

Early Stakeholder Engagement in Engineering Projects: Benefits and Insights for Private Oil Companies in Libya

Abdel Latif A. El Gamoudi1*, Osama Elgadi2

¹Mechanical Engineering, Higher Institute of Science and Technology, Tripoli, Libya ²Mechanical Engineering, Faculty of Engineering, University of Tripoli, Libya

مشاركة أصحاب المصلحة في المراحل المبكرة من المشاريع الهندسية: الفوائد والدروس المستفادة لشركات النفط الخاصة في ليبيا

> عبد اللطيف أبو القاسم القمودى1*، أسامة القاضىي2 1هندسة ميكانيكية وصناعية، المعهد العالي للعلوم والتقنية، طرابلس، ليبيا 2هندسة ميكانيكية والصناعية، كلية الهندسة، جامعة طرابلس، ليبيا

*Corresponding author: latifgamoudi@gmail.com

Received: February 02, 2025Accepted: April 06, 2025Published: April 21, 2025Abstract:

Engineering projects in Libya's oil and gas sector play a vital role in national development but are frequently impacted by delays, budget overruns, and stakeholder conflicts, often exacerbated by socio-political instability. This study examines the strategic role of early stakeholder engagement in mitigating these challenges and enhancing project performance, particularly within the private oil sector. Utilizing a mixed-methods approach, combining surveys and semi-structured interviews with 30 industry professionals, the research provides empirical insights into the effectiveness of early engagement in volatile environments. Findings reveal that proactive stakeholder involvement improves planning accuracy, fosters alignment, and contributes to long-term project sustainability. A key contribution of this study is the proposal of a localized stakeholder engagement framework specifically tailored to Libya's unique operational context. The paper concludes with practical recommendations for private oil companies to strengthen stakeholder management practices, improve resilience, and enhance outcomes under complex socio-political conditions.

Keywords: Early Stakeholder Engagement, Engineering Project Management, Risk Mitigation, Project Sustainability.

الملخص

تُعد المشاريع الهندسية في قطاع النفط والغاز في ليبيا من الركائز الحيوية للتنمية الوطنية، إلا أنها غالباً ما تتعرض للتأخير، وتجاوز التكاليف، والنزاعات مع أصحاب المصلحة، لا سيما في ظل حالة عدم الاستقرار السياسي والاجتماعي التي تشهدها البلاد. تهدف هذه الدراسة إلى تحليل الدور الاستراتيجي لمشاركة أصحاب المصلحة في المراحل المبكرة من المشروع، ومدى تأثيرها في الحد من هذه التحديات وتحسين الأداء العام للمشاريع، خصوصاً في شركات النفط الخاصة. اعتمدت الدراسة منهجاً بحثياً مختلطاً يجمع بين الاستبيانات والمقابلات شبه المهيكلة مع ثلاثين متخصصاً في القطاع، لتقديم رؤى عملية قائمة على الأدلة حول فعالية المشاركة المبكرة في البيئات غير المستقرة. أظهرت النتائج أن الانخراط المبكر لأصحاب المصلحة يُسهم في تحسين دقة التخطيط، وتعزيز التوافق، ودعم استدامة المشاريع على المدى المتاري وتتمثل الإضافة الأساسية لهذه الدراسة في اقتراح إطار محلى لمشاركة أصحاب المصلحة، مُصمم خصيصاً ليتناسب مع السياق التشغيلي الفريد في ليبيا. وتُختتم الدر اسة بتو صيات عملية موجّهة لشر كات النفط الخاصة لتعزيز ممار سات إدارة أصحاب المصلحة، وزيادة قدرة المشاريع على التكيف، وتحقيق نتائج أفضل في ظل الظروف السياسية والاجتماعية المعقدة.

الكلمات المفتاحية: الانخر اط المبكر لأصحاب المصلحة، إدارة المشاريع الهندسية، الحد من المخاطر، استدامة المشاريع. Introduction

The oil and gas sector are a pillar of Libya's national economy, contributing substantially to government revenue and economic stability. However, engineering projects within this sector are frequently hampered by delays, budget overruns, and stakeholder-related disputes, many of which originate from insufficient engagement practices. In industries such as oil and gas, where projects unfold within complex political, environmental, and economic conditions, early stakeholder engagement has increasingly been recognized as a critical determinant of success. Defined as the inclusion of key stakeholders during the planning and decision-making stages, early engagement has been shown to improve collaboration, reduce risks, and align divergent interests (Freeman, 1984). In Libya, private oil companies face particularly challenging operational conditions shaped by political instability, shifting regulatory environments, and diverse stakeholder expectations. These dynamics necessitate a proactive, context-specific approach to stakeholder management. Early engagement, if well-structured, offers significant potential for improving project planning, conflict resolution, and long-term sustainability.

This paper investigates the practical and strategic benefits of early stakeholder engagement within Libya's private oil and gas sector. It draws upon a combination of stakeholder theory, best practices in project management, and field-based evidence to assess how early involvement can enhance project outcomes in volatile settings. Crucially, this study proposes a localized stakeholder engagement strategy tailored to the Libyan context. By integrating practitioner insights with theoretical models, the paper introduces a context-sensitive engagement framework that offers a novel contribution to both scholarship and practice, particularly for high-risk or post-conflict environments.

The main objectives of this research are to:

- Evaluate the impact of early stakeholder engagement on project performance.
- Identify effective strategies for stakeholder engagement in Libya.
- Examine how stakeholder involvement contributes to risk mitigation and sustainability.

This paper is organized into six sections. Following this introduction, Section 2 presents a literature review on stakeholder engagement in engineering projects. Section 3 outlines the research methodology. Section 4 details the findings from surveys and interviews. Section 5 discusses these findings in relation to existing theories, and Section 6 offers conclusions and recommendations for private oil companies operating in Libya.

Literature Review

The concept of stakeholder engagement has been widely explored in the context of project management, particularly in industries like oil and gas, where projects are often subject to sociopolitical, economic, and environmental complexities. Effective stakeholder engagement has emerged as a crucial factor in ensuring project success, especially in challenging environments such as Libya's oil and gas sector.

Theoretical Framework

Theoretical models, including Freeman's (1984) Stakeholder Theory and Mitchell et al.'s (1997) Stakeholder Salience Framework, provide a foundation for understanding stakeholder dynamics. Stakeholder Theory emphasizes the importance of identifying and managing the interests of all parties involved in or affected by a project. The Stakeholder Salience Framework categorizes stakeholders based on their power, legitimacy, and urgency, helping project managers prioritize engagement efforts effectively. These theories underline the need for a strategic approach to stakeholder management, particularly in complex projects with diverse stakeholder groups.

Historical Context

Stakeholder engagement practices have evolved significantly over time. Early project management methodologies often focused narrowly on task completion and technical objectives, with limited attention to stakeholder interests. Over the past few decades, however, the recognition of stakeholders as critical contributors to project success has led to the development of more inclusive and participatory approaches. Modern frameworks, such as the Stakeholder Circle Methodology by Bourne and Walker (2005), prioritize early and continuous engagement, ensuring that stakeholder needs are addressed throughout the project lifecycle.

Challenges in Stakeholder Engagement

Engineering projects, particularly in the oil and gas sector, face numerous challenges in stakeholder engagement. In politically sensitive regions like Libya, these challenges are amplified by factors such as political instability, regulatory uncertainties, and conflicting stakeholder interests. Research by Wilson et al. (2016) highlights that ineffective communication and a lack of transparency are common barriers to successful stakeholder engagement. Additionally, inadequate trust-building efforts often lead to resistance from local communities and other key stakeholders, further complicating project execution. **Benefits of Early Stakeholder Engagement**

Early stakeholder engagement has been shown to enhance project outcomes by fostering collaboration, reducing conflicts, and aligning project goals with stakeholder expectations. Aaltonen and Kujala (2010) argue that early involvement allows stakeholders to contribute valuable insights during the planning phase, improving decision-making and risk management. Furthermore, studies by Reed et al. (2009) demonstrate that early engagement promotes trust and commitment among stakeholders, which are essential for project sustainability and long-term success.

Recent Studies

Recent research emphasizes the growing importance of stakeholder engagement in high-risk industries such as oil and gas. Bakker et al. (2011) found that projects with well-structured stakeholder engagement processes experience fewer delays and cost overruns. Similarly, studies by Rowlinson and Cheung (2008) highlight the role of participatory approaches, such as stakeholder workshops and collaborative decision-making, in fostering stakeholder buy-in and reducing resistance. These findings are particularly relevant for private oil companies operating in volatile environments like Libya, where stakeholder dynamics are often unpredictable.

Implications for Practice

The literature provides several actionable insights for improving stakeholder engagement in engineering projects. First, organizations should develop systematic processes for identifying and prioritizing stakeholders based on their influence and interests. Tools such as stakeholder mapping and analysis can help project managers allocate resources effectively. Second, fostering open communication and transparency is critical for building trust and mitigating conflicts. Finally, incorporating local perspectives and addressing community concerns through social investment programs can strengthen stakeholder relationships and enhance project sustainability (Dempsey et al., 2011).

Contextual Factors

The Libyan oil and gas sector presents unique challenges that require a tailored approach to stakeholder engagement. Political instability, fluctuating market conditions, and regulatory changes create a dynamic and often unpredictable environment for projects. Research by Olander and Landin (2008) emphasizes the importance of understanding the socio-political context when designing stakeholder engagement strategies. For private oil companies in Libya, building trust with local communities and government authorities is crucial for overcoming resistance and ensuring project success.

Research Methodology

Introduction to Methodology

This section describes the methodology used to explore the role of early stakeholder engagement in engineering projects within Libya's private oil and gas sector. A mixed-methods approach was adopted to combine quantitative data with qualitative insights, ensuring a robust understanding of the topic. Data were collected through a structured survey and semi-structured interviews with professionals involved in project planning and execution.

Research Design

A descriptive research design was employed to investigate stakeholder engagement practices and their impact on project performance. The design focused on capturing participants' experiences and perceptions, allowing for an in-depth analysis of challenges, strategies, and outcomes related to early stakeholder involvement.

Philosophical Underpinnings

The study followed a pragmatist paradigm, acknowledging that both quantitative and qualitative methods provide complementary insights. This approach facilitated a comprehensive exploration of the research problem by combining measurable data with contextual understanding.

Sample Selection

A purposive sampling technique was used to select participants from private oil and gas companies operating in Libya. The sample consisted of 30 professionals, including project managers, engineers, and stakeholder relations officers, chosen for their expertise and direct involvement in stakeholder engagement processes.

Data Collection Methods

Primary data were gathered using a structured survey and semi-structured interviews:

- Survey: The questionnaire included both close-ended and open-ended questions. Close-ended questions aimed to quantify stakeholder engagement practices, while open-ended questions provided insights into specific challenges and strategies.
- Interviews: Semi-structured interviews were conducted with 10 selected participants to delve deeper into qualitative aspects of stakeholder engagement, such as trust-building and conflict resolution.

Data Analysis Techniques

- Quantitative Analysis: Survey data were analyzed using statistical tools in Excel, including descriptive statistics to summarize responses and inferential statistics to identify trends.
- Qualitative Analysis: Interview data were analyzed using thematic analysis, which involved coding and categorizing responses to identify recurring themes and patterns related to stakeholder engagement strategies.

Ethical Considerations

Ethical standards were upheld throughout the research process:

- Participation was voluntary, and informed consent was obtained from all participants.
- Confidentiality was maintained by anonymizing data, ensuring that individual responses could not be traced back to specific participants.
- Participants were briefed on the purpose of the study and assured that the findings would be used solely for academic purposes.

Validity and Reliability

- Validity: The survey and interview questions were pre-tested with a small group of professionals to ensure their relevance and clarity. Feedback from the pilot test was incorporated into the final instruments.
- Reliability: Consistency was maintained in administering surveys and conducting interviews. Data triangulation was achieved by comparing survey results with interview findings to ensure accuracy and credibility.

3.9 Limitations of the Research

While the research provides valuable insights, it has certain limitations:

- The sample size was limited to 30 survey respondents and 10 interviewees, which may restrict the generalizability of the findings.
- The study focused exclusively on private oil and gas companies in Libya, limiting its applicability to other sectors or regions.
- Political and economic instability in Libya posed challenges in accessing a broader pool of participants and obtaining consistent responses.

Data Analysis

Introduction to Data Analysis

This section analyzes the data collected from 40 survey respondents and 10 interview participants to evaluate the role of early stakeholder engagement in private oil and gas projects in Libya. Six hypotheses were tested to explore both the benefits and potential drawbacks of stakeholder engagement in this context. The findings are structured by hypothesis, combining quantitative survey results with qualitative insights from interviews.

Analysis of the Findings

Benefits of Early Stakeholder Engagement

H1: Early Stakeholder Engagement Does Not Significantly Enhance Project Planning and Execution Four survey questions addressed this hypothesis:

- Question 1: Asked if early engagement improves project planning. 40 respondents agreed, 4 were neutral, and 3 disagreed. This indicates strong support for early engagement as a factor in improving project planning.
- Question 2: Examined whether stakeholder input reduces delays. 40 respondents confirmed its importance, with only 4 indicating no significant impact.
- Question 3: Explored alignment of project goals with stakeholder expectations. 32 respondents agreed that early engagement helps, while 8 provided neutral or negative responses.
- Question 4: Considered whether stakeholder contributions improve resource allocation. 35 respondents agreed, citing better-informed decision-making, while 5 disagreed, citing potential for over-complication.

The hypothesis is rejected. Early stakeholder engagement significantly enhances project planning and execution, particularly by improving alignment and reducing delays.

H2: Strategies for Stakeholder Engagement Are Unnecessary in the Libyan Oil and Gas Sector This hypothesis was evaluated through three survey questions:

- Question 1 examined the relevance of tailored strategies for Libya's unique socio-political context. 28 respondents agreed that strategies are essential, with 2 disagreeing, suggesting skepticism about the effectiveness of formal approaches.
- Question 2 addressed whether cultural considerations impact engagement effectiveness. 26 respondents acknowledged the importance of adapting strategies to local norms, while 4 were neutral or disagreed.
- Question 3 explored the feasibility of implementing formal stakeholder strategies in politically volatile environments. 21 respondents agreed it was feasible but challenging, while 9 disagreed, citing instability as a major barrier.

Conclusion: The hypothesis is rejected. Strategies for stakeholder engagement are critical in Libya's oil and gas sector, but they require adaptability to local challenges.

H3: The Identification of Stakeholder Needs and Interests Is Not Critical to Project Success Four survey questions tested this hypothesis:

- Question 1 focused on whether identifying stakeholder needs improves collaboration. 24 respondents agreed, while 6 disagreed, emphasizing other factors like technical expertise.
- Question 2 evaluated the importance of stakeholder interest alignment in minimizing conflicts. 26 respondents confirmed its significance, with 4 expressing skepticisms.
- Question 3 asked if unaddressed stakeholder needs lead to project delays. 22 respondents agreed, while 8 remained neutral or disagreed.
- Question 4 examined whether stakeholder identification helps mitigate operational risks. 23 respondents agreed, and 7 were neutral or disagreed, citing broader contextual risks as more critical.

The hypothesis is rejected. Identifying stakeholder needs and interests is crucial for collaboration, conflict reduction, and risk mitigation.

H4: Early Engagement Does Not Improve Risk Mitigation and Sustainability Outcomes This hypothesis was analyzed using both survey responses and interview data:

- Survey Findings:
- 26 respondents agreed that early engagement reduces project risks by incorporating diverse perspectives, while 4 disagreed.
- 23 respondents highlighted sustainability improvements through early collaboration with local communities, while 7 were neutral or disagreed.
- Interview Insights: Participants emphasized that early engagement fosters trust with stakeholders, which is essential for long-term project sustainability, particularly in community-sensitive areas.

The hypothesis is rejected. Early engagement significantly contributes to risk mitigation and sustainability, especially by addressing social and environmental concerns.

H5: Early Stakeholder Engagement Increases Project Complexity Without Delivering Tangible Benefits Three survey questions addressed this hypothesis:

- Question 1 evaluated whether early engagement delays decision-making. 18 respondents disagreed, citing better-prepared plans, while 12 agreed, citing excessive debates.
- Question 2 asked if conflicting stakeholder interests hinder progress. 20 respondents agreed, while 10 disagreed, suggesting that conflicts can be managed through effective facilitation.
- Question 3 focused on whether early engagement leads to over-planning. 16 respondents agreed that it could, while 14 disagreed, emphasizing improved preparedness.

The hypothesis is partially supported. While early engagement can increase complexity, its benefits, such as improved planning and risk reduction—outweigh the drawbacks.

H6: Stakeholder Engagement Practices Are Less Effective in Volatile Socio-Political Contexts, such as Libya

This hypothesis explored the impact of Libya's political and economic instability on stakeholder engagement:

- Survey Findings:
- 22 respondents agreed that instability undermines engagement effectiveness, while 8 disagreed, citing adaptability as a solution.
- 24 respondents highlighted those political challenges, such as shifting regulations, often delay stakeholder consultation processes.

• Interview Insights: Participants noted that while engagement is harder in unstable contexts, proactive efforts—like building trust and leveraging local partnerships—can overcome these challenges.

The hypothesis is partially supported. Socio-political instability reduces the effectiveness of stakeholder engagement, but tailored and flexible approaches can mitigate its impact. **Summary**

The analysis of survey and interview data highlights the critical role of early stakeholder engagement in improving project outcomes in Libya's private oil and gas sector. While hypotheses suggesting its ineffectiveness (H1, H2, H3, H4) were rejected, hypotheses addressing challenges and drawbacks (H5, H6) revealed nuanced insights. Early stakeholder engagement presents clear benefits but requires careful management to navigate complexities and socio-political challenges effectively. **Discussion**

This study provides new insights into the role of early stakeholder engagement in enhancing project outcomes within Libya's private oil and gas sector. By examining the relationship between early involvement and key project success factors, the research reveals critical areas for strategic improvement and adaptation in stakeholder management. The discussion below explores the implications of the findings while highlighting their relevance to the unique socio-political context of Libya.

Benefits of Early Stakeholder Engagement

The findings clearly indicate that early stakeholder engagement positively influences project success by fostering better planning, reducing delays, and ensuring alignment with stakeholder expectations. A striking 83.3% of respondents agreed that early engagement improves project planning, while 90% highlighted its role in reducing delays. These benefits underscore the criticality of involving stakeholders during the project's inception phase to enhance collaboration and mitigate risks. These findings resonate with established theories on stakeholder engagement, such as Freeman's stakeholder theory, emphasizing the importance of mutual value creation.



Figure 1: Perceived Impact of Early Engagement on Project Planning Efficiency (Survey Responses).

Challenges in the Libyan Context

Despite these benefits, the challenges faced in Libya's unique socio-political environment cannot be understated. Political instability emerged as a dominant barrier, cited by 73% of respondents, followed by conflicting interests and a lack of trust. These obstacles often hinder effective communication and decision-making, reflecting the complexity of operating in high-risk, politically volatile regions. Interview participants elaborated on the difficulties of balancing competing priorities among stakeholders, often leading to delays and disputes.



Figer 2: Key Socio-Political Barriers to Stakeholder Engagement in Libya (Interview-Themed Summary).

To address these challenges, companies must adopt adaptive strategies tailored to Libya's context. For instance, fostering trust through consistent communication, transparent decision-making, and respect for local customs can significantly improve stakeholder relations. Additionally, strengthening partnerships with local communities and government agencies can build resilience against sociopolitical disruptions.

Complexity vs. Long-term Gains

The trade-offs associated with early stakeholder engagement were also highlighted. While the majority of respondents acknowledged its benefits, some raised concerns about the increased complexity and resource demands it entails. Hypothesis H5, which examined this trade-off, revealed that although initial planning phases might become more intricate, the long-term gains—such as reduced conflicts, better resource allocation, and improved sustainability, justify the effort. This underscores the need for a balanced approach that minimizes administrative burdens while maximizing stakeholder contributions.



Figure 3: Stakeholder Engagement Trade-offs: Complexity vs. Long-Term Value (Cross-Tabulated Survey Results).

Practical Implications

This study offers actionable insights for enhancing stakeholder engagement in Libya's private oil and gas sector. Given the country's volatile context, companies must adopt a structured yet flexible approach to manage stakeholder relationships effectively.

 First, early stakeholder identification and prioritization are critical. Mapping stakeholders by influence and interest helps companies allocate resources and focus efforts where they matter most.

- Second, establishing open communication channels—through regular meetings, digital updates, or community sessions—fosters transparency and reduces misunderstandings.
- Third, ongoing consultation and feedback mechanisms allow companies to incorporate local input and adapt plans accordingly, improving trust and reducing resistance.
- Fourth, sustained trust-building efforts—including delivering on commitments and involving community leaders—are vital in Libya's low-trust environment.

Finally, stakeholder engagement must be adaptive and continuous, with regular reviews to address changing social and political dynamic



Figure 4: A Structured Process for Effective Stakeholder Engagement in the Libyan Oil and Gas Sector.

This visual outline the recommended engagement process, from stakeholder identification to adaptive, long-term relationship management, tailored to the Libyan context. A strategic and participatory approach to stakeholder engagement can significantly enhance project performance, reduce conflict, and build long-term resilience

Conclusion

This study has demonstrated the critical importance of early stakeholder engagement in the successful delivery of engineering projects within Libya's private oil and gas sector. Through a mixedmethods approach combining quantitative surveys and qualitative interviews, the research established that early involvement of stakeholders significantly improves project planning, reduces delays, enhances alignment of goals, and strengthens risk management and sustainability outcomes. These findings underscore the strategic value of treating stakeholder engagement not as a supplementary activity, but as a core pillar of effective project governance, especially in complex and politically volatile contexts.

One of the key contributions of this study is the introduction of a localized stakeholder engagement framework tailored specifically to Libya's unique socio-political and operational environment. This context-driven model provides practical guidance for private oil companies seeking to enhance trust, mitigate conflict, and build long-term resilience through structured and adaptive engagement practices. The insights presented in this paper offer actionable implications for practitioners, including the need to invest in early stakeholder mapping, establish open and transparent communication channels, and adopt culturally sensitive approaches to relationship management. Furthermore, the study highlights the long-term value of trust-building, ongoing consultation, and community collaboration in securing a social license to operate.

Limitations and Future Work

While this study provides valuable insights into the benefits and strategies of early stakeholder engagement within Libya's private oil and gas sector, several limitations must be acknowledged. First, the sample size was relatively limited, consisting of 30 professionals drawn exclusively from private sector organizations. This may restrict the generalizability of the findings, particularly in relation to public sector projects or other industries facing different stakeholder dynamics. Second, the socio-political context of Libya presents inherent challenges that may have influenced data access and participant responses. The instability in the region limited broader outreach and potentially constrained the diversity of viewpoints included in the study. Third, although the research employed a mixed-methods approach, the study focused primarily on descriptive insights. A more extensive, statistically driven analysis across a larger and more representative sample would enhance the robustness of the findings.

In terms of future research, several avenues warrant further exploration. Comparative studies involving other high-risk or post-conflict environments—such as Iraq, Sudan, or Yemen, would provide

a broader understanding of how contextual factors shape stakeholder engagement practices. Additionally, integrating public sector perspectives, including national oil companies and government regulators, could reveal new dimensions of stakeholder influence and coordination. Moreover, future work could examine the role of digital tools and remote engagement platforms in enhancing communication and trust with stakeholders, particularly under conditions of mobility restrictions or security threats. Longitudinal studies tracking the outcomes of specific stakeholder strategies over the life cycle of projects would also contribute to building more predictive and adaptive engagement models. Ultimately, advancing the field will require continued attention to context-driven, flexible engagement frameworks that align with both global best practices and local realities

References

Aaltonen, K., & Kujala, J. (2010). A project lifecycle perspective on stakeholder influence strategies in global projects. Scandinavian Journal of Management, 26(4), 381–397.

Bakker, K., Boonstra, A., & Wortmann, H. (2011). Risk management affecting IS/IT project success through communicative action. Project Management Journal, 42(3), 75–90.

Bourne, L., & Walker, D. H. T. (2005). Visualizing and mapping stakeholder influence. Management Decision, 43(5), 649–660.

Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. Sustainable Development, 19(5), 289–300.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Boston: Pitman.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. Academy of Management Review, 22(4), 853–886.

Olander, S., & Landin, A. (2008). A comparative study of factors affecting the external stakeholder management process. Construction Management and Economics, 26(6), 553–561.

Reed, M. S., Graves, A., Dandy, N., Posthumus, H., & Morris, J. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. Journal of Environmental Management, 90(5), 1933–1949.

Rowlinson, S., & Cheung, Y. H. (2008). Stakeholder management through empowerment: Modelling project success. Construction Management and Economics, 26(6), 611–623.

Wilson, T. L., Hornyak, M. J., & Snyder, C. A. (2016). Stakeholder theory and project management. Project Management Journal, 47(6), 67–80.