Claims”, “Exaggerated Claims” and “Unrealistic Tender Pricing” are the most severe causes of disputes in their projects, described by all of the respondents. “Exculpatory Clauses” are moderately contributing in the projects in terms of their frequency and severity. From the basis of the prioritization rule established, we can construe the most and the least treacherous causes of disputes relative to all others in the Contract Related Causes of Disputes group. Hence, “Exaggerated Claims” has been found to be the most and “Breaches of Contract by the Project Participants” is the least treacherous causes of disputes respectively, as perceived by the contractors operating in the local construction sector.

## Conclusions and Recommendations

From the analysis of the responses it has been learnt that “Unrealistic Tender Pricing” has been found to be the most and “Poor Supervision.” is the least treacherous cause of disputes respectively, as perceived by the contractors operating in the local construction sector. In order to reduce the high treacherous nature of the first cause of dispute, it is vital that due cost factors are included at the time of bidding along with the provision of adequate contingency so as to accommodate any nominal setbacks during the project lifecycle. Whereas the least treacherous nature of the later cause of dispute is beneficial for the success and maturity of construction sector of Pakistan, it is however reserved that training programs on the lines of international standards be imparted to such personnel along with refresher programs to review and update their learning.

“Rising Value of Dollar” has been found to be the most and “Delay in Payments” is the least treacherous cause of disputes respectively, as perceived by the contractors operating in the local construction sector. To be able to reduce the impact of this most treacherous cause of dispute it is of extreme importance that cost estimations involved in the project be done on sound basis together with the understanding that ideally none of the changes would occur and if they materialize they would be worked upon by all participants to reduce them. The later cause of dispute which has the least treacherous nature provides a positive scenario of the local construction sector where the working environment is such that steps are taken that avoids any undue delays in payments.

“Inappropriate Contract Type” has been found to be the most and “Absence of Construction Management” is the least treacherous cause of disputes respectively, as perceived by the contractors operating in the local construction sector. To be able to reach such a point that permits the minimization of consequences of the most treacherous cause of disputes, it is vital that the construction sector adapts to best value procurement practices or to a lesser extent develop some systematic and rational procedures that encompass monetary and non-monetary factors in the decision. The later cause of dispute indicates that the construction industry is in the infant stage wrt the practice of construction management tools and techniques and is not fully aware of the benefits of such methodologies, it is to be realized that the philosophy of construction is to deliver the best possible product to its client which in relation to claims and disputes is targeted towards their minimization.

“Exaggerated Claims” has been found to be the most and “Breaches of Contract by the Project Participants” is the least treacherous cause of disputes respectively, as perceived by the contractors operating in the local construction sector. To be able to deal with the first cause of dispute it is mandatory that the contract language be such that does not allow any such events and be so succinct and un-ambiguous to discourage the exaggeration of claims, for this

standardization may be adopted as a step towards betterment. The later cause of dispute that is found to be least treacherous may hint that since none of the construction law mechanism and its system exist in the present construction sector as a result of which the project participants try not to breach the contract in the case of which the legal system will be called upon absorbing the scarce cost and time resource and as a response the participants work towards settling their disputes by some other methods rather than going for a legal battle. Therefore, it is of principal importance that steps are taken in this regard so as to facilitate the project participants with the legal option of settling the disputes.

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