



Promoting Sustainable Construction Practices in Developing Countries: Comparative Insights and Future Directions

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Introduction

Sustainable construction practices contribute significantly to the advancement trajectory in developing and developed nations. Emphasising environmental conservation, efficient resource utilisation, and the facilitation of healthier, more productive living and working environments, sustainable construction practices are fundamental to achieving a more prosperous and ecologically balanced future. However, the effective transition to and adoption of these practices in developing nations raises significant challenges. 'Which way forward to addressing these issues as discussed in the last issue including the editorial (Windapo and Umeokafor 2023). These challenges, explored in depth in the diverse research articles featured in this issue, illuminate the ongoing difficulties developing nations face in embracing sustainable construction practices, along with potential solutions and future directions for research. They contribute to answering the question in the last issue, 'Which way forward?' (Ibid).

This twelfth issue of the Journal of Construction Business and Management offers a thought-provoking and insightful collection of five seminal research articles by 11 authors from Nigeria, South Africa, Uganda, the United Kingdom and the United States of America. The key themes of the articles include promoting awareness of Autoclaved Aerated Concrete Blocks (AACB) for construction, enhancing government construction project success through effective leadership styles, fostering the adoption of Building Information Modelling (BIM) in Quantity Surveying, examining the link between Quantity Surveyors' conflict-handling styles and personality traits, and tracking technological and organisational change in the UK construction sector. As discussed below, each theme contributes to a nuanced and comprehensive understanding of the urgent need for, obstacles to, and promising strategies for sustainable construction in developing countries.

Discussion of the papers

The articles in this issue present incisive, empirically ground analyses of critical issues regarding sustainable construction in developing countries. They reveal the complexities of shifting towards more sustainable practices and the potential solutions to such challenges. Oladiran and Simeon (2023) detail the lack of awareness of AACB in Nigeria in contrast to South Africa, a discrepancy that undermines the successful implementation of this sustainable construction material in the former. Besides proposing

strategies such as continuous development training and research, the authors underscore the need for future investigations examining the underlying reasons for the varying levels of AACB awareness among construction professionals in different countries. Accordingly, the authors recommend improving professionals' awareness level of AACB through workshops and seminars and adopting environmentally sustainable materials. They also noted the need to improve the supply chain challenges toward attracting clients, consultants and contractors. Admitted that these are required, how do we get the stakeholders, including the government, involved? Governmental interest in such issues in developing countries, including Nigeria, has always been low. Perhaps future research can focus on alternative salient strategies that defy such challenges and are independent of the government.

Despite the criticisms of the government, they are the main client of the construction industry globally. Hence, the commissioner or client of most projects in the industry. However, many of these projects are unsuccessful, and the leadership style has been argued to be one of the leading causes. Consequently, using Uganda as a case study, Ssenyange and Kudakwashe (2023) examine the role of leadership styles in completing government construction projects, contributing valuable insights. They found that leadership style contributes to the success or failure of government projects. They found that leadership style contributes to the success or failure of government projects. Their findings, emphasising the importance of effective communication and stakeholder participation, suggest promising avenues for project managers' targeted training and development, thereby enhancing project outcomes and contributing to infrastructural advancement. Some recommendations include the onus on the project manager to drive adequate dissemination of information to stakeholders and the project leader to ensure stakeholder participation at the early stages of the projects (especially the design stage), decision-making on the project site and defining the project duration. Although not without limitations, implementing digital technologies is one of the ways of addressing communication and operation issues. However, the adoption of digital technologies in the construction industry is still low, especially in developing countries.

The third paper, Ogunseiju, Odeyinka, and Yusuf (2023), expands the discourse on adopting digital technologies in the construction industry in developing countries by investigating the limited use of BIM in Nigerian QS firms. They highlight the importance of adaptive technologies in streamlining construction processes and promoting more sustainable practices. Here, the lack of BIM adoption shows missed opportunities for efficiency enhancements. Therefore, increased promotion of BIM adoption among QS firms constitutes a fundamental step towards rectifying this lacuna.

One of the significant barriers to collaborative working is conflict. It is described as a norm by construction industry experts, according to Aderibigbe et al. (2023). It has devastating effects on productivity, cost, performance, and client satisfaction (Arcadis, 2021)—human behaviours, including interpersonal relations, are determinants of conflict. The fourth paper, Verwey, Cumberlege, and Crafford (2023), delves into the interconnections between quantity surveyors' conflict-handling styles and personality traits, suggesting the importance of personal factors in achieving successful project outcomes. Future research should expand this line of inquiry to include a broader range of construction professionals and contexts.

Lastly, Lowe's (2023) examination of technology and organisational change in the UK construction sector offers a unique perspective on the evolving dynamics of construction practices and their implications for sustainability. Aimed at identifying the extent of the spread of technical and organisational change in the UK construction sector from 1997 to 2020, the author concludes that the materials sector has seen little improvement in terms of switching materials and limited increases in mechanisation. However, they found no evidence of the use of off-site prefabrication. There is a growth in subcontracting as contractors seek to transfer or reduce risks. These insights can inform strategic adjustments and policy decisions in developing countries seeking to advance their construction sectors.

Conclusion

This issue highlights interconnected challenges and potential solutions for promoting sustainable construction practices in developing nations. They range from raising awareness of sustainable construction materials and fostering the adoption of innovative technologies to optimising leadership

styles and understanding personal factors impacting project outcomes. The depth and breadth of topics covered in this issue attest to the complexity of the task. However, they indicate a path forward marked by continued research, targeted interventions and policy formulation, and a collaborative effort among various stakeholders. We hope this collection of articles will stimulate further research and dialogue to accelerate the sustainability transition in the construction sectors of developing nations.

We extend our profound thanks to the authors for their valuable contributions and to the reviewers for their role in ensuring the quality and relevance of the research presented. We also appreciate the continued support of the Journal's Editorial Board and our panel of reviewers. We welcome feedback and suggestions from readers on how we may further enhance the quality and impact of the journal.

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