

## EDITORIAL

### **Resilient African Cities:** *Infrastructure, Climate Innovation and Inclusive Development*

Welcome to the Twenty-first Volume, 1<sup>st</sup> Issue of the Africa Habitat Review–Journal of the Faculty of Built Environment and Design. This issue presents critically analysed papers on matters relating to sustainable materials, urban resilience, construction management, social justice, heritage preservation, innovative business strategy, and spatial planning across Africa. Collectively, the contributions foreground context-sensitive research and practice, offering grounded insights into the evolving relationships between people, policy, infrastructure, and the built environment on the continent.

*Service Life of Floor Finishes in Nairobi's Public Buildings: Lessons for Sustainable Materials* presents a timely reflection on the importance of durability and long-term performance in sustainable construction. The paper draws attention to how premature replacement of floor finishes, often driven by shifting aesthetic preferences rather than structural failure, contributes to unnecessary waste, increased maintenance costs, and weakened resource efficiency. This editorial recognizes the study's significance in advancing evidence-based material selection and localized maintenance planning, while reinforcing the need to integrate service life prediction into design practice in Kenya's public building sector.

*Reframing Sustainability in East African Cities: Community Perspectives in the Built Environment* offers a compelling challenge to conventional, technocratic interpretations of sustainability by centring lived experience, local agency, and participatory urban practice. Through a Southern urbanism lens, the paper demonstrates how communities in Nairobi, Kampala, and Dar es Salaam are actively reshaping sustainability as an inclusive and adaptive process grounded in place-specific realities. This editorial highlights the study's contribution to debates on spatial justice, informality, and resilient urban futures, while affirming the value of community knowledge in redefining sustainable urban transformation in East Africa.

*Construction Delays in Rwanda's Local Government Projects: A Statistical Framework for Management* makes an important empirical contribution to the understanding of infrastructure delivery challenges within Rwanda's development agenda. By demonstrating the dominant influence of financial factors on project delays, the paper offers a robust statistical basis for targeted reforms in planning, payment systems, and technical capacity enhancement. This editorial underscores the relevance of the proposed Rwanda Construction Delay Management Framework as a practical and policy-oriented tool capable of improving efficiency, accountability, and project implementation outcomes in local government construction.

*The Geometry of Building Justice: Exploring Dignity Through the Buxton Point Affordable Housing Project, Kenya* advances a critical conversation on the relationship between housing, justice, and human dignity in rapidly urbanizing contexts. The paper shows that while technical compliance is necessary, it is not sufficient to guarantee inclusive and dignified living environments. This editorial acknowledges the study's strength in revealing how participation, transparency, and representation are central to just housing delivery, and it affirms the paper's call for rights-based and democratically grounded frameworks within Kenya's Affordable Housing Programme.

*Two-Phase Stabilization of Black Cotton Soil in Kenya Using Sodium Chloride and Cement* addresses one of the most persistent engineering challenges affecting infrastructure development in expansive soil regions. By proposing a staged stabilization method that improves strength and reduces shrinkage while remaining environmentally compliant, the paper provides a practical and sustainable solution for problematic soils in Kenya. This editorial recognizes the study's contribution

to geotechnical innovation, cost-effective construction practice, and environmentally responsible infrastructure delivery in regions where soil instability continues to constrain development.

*Community Engagement in Open-Air Museums for Documenting Vernacular Architecture: A Comparative Case Study of Bokrijk and Makumbusho* provides a thoughtful exploration of how community participation can strengthen heritage preservation and architectural learning. By comparing the research-driven model of Bokrijk with the grassroots co-creation approach of Makumbusho, the paper reveals the diverse ways in which vernacular knowledge can be documented, transmitted, and sustained. This editorial highlights the manuscript's importance in bridging cultural heritage and design education, while underscoring the role of open-air museums as living spaces for contextual, sustainable, and climate-responsive architectural pedagogy.

*Experimental Investigation of Interaction Effects of Integral Waterproofing Admixtures and Naphthalene-Based Superplasticizers on Fresh and Hardened Concrete* contributes valuable technical insight into the optimization of concrete performance in construction practice. The paper carefully demonstrates that while superplasticizers can enhance workability and strength at moderate levels, excessive dosages compromise mechanical performance. This editorial draws attention to the study's practical significance for engineers and material specialists, particularly in liquid-retaining structures, and emphasizes its broader contribution to quality control, durability, and evidence-based admixture proportioning in concrete technology.

*Integrating African Design Technologies into Business Strategy: A Mixed-Methods Study on Innovation and Sustainability* positions African cultural knowledge, motifs, materials, and narratives as strategic resources within contemporary business and innovation ecosystems. The paper persuasively demonstrates that indigenous design principles can enhance firm performance, deepen consumer engagement, and support sustainable development through culturally rooted practices and local resource use. This editorial recognizes the study's originality in reframing African design not merely as heritage, but as a dynamic and competitive business asset with growing relevance for entrepreneurship, sustainability, and global market positioning.

*Assessment of Planned Urbanization and Rural Settlement Policy Implementation in Post-Genocide Rwanda (2018–2024)* presents a critical review of Rwanda's efforts to manage urbanization and rural settlement through structured policy and institutional reform. The paper provides valuable evidence of progress while also acknowledging the contested dimensions of implementation and governance that accompany such ambitious national strategies. This editorial highlights the study's importance in contributing to debates on state-led planning, development effectiveness, and post-conflict transformation, while offering useful reflections on what has worked, what remains challenged, and what can inform future policy directions.

*The Role of Car-Free Zones as Public Open Spaces in Enhancing Place Identity in Kigali City* offers an insightful examination of how pedestrianized public spaces foster urban meaning, memory, and social attachment. By connecting physical elements, user perceptions, and experiential values, the paper demonstrates that car-free zones are not simply traffic interventions, but important sites of place-making and identity formation. This editorial acknowledges the study's relevance to contemporary urban design and public space discourse in Africa, particularly as cities increasingly seek inclusive, healthy, and people-centred environments that support recreation, environmental quality, and social belonging. Taken together, the papers in this issue demonstrate the richness and urgency of built environment scholarship in Africa today. They reveal a shared commitment to advancing sustainability, justice, innovation, and resilience through research that is both analytically rigorous and deeply grounded in context. This volume therefore not only contributes to academic discourse, but also offers meaningful direction for practitioners, policymakers, and communities engaged in shaping more equitable and sustainable human settlements across the continent.

*The article on Adoption of Green Roofs for Climate Change Adaptation in Nairobi CBD* examines the growing environmental challenges affecting Nairobi's Central Business District, particularly the Urban Heat Island

effect and flash flooding. The study explores the adoption of green roofs as a sustainable climate adaptation strategy using a mixed-methods approach involving architects, developers, and regulators. Findings indicate that although stakeholders recognize the environmental and aesthetic benefits of green roofs, actual implementation remains low due to limited technical knowledge, lack of practical exposure, and high installation costs. The article further identifies inadequate institutional support and absence of clear policy guidelines as major barriers to adoption. Respondents strongly support government incentives and regulatory frameworks to encourage uptake. The study makes an important contribution to urban sustainability discussions by emphasizing the need for stronger policy intervention, technical training, and financial support to mainstream green roofs as an effective environmental management strategy in Nairobi CBD.

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