

The Role of Construction Management in Conflict Resolution in National Government-Funded Construction Projects in Uasin Gishu Kenya .

Contributing factors to conflict in NGF Construction Projects in Uasin Gishu.

¹Margaret Thatcher Miyawa, ²Prof. Sylvester Munguti Masu, ³Dr. Sarah Gitau

¹Ongoing Masters student (TUK), Registered and practicing Building Technologist, Construction Project Manager, Kenya

²Proffesor in Department of Construction & Property Studies, TUK, Nairobi, Kenya

³Senior Lecturer, Department of Construction and Property Studies (DCPS) , Kenya DOI:

<https://doi.org/10.51244/IJRSI.2025.120800297>

Received: 29 Aug 2025; Accepted: 04 Sep 2025; Published: 07 October 2025

ABSTRACT

National government-funded (NGF) construction projects in Kenya play a crucial role in fostering infrastructure development and economic growth. However, these projects are often marred by persistent conflicts arising from poor contract management, political interference, delayed payments, land acquisition disputes, and stakeholder disagreements. These conflicts lead to project delays, cost overruns, and in extreme cases, project abandonment. This study aimed to investigate the contributing factors to conflict in national government funded construction projects. Specifically, the study sought to examine the delays in payment, variation in design, misinterpretation of designs and delays in decision making by the stakeholders involved. The study adopted a mixed-methods research design, integrating both quantitative and qualitative approaches. Quantitative data was collected through self-administered questionnaires distributed to 173 respondents drawn from a target population of 185 professionals, including project managers, architects, quantity surveyors and contractors. Qualitative data was gathered through interviews with key industry players. The research utilized descriptive statistics such as means and standard deviations, alongside inferential techniques like correlation and regression analysis to interpret the findings. The study contributed valuable insights into how the contributing factors of conflict in national government funded project in uasin Gishu. The findings informed policy makers and practitioners, government agencies, construction managers, and other stakeholders on contributing factor of conflicts in NG funded projects in Uasin Gishu. Ultimately, the study revealed that the leading causes of conflict in national government-funded construction projects were late payment of contractors ($M = 4.27$), poor communication among stakeholders ($M = 4.14$), and design changes ($M = 3.89$). The regression model indicated a strong and significant contribution of construction management to conflict resolution ($R^2 = 0.770$, $p < .001$). It was concluded that targeted management strategies, particularly those emphasizing communication, stakeholder involvement, and contract clarity, are effective in minimizing conflicts.

Key words: construction management, conflicts, national government , delayed payments, variations,

INTRODUCTION

Construction projects funded by national governments are often complex, involving multiple stakeholders with diverse interests, expectations, and responsibilities. The construction industry plays a significant role in economic development, infrastructure growth, and employment creation (Ofori, 2019). However, conflicts are common in these projects due to disagreements among stakeholders, project delays, contractual disputes, and mismanagement of resources (Nguyen et al., 2022). Effective construction management serves a key tool in mitigating and resolving such conflicts, ensuring that projects are completed within the stipulated time, budget, and quality expectations.

Conflict in construction projects arises from factors such as contract ambiguity, communication breakdowns, and stakeholder competition (Cheung & Pang, 2021). In national government construction projects, conflicts may escalate due to political influences, bureaucratic inefficiencies, and funding challenges. Construction managers are responsible for overseeing project implementation, coordinating resources, and facilitating communication among stakeholders (Zaneldin, 2020). By implementing conflict resolution strategies, construction managers contribute to the successful completion of projects while maintaining professional relationships among involved parties.

Construction management plays a vital role in ensuring the success of infrastructure projects worldwide, particularly in addressing conflicts that arise in large-scale national government projects.

The construction industry in Africa plays a crucial role in national development by providing essential infrastructure such as roads, bridges, housing, and government buildings. However, many national government construction projects across the continent face significant conflicts arising from contractual disputes, delays, cost overruns, resource misallocation, and political interference (Osei & Ameyaw, 2021). Effective construction management strategies are essential for resolving such conflicts and ensuring successful project delivery. This section examined construction management and conflict resolution mechanisms in five African countries: South Africa, Nigeria, Egypt, Ethiopia, and Kenya.

Nigeria's construction industry is one of the largest in West Africa but faces persistent challenges related to contract disputes, project delays, and corruption in national government projects (Ameh & Odusami, 2021). The country lacks a unified construction dispute resolution framework, leading to frequent litigation, which often stalls project completion (Ibrahim, 2020). The Second Niger Bridge project, a major government infrastructure initiative, faced multiple legal and financial disputes among contractors, delaying its completion. The Nigerian government has since promoted ADR mechanisms such as arbitration and mediation to address construction conflicts (Eze, 2021).

Egypt has a well-established construction sector, driven by government-funded mega projects such as the New Administrative Capital and the Suez Canal Expansion. Construction management in Egypt follows a structured approach, with regulations set by the Egyptian Federation for Construction and Building Contractors (El-Sayed & Abdel-Razek, 2021). The country employs a combination of litigation, ADR, and government arbitration to resolve construction disputes.

Ethiopia has experienced significant infrastructure development, with government-led projects such as the Grand Ethiopian Renaissance Dam (GERD) and Addis Ababa Light Rail. However, these projects have faced major conflicts, including disputes over resource allocation, environmental concerns, and contractual disagreements (Tefera & Gebremedhin, 2021). The Ethiopian government has institutionalized arbitration and mediation as primary conflict resolution mechanisms in construction management, guided by the Ethiopian Federal Arbitration Law (Wondimu & Getachew, 2022).

Kenya has a rapidly growing construction sector, driven by government-funded projects such as roads, railways, and housing developments under the Vision 2030 initiative (Kithinji & Muiruri, 2020). The country's construction dispute resolution mechanisms include litigation, arbitration, and mediation under the Chartered Institute of Arbitrators (CIArb) Kenya Branch (Ngotho & Karanja, 2021).

The Kenyan construction industry also utilizes the Public Procurement and Asset Disposal Act (PPADA) to address disputes related to procurement and contractor selection (Wachira & Otieno, 2020). However, challenges such as corruption, political interference, and bureaucratic delays continue to contribute to construction conflicts. Strengthening ADR mechanisms and improving transparency in contract management are essential steps for reducing disputes in Kenya's construction sector.

One of the primary sources of conflict in government construction projects in Kenya is contractual disputes. Many conflicts emerge due to disagreements between government agencies and contractors over contract terms, payment schedules, and variations in project scope. Some contractors accuse government agencies of altering project specifications without prior agreements, while others cite delays in payments that disrupt cash

flow and slow down project implementation (Wachira & Otieno, 2020). Additionally, project delays caused by bureaucratic inefficiencies, procurement challenges, and funding constraints further exacerbate conflicts between contractors and government entities (Ngotho & Karanja, 2021). When projects take longer than anticipated, stakeholders often engage in legal disputes over penalties, compensation claims, and extended timelines.

Political interference has also contributed to conflicts in the construction industry. Changes in political leadership sometimes result in the cancellation or renegotiation of contracts, leading to disputes between contractors and the government. Political influences can also affect project Corruption and mismanagement have further fueled disputes in national government construction projects. Allegations of bribery, favoritism in tender awards, and misappropriation of funds have often led to legal battles and project delays (Kariuki & Mutua, 2021).

Statement of the problem

The construction industry plays a vital role in national development, particularly in infrastructure expansion, economic growth, and employment creation. In Kenya, the government has undertaken numerous large-scale construction projects, such as roads, bridges, railways, and public housing initiatives, to enhance economic development and improve the living standards of citizens (Kithinji & Muiruri, 2020). However, these projects have frequently been marred by conflicts that arise at various stages of implementation, leading to delays, cost overruns, contract terminations, and, in some cases, project abandonment (Omondi & Ochieng, 2022). The persistent occurrence of disputes within government construction projects indicates a fundamental challenge in the management and resolution of conflicts, which threatens the timely and successful completion of infrastructure initiatives.

The problem of conflicts in national government construction projects has been exacerbated by several factors, including delays in project payment approvals, variations in design, misinterpretation of designs, and delays in project managers decision-making in national government-funded construction projects in Uasin Gishu (Wachira & Otieno, 2020). Many contractors experience payment delays due to bureaucratic inefficiencies and financial mismanagement, leading to strained relationships with government agencies. Furthermore, contract variations, where project specifications change midway through implementation, create disagreements over additional costs and extended timelines (Muchiri & Wanjiru, 2021). Cases of disputes between the government and construction firms, as well as between contractors and subcontractors, have been common, resulting in litigation and arbitration proceedings that further slowdown project execution.

(Kithinji & Muiruri, 2020). Strengthening contract management practices by ensuring clear contractual terms, timely payments, and transparent procurement processes can also reduce conflicts. Therefore, there was pressing need to investigate how construction management practices contribute to conflict resolution in national government-funded construction projects in Uasin Gishu County.

LITERATURE REVIEW

A major source of conflict in public construction projects is the ambiguity or incompleteness of contract documents. According to Cheung and Pang (2020), poorly defined responsibilities and unclear contract terms often lead to disputes over scope changes, delayed payments, and accountability. In government-funded projects, contracts are sometimes drafted under political pressure or fast-tracked to meet administrative timelines, compromising technical details and increasing the potential for misunderstandings. Wachira and Otieno (2020), assert that inadequate enforcement of the Public Procurement and Asset Disposal Act (PPADA) in Kenya contributes to a high incidence of contractual disputes, particularly regarding procurement procedures and payment timelines.

Scope creep, where project specifications are altered without corresponding adjustments in resources or timelines, is another major trigger. Karanja and Wambugu (2020), studied road construction projects under the Kenya Urban Roads Authority (KURA) and found that more than 60% of disputes arose from unplanned scope

expansions that were politically motivated. Further, Kikwasi (2012), notes that conflicts often stem from delayed payments, variation orders, and political interference in publicly funded projects.

Government-funded projects are particularly prone to conflict due to bureaucracy, political pressure, and rigid procurement procedures. As Owolabi et al. (2014) observed, conflicts also arise from inadequate project planning and frequent changes to project scope, which affect timelines and resource allocation. These expansions strained contractor capacity and resulted in legal battles over compensation and deadlines.

Delayed payments are a persistent issue in public construction and one of the most cited sources of conflict. Construction firms operating under government contracts often rely on timely payments to manage cash flow, procure materials, and pay subcontractors. When payments are delayed due to bureaucratic red tape, misallocation of funds, or political instability, it disrupts project timelines and breeds mistrust among parties (Agyekum et al., 2021).

In Kenya, Ngotho and Karanja (2021), found that delays in processing interim payment certificates resulted in frequent standoffs between contractors and public agencies. In some cases, contractors abandoned sites or suspended work, citing financial strain. The researchers emphasized that the lack of financial transparency and weak accountability systems in public agencies intensified these payment-related conflicts.

Poor communication among project stakeholders is another critical source of conflict. According to Karlsen et al. (2020), the absence of structured communication frameworks results in misinterpretation of project goals, duplication of efforts, and lack of accountability. In multistakeholder environments typical of government-funded projects, the failure to coordinate between engineers, contractors, community representatives, and oversight bodies leads to conflicting expectations and operational inefficiencies.

In a study conducted in Kenya by Gwaya et al. (2019), they emphasized that community exclusion from key decision-making processes, such as project siting, compensation terms, and environmental impact, often results in resistance or sabotage. The authors suggested that participatory planning is essential for aligning stakeholder interests and minimizing opposition-related disputes.

In summary, the common sources of conflict in national government-funded construction projects are deeply rooted in systemic weaknesses related to contract management, stakeholder engagement, payment processes, political interference, and procurement integrity. Addressing these issues requires a holistic approach that prioritizes transparency, inclusivity, and strong institutional oversight. In Kenya, the need for more robust legal frameworks, better stakeholder coordination, and proactive construction management practices is paramount to minimizing these recurring disputes.

Objectives

- 1 To find out delays in project payment approvals in national government-funded construction projects in Uasin Gishu.
2. To investigate poor communication among stakeholders in national government-funded construction projects in Uasin Gishu.
3. To assess design changes and variation in national government-funded construction projects in Uasin Gishu.

FINDINGS

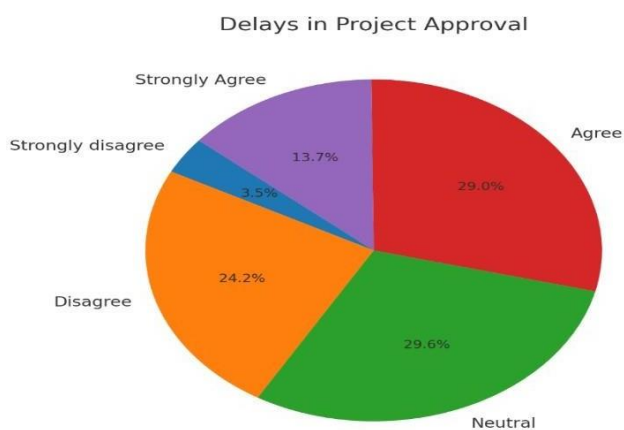
Delays in project approval and payments

This section presents the findings on 'delays in project approvals', as gathered from 173 respondents. The responses were measured on a five-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree'. Table 4.6 below shows- Delays in project approvals shows the distribution of responses, followed by a graphical illustration.

Table 1. Delays in project approvals payments

Response	Frequency	Percentage (%)
Strongly disagree	6	3.5
Disagree	42	24.3
Neutral	51	29.8
Agree	50	29.2
Strongly Agree	24	13.8
Total	173	100%

Source: Field Survey, May 2025



Source: Field Survey, May 2025

Figure 1: Pie chart representation of responses on delays in project approvals.

The results indicate that the highest proportion of respondents for 'delays in project approvals' were 'Neutral' (29.8%). This suggests a tendency toward agreement or concern regarding this issue. The mixed distribution across other categories also points to variability in perception, possibly influenced by role, experience, or project exposure.

Variations in design

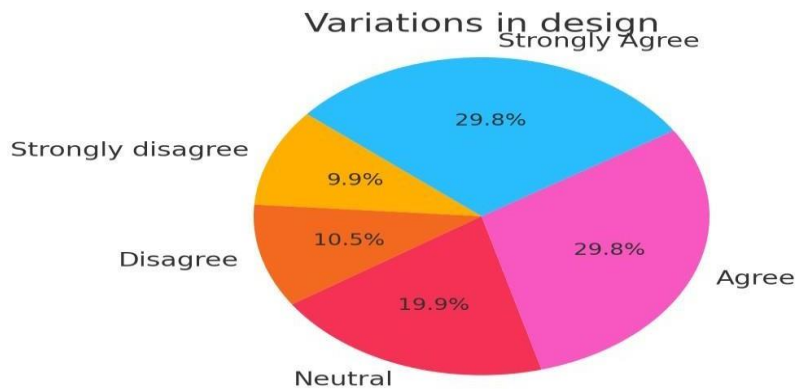
This second objective presents the findings on 'variations in design', as gathered from 173 respondents. The responses were measured on a five-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree'.

Table 2. Variations in design shows the distribution of responses, followed by a graphical illustration.

Response	Frequency	Percentage (%)
Strongly disagree	17	9.9
Disagree	18	10.5
Neutral	34	19.9

Agree	51	29.8
Strongly Agree	53	30.6
Total	173	100

Source: Field Survey, May 2025



Source: Field Survey, May 2025

Figure 2. pie chart representation of responses on variations in design.

The results indicate that the highest proportion of respondents for 'variations in design' were 'Agree' (29.8%). This suggests a tendency toward agreement or concern regarding this issue. The mixed distribution across other categories also points to variability in perception, possibly influenced by role, experience, or project exposure.

Poor communication among the stakeholders

This third objective section presents the findings on 'Poor communication among the stakeholders', as gathered from 173 respondents. The responses were measured on a five-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree' 'Poor communication among the stakeholders' shows the distribution of responses, followed by a graphical illustration.

Table 3. Distribution of responses

Response	Frequency	Percentage (%)
Strongly disagree	18	10.5
Disagree	42	24.6
Neutral	65	38.0
Agree	21	12
Strongly Agree	27	15.8
Totals	173	100%

Source: Field Survey, May 2025

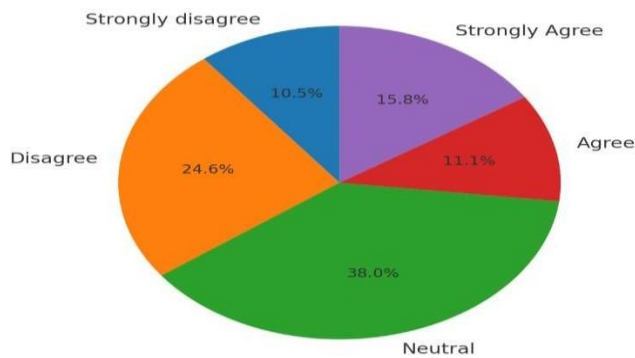


Figure 3. Pie chart representation of responses on Poor communication among the stakeholders. Discussions

The findings of this study highlight critical factors that contribute to conflict in national government-funded (NGF) construction projects in Uasin Gishu County. Among the most significant were delays in project approvals ($M = 4.27$), which emerged as the leading cause of conflict. This aligns with previous literature, where schedule slippages are frequently reported as the foremost source of disputes in large public projects due to bureaucratic processes, inadequate planning, and limited resource allocation. Similarly, poor communication among stakeholders ($M = 4.14$) was identified as a major contributor, underscoring the role of ineffective information flow in creating misunderstandings, misaligned expectations, and mistrust between clients, contractors, and consultants. Design changes and variation ($M = 3.89$) also played a notable role, reflecting the disruptive impact of late modifications on project scope, costs, and timelines. These results reinforce the idea that both technical and relational factors fuel conflict in the construction sector.

Finally, the regression model ($R^2 = 0.770$, $p < .001$) confirmed that construction management plays a strong and significant role in conflict resolution. This finding suggests that nearly 77% of the variation in conflict resolution outcomes can be explained by the application of construction management practices. The implication is that conflict in NGF projects is not an inevitable occurrence but can be effectively managed through structured project management approaches.

Overall, these results reinforce the pivotal role of construction management in conflict prevention and resolution. They suggest that improving communication, enforcing contract clarity, and maintaining proactive engagement are key pathways for reducing disputes and ensuring timely, cost-effective, and sustainable delivery of NGF construction projects in Uasin Gishu County.

CONCLUSION

The study concludes that conflicts in national government-funded construction projects are primarily driven by systemic and operational challenges such as delayed payments, poor communication, and design changes. These factors reflect weaknesses in planning, coordination, and contract clarity, which contribute to misunderstandings and friction among project stakeholders. The findings affirm that unless these root causes are addressed, public construction projects will continue to suffer from preventable disputes that undermine performance.

In relation to construction management practices, the study concludes that structured communication, regular meetings, and use of standardized contract procedures play a vital role in mitigating conflicts. These mechanisms enable early detection of issues and foster collaborative problem-solving. The presence of formalized practices indicates a growing recognition of construction management as a proactive discipline in public project governance, although gaps remain in enforcement and consistency.

The findings further conclude that unresolved conflicts significantly compromise project performance through delays, cost escalation, and poor workmanship. The data underscores the detrimental ripple effect that disputes have across project timelines, budgets, and quality outcomes.

RECOMMENDATIONS

To address the key causes of conflict in government-funded construction projects, the study recommends the adoption of automated project payment systems to eliminate delays, and the enforcement of standardized design validation procedures to minimize costly variations. Furthermore, communication protocols should be strengthened to ensure timely and accurate information flow among all stakeholders, supported by ICT platforms where possible.

Construction managers should institutionalize practices such as frequent progress review meetings, use of supervision tools, and adoption of formal communication logs. These practices must be complemented by capacity-building programs that focus on negotiation, mediation, and contract administration. The government, through agencies like NCA and PPRA, should spearhead continuous professional development for public project managers with a focus on conflict mitigation.

To enhance the implementation of conflict resolution mechanisms, it is recommended that government agencies and project teams institutionalize clearer communication frameworks and decision-making protocols. Capacity-building initiatives should target both technical and nontechnical stakeholders to align understanding and reduce harmful interference. Moreover, contract documentation and role definitions should be streamlined to minimize ambiguity and enable managers to act decisively in resolving conflicts. Strengthening these areas will promote a more enabling environment for timely and constructive conflict resolution in public construction projects.

To minimize the impact of unresolved conflicts on performance, it is recommended that conflict resolution mechanisms such as Dispute Resolution Boards (DRBs), project-level grievance redress systems, and early-warning systems be integrated into all government construction contracts. Construction managers should also be given more authority and legal support to enforce dispute resolution clauses without unnecessary escalation.

Best practices in conflict prevention such as involving stakeholders from the design stage, ensuring timely disbursement of funds, and maintaining clear documentation should be mainstreamed in all government-funded projects. This calls for the development of a national construction conflict management framework that institutionalizes these practices and links them to performance evaluation, procurement compliance, and contractor registration processes.

Some of the practical examples include:

Establishing Conflict Resolution Boards in NGF Projects

Integrate DRBs in contracts ought to be made mandatory in NGF contracts (e.g., using FIDIC provisions) to establish a Dispute Resolution/Adjudication Board (DRB/DAB) at project inception.

Independent professionals who constitute boards with neutral experts (engineers, QS, legal experts) who are not directly tied to the project to ensure impartiality.

Standing vs. ad-hoc boards where Standing boards meet regularly (monthly/quarterly) to monitor and proactively address brewing conflicts.

Ad-hoc boards are set up when a dispute arises—useful for smaller projects.

A Clear mandate & procedures: Draft terms of reference (TOR) that specify scope, authority, timelines for decision-making, and appeal mechanisms.

Capacity building should be introduced to Train board members and project teams in negotiation, mediation, and adjudication skills.

Implementing Structured Communication Frameworks

Communication matrix is Developed where responsibility–accountability matrix (who communicates what, when, and to whom).

Regular coordination meetings are Establish structured weekly or biweekly meetings (client– consultant–contractor) to address issues early.

Digital platforms where project management information systems (PMIS) like Procore, Oracle Primavera, or local e-procurement portals to track approvals, variations, and correspondence. Central documentation Maintains a shared digital repository (cloud-based or e-government systems) for contracts, drawings, minutes, and progress reports to reduce disputes caused by miscommunication.

Conflict early warning system which encourage reporting of issues (delays, payment disputes, design changes) through early-warning notices in line with best practice (e.g., FIDIC Clause Introducing Stricter Timelines and Automated Payment Systems

Enforce of payment timelines:- Align NGF projects with the Public Finance Management (PFM) Act by setting maximum timelines (e.g., 30 days) for interim payment certificates. Automated payment tracking:- Implement Integrated Financial Management Information Systems (IFMIS) with real-time dashboards for monitoring pending and cleared payments.

Escrow accounts: For large projects, establish escrow accounts jointly managed by client and contractor to ensure prompt release of funds.

Penalties for delays: Include contractual provisions for interest charges or liquidated damages on delayed payments by the employer.

Performance-linked disbursements: Automate payments tied to milestones verified by the supervising consultant, reducing bureaucratic bottlenecks.

Transparency & audits: Publish quarterly payment reports to improve accountability and minimize corruption-related disputes.

Boards help resolve conflicts fairly and quickly, Structured communication prevents misunderstandings before they escalate and Automated payments with strict timelines tackle the root cause of many conflicts (delayed payments).

Streamlined approval processes by reducing bureaucratic layers and adopting e-procurement and e-payment systems as well as the Treasury and relevant ministries to establish strict timelines for payment approvals and enforce penalties for unjustified delays. Project dedicated accounts or escrow systems to guarantee availability of funds for contractors. Project managers should enhance financial planning by preparing accurate cash-flow projections to minimize reliance on late disbursements. Contractors should adopt transparent financial reporting and engage regularly with client representatives to fast-track approval of payment certificates.

Government agencies should make structured communication protocols mandatory in NGF projects, including reporting templates and regular progress meetings. Policies should encourage adoption of digital platforms for centralized project information sharing and documentation. Project managers should hold frequent coordination meetings with clear agendas and follow-up action plans. Contractors, consultants, and clients should designate communication officers or liaisons to improve information flow and accountability. A collaborative culture should be embraced by involving all key stakeholders in critical project decision.

The Government to do comprehensive feasibility studies and stakeholder consultations at project inception to reduce the frequency of design variations. A guideline should be developed and enforced with clear guidelines for approving design changes, including mandatory cost-benefit and risk analyses. Adoption of modern design technologies such as Building Information Modelling (BIM) in all NGF projects.

Consultants should conduct rigorous design reviews before implementation to identify and rectify potential errors early. The Contractors and project managers should document and justify all proposed changes, ensuring transparency and accountability. Site-level supervision and quality assurance to minimize technical errors that lead to redesigns should be strengthened.