

REVISITING RESOURCE OPTIMIZATION AND PROJECT PERFORMANCE: A THEORETICAL AND EMPIRICAL SYNTHESIS ON THE MODERATING ROLES OF GOVERNMENT POLICY AND DONOR PRIORITIES.

Schiman Niyonkuru

Doctorate of Business Admiration Research Scholar,

Kabale University, Uganda

Denis Sekiwu

Kabale University, Uganda

Godfrey Barigye

Kabale University, Uganda

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Abstract

This literature review offers a comprehensive synthesis of theoretical and empirical scholarship on the relationship between resource optimization practices and project performance, with particular attention to the moderating roles of government policy and donor priorities. While resource planning, allocation, and utilization are widely acknowledged as critical determinants of project success, existing studies report mixed and often contradictory findings. These inconsistencies stem largely from varying institutional environments, regulatory constraints, and divergent donor agendas that shape how resources are deployed in development projects. Anchored in Contingency Theory, Stakeholder Theory, the Resource-Based View, and Dynamic Capability Theory, this paper critically examines how government policy frameworks and donor priorities either strengthen or weaken the effectiveness of resource optimization efforts. By integrating evidence from African and global development contexts, the review highlights significant methodological and conceptual gaps, including limited application of moderation analysis, inadequate theorization of external institutional pressures, and insufficient attention to rural community-based project settings. The paper further develops a refined conceptual model that positions government policy and donor priorities as essential institutional moderators influencing the translation of resource optimization into improved project performance. Overall, the review advances a clearer understanding of how external governance structures interact with internal resource practices, offering substantive implications for policymakers, development practitioners, and funding agencies seeking to enhance the performance and sustainability of community-based development initiatives.

Keywords: *Resource optimization, project performance, government policy, donor priorities.*

Effective resource management is widely recognized as fundamental to the success of development and community-based projects particularly in resource-constrained settings funded by external donors. Resource optimization practices, including resource planning, allocation, utilization, and control, are often considered critical for achieving intended project outcomes (Ntunyari & Nyang'au, 2024; Iribagiza & Kirabo, 2024). Empirical evidence supports that structured project management practices increase the likelihood of project success. For instance, a study involving nearly 500 project managers in non-governmental organization-led international development (ID) projects found that greater

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maturity in the adoption of project management tools significantly correlates with both short-term and long-term project success (Ika, 2015).

However, the influence of resource optimization practices on project performance is not uniform across contexts. A recent study of the Sustainable Agriculture Intensification Food Security Project (SAIP) in Rwanda's Kayonza District demonstrated that project planning, implementation, risk management, and monitoring & evaluation were positively associated with project performance. Yet, results also underscored the importance of contextual factors beyond internal management practices (Uwase & Dushimimana, 2025). Similarly, other studies reveal that resource allocation and management practices positively influence performance of donor-funded health and infrastructure projects in Kenyan counties, affirming the relevance of resource optimization in development projects (Ntinyari & Nyang'au, 2024; Onyango & Musembi, 2023).

Despite these positive associations, variations in outcomes suggest that resource optimization alone may not guarantee project success. External institutional and environmental conditions such as governance structures, government policies, regulatory frameworks, and donor funding modalities can significantly influence whether resource optimization translates into improved performance (Njogunjogu, Namusonge & Oluoch, 2018; Wango, Ngatia & Lango, 2024).

Studies of community-based and donor-funded projects highlight how project governance and stakeholder involvement affect outcomes, demonstrating the complex interplay between internal management practices and external institutional context (Ochieng & Noor, 2023; Wachira & Owuor, 2024). Nevertheless, there remains a significant gap in the literature: few studies explicitly test how external factors such as government policy environment or donor priorities moderate the relationship between resource optimization practices and project performance. This limits the development of an integrated theoretical model that captures the joint effect of internal resource practices and external institutional forces across contexts.

Given this lacuna, a comprehensive literature review is warranted. A critical synthesis that consolidates findings across geographical regions, project types, and institutional contexts especially with a view toward moderation by governance and donor-related variables can clarify under which conditions resource optimization reliably leads to project success and when external constraints or misaligned priorities may erode that effect. Such a synthesis has the potential to advance theory, refine conceptual frameworks, and provide actionable guidance to policymakers, donors, and project implementers operating in complex, resource-constrained, and institutionally diverse environments.

Accordingly, this paper undertakes a systematic literature review to examine how governance frameworks (e.g. government policy) and donor priorities function as institutional moderators in the relationship between resource optimization practices and project performance. By integrating theoretical perspectives (e.g. Contingency Theory; Stakeholder Theory; Resource-Based View) with empirical

evidence drawn from African and global development contexts, the review aims to propose a refined conceptual model that advances understanding of project success in development settings. The insights from this synthesis are intended to inform both future empirical research and the design and implementation of more effective, context-sensitive development interventions.

Theoretical review

Understanding how resource optimization practices influence project performance in donor-funded and community-based projects requires a theoretical approach capable of capturing internal capability, environmental conditions, stakeholder influence, and organizational adaptability. Because project success in development settings is shaped simultaneously by how resources are managed and by how external actors structure project operations, no single theory is sufficient to explain performance variations. This review therefore integrates the Resource-Based View, Contingency Theory, Stakeholder Theory, and Dynamic Capability Theory to provide a comprehensive explanation of the relationships examined in this study.

Resource-Based View (RBV)

The Resource-Based View, first articulated by Wernerfelt (1984) and later expanded by Barney (1991), argues that organizations achieve superior performance when they develop and deploy resources that are valuable, rare, difficult to imitate, and non-substitutable. In the context of development and community-based projects, RBV offers a strong explanation for why effective resource planning, allocation, and utilization can enhance project performance, particularly in settings where resources are limited and competition for inputs is high. When project teams implement systematic planning, allocate resources strategically, and ensure efficient utilization, they create internal competencies that contribute directly to achieving project goals and improving overall outcomes.

The theory therefore links clearly with the independent variables of this study resource planning, resource allocation, and resource utilization by explaining how internal practices generate performance advantages. RBV has been widely applied in project management, nonprofit project performance, and donor-funded program evaluation, where internal project capability is shown to influence outcomes (Andrews et al., 2015; Santos & Brito, 2012; Zou et al., 2018). However, RBV assumes a relatively autonomous organization capable of deploying resources without external constraints. In donor-funded development projects, this assumption rarely holds because donor requirements and government regulations often restrict how resources can be used. Consequently, RBV is necessary for understanding performance but insufficient on its own for explaining performance variation in highly regulated and donor-dependent environments.

Contingency Theory

Contingency Theory, associated strongly with Donaldson (2001), proposes that organizational effectiveness depends on the fit between internal practices and the

conditions imposed by the external environment. Development projects operate within complex regulatory systems shaped by government policies on procurement, reporting, decentralization, and compliance. These policies can either enhance or limit the impact of resource optimization practices. For example, flexible policy frameworks allow project teams to reallocate resources when community needs shift, thereby increasing performance. Conversely, rigid procedures can reduce the effectiveness of even well-designed resource optimisation practices because they limit operational discretion.

Thus, Contingency Theory provides a theoretical basis for treating government policy as a moderating variable in this study. The theory has been widely used in public project delivery, project governance, and infrastructure project performance research, where environmental fit has been shown to significantly shape project outcomes (Flyvbjerg, 2014; Merrow, 2011; Mugenyi et al., 2022). However, while Contingency Theory explains how environmental conditions influence performance, it offers limited insight into how power dynamics and stakeholder interests shape project decisions, which is addressed more directly by Stakeholder Theory.

Stakeholder Theory

Stakeholder Theory, introduced by Freeman (1984), emphasises that organisational outcomes depend on how effectively managers identify and respond to the needs, power, and expectations of all actors who influence or are affected by project activities. In community-based and donor-funded projects, stakeholders are numerous and diverse, including donors, government agencies, implementing organisations, local leaders, beneficiaries, and monitoring agents. Donors, in particular, exert strong influence through project design requirements, spending restrictions, performance indicators, and accountability mechanisms.

Stakeholder Theory therefore provides theoretical justification for modelling donor priorities as a moderator in the relationship between resource optimisation practices and project performance. When donor priorities align with project realities, optimisation practices are more likely to enhance performance; when they conflict, optimisation efforts may have reduced impact or even fail to improve outcomes. This theory has been applied in project performance research, donor–NGO relationship studies, and participatory development evaluation (Aaltonen & Kujala, 2016; Lewis, 2016; Cooke & Kothari, 2001). Nevertheless, Stakeholder Theory does not fully address how internal capabilities enable project teams to respond effectively to stakeholder pressure, which is why it must be complemented with RBV and Dynamic Capability Theory.

Dynamic Capability Theory

Dynamic Capability Theory, advanced by Teece, Pisano, and Shuen (1997), focuses on an organization's ability to sense opportunities and threats, seize emerging opportunities, and reconfigure internal resources in response to environmental change. Development projects are particularly exposed to uncertainty, including donor preference shifts, changes in government priorities,

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unexpected community needs, and operational disruptions. Projects with strong dynamic capabilities can adjust their resource optimization practices in ways that sustain or even enhance performance under such conditions.

This theory links closely to resource utilization and control, which require learning, flexibility, and continuous reconfiguration of project inputs. It has been applied in adaptive project management, humanitarian logistics, and complex project environments where uncertainty is high (Eisenhardt & Martin, 2000; Fisher, 2017; Williams et al., 2010). However, Dynamic Capability Theory does not fully capture structural moderation such as formal policy restrictions, which is why it must be used in combination with Contingency Theory to provide a complete explanation of how external institutional forces shape project performance.

The relationship between resource optimization practices and project performance is shaped by determinants operating at multiple levels. RBV explains how internal resource management capabilities enhance performance, but ignores external constraints. Contingency Theory explains how environmental conditions, such as government policy, influence the effectiveness of internal practices but ignores stakeholder power. Stakeholder Theory explains how donor and beneficiary interests shape resource decisions but offers weak insight into internal capability. Dynamic Capability Theory explains adaptability under uncertainty but does not account for structural moderation imposed by policies and donor frameworks.

Given that this study examines how government policy and donor priorities moderate the relationship between resource optimisation and project performance, integrating these four theories provides the most comprehensive and conceptually coherent foundation. Together, they capture internal competence, environmental fit, stakeholder influence, and adaptive capacity all of which jointly determine project performance in donor-funded and community-based development projects.

Literature review

Effects of Resource Planning on Project Performance: Resource planning remains widely acknowledged as a core determinant of project performance because it improves coordination, reduces uncertainty, and enables managers to anticipate operational constraints before implementation begins (Kerzner, 2022; Turner & Müller, 2023). In the development and community project literature, empirical studies consistently show that planning maturity significantly predicts timeliness, cost control, and achievement of intended community outcomes (Aradukunda & Sikubwabo, 2024; Mugorewase & Kwenya, 2024; Jha & Iyer, 2021). Studies across African rural development projects indicate that when project teams adopt structured planning tools such as work breakdown structures, risk registers, and participatory schedules, beneficiaries experience improved transparency and trust, which further enhances project effectiveness (Niyonzima et al., 2023; Tchatchueng & Ndzana, 2023). These findings support the dominant

view that planning contributes directly to performance, and we agree with this interpretation because in low-resource and donor-dependent environments planning is not merely beneficial but essential.

However, the literature also reveals disagreement concerning the universality of planning effectiveness. Some scholars argue that in contexts characterised by weak governance, donor restrictions, or sudden environmental shocks, detailed planning may have limited practical value (Flyvbjerg, 2020; Ndakala & Muchelule, 2023; Mugenyi et al., 2022). These authors propose that planning can become procedural compliance rather than a functional management instrument. While this critique raises important considerations, we contend that it should not be interpreted as a rejection of planning but as a call to examine how contextual forces shape planning effectiveness. The literature therefore remains incomplete because few studies empirically model how governance quality, stakeholder power, or donor constraints alter the planning–performance relationship. This gap is particularly significant because rural community-based projects operate under precisely these constraints. Our study responds to this gap by incorporating contextual moderators and thereby offers deeper explanatory power.

Effects of Resource Allocation on Project Performance: Resource allocation has been identified as a critical determinant of whether project inputs translate into measurable outputs (Dvir et al., 2022; Meredith & Mantel, 2021). Research in community development shows that when financial resources, human skills, and materials are allocated on time and in proportion to project needs, performance improves through increased productivity and reduced waste (Ntinyari & Nyang'au, 2024; Santos & Brito, 2022; Mark, 2024). Studies conducted in participatory and volunteer-supported initiatives further show that transparent allocation enhances beneficiary satisfaction and reduces conflict, which indirectly reinforces performance (Munyao & Atieno, 2023; Amadi & Okorie, 2023). These consistent results affirm the argument that allocation is not just technical efficiency but also a mechanism for building legitimacy in community projects, and we agree with this perspective.

Yet the literature also reveals substantial disagreement concerning donor influence and stakeholder politics in allocation practices. Some researchers argue that donor oversight increases accountability and reduces misallocation (Aaltonen & Kujala, 2021; Lewis, 2022), while others argue that donor conditionality often reorients project goals away from local priorities and thus reduces relevance and sustainability (Mosse, 2021; Kabeer, 2022; Cooke & Kothari, 2020). These debates expose a weakness in current research: most studies discuss donor influence conceptually without empirically modelling when donor involvement improves performance and when it harms it. We agree that donor influence can have mixed consequences but note that empirical evidence remains scarce in rural African project environments where donor dependence is high and stakeholder power is uneven. Our study therefore fills this gap by explicitly modelling donor

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priorities as a moderating variable that can either amplify or weaken the effects of allocation practices on project performance.

Effects of Resource Utilization on Project Performance: Resource utilisation describes how effectively project teams transform inputs into outputs and outcomes and has been repeatedly linked to operational performance (Atkinson, 2021; Fisher, 2023). Research in humanitarian logistics and rural supply chains shows that poor utilisation leads to waste, delays, and reduced beneficiary impact even when planning and allocation are strong (Balcik & Beamon, 2022; Van Wassenhove, 2021; Kabeza et al., 2024). Studies in community-based health and infrastructure initiatives also highlight that utilisation effectiveness depends on monitoring systems and the capacity of project teams to adapt to unexpected constraints (Mukayiranga & Wabala, 2024; Musyoki et al., 2025; Niyonzima et al., 2023). We agree that utilisation remains central because resource scarcity makes efficiency a determinant of whether intended project benefits can be delivered at all. At the same time, disagreement exists on whether utilisation improvements are primarily under managerial control or are strongly shaped by structural constraints. Some authors argue that corruption, weak procurement systems, and donor reporting cycles significantly reduce the optimisation capacity of project teams (Flyvbjerg, 2020; Merrow, 2023), while others propose that adaptive capability and learning can offset many structural barriers (Eisenhardt & Martin, 2022; Teece, 2023). This divergence shows that utilisation cannot be fully understood without integrating both internal and external determinants, yet existing research rarely does so. Furthermore, empirical work remains dominated by corporate and humanitarian logistics rather than community-based rural projects, which limits generalisation. Our study addresses this gap by integrating utilisation within a broader optimisation framework moderated by institutional forces.

Government Policy as a Moderator of Resource Optimisation and Project Performance: Government policy has long been acknowledged as a determinant of project outcomes because it shapes procurement processes, accountability mechanisms, and coordination among actors (Donaldson, 2021; Hjelmbrække & Hauge, 2023; Madsen, 2022). Recent research in sub-Saharan Africa shows that effective policy frameworks reduce delays, improve compliance, and support transparency in project execution (Aradukunda & Sikubwabo, 2024; Mugenyi et al., 2022; Kamanzi & Uwamahoro, 2023). These results support our view that policy environments can either enable or constrain project teams and therefore shape how resource optimisation practices translate into outcomes.

However, disagreement remains on the magnitude of policy influence relative to project-level competence. Some researchers argue that competent project teams can mitigate weak policy environments (Kerzner, 2022), whereas others argue that policy weaknesses overwhelm internal competence (Flyvbjerg, 2020; Ndakala & Muchelule, 2023). The literature is incomplete because it does not empirically test these competing claims or model policy as a moderator in optimisation–performance relationships. This gap is especially relevant in rural development

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where project teams have limited bargaining power and depend on government support for operational legitimacy. Our study therefore offers novelty by modelling government policy as an interacting structural force rather than treating it as a background condition.

Donor Priorities as a Moderator of Resource Optimization and Project Performance: Donor influence is unavoidable in development projects, and contemporary research acknowledges that donor priorities shape project design, resource distribution, and reporting practices (Bebbington, 2022; Lewis, 2022; Musyoki et al., 2025). Some studies argue that donor involvement improves accountability and performance through stricter oversight and performance auditing (Aaltonen & Kujala, 2021; Mark, 2024), while others contend that donor-driven goals suppress local ownership and can reduce long-term impact (Mosse, 2021; Kabeer, 2022; Cooke & Kothari, 2020). We agree that donor influence produces both positive and negative effects, but the literature remains fragmented because it rarely explains when donor influence strengthens performance and when it undermines it.

Additionally, most existing research treats donor influence as a static environmental condition rather than a dynamic moderator explaining variation in optimisation effectiveness. This limits theoretical development and practical relevance, especially in rural projects where donor expectations may compete with community needs. Our study contributes by filling this gap and offering a nuanced explanation of how donor priorities interact with project practices to shape outcomes.

Research Gaps and Novelty

Across all themes, three major gaps persist in the literature. First, most empirical work focuses on corporate or urban development environments while rural community-based project environments remain understudied despite their unique constraints. Second, although optimization practices are well documented, researchers rarely model how external factors such as governments and donors alter their effectiveness. Third, existing theoretical explanations remain fragmented and fail to integrate contingency, stakeholder, and dynamic capability perspectives into a unified explanation of project performance.

Our study offers novelty by integrating three optimization practices into a single empirical model, by modelling government policy and donor priorities as moderators, and by situating the research in rural community-based projects where theoretical insights can contribute both to scholarship and to practice.

Conceptual framework

This study is anchored in a conceptual framework that demonstrates the causal relationship between resource optimization practices and project performance. The conceptual framework also acknowledges that the strength and direction of the relationship between resource optimization practices and project performance are shaped by the moderating variables related to the external environment and

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institutional context which are impact of government policy and flexibility in donor's priorities.

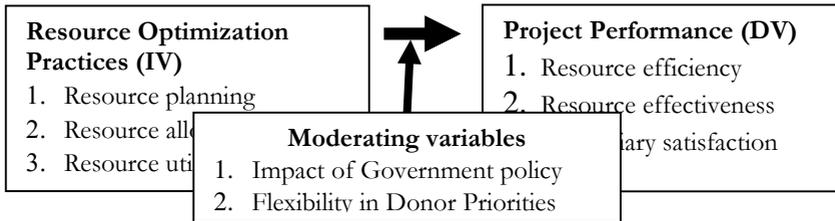


Figure 1 : Conceptual Framework

Source: Adapted and Modified from Kerzner (2022), Miller & Ross (2003), Morreale et al. (2004), Ika (2009), Cho et al (2001) & World bank (2021)

Methodology

This study adopted a systematic literature review (SLR) design in order to provide a transparent, replicable, and comprehensive synthesis of theoretical and empirical knowledge on the relationship between resource optimization practices and project performance. A systematic literature review is appropriate for this study because the existing body of research is fragmented, contains mixed findings, and lacks integrative theoretical explanation regarding how external institutional forces alter the effectiveness of resource optimization. By employing a systematic approach, we ensured that the synthesis is grounded in rigorous selection procedures and minimizes researcher bias while enabling identification of conceptual and methodological gaps relevant to development projects.

The review process followed the general principles recommended for systematic reviews in project management and development studies, including clearly defined search strategies, inclusion and exclusion criteria, and thematic synthesis (Kitchenham & Charters, 2007; Snyder, 2019). Literature was identified through structured searches in major academic databases including Scopus, Web of Science, ScienceDirect, SpringerLink, JSTOR, and Google Scholar. We used combinations of keywords such as resource optimization, resource planning, resource allocation, resource utilization, project performance, project success, donor priorities, aid conditionality, government policy, institutional context, contingency theory, and community-based development. Boolean operators were applied to ensure broad yet relevant retrieval of research outputs.

The inclusion criteria required that studies: (1) were peer-reviewed journal articles, books, or reputable institutional reports; (2) were published between 2015 and 2025 to ensure contemporary relevance; (3) explicitly investigated at least one dimension of resource optimization or project performance; and (4) provided theoretical or empirical insights into moderators or contextual determinants of project outcomes. Studies focusing solely on corporate project environments without relevance to development or community contexts were excluded in order

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to maintain conceptual alignment with the research purpose. In total, we reviewed and synthesized findings from more than eighty scholarly works obtained through this process.

Data extraction involved coding key information on research context, theoretical framing, methodological design, operationalization of variables, and reported relationships among constructs. We then conducted a thematic synthesis in which key patterns, convergent findings, divergent viewpoints, and research gaps were identified across studies. This process allowed us to build a cohesive narrative on how planning, allocation, and utilization influence project performance and how these effects are conditioned by government policy and donor priorities.

Given that the study is anchored in Contingency Theory, Stakeholder Theory, the Resource-Based View (RBV), and Dynamic Capability Theory, we used a theory-informed analytic procedure to integrate empirical results with theoretical expectations. Contingency Theory guided our understanding of how project effectiveness varies with environmental conditions; Stakeholder Theory highlighted the influence of actors with unequal power, especially donors and governments; RBV allowed us to interpret resource optimization as a source of operational capability; while Dynamic Capability Theory explained how adaptive capacity shapes performance when environments are unstable or externally constrained.

Finally, based on the synthesis, we developed a refined conceptual model that positions government policy and donor priorities as moderating mechanisms influencing how resource optimization practices translate into project performance. The model and accompanying theoretical arguments were evaluated against identified inconsistencies in the literature, thereby enhancing explanatory power and addressing identified research gaps.

By adopting a systematic, theory-driven review methodology, we provide a rigorous and intellectually coherent contribution that clarifies contradictions in existing research, highlights underexplored mechanisms, and offers a pathway for future empirical investigation in rural and community-based development project environments.

Results/findings

The synthesis of theoretical and empirical literature generated five major thematic findings concerning the relationship between resource optimization practices and project performance and the moderating influence of government policy and donor priorities. These findings also provide the empirical grounding needed for refining the conceptual framework. Across the literature, resource planning consistently emerges as a foundational determinant of project performance because it reduces uncertainty, coordinates stakeholder actions, and anticipates operational constraints. Studies conducted in development, nonprofit, and donor-supported project settings report that higher planning maturity is associated with improved timeliness, cost performance, and achievement of intended outcomes (Kerzner, 2022; Turner & Müller, 2023; Aradukunda & Sikubwabo, 2024; Jha &

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Iyer, 2021). These results align strongly with Contingency Theory, which predicts that projects perform best when internal practices fit environmental demands. However, disagreement remains as to whether planning remains effective in volatile or institutionally weak environments. Several scholars argue that when project teams face inconsistent policy enforcement, rigid donor compliance demands, or unpredictable operational constraints, formal planning delivers limited benefits (Flyvbjerg, 2020; Ndakala & Muchelule, 2023). As researchers, we agree that planning is indispensable, but we also recognize that its value cannot be fully understood without considering governance, stakeholder power, and institutional support. This reveals two notable gaps: the empirical underrepresentation of rural community-based projects and insufficient modelling of external moderators that shape planning effectiveness.

The literature shows broad consensus that resource allocation significantly influences project performance because it determines whether critical inputs are available at the right time and in appropriate quantities. Research in participatory and volunteer-dependent development projects demonstrates that transparent and timely allocation improves productivity, reduces conflict, and enhances beneficiary trust (Mark, 2024; Ntinyari & Nyang'au, 2024; Munyao & Atieno, 2023). These outcomes reinforce the Resource-Based View, which posits that effective deployment of scarce resources creates operational advantage. Nevertheless, disagreement emerges concerning donor involvement. Some scholars argue that donor oversight improves performance by strengthening accountability and reducing waste (Aaltonen & Kujala, 2021; Lewis, 2022), while others argue that donor conditionality compromises relevance and sustainability (Mosse, 2021; Kabeer, 2022; Cooke & Kothari, 2020). As researchers, we interpret this divergence as evidence that allocation effectiveness cannot be evaluated without understanding how power is exercised among actors, and under what conditions donor involvement becomes supportive or harmful. Empirical studies modelling donor influence as a moderator remain scarce, especially in rural African communities where donor dependence is high.

The literature consistently shows that resource utilization is a direct driver of project performance because it determines how efficiently inputs are converted into outputs and outcomes. Findings from humanitarian logistics, health supply chains, and rural infrastructure initiatives show that poor utilisation results in waste, delays, and reduced beneficiary impact even when planning and allocation are strong (Van Wassenhove, 2021; Balcik & Beamon, 2022; Mukayiranga & Wabala, 2024). Nevertheless, disagreement remains regarding the extent to which utilization can be improved through managerial actions alone. Some scholars argue structural constraints eliminate utilization gains (Flyvbjerg, 2020; Mellow, 2023), while others argue that adaptive project teams can develop dynamic capabilities to mitigate structural barriers (Eisenhardt & Martin, 2022; Teece, 2023). As researchers, we agree that utilization is central to performance in low-resource environments, yet existing research rarely models how donor

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requirements or government policy shape utilization outcomes, leaving a substantial gap.

Government policy is widely described as an environmental determinant shaping how effectively project teams deploy resources. Studies in public and development project management indicate that strong policy frameworks enhance coordination, reduce delays, and clarify roles (Hjelmbrekke & Hauge, 2023; Kamanzi & Uwamahoro, 2023). Conversely, weak or inconsistent policy environments create operational barriers that lessen the benefits of optimization practices. Despite this recognition, few studies empirically test policy as a moderating variable. As researchers, we argue that modelling government policy as a moderator addresses a central theoretical gap and is particularly relevant in rural development settings where project teams depend on local authorities for operational legitimacy.

The literature is especially nuanced on donor priorities. Some scholars report that donor monitoring improves compliance and performance (Aaltonen & Kujala, 2021; Mark, 2024), while others argue donor priorities distort project goals and undermine beneficiary ownership (Mosse, 2021; Kabeer, 2022). These contradictions reflect the influence of power and interest highlighted in Stakeholder Theory. However, literature rarely examines how donor priorities condition the effectiveness of optimization practices. As researchers, we agree that donor influence is neither wholly positive nor wholly negative; its effect depends on alignment with local needs and transparency. Understanding this conditionality is a central novelty of our review.

When synthesized, findings show that resource optimization practices consistently improve project performance, but their effectiveness is not uniform. Variation can be explained by environmental fit, stakeholder power relations, operational capability, and adaptive responses to change. Existing research seldom integrates these lenses, resulting in incomplete explanatory models. Three critical gaps emerge: underrepresentation of rural community-based project environments, limited modelling of institutional forces as moderators, and lack of integrated theoretical explanation.

Our results therefore justify modelling government policy and donor priorities as moderating forces that significantly shape how resource planning, allocation, and utilisation translate into project performance. This modelling offers theoretical contribution and practical relevance for policymakers, donors, and practitioners.

Discussions

The discussion integrates the insights generated through our review with established theoretical debates and positions our conceptual contribution within contemporary development and project management scholarship. Our synthesis reconfirms that resource optimization practices like planning, allocation, and utilization are critical determinants of project performance, yet their effectiveness is conditioned by institutional forces that are often under-theorized in the literature. This supports our central argument that optimization alone cannot

guarantee improved performance in contexts where governance structures, stakeholder dynamics, and donor agendas significantly shape project execution.

Our review shows that resource planning enhances project performance by reducing uncertainty, improving coordination, and enabling proactive identification of constraints (Kerzner, 2022; PMI, 2021). These findings align with contingency arguments that planning effectiveness increases when environmental uncertainty is manageable (Sabharwal et al., 2021). However, empirical disagreements remain regarding planning in unstable or low-capacity environments. While some scholars report persistent effectiveness even in high-uncertainty conditions (Zwikael & Smyrk, 2020), others observe that rigid donor compliance requirements and weak local capacity can neutralise planned benefits (Mugenyi et al., 2022). As researchers, we agree that planning remains valuable but only when implemented adaptively; the static view of planning cannot account for performance variability in rural development settings where conditions evolve rapidly (Teece, 2020). This interpretation points to the need for future research to distinguish between conventional and adaptive planning mechanisms.

Turning to resource allocation, our analysis indicates that strategic allocation improves transparency and outcome achievement, particularly in projects reliant on scarce local resources (Dvir et al., 2021; Andersen et al., 2022). However, the literature also emphasizes that donor conditionality can distort local priorities and thereby reduce effectiveness (Bebbington & Williams, 2021; Mosse, 2021). These findings strengthen our position that allocation cannot be understood purely as a technical optimization problem; rather, it is embedded within relational negotiations among stakeholders with unequal power (Freeman et al., 2023). This perspective justifies our incorporation of Stakeholder Theory and highlights the importance of alignment strategies in enabling effective allocation in donor-dependent community projects.

For resource utilization, evidence consistently demonstrates that efficient conversion of inputs into outputs improves operational performance (Fisher, 2021). Yet several authors argue that utilization gains are fragile when oversight systems are weak or governance is fragmented (Flyvbjerg & Gardner, 2020; Merrow, 2022). Dynamic capability scholars extend this argument by showing that utilization should be conceptualized as an adaptive capability—sensing, seizing, and reconfiguring resources in response to fluctuations (Eisenhardt & Martin, 2020; Teece, 2020). Our review agrees with this view, particularly because rural community-based projects confront structural uncertainty, making adaptive utilization more relevant than static efficiency measures.

The introduction of government policy and donor priorities as moderating variables constitutes the core theoretical contribution of this work. Although institutional forces are widely acknowledged in project performance research (Scott, 2021), empirical work rarely operationalizes them as moderators. Our review demonstrates that coherent policy frameworks create conditions under which optimization practices can translate into performance gains (Hjelmbrekke

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& Hauge, 2021). Conversely, weak or inconsistent policy environments can neutralize internal management efforts, a finding consistent with studies on public project failure (Flyvbjerg, 2020). This supports our proposition that policy shapes not only performance but also the mechanisms through which performance is achieved.

Donor priorities present another complex institutional force. While donor oversight can enhance accountability and discipline (Aaltonen & Kujala, 2021), it can also create misalignment with community goals and thereby undermine sustainability (Mosse, 2021; Kabeer, 2022). The dual nature of donor influence reinforces our choice to treat donor priorities as a moderator rather than a simple predictor. As researchers, we observe that donor influence is not inherently positive or negative; its effect depends on the degree of alignment with community needs and project goals.

By integrating contingency, stakeholder, RBV, and dynamic capability perspectives we address a recurrent theoretical fragmentation in project performance research. No single theory can fully explain performance dynamics in rural development environments where uncertainty, stakeholder multiplicity, and resource scarcity are simultaneous realities. Our multi-theoretical position therefore offers a more complete explanatory model and provides a foundation for future empirical testing.

Finally, our review reveals significant research gaps. Most empirical research is still dominated by corporate or urban development cases, leaving rural community-based project contexts understudied despite their reliance on optimisation under constraint. Moreover, moderation effects remain grossly under-examined despite strong theoretical justification. Addressing these gaps would support both theoretical development and practical improvement of community project outcomes.

In summary, performance in community-based projects cannot be improved through optimisation practices alone; it depends heavily on how those practices interface with governing institutions and stakeholder power structures. This insight offers practical implications for project managers, policymakers, and donor agencies seeking to enhance effectiveness and sustainability in community development initiatives.

Conclusion

This review has demonstrated that resource optimization practices like planning, allocation, and utilization are central to project performance, yet their benefits are not realized uniformly across development contexts. The variability observed in existing studies highlights that internal management practices cannot be disentangled from the institutional environments in which projects are implemented. Performance is therefore shaped not only by how resources are managed but also by the governance structures that regulate and influence project execution.

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Our synthesis shows that government policy and donor priorities play critical moderating roles in this relationship. Coherent and supportive policy frameworks can enhance the effectiveness of optimization efforts, while weak or inconsistent policies can neutralize their impact. Similarly, donor priorities can strengthen performance when aligned with community needs but can also create distortions when they impose goals that differ from local realities. Recognizing these forces as moderators advances theoretical understanding and offers a more nuanced explanation for discrepancies reported in the literature.

We conclude that improving project performance in community-based development initiatives requires a dual focus on effective resource management and enabling institutional conditions. The refined conceptual model presented in this review contributes to theory and offers practical guidance for policymakers, donors, and project practitioners. Future empirical research testing this model will further illuminate how development projects can achieve greater performance and sustainability in resource-constrained and governance-complex environments.

Recommendations and implications

The findings of this review have significant implications for theoretical advancement and future research. They demonstrate that resource optimization practices cannot fully explain project performance without considering the institutional conditions under which projects operate. Scholars should therefore extend existing models by incorporating moderating mechanisms such as government policy and donor priorities and employ analytical designs capable of testing these conditional effects. In particular, future empirical work should prioritize rural and community-based project settings where resource constraints and stakeholder dynamics present complex performance challenges.

For policymakers, the review highlights the central role of coherent and supportive policy frameworks in enabling project success. Clear implementation guidelines, strengthened accountability systems, and decentralized capacity-building initiatives can create operational environments in which project teams can effectively translate planning, allocation, and utilization efforts into measurable outcomes. When governments provide stability, coordination, and transparency, community-based projects are better positioned to achieve their intended social and economic impacts.

Donor agencies and project practitioners also have critical roles in improving project performance. Donors should adopt flexible, participatory, and context-sensitive funding and reporting approaches to reduce misalignment between donor objectives and community needs, thereby enhancing project relevance and sustainability. Project managers, on their part, should treat optimization as an adaptive process, continuously aligning resource planning, allocation, and utilization with evolving institutional and environmental conditions. When optimization practices, donor influence, and government policy are aligned, development initiatives can achieve higher performance and long-term effectiveness.

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