**The Impact of Stakeholder Involvement on Project Delays**

**ABSTRACT**

**Background:** Delay is a prevalent and intricate issue that negatively impacts the performance of construction projects. Despite the extensive research on project delays, only a limited number of studies have thoroughly synthesised and contrasted the reasons of delays according to project type. The study’s aim is to assess the impact of stakeholders’ involvement on project delays.

**Methods:** The target demographic of this study comprised the China Geo-Engineering Construction Company. The sample size of 198 respondents. The purposive sample technique was employed. The research also employed a quantitative methodology utilising a survey design.

**Results:** The analysis of the three distinct surveys about the responses of the clients, architects, quantity surveyors, inhabitants and consultants agree to the fact that Design changes, delays in payment to contractors, cost and time overrun; arbitration; total abandonment and litigation mostly accountable for the delay.

**Conclusions:** The study concludes that there still exist a number of effects that put construction projects at great risk that have an effect on their performance.

**Key Words:*****Project, Delays, Stakeholders, Involvement, Construction industry***

**INTRODUCTION**

“This construction industry is vital to a nation's progress, significantly impacting its Gross Domestic Product (GDP). The United Nations Economic Commission for Europe (UNECE) Statistical Database reveals that the construction sector's contribution to GDP in developed nations varies between four and ten percent” (UNEP, 2020). “Thus, the effective implementation of construction projects improves community welfare and progress, along with supplementary benefits including housing, education, commerce, transportation, and prosperity” (Amoatey & Ankrah, 2017; Wang et al., 2016). “Construction projects have diverse and unforeseen management challenges that threaten their success, including the increasing complexity of their requirements. At present, delays in construction projects continue to be a compelling subject of research in both developing and wealthy nations” (Alaghbari et al., 2007; Amoatey & Ankrah, 2017; Honrao & Desai, 2015).

“Delays sometimes lead to schedule overruns, expense overruns, disagreements, litigation, and occasionally total project abandonment” (Celestin, 2025; Mejía et al., 2023). “Delays directly affect anticipated output and revenue, as contractors depend on a finite number of contracts. Delays exceeding the original contract timeline result in significant cost overruns for owners in numerous projects, encompassing difficulties, expenses, and income losses” (Sambasivan & Soon, 2007; Timilsina et al., 2020). “A multitude of research has examined the factors contributing to delays in construction projects across different nations. Factors causing delays vary by project type and exert differing degrees of impact on schedule performance” (Emam et al., 2020; San & Sothy, 2016). “The primary considerations for hydropower projects include environmental clearances, geological challenges, and local concerns (Ramli et al., 2019), The primary variables affecting residential projects include meteorological circumstances, a deficiency of trained personnel due to the site's remote location, and delays in progress payments from the client” (Ramli et al., 2019).

“The distinctiveness of construction or infrastructure projects generates variables that exert varying degrees of impact on timetable performance” (Emam et al., 2022). “In road projects, material scarcity is a significant issue contributing to delays, owing to the enormous quantity of materials needed for construction” (Kamal-Eldin & Yanishlieva, 2002), together with the deficiency of equipment resulting from the extensive mechanisation of their construction methods (Barati & Shen, 2016). “Road projects are more susceptible to the detrimental impacts of weather, geography, and natural calamities than construction projects” (Durdyev et al., 2017). “Conversely, the absence of labour and material supply issues constitutes the most significant aspect in construction projects” (Memari et al., 2017). “Construction projects necessitate increased operations at the site and encounter limitations regarding space and resource availability” (Durdyev, 2018; Durdyev et al., 2017). Building projects also involve more stakeholders, which can adversely influence the performance of the project schedule (Asiedu & Alfen, 2015).

“The prioritisation of delay factors differs by area. The first investigation for this study identified numerous publications regarding delays in construction and infrastructure projects in Africa and Asia. The primary variables influencing the construction business in the United Arab Emirates include change orders, delays in client choices and approvals, and challenges in contractor finance” (AlGheth & Ishak Sayuti, 2020). “The primary factors contributing to delays in Chinese projects are inadequate equipment, ineffective communication among contracting parties, and subcontractor-related problems” (Daniel, 2019). (Ayodeji & Agboola, 2006; Emam et al., 2022) examined 60 construction projects in Nigeria and discovered an average delay of 90% for residential projects and 63% for office projects. (AlGheth & Ishak Sayuti, 2020) examined 14 building projects in Jordan, identifying delays between 125% and 455%, with a mean delay of 226% (Mahamid, 2018) examined 101 road projects in Palestine and discovered an average delay of 48%. Furthermore, (Amoatey & Ankrah, 2017) opined that seventy percent of 48 road projects in Ghana had delays, with an average time overrun of 17 months.

“Internal stakeholders are responsible for specific project planning activities and must engage in specified tasks, while external stakeholders typically are not” (Akinsiku & Akinsulire, 2012; Mejía et al., 2023). “Similar to external stakeholders, internal stakeholders are also inadvertently engaged in or consulted on activities for which they bear no direct responsibility. Activities involving internal stakeholders with varying degrees of engagement encompass project scope estimation; delineation of work products, task characteristics, and project life cycle; forecasting of effort and expenses; formulation of budget and project timeline; identification of project risks; strategising for data management, project resources, personnel, stakeholder engagement, and training; development and evaluation of the project plan; alignment of work and resource needs; and securing stakeholder commitment to the project plan” (Mejía et al., 2023). Project planning activities in which external stakeholders participate are frequently identical to those of internal stakeholders. However, roles of external stakeholders are limited to that of consultants rather than team members directly accountable for individual project planning activities (Akinsiku & Akinsulire, 2012; Mejía et al., 2023). Therefore, the study intends to assess the impact of stakeholders’ involvement in project delays.

**METHODOLOGY:**

This study will utilise a combination of primary and secondary sources to achieve its objectives. The target demographic of this study comprised the China Geo-Engineering Construction Company. The sample size of 198 respondents included 9 quantity surveyors, 8 architects, 1 consulting firm, clients, and 180 residents. The purposive sample technique was employed to identify persons inside the institution who have participated in at least one phase of the project management lifecycle. This non-probabilistic method has been implemented to guarantee the research sample's relevance to the studies. The research employed a quantitative methodology utilising a survey design. The survey approach was chosen for its capacity to gather structured replies from a varied respondent pool. The acquired data was subjected to quantitative analysis utilising descriptive statistics. The acquired data was refined to remove inaccuracies and subsequently input into SPSS for analysis.

**RESULTS**

Information was sought about the gender, qualification and length of service of stakeholders.

One hundred and fifty (150) respondents representing 75% were males whilst fifty (50) respondents representing 25% were females. Gender balance favours the male according to the analysis made above. The male population play greater role in the growth and productivity of the construction company based on the analysis presented above but the female population cannot be left out even though their effort is minimal as compared to the male. The educational backgrounds shows that one hundred and fifty (150) employees with a percentage of 50% are those who completed their first degree. Respondents with Higher National Diploma are fifty (50) with a percentage of 25% and fifty (50) respondents had diploma represented by 25%.

**Stakeholders Causes of Project Execution Delays**

The results indicated that 80 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done were stakeholders’ causes whilst 100 respondents strongly agree to it.

Also, 90 respondents agree and strongly agree that Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, Bureaucracy, and Multiple projects by contractors, Incompetent contractors were stakeholders’ causes of project delivery.

Finally, 80 respondents agree and strongly agree that Contractual claims, Unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 20 respondents were neutral.

The sampled results indicated that 1 respondent agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, and Bureaucracy were stakeholders’ causes whilst 1 respondent strongly agree to it.

Also, 2 respondents agree that multiple projects by contractors was stakeholders’ causes of delay, and 1 respondent strongly agree that incompetent contractors, Contractual claims, Unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 1 respondent disagree to it.

Moreover, 4 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, and Bureaucracy were stakeholders’ causes whilst 4 respondents strongly agree to it.

Finally, 5 respondents agree that multiple projects by contractors, incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage or lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 3 respondents disagree to it.

From Quantity Surveyors Related Response, 5 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply or procurement problems, and Bureaucracy were stakeholders’ causes whilst 4 respondents strongly agree to it.

Again, 4 respondents agree and strongly agree respectively that multiple projects by contractors, incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage or lack of equipment, Shortage of materials, Skills shortage or unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 1 respondent disagree to it.

Consultant Related Response: 1 respondent agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, Bureaucracy and multiple projects by contractors were stakeholders’ causes of project delivery whilst 1 respondents strongly agree that incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery. No respondent was neutral, disagree or strongly disagree to it.

From Inhabitants Related Response, one hundred and fifty (150) respondents agree that cost overrun and total abandonment affect project execution delay whilst thirty (30) respondents disagree to it. Again, one hundred and fifty (150) respondents strongly agree that time overrun; arbitration; and litigation affect delay in project execution whilst thirty (30) of them disagree to it. Finally, ninety (90) respondents agree that negative social impact; idling resources; disputes; delay by clients to return loan for the project; poor quality of work due to hurry; delay in getting profit by clients; bankruptcy; create stress on contractors; total abandonment; acceleration losses; and rescheduling and rearrangement affect project execution delay whilst ninety (90) respondents disagree to it.

Clients Related Response: the clients being the Government of Ghana and the ministry of roads and highways all strongly agree that cost overrun; time overrun; arbitration; total abandonment; and rescheduling and rearrangement whilst they also agree on negative social impact; idling resources; disputes; poor quality of work due to hurry; bankruptcy; litigation; create stress on contractors and acceleration losses. This implies that the clients should do everything possible to ensure that the effects of project execution are tackled effectively so as to prevent those effects from delaying the construction project.

With Architects Related Response, the four (4) architects strongly agree that time overrun; disputes; arbitration; delay by clients to return loan for the project; litigation; and total abandonment affect delay in project execution whilst the remaining four only agree that cost overrun; negative social impact; idling resources; poor quality of work due to hurry; create stress on contractors; acceleration losses; delay in getting profit; bankruptcy; and rescheduling and rearrangement affect project execution delay.

Quantity Surveyors Related Response shows that five (5) respondents strongly agree that time overrun; litigation and total abandonment affect project execution delay whilst four (4) agree that cost overrun; negative social impact; idling resources; disputes; arbitration; delay by clients to return loan to complete the project; poor quality of work due to hurry; delay in getting profit by clients; bankruptcy; create stress on contractors; acceleration losses; and rescheduling and rearrangement also affect project execution delay.

Again, one (1) respondent strongly agree that time overrun; disputes; arbitration; delay in getting profit; and bankruptcy affect delay in project execution whilst that respondent only agree that cost overrun; negative social impact; idling resources; delay by clients to return loan for the project; poor quality of work due to hurry; litigation; create stress on contractors; total abandonment; acceleration losses; and rescheduling and rearrangement affect project execution delay. This implies that the consultants should give accurate reports and recommendations since the quantum to be paid to contractors largely depends on these reports

## Key managerial issues

There are attempt to develop their support and change their view by ensuring they fully understand the project and the benefits it will deliver. Their resistance maybe due to lack of information or understanding. There are attempt to build their confidence in you and in the team. To find out what is important to them, if you can help them out or minimize negative impact on them, they may be more helpful. Demonstrate that you are doing your best to limit adverse effects on them. Counter any negative influence they may have on others (Frimpong et al., 2003). The unique characteristic of the construction industry is epitomized in the project. This has meant that every project is different, a situation which emanates from the project’s own characteristics, that is, its type, its size, its geographic location, personnel involved in the project, those emanating from the other subsystems within the industry, and also those from the super-system. Hence project execution is inherently risky and the lack of appropriate approach to addressing these risks has led to a lot of undesirable results in project execution in the construction industry of most developing countries. Most of the problems militating against the achievement of the desired effect on the construction industry of any country have to do with the project execution challenges, namely, the difficulty in achieving the main objectives of the project. Traditionally, this is seen in the failure of the project to achieve its cost, time, quality and other targets due to inefficiencies in the execution process. This ultimately, causes dissatisfaction among all the stakeholders.

**DISCUSSION**

Accountability of Contractors

The causes of the delay encompassed restricted financial capacity, insufficient cash flow, and budgetary complications (Akogbe et al., 2013; Pai et al., 2018; Pall et al., 2020). The daily operations of construction projects necessitate contractors that incur substantial costs for resources. “Consequently, if owners remit payment tardily for completed work, contractors may encounter difficulties in financing construction operations, so significantly increasing the likelihood of work disruptions and delays. The deficiency of financial resources may place the contractor in a precarious position that negatively impacts project schedule performance” (Aforla et al., 2016; Honrao & Desai, 2015; Ibrahim et al., 2012). “To mitigate cash flow issues, certain authors recommend securing funds for contractual guarantees from owners and contractors” (Yang et al., 2022). To mitigate the issues of implausible initial durations and bid submissions (Pai et al., 2018; Pall et al., 2020; Wang et al., 2016), “certain scholars advocate for alternative contractor selection methods beyond the lowest bidder criterion, incorporating selection parameters such as bonuses for early delivery and incentives for the expedited completion of tasks” (Othuman Mydin et al., 2014; San & Sothy, 2016).

Accountability of Subcontractors and Suppliers

“Road developments necessitate the employment of competent individuals for site management and oversight. Delayed delivery and material-equipment complications encompassed tardy arrival of materials, equipment malfunctions, and procurement challenges” (Akogbe et al., 2013; El Sayed et al., 2020; San & Sothy, 2016). Resource scarcity encompassed deficiencies in equipment, materials, and skilled labour (Akogbe et al., 2013; Durdyev, 2018; Durdyev et al., 2017). “The volatility in scarcity prices of resources can impact work progress” (Aforla et al., 2016). “Projects must ensure efficient allocation of equipment and tools on building sites and conduct comprehensive constraints analysis prior to commencing the construction phase to prevent delays” (Famiyeh et al., 2017; Yang et al., 2022). “Subcontractors must incorporate equipment maintenance programs at building sites and guarantee the availability of requisite equipment for designated scheduled activities” (Mahamid, 2018). Furthermore, to prevent resource shortages, subcontractors must to adopt supply chain management strategies and ensure early integration into the project life cycle (Eriksson, 2015; Oyegoke & Al Kiyumi, 2017). The performance of suppliers and subcontractors can greatly effect the building timetable. The significant interdependence of activities inherent in building projects implies that the absence of inputs and services for one activity might adversely affect other interconnected operations. The influence of many activities on the timetable heightens the likelihood of delays. Both roadway and infrastructure projects necessitate substantial resources that influence the planning and implementation of the construction phase.

Responsibility of Designers and Consultants

“Experienced designers and consultants with proficient management abilities facilitate the project team's focus on finishing each phase without delays” (Honrao & Desai, 2015). “Designers are essential in creating the documentation that will direct the construction process. Consequently, deficiencies in the activities executed by the designers might substantially affect the project timeline throughout the building phase. Deficiencies in communication, coordination, disagreements, disputes, and similar factors might compromise the quality of construction papers. Designers are advised to implement methodological and technological strategies to enhance the automation of design reviews in the initial stages and to optimise the management of the information that is collected, analysed, and processed. Effective design quality control and information management will diminish the frequency of information requests and design modifications during the construction phase. A prompt response to design flaws mitigates wait times that may result in delays” (Eriksson, 2015;).

Consequences of failing to manage stakeholder expectations

Project progress might be significantly impeded if any key stakeholders and their expectations are overlooked. The stakeholders are regarded as the foundation for any project. The project cannot proceed well without their participation (Famiyeh et al., 2017). “Failing to engage important stakeholders invites complications for your project. They can generate significant complications in your project. They may request an unreasonable alteration in scope that can affect pricing, timing, and scheduling” (Eriksson, 2015; Oyegoke & Al Kiyumi, 2017). “It is essential to delineate the scope in collaboration with key stakeholders to facilitate effective monitoring in accordance with the scope baseline. It is certain that failure to identify and manage stakeholders will result in your project being over-budget and delayed” (Akinsiku & Akinsulire, 2012; Choudhry & Arabia, 2015; Frimpong et al., 2003; Ibrahim et al., 2012).

“For effective project execution in road construction, most countries depend on regular recurrent budget funding from the treasury; however, the allocated amounts typically fall significantly short of actual requirements, and the budgeted funds are seldom fully disbursed” (Celestin, 2025; Timilsina et al., 2020). “Certain nations endeavoured to establish Road Funds (RFs), commonly known as "first generation" road funds, typically as a designated item in the national budget. This indicated a kind of earmarking government money to fund a service, managed and predominantly provided by government departments, and distributed based on relatively established priorities” (El Sayed et al., 2020). The RFs typically failed to meet their objectives, evidenced by inadequate governance (misallocation and improper utilisation of money, insufficient auditing), ineffective collection and disbursement, and insufficient annual contributions for the construction of the national road network.

**CONCLUSION**

Construction delays are a significant factor in the execution of construction projects. The study reveals that several factors continue to jeopardise construction projects and adversely affect their performance. A construction project is deemed successful when it meets its set objectives, accomplished on schedule, within budget, and to established quality standards, thereby satisfying stakeholders. One of the most significant issues that may occur in the execution of building projects is delays, the extent of which varies greatly between projects. The study identified six principal consequences of delays categorised as contractor-related, client-related, consultant-related, labour-related, and external-related: time overrun, cost overrun, disputes, arbitration, outright abandonment, and litigation. The study additionally disclosed the subsequent effects of stakeholders on project execution: Modifications in design, Delays in contractor payments, Delays in information dissemination, financial constraints, Inadequate project management, compensation discrepancies, and disputes on the assessment of completed work. Disputes among the participating parties, Alterations to the project timeline, supply and procurement issues. Bureaucracy, several projects by contractors, inept contractors, Contractual disputes, unforeseen site conditions, governmental interference, Inadequate comprehension of the project. Deficiency of equipment, scarcity of materials. Deficiency of skills / unavailability, and natural disasters. The research findings revealed that most delay factors pertain to client-related issues. The poll concludes that clients must possess substantial economic capacity and financial planning for the project, as well as timely decision-making, to mitigate delays. The majority of issues concerning consultants stem from a lack of comprehension of client requirements, insufficient project information, and the omission of certain features in drawings. Analysis of contractor-related issues reveals that delays predominantly stem from inadequate acquisition of contemporary equipment and the usage of substandard materials in construction. Ultimately, additional factors contributing to delays include project conditions such as site characteristics, complexity, and complications arising from weather conditions. Delays could arise from external factors such as changes in government, regulations, and location. The client must possess both mental and financial resilience to initiate a new project, hence minimising delays.

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**Reference**

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