CLAIMS MANAGEMENT: UNDERLYING CAUSES IN MEGA-CONSTRUCTION PROJECTS

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Construction claims remain unavoidable in any megaproject contractual relationship and can quickly escalate to misunderstandings, disputes and litigations if not appropriately managed. Disputes pose a significant risk in hindering project progress; they are characterised by lengthy legal battles that consume substantial time and financial resources. This study identifies the causes of claims encountered by clients, contractors and consultants in transport and energy sector mega construction projects in South Africa. A semi-systematic literature review was used to identify, select and appraise existing literature on this issue. Content analysis using NVivo 12 was used to identify factors causing claims in the construction sector, particularly in MCPs. Findings of the study revealed that construction projects occurring outside of South Africa experienced a delay in payments, time and cost overruns, change orders, inadequate project and drawing specifications, natural risks or force majeure. In South Africa, delays and cost overruns (due to insufficient experience and expertise of project managers and engineers) frequent to be the causes attributable to claims.

Keywords: MCP, Contract issues, Project delays, Construction sector, Cost overruns.

1 INTRODUCTION

Mega Construction Projects (MCPs) play a pivotal role in boosting economies (Maqsoom et al. 2019). Claims within construction are a problem area that requires much attention because they are considered to be the most disruptive and unpleasant occurrences in a project (Zaneldin 2020). The escalation in claims emanates from the increasing complexity and large size of MCPs (Xue et al. 2020). Therefore, construction claims are ineluctable in contractual relationships and often lead to misunderstandings, disagreements, and litigation if not correctly handled (Akinradewo 2017). If not sufficiently resolved, claims tend to stifle project progress since they are associated with prolonged legal fights that consume large amounts of time and money (Pourhashemi et al. 2019). The effective management of the generic problem of construction claims lies in procuring effective claims management strategies (Parchami et al. 2019). This paper aims to identify the underlying factors causing claims in MCPs in the South African context. The global perspective of these causes will also be looked at to determine what is perceived by the world to be the common causes of claims in MCPs.

2 LITERATURE REVIEW

2.1 Mega-Construction Projects

MCPs are large, complex projects that involve substantial investments (over $1 billion), social importance and time (Cerić et al. 2020). MCPs are needful because they lead to infrastructural development and economic growth (Rothengatter 2019).
2.2 Importance of Claims Management

Recent experiences with MCPs are bedevilled large volumes of claims, which adversely affect their economic performance (Akinradewo 2017). Claims remain endemic to construction projects and tend to result from several factors that often contribute to project delays and escalated project costs (Kasapoğlu 2018). Claims tend to cause suspension of construction work, time extension in carrying out projects and delays in payment for work done (Al Malki and Alam 2021). Claims management, therefore, exists to ensure that disagreements that give rise to claims do not escalate into disputes (Komurlu and Arditi 2017). Table 1 provides a summary of the causes of claims mentioned by various scholars.

2.3 Causes of Construction Claims: Global

Al Malki and Alam (2021) mentioned delay in payments to contractors, change or variation orders, inadequate investigation before bidding, delay approval of shop drawings and insufficient time for bid preparation as causes of claims. Parikh et al. 2019 also stated that delays in payments and/or reduced payments caused claims. According to Iskandar, Hardjomuljadi and Sulistio (2021), factors such as contractor delay in work completion, ambiguous definition of contract documents and project delays as the causes of claims. Owner-dominated contracts and lack of knowledge about contractual rights (Kisi et al. 2020). Noushad et al. (2021) cited the following as causes of claims; changes in scope and definition of a project, project delay, delay in handing over the site and work permissions as causes of claims. According to Shrestha and Neupane (2021), change orders, contractor ambiguity, project delay, project acceleration, extra work time and different site conditions in design vs on-site were common causes of claims. Ekhator (2016) cited delay in payments, insufficient detail in the contract, delay in the release of drawings. Shen et al. (2017) listed contract risk, client behaviour and lack of project definition, natural risk. Other causes of claims mentioned in the literature survey include schedule delays (Sakate and Dahwale 2017), errors and omissions in design or specifications (Jalal et al. 2020), project delays, cost overruns and adverse weather conditions (Akinradewo 2017), delay in payment, incomplete contract, inadequate specifications and drawings, variation order, change order by owner, lack of communication, poor project management, weather conditions and site conditions (Saad, 2017), design changes introduced at the post-tender stage, implementation of project in unduly short periods with inadequate site investigation, design work, tender and contract documentation and inadequate definition or specification of the scope of contract works (Bakhary et al. 2015). Khekale and Futane (2015) also mentioned schedule delays, changes in contract work, differing/unusual site conditions, suspension of work, variation in quantities, damages from natural disasters and force majeure, cost overruns, ambiguity in specifications and drawings and acceleration of work progress.

2.3 Possible Causes of Claims in South Africa

According to Tshidavhu and Khatleli (2020), contractual claims are significant causes of schedule and cost overruns in South African MCPs. MCP failure is also a result of organisational and management-related challenges such as poor site management, inadequate monitoring and control, an unstable management structure, lack of experience and expertise, inadequate management skills (Tshidavhu and Khatleli 2020). Medupi and Kusile Power Stations in South Africa have been subjected to intense political scrutiny because of their runaway costs (Yelland 2019). The two projects experienced geological problems as a direct result of a rushed
implementation. The absence of appropriate project management capabilities and engineering contributed to project delays.

Moreover, it was initially estimated that the Medupi project would cost ZAR69bn. However, costs increased massively to ZAR154bn (Phahla 2018). Kusile’s cost to completion budget is also projected to double from ZAR81bn to an estimate of ZAR161.4bn in 2025 (Madubela 2021). Similarly, a constructed Multi-Product Pipeline project meant to transport liquid fuel from Durban to Johannesburg (slightly over 500km stretch) to meet the forecasted inland demand for fuel in South Africa was estimated at ZAR12.7 bn. The projected costs have since been raised to ZAR30 bn due to severe delays and cost overruns (Groenewald 2017).

3 RESEARCH METHODOLOGY

This research is a qualitative semi-systematic literature review, also referred to as a narrative literature analysis. The interpretivism philosophy underpins this study (Kelly et al. 2018). Google Scholar, Science Direct and Scopus were used in identifying existing literature mentioning or discussing claims and their causal factors in their titles, abstracts and content. Nodes, simply described as containers for gathering related data on claims, were done. The causes of claims were then extracted from the uploaded articles using the search query ‘claims’. All the information that discussed or mentioned claims were then coded into the nodes.

4 RESULTS AND FINDINGS

Figure 1 illustrates the causes of claims frequently mentioned by authors as per the literature review. These include:

- Contract problems (Iskandar et al. (2021), Shrestha and Neupane (2021), Saad (2017), Shen et al. (2017) Ekhatore (2016), Bakhary et al. (2015)).
- Site related errors (Noushad et al. (2021), Shrestha and Neupane (2021), Tshidavhu and Khatleli (2020), Saad (2017), Bakhary et al. (2015), Khekale and Futane (2015)).
- Project delays (Tshidavhu and Khatleli (2020) Iskandar et al. (2021), Noushad et al. (2021), Shrestha and Neupane (2021)).
- Delays in payments (Al Malki and Alam (2021), Parikh et al. (2019), Saad (2017) Ekhatore (2016)).
- Change or variation orders (Al Malki and Alam (2021), Saad (2017), Khekale and Futane (2015)).
- Schedule delays (Tshidavhu and Khatleli (2020), Sakate and Dahwale (2017), Khekale and Futane (2015)).
- Cost overruns (Tshidavhu and Khatleli (2020), Akinradewo (2017), Khekale and Futane (2015)).
- Poor project management (Tshidavhu and Khatleli (2020), Saad (2017)).
In MCPs outside of South Africa, contract issues, site-related errors, and project delays were the most mentioned. The predominant causes of claims in MCPs in South Africa result from project delays, cost overruns, poor site management and poor project management.

5 CONCLUSION AND RECOMMENDATIONS

The pivotal role that the construction sector plays in contributing to the GDP of nations and employment creation remains undeniable, in addition to the inevitability of claims in MCPs. Construction claims need adequate management strategies that can consistently aid in the de-escalation of claims before their evolution into disputes. Ineffective management of claims tends to cause delays in project progress and are often associated with legal battles that require significant amounts of time and money. Since MCPs in themselves are characterised by huge expenditures, the management of their claims remain vital and are a desirable approach to curbing increased expenses. The management of claims requires a critical and thorough identification of the causes of claims. This study has found that the various causes of claims are dependent on the type of MCP and the common internal and external factors that such MCPs are characterised by Inadequate planning, unclear project specifications, schedule delays are factors that cause claims in South African MCPs in the energy and transport sector. Since most studies tend to focus on disputes, it remains expedient that further studies interrogating specific causes of claims within the transport and energy MCPs are undertaken to supplement secondary data collection from professionals within these two sectors.

References


