A Scoping Review of Sustainable Housing Practices: Environmental, Economic, and Social Benefits

Boitumelo Raesetsa Mogashoa[1*], Morena William Nkomo[1]
[1] Department of Construction Management and Quantity Surveying
University of Johannesburg, Johannesburg, South Africa
brmogashoa@gmail.com, mnkomo@uj.ac.za
Gift Laolang[2]
[2]School of Built Environment and Development Studies, University of Kwa-Zulu Natal (UKZN), Howard College Campus, Durban, South Africa
gift.laolang@gmail.com

Abstract

Rapid urbanisation, environmental degradation, and socio-economic inequality have intensified the global demand for sustainable housing infrastructure, with these challenges being particularly pronounced in developing economies such as South Africa. These challenges are closely linked to the United Nations' Sustainable Development Goals (SDGs), especially SDG 11, which focuses on creating cities and communities that are inclusive, safe, and resilient. In response, this study employed the PRISMA framework to guide a systematic scoping review of sustainable housing practices across both developed and developing contexts, with a particular emphasis on their environmental, economic, and social impacts. The review revealed that environmental benefits include the use of sustainable materials, energy-efficient design strategies, efficient waste management systems, and adherence to green building certification frameworks. Economically, key benefits include reduction in utility bills, life cycle cost reduction, increased property value, investment attraction, initial costs, improved health and productivity, access to incentives and subsidies, market awareness and job creation. From a social perspective, sustainable housing practices contribute to housing affordability, social equity and inclusion, education and training, enhanced quality of life, economic and social stability, and improved health and well-being. Despite notable improvements, the analysis identifies key gaps that require additional examination. Greater emphasis is needed on informal settlements and low-income housing contexts, with a focus on developing affordable, locally appropriate, and community-led solutions to improve the inclusivity, effectiveness, and scalability of sustainable housing initiatives. The findings emphasise the importance of continuous innovation, research, and collaboration in sustainable housing practices.

Keywords

Sustainable Practices, Housing, Environmental, Socio-economic, Scoping Review, Developing Economies

1. Introduction

The construction industry plays a pivotal role in economic development by facilitating the transfer of technology, expanding market opportunities, enhancing clients' quality of life, and generating employment, particularly for low-skilled workers (Windapo & Cattel,2023). To ensure continued progress, stakeholders are encouraged to adopt innovative construction methods, systems, and strategies that enhance productivity and efficiency (Fei et al., 2021). Beyond its direct contributions, construction also stimulates job creation, which drives investment and promotes growth in other sectors through the multiplier effect (Olarewaju & Shaker, 2020).

Housing availability serves as a key indicator of a society's capacity to meet its population's basic needs (Rolfe et al., 2020) and plays a critical role in long-term human and economic advancement. However, the global housing shortage persists as a major unresolved challenge (Potts, 2020). Sustainable housing development is essential for addressing environmental challenges and fostering resilient, inclusive communities. Despite its significance, the adoption of sustainable practices in housing remains hindered by numerous barriers. This study seeks to systematically

analyse existing scholarly literature to evaluate the impact of sustainable construction on housing development in South Africa.

In developing nations, specifically in the context of South Africa, the lack of adequate housing is among the nation's most urgent socioeconomic concerns (Marutlulle, 2021). While government policies emphasise inclusive human settlement development, their implementation has faced numerous obstacles (Ratshitanga, 2017). Additionally, addressing the housing backlog remains a critical priority, requiring solutions that are both cost-effective and efficient (Gunter & Manuel, 2019). Globally, sustainable construction contributes to achieving multiple Sustainable Development Goals (SDGs), including goals related to health, clean water, affordable energy, sustainable cities, and climate action (Ogunmakinde et al., 2022). However, developing countries face barriers such as socio-economic constraints and limited technical capacity (Serpell et al., 2013). In some regions, economic growth is prioritized over sustainability, leading to missed opportunities (Banihashemi et al., 2017), while others like the UAE are advancing through innovative technologies (Ibrahim, 2020). Countries such as South Africa and Malaysia continue to encounter systemic obstacles to sustainable housing (Marsh et al., 2021; Syed Jamaludin, 2018)), despite efforts to address the needs of low- and middle-income groups (Moghayedi et al., 2021).

Beyond environmental benefits, green buildings offer social advantages such as improved air quality and enhanced well-being, supporting the broader goals of social sustainability and community development (Alaie et al., 2022; Simpeh & Smallwood, 2018; Dergunova & Erofeev, 2021; Shams & Rahman, 2017). The construction industry plays a vital role in driving economic growth by creating employment and stimulating other sectors such as raw material extraction, manufacturing, and services like design and project management (Rolfe et al., 2020; Pheng & Hou, 2019). This interconnectedness presents a valuable opportunity to promote sustainable development, especially through the integration of sustainability into construction project management, which enables a balance between financial, social, and environmental priorities (Armenia, 2019). Implementing Sustainable Construction Project Management (SCPM) in public infrastructure can reduce carbon emissions and deliver long-term benefits (Mashwama et al., 2022). Sustainable housing plays a central role by providing affordable, reliable, and well-connected living environments (Mukhtar et al., 2016a). The rise of green buildings, which use technologies such as water recycling and energy-efficient systems, demonstrates how sustainable construction can reduce resource use, improve environmental quality, and enhance construction standards (Zhao et al., 2023).

This study seeks to explore and synthesise existing literature to identify, categorise, and critically examine the environmental, economic, and social benefits of sustainable housing practices in developing countries. Through a scoping review approach, the research aims to map the existing body of scholarly work, highlight prevailing themes, uncover research gaps, and propose directions for future inquiry. The study objective is to provide a comprehensive understanding of sustainable housing practices across both developed and developing contexts, offering a holistic view of how these practices contribute to sustainable development. By addressing these objectives, the review aims to inform policy, guide academic research, and support practical implementation in the built environment.

2. Research Method

This study adopts a scoping review methodology to systematically explore the depth of existing literature on sustainable housing practices. Scoping reviews are particularly suited for emerging or interdisciplinary fields, where the objective is to map key concepts, identify knowledge gaps, and provide an overview of existing evidence rather than assess the quality of individual studies (Cooper et al., 2019). This methodological approach enables a comprehensive understanding of how sustainable housing is conceptualised and implemented across diverse contexts, supporting evidence-based decision-making in housing policy and practice. This literature review adopted a 3-stage process of (1) Search Strategy, (2) Inclusion and Exclusion Criteria, (3) Data Extraction and Identification and (4) Data Reporting.

Search Strategy: A systematic search strategy was adopted to identify relevant literature on sustainable housing practices across various global and developing contexts. The search was designed to capture a broad range of peer-reviewed and grey literature sources that discuss sustainability in housing from environmental, social, economic, and policy perspectives. Major academic databases Scopus, Web of Science, and Google Scholar were used as primary sources. The search query employed the Boolean AND operator to systematically combine all key concepts, ensuring that each retrieved record contained every element of the research question (Badami et al., 2023). Search terms were combined using Boolean operators and included keywords related to sustainable, housing, practices, environmental, economic, and Social. The search query employed the Boolean (AND) operator to combine all key concepts, thereby ensuring that each retrieved record contained every element of the research question, as demonstrated by (Chigbu et al.,2023). This enhances the specificity and focus of the search results, thereby reducing irrelevant articles and

improving the efficiency of the screening process (Laolang et al., 2024). This targeted approach enhances the review's ability to systematically capture relevant literature while upholding methodological rigour and ensuring alignment with the core research objective.

Inclusion and Exclusion Criteria: To ensure relevance and methodological consistency, a clear set of inclusion and exclusion criteria was applied during the study selection process. Inclusion and exclusion criteria are essential for conducting high-quality systematic reviews (Khan et al., 2022). Moreover, Pérez et al. (2020) emphasise that applying well-defined inclusion criteria ensures the relevance of selected studies, minimises bias, and establishes a transparent and structured framework for the review process. For this study, the following inclusion criteria were established:

- Studies focusing on Sustainable Housing Practices: Environmental, Economic, and Social Benefits
- Publications made between 2020 and 2024
- Published documents that are written in English
- Peer-reviewed journals and review articles

The exclusion criteria:

- Studies not focusing on Sustainable Housing Practices: Environmental, Economic, and Social Benefits
- Publications before 2015 and 2019
- Not written in English
- Not a peer-reviewed journal and review articles

Data Extraction: A systematic and transparent data extraction process was implemented to ensure the consistent retrieval of relevant information from all included studies. A predefined data extraction template was designed in alignment with the review objectives and research questions, enabling structured comparison and synthesis of findings across diverse sources. All extracted data were recorded using Excel and independently verified to minimise bias and ensure accuracy. Accurate data extraction is vital to avoid errors that can lead to false conclusions and biased results (Duan et al., 2024). The data extraction form was designed to capture essential information from each study, including author(s), year of publication, study objectives, research methodology, key findings, and implications related to sustainable housing practices, specifically across environmental, economic, and social dimensions. The extracted data were systematically analysed to identify recurring themes, emerging trends, and gaps in the literature concerning the current state of sustainable housing. These findings were then organised and synthesised to present a comprehensive overview of the topic, supporting a deeper understanding of the factors influencing sustainable housing implementation in diverse contexts.

Data Reporting: This study adheres to the PRISMA guidelines, ensuring a transparent and replicable process throughout the review. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) is a set of guidelines designed to improve the transparency and completeness of reporting in systematic reviews and meta-analyses (Athikarisamy & Patole, 2021). By providing a comprehensive checklist and tailored extensions for various review types, PRISMA supports authors in clearly reporting methods and findings, while enabling reviewers and readers to assess the rigour and reliability of the evidence presented by (Randles & Paul, 2023). The findings were organised and presented in alignment with the objective of the scoping review. By adhering to the PRISMA guidelines, the review ensured transparency, methodological rigour, and consistency in reporting, thereby enhancing the credibility, reliability, and practical value of the results.

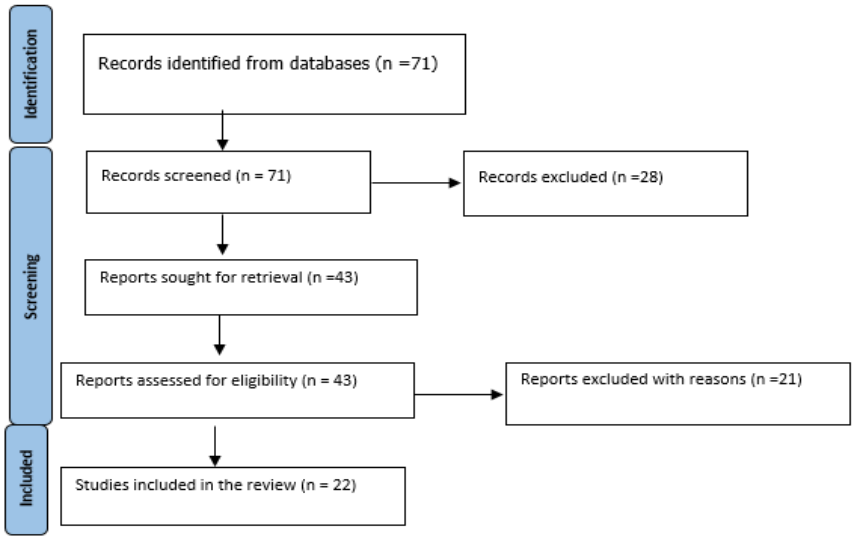

Fig. 1. PRISMA Model.

3. Literature Findings

3.1. Sustainable Housing Practices: Environmental Benefits

Use of Sustainable Materials, Energy Efficiency and Efficient Waste Management Systems: Sustainable housing practices provide significant environmental benefits by reducing energy consumption, conserving water, protecting ecosystems, and promoting long-term ecological balance (Moghayedi et al., 2023). Additional sustainable housing incorporates resource-efficient materials such as recycled, locally sourced, or low-impact materials, which minimise environmental degradation and promote a circular economy in construction (Jakhar & Jain, 2024). One of the most significant environmental benefits of sustainable housing is the reduction of energy consumption. This is achieved through the integration of energy-efficient design principles, including passive solar heating, thermal insulation, and the utilisation of renewable energy systems such as solar panels, which collectively contribute to lowering greenhouse gas emissions (Heidari et al., 2024). Furthermore, practices such as rainwater harvesting, greywater recycling, and efficient waste management systems also play a crucial role in conserving water resources and reducing pollution (De et al., 2023).

Green Building Certification Systems: Green building certification systems (e.g., LEED, EDGE, Green Star) provide frameworks that guide environmentally responsible design, construction, and maintenance (Tumbaga et al., 2022). These systems collectively promote ecosystem preservation, climate change mitigation, and long-term environmental resilience in both urban and rural housing developments. For instance, LEED-certified buildings have been shown to achieve significant energy and water savings, which contribute to lower operational costs and reduced environmental impacts (Dahak et al., 2024). These systems aim to reduce the environmental impact of buildings throughout their lifecycle, from sitting and design to construction, operation, maintenance, and demolition (Kudinova, & Shushunova, 2023; Attaianese & Coppola, 2018). Collectively, these practices promote ecosystem preservation, climate change mitigation, and long-term environmental resilience in urban and rural housing developments and contribute to the realisation of Sustainable Development Goals (SDGs), particularly SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action).

3.2 Sustainable Housing Practices: Economic Benefits

Sustainable housing practices offer a range of economic benefits that positively impact homeowners, developers, and the broader community. These benefits include significant cost savings through reduced utility and maintenance expenses, increased property values, and enhanced occupant health and productivity, which lead to improved economic performance. Although the initial investment in sustainable housing technologies and materials may be higher, the long-term financial returns often outweigh the upfront costs. These advantages make sustainable housing

a viable and attractive option not only for homeowners but also for developers and investors seeking resilient, future-oriented assets, as shown below (Table 1).

Table 1. Sustainable Housing Practices: Economic Benefits

Benefits	Description	Source
Reduction in Utility Bills	Lower electricity and water bills due to energy-efficient designs	(Lee, 2022)
Life Cycle Cost Reduction	Long-term savings from reduced maintenance and operational costs	(Wong et al., 2024)
Increased Property Value	Higher market value for homes with green certifications	(Wang et al., 2025; Priess et al., 2017)
Investment Attraction	Sustainable projects attract more investment due to long-term benefits	(Oyetunji, 2022)
Initial Costs	Higher initial construction costs, offset by long-term savings	(Hajare & Elwakil, 2020)
Improved Health and Productivity	Better living conditions enhance health and productivity, reducing healthcare costs	(Lee, 2022)
Access to Incentives and Subsidies	Incentives reduce initial costs and promote sustainable practices	(Wong et al., 2024)
Market Awareness	Need for increased awareness about economic benefits among stakeholders	(Kucharska-Stasiak & Olbińska, 2018)
Job Creation	Demand for skilled labour in energy systems, eco-design, and sustainable material production	(Klaric et al., 2019)

3.3. Sustainable Housing Practices: Social Benefits

Sustainable housing practices extend beyond environmental and economic gains, offering substantial social benefits that enhance the quality of life and promote inclusive development. Table 2 below summarises the social benefits of sustainable housing practices as identified in the literature review.

Table 2. Sustainable Housing Practices: Social Benefits

Benefits	Description	Source
Housing Affordability	Long-term cost savings on utilities and maintenance make sustainable housing more accessible to low- and middle-income groups	(Ezennia & Hoskara, 2021)
Social Equity and Inclusion	Access to adequate housing and reducing disparities in living conditions	(Olanrewaju et al., 2018), (Adewale et al., 2024)
Education and Training	Equips individuals with sustainability knowledge and skills	(Jiménez-Expósito et al., 2022; Troje, 2023)
Enhanced Quality of Life	Safer, healthier, and more comfortable living environments lead to better life satisfaction and stability.	(Shama & Motlak, 2018; Prochorskaite et al., 2016)
Economic and Social Stability	Reduced utility costs, affordable rent, and employment opportunities.	(Troje, 2023)
Improved Health and Well-being	Enhanced indoor air quality, natural ventilation, thermal comfort, and non-toxic materials reduce illnesses and support mental well-being.	(Moore et al., 2016; Romero et al., 2023; Lee 2020)

4. Discussion

The findings of this review highlight that sustainable housing practices deliver multidimensional benefits that are crucial for addressing current global challenges in urban development, environmental sustainability, and social equity, especially in the context of developing countries. The findings of this scoping review provide a comprehensive

understanding of sustainable housing practices, highlighting their environmental, economic, and social benefits as identified across the literature. The results indicate that environmental benefits are achieved through sustainable materials, energy-efficient design strategies, efficient waste management systems, and adherence to green building certification frameworks, all of which collectively contribute to the advancement of sustainable housing practices.

Moreover, sustainable housing practices yield substantial economic benefits, which strengthen the financial viability of housing developments for homeowners, developers, investors, and governments. The review identifies key economic dimensions that highlight the long-term value of sustainable housing, particularly in the context of resource-constrained and rapidly urbanising environments. Key economic benefits include reduction in utility bills, life cycle cost reduction, increased property value, investment attraction, initial costs, improved health and productivity, access to incentives and subsidies, market awareness and job creation. The economic benefits of sustainable housing are multifaceted and extend well beyond short-term savings. They contribute to financial resilience, inclusive growth, and long-term sustainability in housing markets.

The findings of the review indicate that sustainable housing practices generate a diverse array of social benefits that enhance long-term affordability, increase investment value, and support broader socio-economic development. These benefits include improved housing affordability, social equity and inclusion, education and training, enhanced quality of life, economic and social stability, and improved health and well-being. Collectively, these outcomes highlight the role of sustainable housing in promoting inclusive, resilient, and thriving communities.

Overall, the study shows that sustainable housing practices offer a comprehensive and coordinated response to the many challenges faced by the built environment. These practices are essential not only for achieving Sustainable Development Goal 11 (Sustainable Cities and Communities) but also for making substantial contributions to Goals 9 (Industry, Innovation, and Infrastructure) and 13 (Climate Action). Sustainable housing practices integrate environmental, economic resilience, and social equity factors to create valuable opportunities for fostering inclusive, low-carbon, and future-ready urban growth, particularly in rapidly expanding and resource-constrained countries.

5. Future Studies

Future studies should prioritise context-specific, empirical research in developing countries to address the existing knowledge gap and assess the long-term impacts of sustainable housing on affordability, health, and resilience. Special attention should be given to informal and low-income housing contexts, exploring affordable and community-driven solutions. Further research is needed on integrating digital technologies, such as BIM and smart systems, into sustainable housing delivery. Additionally, studies should investigate effective policy frameworks, financing models, and sustainability metrics to support adoption. A multifaceted approach will be essential to develop holistic, inclusive, and scalable sustainable housing strategies aligned with global development goals.

6. Conclusion and Recommendations

This review highlights that sustainable housing practices offer a multidimensional solution to the intersecting challenges of urbanisation, environmental degradation, and social inequality, particularly in developing countries. The scoping review provides a comprehensive understanding of sustainable housing practices through environmental, economic, and social benefits as reflected across the literature. Environmentally, the use of sustainable materials, energy-efficient design strategies, waste management systems, and green building certification frameworks collectively promotes ecological balance and reduce carbon emissions. Economically, sustainable housing enhances long-term financial viability by reducing utility costs, increasing property value, attracting investment, and generating green jobs. Socially, it contributes to improved affordability, equity, education, health, and overall quality of life, thus supporting the development of inclusive and resilient communities. For developing countries, specifically South Africa, informal settlements and infrastructure backlogs remain prevalent, and sustainable housing is a practical and necessary pathway toward inclusive, resilient, and future-proof urban development.

Therefore, the study recommends that coordination efforts are required from both developed and developing economies by the national and local governments, policymakers, construction professionals, and housing stakeholders. Cross-sector collaboration, innovation, and inclusive participation will be critical to scaling sustainable housing solutions that address environmental, economic, and social challenges in line with national priorities and global development goals. The government and policymakers should integrate sustainability into national housing policies, provide financial incentives, and build local government capacity to enforce green standards.

7. References

1. Adewale, A., Idemudia, C., Okwandu, A. C., & Iwuanyanwu, O. (2024). Sustainable development in affordable housing: Policy innovations and challenges. Magna Scientia Advanced Research and Reviews, 11(2), 090-104. https://doi.org/10.30574/msarr.2024.11.2.0112
2. Alaie, A., Yazdanfar, S.A., Norouzian-Maleki, S. and Hosseini, S.B., 2022. Evaluation of studies in the field of social sustainability in housing: a systematic review. Journal of Housing and the Built Environment, 37(4), pp.2179-2214.
3. Armenia, S., Dangelico, R.M., Nonino, F. and Pompei, A. (2019). Sustainable Project Management: A Conceptualization-Oriented Review and a Framework Proposal for Future Studies. Sustainability, 11(9), p.2664.
4. Athikarisamy, S. E., & Patole, S. (2021). Reporting of Meta-Analysis (PRISMA). Springer EBooks, 111–123. https://doi.org/10.1007/978-3-030-71921-0_11Attaianese, E., & Coppola, N. (2018). HFE in Green Buildings: Protocols and Applications. Advances in Intelligent Systems and Computing, 913–922. https://doi.org/10.1007/978-3-319-96068-5_99
5. Attaianese, E., & Coppola, N. (2018). HFE in Green Buildings: Protocols and Applications. Advances in Intelligent Systems and Computing, 913–922. https://doi.org/10.1007/978-3-319-96068-5_99
6. Badami, M., Benatallah, B., & Baez, M. (2023). Adaptive search query generation and refinement in systematic literature review. Information Systems, 117, 102231–102231. https://doi.org/10.1016/j.is.2023.102231
7. Banihashemi, S., Hosseini, M.R., Golizadeh, H. and Sankaran, S. (2017). Critical success factors (CSFs) for integration of sustainability into construction project management practices in developing countries. International Journal of Project Management, 35(6), pp.1103–1119.
8. Chigbu, U.E., Atiku, S.O. and Du Plessis, C.C. (2023). The Science of Literature Reviews: Searching, Identifying, Selecting, and Synthesising. *Publications*, [online] 11(1), p.2. doi:https://doi.org/10.3390/publications11010002.
9. Cooper, S., Cant, R., Kelly, M., Levett-Jones, T., McKenna, L., Seaton, P., & Bogossian, F. (2019). An Evidence-Based Checklist for Improving Scoping Review Quality. Clinical Nursing Research, 30(3), 105477381984602. https://doi.org/10.1177/1054773819846024
10. Dahak, A. E., Mastouri, H., Radoine, H., El-Asli, A., & Samir, T. Y. (2024). Building Sustainability: Achieving LEED Certification for a Hotel in Rabat, Morocco. Smart Innovation, Systems and Technologies, 307–318. https://doi.org/10.1007/978-981-99-8501-2_28
11. De, A., Martins, T., & Milograna, J. (2023). Integrated systems for rainwater harvesting and greywater reuse: a systematic review of urban water management strategies. Water Science & Technology: Water Supply. https://doi.org/10.2166/ws.2023.240
12. Dergunova, A.V. and Erofeev, V.T. (2021). Economic, environmental, and social benefits of green building. AlfaBuild. doi:https://doi.org/10.57728/ALF.20.5.
13. Duan, Y., Zhao, P., Deng, Y., Luo, W., Chen, Z., Liu, S., Zhou, J., Xu, Z., Tang, B., & Yu, L. (2024). Validity of data extraction in acupuncture meta-analysis: a reproducibility study protocol. BMJ Open, 14(11), e088736–e088736. https://doi.org/10.1136/bmjopen-2024-088736
14. Ezennia, I. S., & Hoskara, S. O. (2021). Assessing the subjective perception of urban households on the criteria representing sustainable housing affordability. Scientific African, 13, e00847. https://doi.org/10.1016/j.sciaf.2021.e00847
15. Fei, W., Opoku, A., Agyekum, K., Oppon, J.A., Ahmed, V., Chen, C. and Lok, K.L. (2021). The Critical Role of the Construction Industry in Achieving the Sustainable Development Goals (SDGs): Delivering Projects for the Common Good. Sustainability, [online] 13(16), p.9112. Available at: https://www.mdpi.com/2071-1050/13/16/9112
16. Gunter, A. and Manuel, K. (2019). Urban Housing in South Africa: The Role of Housing in Development and Transformation. Urban Geography in South Africa, pp.209–223. doi:https://doi.org/10.1007/978-3-030-25369-1_13.
17. Hajare, A., & Elwakil, E. (2020). Integration of life cycle cost analysis and energy simulation for building energy-efficient strategies assessment. Sustainable Cities and Society, 61, 102293. https://doi.org/10.1016/j.scs.2020.102293
18. Heidari, M., Thangavel, S., Al-Naamani, E., & Khashehchi, M. (2024). Emerging trends in smart green building technologies. CRC Press EBooks, 313–336. https://doi.org/10.1201/9781003496656-15

19. Ibrahim, I.A. (2020). Sustainable housing development: role and significance of satisfaction aspect. City, Territory and Architecture, 7(1). doi:https://doi.org/10.1186/s40410-020-00130-x.
20. Jakhar, R., & Jain, S. (2024). Exploring Green Materials for Building a Sustainable Future. Eco-Materials and Green Energy for a Sustainable Future, 3–21. https://doi.org/10.1201/9781003473749-2
21. Jiménez-Expósito, R. A., Serrano-Jiménez, A., Fernández-Ans, P., Stasi, G., Díaz-López, C., & Barrios-Padura, Á. (2022). Promoting Sustainable and Resilient Constructive Patterns in Vulnerable Communities: Habitat for Humanity's Sustainable Housing Prototypes in El Salvador. Sustainability, 15(1), 352. https://doi.org/10.3390/su15010352
22. Khan, K. S., Bueno-Cavanillas, A., & Zamora, J. (2022). Revisiones sistemáticas en cinco pasos: II. Cómo identificar los estudios relevantes. Medicina de Familia. SEMERGEN, 48(6), 431–436. https://doi.org/10.1016/j.semerg.2021.12.006
23. Klaric, S., Korjenic, A., Hollands, J., & Subasic, L. (2019). Advantages of an Interdisciplinary Approach to the Sustainable Development of Two Scenarios in Bosnia and Herzegovina. Buildings, 9(6), 143. https://doi.org/10.3390/buildings9060143
24. Kucharska-Stasiak, E., & Olbińska, K. (2018). Reflecting Sustainability in Property Valuation - Defining the Problem. Real Estate Management and Valuation, 26(2), 60–70. https://doi.org/10.2478/remav-2018-0016
25. Kudinova, Y., & Shushunova, N. (2023). Modern certification systems for green construction. AIP Conference Proceedings, 2791, 050034–050034. https://doi.org/10.1063/5.0156477
26. Laolang, G., Musonda, I., & Onososen, A. (2024). Water Infrastructure Asset Management (WIAM) and Application Using Digital Twin: Systematic Review. International Conference on Construction in the 21st Century.
27. Lee, S. (2020). The Impacts of Sustainable Practices on Affordable Housing Developments: Residents' Perspectives. Advances in Science, Technology & Innovation/Advances in Science, Technology & Innovation, 63–68. https://doi.org/10.1007/978-3-030-17308-1_6
28. Marsh, R.J., Brent, A.C. and De Kock, I.H. (2021). Understanding the barriers and drivers of sustainable construction adoption and implementation in South Africa: A quantitative study using the Theoretical Domains Framework and CQM-B model. Journal of the South African Institution of Civil Engineering, 63(4), pp.11–23. doi:https://doi.org/10.17159/2309-8775/2021/v63n4a2.
29. Marutlulle, N.K. (2021). A critical analysis of housing inadequacy in South Africa and its ramifications. Africa's Public Service Delivery and Performance Review, 9(1). doi:https://doi.org/10.4102/apsdpr.v9i1.372.
30. Mashwama, N., Thwala, D. and Aigbavboa, C. (2020). Obstacles of Sustainable Construction Project Management in South Africa Construction Industry. Sustainable Ecological Engineering Design, pp.305–314. doi:https://doi.org/10.1007/978-3-030-44381-8_23.
31. Moghayedi, A., Awuzie, B., Omotayo, T., Le Jeune, K., Massyn, M., Ekpo, C.O., Braune, M. and Byron, P., 2021. A critical success factor framework for implementing sustainable innovative and affordable housing: a systematic review and bibliometric analysis. Buildings, 11(8), p.317.
32. Moghayedi, A., Phiri, C., & Ellmann, A.-M. (2023). Improving sustainability of affordable housing using innovative technologies: Case study of SIAH-Livable. Scientific African, 21(e01819), e01819. https://doi.org/10.1016/j.sciaf.2023.e01819
33. Moore, T., Strengers, Y., & Maller, C. (2016). Utilising Mixed Methods Research to Inform Low-carbon Social Housing Performance Policy. Urban Policy and Research, 34(3), 240–255. https://doi.org/10.1080/08111146.2015.1077805
34. Mukhtar, M.M., Amirudin, R.B., Sofield, T. and Mohamad, I.B. (2016a). Critical success factors for public housing projects in developing countries: a case study of Nigeria. Environment, Development and Sustainability, [online] 19(5), pp.2039–2067. doi:https://doi.org/10.1007/s10668-016-9843-2.
35. Ogunmakinde, O.E., Egbelakin, T. and Sher, W. (2022). Contributions of the circular economy to the UN sustainable development goals through sustainable construction. Resources, Conservation and Recycling, 178, p.106023. doi:https://doi.org/10.1016/j.resconrec.2021.106023.
36. Olanrewaju, A., Tan, S. Y., & Abdul-Aziz, A.-R. (2018). Housing providers' insights on the benefits of sustainable affordable housing. Sustainable Development, 26(6), 847–858. https://doi.org/10.1002/sd.1854
37. Olarewaju, O. and Shaker, S. (2020). Construction Industry Performance and the Growth of South African Economy: Any Causal Relationship? Test Engineering and Management, 83, pp.22508–22521.
38. Oyetunji, A. K., Oluleye, B. I., Olukolajo, M. A., & Chan, D. W. M. (2022). Is green good: Unveiling the latent benefits of sustainable housing delivery. Cities, 129, 103809. https://doi.org/10.1016/j.cities.2022.103809

39. Pérez, J., Díaz, J., Garcia-Martin, J., & Tabuenca, B. (2020). Systematic literature reviews in software engineering—enhancement of the study selection process using Cohen's Kappa statistic. Journal of Systems and Software, 168, 110657. https://doi.org/10.1016/j.jss.2020.110657
40. Pheng, L.S. and Hou, L.S. (2019). The Economy and the Construction Industry. Construction Quality and the Economy, [online] pp.21–54. doi:https://doi.org/10.1007/978-981-13-5847-0_2.
41. Potts, D. (2020). Broken Cities. Zed Books Ltd.
42. Priess, P., Rajnoha, R., Losert, S., Vogel, S., & Teufel, H. (2017). SUSTAINABLE REAL ESTATE DEVELOPMENT AND ITS IMPLICATIONS ON INVESTMENT: STATISTICAL RELATIONS ON THE CASE FROM AUSTRIA. Journal of Security and Sustainability Issues, 6(3). https://doi.org/10.9770/jssi.2017.6.3(8)
43. Prochorskaite, A., Couch, C., Malys, N., & Maliene, V. (2016). Housing Stakeholder Preferences for the "Soft" Features of Sustainable and Healthy Housing Design in the UK. International Journal of Environmental Research and Public Health, 13(1), 111. https://doi.org/10.3390/ijerph13010111
44. Randles, R., & Paul, A. (2023). Guidelines for Writing a Systematic Review. Nurse Education Today, 125(125), 105803–105803. https://doi.org/10.1016/j.nedt.2023.105803
45. Ratshitanga, T. (2017). South Africa's Public Housing Challenges. Journal of Public Administration, 52(1), pp.64–73.
46. Rolfe, S., Garnham, L., Godwin, J., Anderson, I., Seaman, P. and Donaldson, C. (2020). Housing as a social determinant of health and wellbeing: developing an empirically-informed realist theoretical framework. BMC Public Health, [online] 20(1), pp.1–19. doi:https://doi.org/10.1186/s12889-020-09224-0.
47. Romero, L. O., Vergara, A. V., Valdebenito, R., O'Ryan, A. C., Baeza, F., & Rasse, A. (2023). "My life will be much better than before": a qualitative study on the relationship between renewal of public housing, quality of life, and health. Cadernos de Saude Publica, 39(5), e00149822. https://doi.org/10.1590/0102-311XES149822
48. Serpell, A., Kort, J. and Vera, S. (2013). AWARENESS, ACTIONS, DRIVERS AND BARRIERS OF SUSTAINABLE CONSTRUCTION IN CHILE. Technological and Economic Development of Economy, 19(2), pp.272–288. doi:https://doi.org/10.3846/20294913.2013.798597.
49. Shama, Z. S., & Motlak, J. B. (2019). Indicators for Sustainable housing. IOP Conference Series: Materials Science and Engineering, 518, 022009. https://doi.org/10.1088/1757-899x/518/2/022009
50. Shams, S. and Rahman, M. (2017). Green Building. Chapter 19 in Sustainable Utilization of Natural Resources. 1st ed. Florida: CRC Press.
51. Simpeh, E.K. and Smallwood, J. (2018). ANALYSIS OF THE BENEFITS OF GREEN BUILDING IN SOUTH AFRICA. Journal of Construction Project Management and Innovation, [online] 8(2), pp.1829–1851. doi:https://doi.org/10.36615/jcpmi.v8i2.161.
52. Syed Jamaludin, S.Z.H., Mahayuddin, S.A. and Hamid, S.H.A. (2018). Challenges of Integrating Affordable and Sustainable Housing in Malaysia. IOP Conference Series: Earth and Environmental Science, 140, p.012001. doi:https://doi.org/10.1088/1755-1315/140/1/012001.
53. Troje, D. (2023). Improving social value through facilities management: Swedish housing companies. Buildings & Cities, 4(1), 749–766. https://doi.org/10.5334/bc.327
54. Tumbaga, J., Vimonsatit, S., & Lopez, J. R. (2022). TRENDS IN SUSTAINABLE PRACTICES IN THE CONSTRUCTION INDUSTRY USING GREEN STAR CERTIFIED BUILDINGS DATA. Proceedings of International Structural Engineering and Construction, 9(1). https://doi.org/10.14455/isec.2022.9(1).sus-05
55. Wang, J., Lee, C. L., & Han, H. (2025). Green building certification and drivers of green premiums: a meta-regression analysis on global housing market. Smart and Sustainable Built Environment. https://doi.org/10.1108/sasbe-11-2024-0472
56. Windapo, A.O. and Cattel, K. (2023). The South African Construction Industry: Perceptions of Key Challenges Facing Its Performance, Development and Growth. Journal of Construction in Developing Countries, 18(2), pp.65–79.
57. Wong, S. Y., Ling, P.-S., Tseng, M.-L., Ting, K. S., Low, W. W., & Wong, K. S. (2024). Assessing sustainable housing in rural areas of Malaysia: effects on economic benefits and social implications. Smart and Sustainable Built Environment. https://doi.org/10.1108/sasbe-06-2024-0207
58. Zhao, W., Peng, P., Guo, B., Deng, X. and Wu, W. (2023). Comprehensive Social Cultural and Economic Benefits of Green Buildings Based on Improved AHP–FCE Method. Buildings, 13(2), p.311. doi:https://doi.org/10.3390/buildings13020311.