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Sustainable and Affordable Housing

Deepshikha Sarkar^{1*}, Manjari Kapoor²

^{1,2}GD Goenka University, Gurugram, Haryana, India

*Corresponding author

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Abstract

The study aims to identify the best practices, challenges and opportunities for integrating sustainability and affordability in housing developments. The study uses the PRISMA Model to draw inferences from 32 literature reviews. The study findings revealed that the integration of sustainability and affordability within housing consist of dealing with barriers pertaining to financing, policy and construction. Moreover, financial, technological, and policy shortages are obstacles, yet creative strategies like multi-sectoral alliances and passive design promote affordable housing. Clarity, bipartisan support, and targeted subsidies that prioritize resilience to climate change and long-term affordability are necessary for efficient policies.

Keywords: Sustainable, affordable housing, paradigm, practices, concepts, challenges, opportunities, policies, innovation opportunities

1. Introduction

1.1 Background for Review

In every country around the globe, providing suitable housing for those with low incomes is a difficult task. Urbanization, population increase, and poor preparation and execution are the primary causes of the expanding housing crisis in the majority of emerging nations. Lack of adequate housing is becoming exponentially more prevalent in emerging nations due to swift urbanisation and rising populations (Abubakar, 2021). One of the most important ways to reduce urban income disparity and its wide-ranging effects is through social housing initiatives. These programs aim to end the vicious circle of deprivation and promote a more inclusive, egalitarian, and sustainable urban neighbourhood by giving those who require access to excellent, reasonably priced housing. In addition to providing an anchor for individuals and households experiencing homelessness, social housing also enhances societies' general well-being (Makalima, 2024).

As suggested by (Ichendu & Budnukaeku 2021), Low-cost housing requires effective budgeting as well as the utilisation of less costly building materials and techniques. It is anticipated that improved expenses, material, plant, and labour administration, as well as the effective utilisation of regional resources, talents, and cutting-edge technology, will lead to the development of affordable homes (Perera, 2019). In order for housing

construction to be environmentally conscious, the ecological framework must be capable of supporting the environmental consequences of the financial, cultural, and social operations related to housing, and the living circumstances must be secure and supportive of the residents' physical well-being (Ichendu & Budnukaeku, 2021). The socioeconomic prerequisites for both the demand and supply of ecologically sound housing as well as appropriate housing quality make up the shared core, even though every one of the financial, social, and cultural parameters has particular issues to promote the long-term viability and sustainability of housing development (Ichendu & Budnukaeku, 2021; Abureesh, 2023).

Contemporary nations' financial and social environments have been drastically altered by urbanisation, with major ramifications for the availability and calibre of housing (Bhanye et al., 2024). A basic human necessity, housing continues to be extremely difficult, especially for households with limited resources. According to the UN, everyone has an intrinsic and unalienable entitlement to affordable housing. The massive urbanisation that is taking place throughout the globe makes the shortage of housing worse (Bhanye et al., 2024).

1.2 Review Aim and Objectives of the Study

The study therefore aims to identify the best practices, challenges and opportunities for integrating sustainability and affordability in housing developments.

The research will address the following research objectives

- To determine the paradigm, practices and concepts to define the role of sustainability and affordability in housing developments.
- To examine the challenges and opportunities for integrating sustainability and affordability in housing developments.
- To assess the policies and innovation opportunities for advancing sustainable and affordable housing solutions.

1.2.1 Research Questions

- What are the paradigms, practices and concepts to define the role of sustainability and affordability in housing developments?
- What are the challenges and opportunities for integrating sustainability and affordability in housing developments?
- What are the policies and innovation opportunities for advancing sustainable and affordable housing solutions?

2. Inclusion and Exclusion Criteria

The current study will predominantly make use of databases like Google Scholar for the collection of relevant papers. The papers used for this study were selected using the inclusion-exclusion criteria listed below.

2.1 Inclusion Criteria

- Studies that were published over a five-year period, from 2019 to 2024.
- Only studies that were originally published or translated into English were included.
- Every conceptual, empirical, review paper and article pertaining to the search criteria was considered.
- Only the research sources that were openly available were included.

2.2 Exclusion Criteria

- Studies carried out prior to 2019 and in 2024 at the pre-publication stage were not included.
- Studies released in languages other than English were not taken into account.
- No deliberate attempt was made to translate the original articles unless they were readily available.
- All grey material, including technical papers and articles from internet pages, was absolutely disregarded by the researcher.
- Additionally, the partially inaccessible study was disregarded.

3. Search Strategy

3.1 Search strings

The keywords used for the initial investigation to identify references have been taken into consideration while designing search strings. Five search strings were utilised to identify relevant literature from the Google Scholar database:

1. Paradigms, practices and concepts of sustainability and affordability in housing developments.
2. Challenges and opportunities of integrating sustainability and affordability in housing developments.
3. Policies and innovation for sustainability and affordability in housing developments.

3.2 Search Strategy

Step 1

The information given below highlights the search terms that were used and the total number of references that were first found. Thus, a total of 11,697 references have been selected from the utilisation of search strings in the Science Direct database.

A total of 11,697 references were initially identified:

1. Paradigms, practices and concepts of sustainability and affordability in housing developments: 657
2. Challenges and opportunities of integrating sustainability and affordability in housing developments: 6500

3. Policies and innovation for sustainability and affordability in housing developments: 4540

Step 2

Subsequently, each reference published prior to 2019 was eliminated. Due to the inclusion-exclusion criterion, only references from 2019 to 2024 were considered. By this point, 5235 references have been finalised, eliminating the 6462 references that had been published before to 2019.

1. Paradigms, practices and concepts of sustainability and affordability in housing developments: 305
2. Challenges and opportunities of integrating sustainability and affordability in housing developments: 2830
3. Policies and innovation for sustainability and affordability in housing developments: 2100

Total 5235 references

Step 3

In order to guarantee that every unique article was taken into consideration for the following step, duplicates were eliminated from the original database in the phase that followed. As a result, about 1227 articles were excluded, leaving 4008 studies in total for consideration.

Step 4

A further selection of 2104 papers results from the exclusion of all book chapters, abstracts, and closed-access studies. Following the criteria for exclusion, all conference papers and book chapters have been eliminated from the study. 32 final references for the study were chosen after each of these papers was examined in light of the study's goals.

Final References: 32

3.3 Identification of References

4. Methods for Study Selection and Appraisal

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework or set of recommendations was created by (Welch et al. 2013). These methods can be applied to comprehensive literature evaluations and meta-analytic critical evaluations of journals. To conduct in-depth studies and literature studies for write-up demands, the PRISMA apparatus or procedures employ a variety of techniques. In the present study, the Google Scholar database has been used.

5. Data Extraction and Synthesis

The table below depicts the summary of the finalised studies

6. Results and Discussion

6.1 Paradigms, practices and concepts of sustainability and affordability in housing developments

(Emenike 2022) assessed how Nigerian property values are affected by sustainable housing infrastructures. According to the research, the region appears to have a low implementation of sustainable housing infrastructure, which has typically influenced variables impacting the value of local real estate. Furthermore, the field of construction and property management has become more difficult in the current digital age due to contemporary technological advances and innovation. In order to maintain a housing infrastructure's physical, operational, socioeconomic, and legal legitimacy in a sustainable way, innovative solutions must be found.

(Adekanbi 2022) examined the elements that will improve the efficient application of planning strategies throughout the provision of reasonable, sustainable housing. The usage of defective and inadequate supplies, insufficient payments for finished projects, and variations in resource pricing are the key conclusions of how construction limitations affect the execution of scheduling. Additionally, operational budget planning at the bidding phase, ongoing tracking of construction advancement, and quality assurance via tracking and documenting project completion leads to evaluating the efficiency and suggesting modifications that are needed, and suitable work delegation is the most important method of planning to accomplish sustainable cost-effective housing shipping during the planning process.

(Gashe 2022) determined the middle-income group's accessibility to housing finance. The study findings suggested that there exists an issue of housing backlog within these middle-income groups. It was also found that commercial banking institutions implement a criteria framework that emphasizes affordability but fail to observe the housing industry in a comprehensive, diversified, and wider context. The study revealed that banking institutions play a significant role in improving the accessibility of middle-income households regarding housing affordability.

(Cheah et al. 2021) investigated how institutional players respond to social, conventional, and regulatory influences and their legitimacy-seeking conduct in relation to housing concerns. According to a thematic assessment of the collected data, these stakeholders engage in building connections in order to achieve market, interpersonal, social, and political credibility, driven by comprehension. Through a variety of social, political, and economic initiatives, developing relationships also results in the legitimacy of institutional players' existence (Sunday et al., 2021). Furthermore, (Presswood et al. 2021) revealed that affordability is a crucial component that needs to be taken into account when calculating the house's initial purchase price as well as its continuing financing capacity. More cooperation between architects and householders at the beginning of the planning phase increases the likelihood of low-cost housing construction projects. In order to keep impoverished urban neighbourhoods from becoming isolated, adequate infrastructure that offers a variety of jobs, medical care, and higher learning must be provided in addition to housing.

Through an analysis of contemporary project development techniques, (Qin et al. 2020) investigated Malaysia's present sustainability evaluations of affordable housing options. The market, ecology, and social life are all significantly impacted by the construction sector. As a result, sustainability is crucial to the building industry at every stage, from design to disposal. The construction's sustainability is only demonstrated by its long-term effectiveness, not by its completion date.

6.2 Challenges and opportunities of integrating sustainability and affordability in housing developments

(Eglin 2023) assesses the possibilities and difficulties of delivering affordable housing through community-driven, sustainable techniques. The main conclusions of this study are that, because of the region's climate and sociological customs, there is a great deal of room for regionally tailored housing plans to address the problem of affordable housing and offer excellent, reasonably priced options (Suleman et al., 2024). The application of such techniques in the housing industry is, however, constrained by certain structural issues with regard to policy formulation and regional views of sustainability.

In order to maximise effectiveness and promote sustainable development, (Akinsulire et al. 2024) examined important facets of the investment process and strategic planning in relation to affordable housing. Establishing specific goals, determining critical success elements, and creating workable plans are all part of the strategy process. Analysing local housing requirements, comprehending market conditions, and coordinating building objectives with neighbourhood principles are all part of affordable housing. Despite addressing more general urban growth objectives, well-executed strategic planning guarantees that housing developments are sensitive to the demands of low- and moderate-income communities.

(Azman et al. 2023) assessed the barrier factors related to Sustainable and Affordable Housing (SAH) progression. From the viewpoints of the key players (developers, homeowners, and the administrations) in SAH growth, the conclusions include several obstacles. The findings indicated that the primary obstacles in carrying out SAH construction include those related to finances, skills and technological advances, academic awareness and understanding, availability and land use strategy, compliance and activities, site evaluation, and property cost (Adedeji et al., 2023).

(Sohaimi et al. 2024) the objectives of this paper are (i) to investigate the elements that contribute to sustainable inexpensive housing and (ii) to suggest a framework for sustainable accessible housing. Three key components of sustainable affordable housing, economic, non-monetary, and ecological factors, are highlighted in the results. The survey also found that the non-monetary component of sustainable affordable housing addresses received more attention than the financial and ecological sides.

(Reid 2023) assessed the supply-side obstacles that affect the effectiveness of the value chain for the distribution of affordable housing. Seven major issues that need attention were found after these obstacles were categorised by thematic analysis, which had an impact on the planning and building phase. These included (i) design (not) for everyone, (ii) uniformity of services, (iii) unhealthful living conditions, (iv) poor project management in building, (v) ecological unsustainable practices, (vi) creation of places, and (vii) a lack of technological expertise (Sunaili et al., 2024). Similarly, (Enwin & Ikiriko 2023) suggested that insufficient infrastructure raises building expenses and impedes the growth of dwellings. The efficient affordable housing development is hampered by a lack of government backing and policy execution. The procedure is further hampered by bureaucratic delays and fraud.

(Ramli et al. 2024) explored the problems of inexpensive housing and factors that affect its sustainability, with a particular emphasis on Malaysia. Initially, the problems pertaining to "the place and accessibility" and "financing difficulties" were recognised as being of utmost importance, providing insight into the hurdles encountered in these areas. Furthermore, it was noted that "location and availability" and "flexibility and upgradability" were essential components in maintaining inexpensive housing in Malaysia.

6.3 Policies and innovation for sustainability and affordability in housing developments

Public administrations typically carry out housing policies, which can be characterised as a variety of actions in the housing industry with the intention of achieving objectives whether inside or outside the housing industry (Trillo, 2020).

(Saiz 2023) discussed the negotiations that affect the public's and governments' various housing policy goals. Policy objectives should be clear and their consequences must be recognised. Land usage and housing regulations should aim for wide, bipartisan agreement because of the long-lasting effects of the construction of housing. Due to public resources being scarce and to prevent harmful overall equilibrium consequences, subsidies should be precisely tailored (Anthony, 2023). These fundamental economic methods must be skilfully combined in order for housing policies to be efficient. Policies must be meticulously crafted to predict the actions of people, businesses, governments, and marketplaces (Ayoade & Ahmed, 2020).

(Moghayedi et al. 2023) assessed several sustainable design approaches, components, and technology that can be used to create SAH. According to the research's findings, passive design, the utilisation of locally sourced and recycled supplies, and socio-technical advances are all examples of sustainable design strategies that can effectively improve housing cost and sustainability while also advancing SAH. (Podbielski 2019) analysed the negotiations that affect the public's and governments' various housing policy goals. It was found that policy objectives must be clear and their consequences must be recognised. Land usage and housing regulations should aim for wide, bipartisan agreement because of the long-lasting effects of the construction of housing. Due to public funds being scarce and to prevent harmful overall equilibrium consequences, subsidies should be precisely tailored. These fundamental economic methods must be skilfully combined in order for housing policies to be efficient. Policies must be meticulously crafted to predict the actions of people, businesses, governments, and marketplaces. For them to succeed, competent and nonideological execution is essential. Similarly, (Tsenkova 2021) revealed multi- sectoral alliances for SAH in communities are extremely varied and use the forces of the housing market to advance socioeconomic mix and affordability objectives. Given that community reconstruction takes generations and that transferring accountability to developers privately may not be effective, especially in light of urbanisation and displacement of lower-income inhabitants, municipalities frequently take an active role for overseeing the planning-design regulatory linkage. To enhance the availability of affordable rental housing, these collaborations require strong and ongoing organisational dedication, planning policy cooperation, and financial assistance.

(Jeddi Yeganeh 2021) assessed the pathways to sustainable housing. The study revealed that municipal governments and state housing departments are uniquely positioned to promote and advance conservation of the environment and climate, especially in big cities and in areas that are more susceptible to ecological threats. There are still notable variations in housing policy development amongst agencies, and subsequent investigations on policy innovation ought to investigate the elements that affect the usefulness of new policies as well as the obstacles that the ecological sustainability drive encounters both inside and outside of organisations.

(Sadiqi 2019) aimed to improve the effectiveness and responsibility of social housing occupants in relation to municipal government and to assess social housing policies under the prism of public worth, which guides the method of decision-making. The study found that effectiveness is impacted by insufficient funds owing to restrictions, inadequate legislative applications, bad governance, a shortage of appropriate designs for social cohesiveness, impoverishment, the well-organised utilisation of assets, and environmental preservation.

Figure:

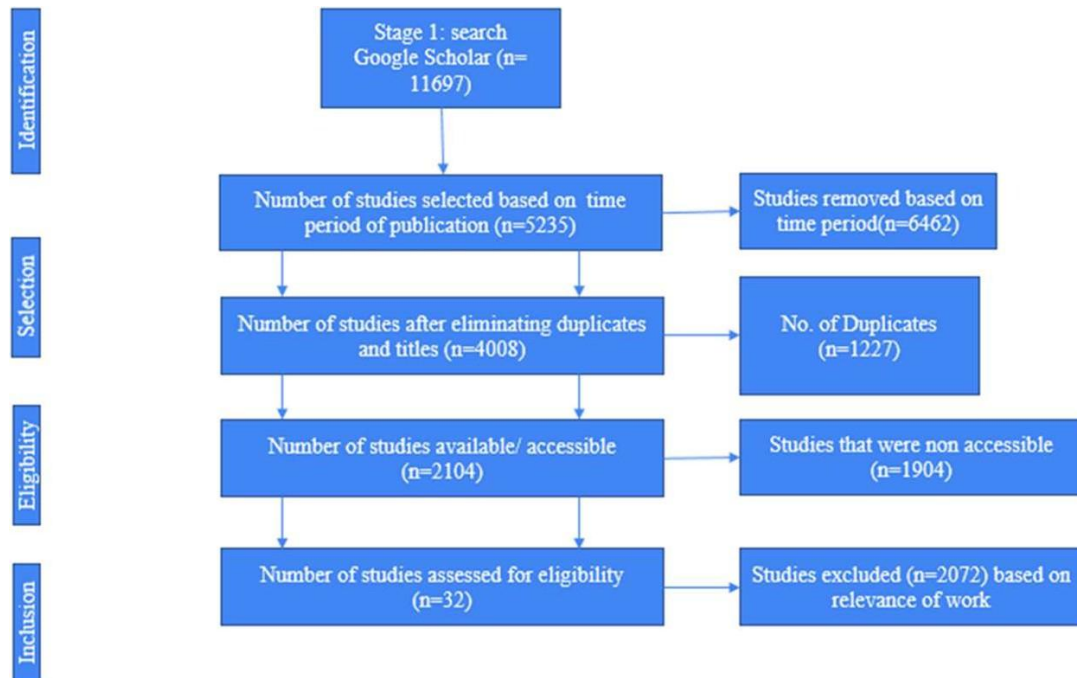


Figure 1: PRISMA Model

Table:

Table 1: Systematic Literature Review Table

Sr. No	Authors	Aim	Methodology	Results
1	Abubakar, A. (2021)	To develop a framework for sustainable provision of low-income housing in Abuja, Nigeria.	Interview Survey	Lack of adequate housing is becoming exponentially more prevalent in emerging nations due to swift urbanisation and rising populations
2	Emenike, K. C. (2022).	The study aims to examine the impact of sustainable housing infrastructure on property values in Nigeria.	Semi- structured interviews	The field of construction and property management has become more difficult in the current digital age due to contemporary technological advances and innovation.
3	Adekanbi, A. O. (2022).	To determine the achievement of sustainable affordable housing in South Africa through effective implementation of planning techniques.	Quantitative and Qualitative Research study	The usage of defective and inadequate supplies, insufficient payments for finished projects, and variations in resource pricing are the key conclusions of how construction limitations affect the execution of scheduling.

4	Makalima, M. (2024).	To address the urban inequality through innovative social housing strategies: a comparative analysis of approaches and outcomes	Interview technique qualitative data	In addition to providing an anchor for individuals and households experiencing homelessness, social housing also enhances societies' general well-being
5	Gxashe, L. S. (2022)	To suggest affordable housing finance systems for Middle-income Group in South Africa	Qualitative research approach	The study revealed that banking institutions play a significant role in improving the accessibility of middle-income households regarding housing affordability.
6	Cheah, C. W., Low, B., & Lee, C. K. C. (2021)	The study investigated how institutional players respond to social, conventional, and regulatory influences and their legitimacy-seeking conduct in relation to housing concerns.	Qualitative Interviews	The study found that through a variety of social, political, and economic initiatives, developing relationships also results in the legitimacy of institutional players' existence.
7	Qin, H. T. Y., Im, L. P., & Abdullateef, O. (2020).	To investigate Malaysia's present sustainability evaluations of affordable housing options.	Content Analysis	Findings revealed that sustainability is crucial to the building industry at every stage, from design to disposal. The construction's sustainability is only demonstrated by its long-term effectiveness, not by its completion date.
8	Ichendu, C., & Budnukaeku, A. C. (2021).	To appraise and present the concept of housing.	Literature Review	Low-cost housing requires effective budgeting as well as the utilisation of less costly building materials and techniques. It is anticipated that improved expenses, material, plant, and labour administration, as well as the effective utilisation of regional resources, talents, and cutting-edge technology, will lead to the development of affordable homes
9	Presswood, R., Thadani, H. L., Go, Y. I., Afshan, S., & Rweyora, A. K. (2021).	To determine the construction and energy aspects of affordable housing developments for formal settlements.	Case Study Approach	The study revealed that affordability is a crucial component that needs to be taken into account when calculating the house's initial purchase price as well as its continuing financing capacity. More cooperation between architects and householders at the beginning of the planning phase increases the likelihood of low-cost housing construction projects.
10	Eglin, T. (2023).	To assess the possibilities and difficulties of delivering affordable	Qualitative data collection	Because of the region's climate and sociological customs, there is a great deal of room for regionally

		housing through community-driven, sustainable techniques.		tailored housing plans to address the problem of affordable housing and offer excellent, reasonably priced options
11	Akinsulire, A. A., Idemudia, C., Okwandu, A. C., & Iwuanyanwu, O. (2024)	To determine the strategic planning and investment analysis for affordable housing in order to enhance viability and growth.	Case Study approach	Analysing local housing requirements, comprehending market conditions, and coordinating building objectives with neighbourhood principles are all part of affordable housing. Despite addressing more general urban growth objectives, well- executed strategic planning guarantees that housing developments are sensitive to the demands of low- and moderate- income communities.
12	Azman, N., Mohamad, M. H., Aliasak, M. H., & Sa'ad, M. F. (2023).	To assess the Barriers to adopting Sustainable Affordable Housing (SAH) development	Content Analysis Method	The findings indicated that the primary obstacles in carrying out SAH construction include those related to finances, skills and technological advances, academic awareness and understanding, availability and land use strategy, compliance and activities, site evaluation, and property cost.
13	Sohaimi, N. S., Yusoff, M. N., Kassim, U., Nasir, D.	The study aims to investigate the elements that contribute to sustainable inexpensive	Scopus and Mendeley database	Three key components of sustainable affordable housing, economic, non-monetary, and ecological factors, are highlighted
	S. M., & Sohaimi, M. S. (2024)	housing and suggest a framework for sustainable accessible housing.		in the results. The survey also found that the non-monetary component of sustainable affordable housing addresses received more attention than the financial and ecological sides.
14	Reid, A. (2023)	To identify the barriers hindering the sustainable design and construction of affordable homes.	Web of Science and Scopus	Seven major issues included (i) design (not) for everyone, (ii) uniformity of services, (iii) unhealthful living conditions, (iv) poor project management in building, (v) ecological unsustainable practices, (vi) creation of places, and (vii) a lack of technological expertise
15	Ramli, N. A., Zainol, N. N., Sukereman, A. S., & Ishak, N. A. (2024)	To explore the problems of inexpensive housing and factors that affect its sustainability, with a particular emphasis on Malaysia.	A quantitative method using a questionnaire survey	The problems pertaining to "the place and accessibility" and "financing difficulties" were recognised as being of utmost importance

16	Bhanye,J., Lehobo,M. T., Mocwagae, K., & Shayamunda , R. (2024)	To analyse the strategies for Sustainable Innovative Affordable Housing (SIAH) for low income families in Africa	Literature search and thematic analysis	The study examined many housing tactics, including co-housing, community-led housing, micro-housing, 3D printing, upcycling, mixed-use projects, incremental dwellings, low affordable housing, inclusionary housing, and environmentally friendly construction techniques.
17	Adedeji, I., Deveci, G., & Salman, H. (2023).	To analyse the challenges in providing affordable housing in Nigeria and the adequate sustainable approaches for addressing them.	Literature Review	The findings of the paper suggested that the financial, ecological, cultural, institutional, and technical aspects may be the most appropriate ways to look at sustainable solutions for Nigeria's housing affordability challenges.
18	Enwin, A. D., & Ikiriko, T. D. (2023).	To understand the challenges of affordable housing provision in Nigeria.	Literature Review	Efficient affordable housing development is hampered by a lack of government backing and policy execution. The procedure is further hampered by bureaucratic delays and fraud.
19	Suleman, T. A., Ezema, I. C., & Aderonmu, P. A. (2024)	To explore the opportunities in circular design as an affordable housing solution in Nigeria.	desk review approach	Circular housing design implementation in Nigeria can help with urban mineral extraction, energy optimising, decarbonisation, cost-effectiveness, climate change reduction, and ecological value enhancement.
20	Abureesh, N. (2023)	To improve housing sustainability and affordability in Palestine.	Literature review	The goal of the research is to provide inexpensive housing that incorporates sustainability elements beyond ecological issues. The triple bottom line linked to sustainable design is influenced by social and economic factors, which are taken into account in this investigation. The investigation comes to the conclusion that the difficulties found in this research can be resolved by adopting well- informed design decision-making methods that take into consideration important criteria, success variables, design obstacles, obstacles, and design motivations for sustainable accessible housing.
21	Sunaili, W. N. S. E., Mustapa, N. A., Salleh, R. M., & Isa, S. S. M. (2024).	To assess the barriers to implementing Sustainable Housing Development	Questionnaire	The results point to important obstacles in the areas of design, technology, economics, social issues, and institutions. The primary obstacles in each area include the absence of governmental promotions, ignorance of sustainable products and materials, reluctance to alter current customer attitudes, and a shortage of professional expertise and sustainability education for employees/

22	Moghayedi, A., Phiri, C., & Ellmann, A. M. (2023).	To improve the sustainability of affordable housing using innovative technologies.	Literature review	To suggest the passive design, the utilisation of locally sourced and recycled supplies, and socio- technical advances are all examples of sustainable design strategies that can effectively improve housing cost and sustainability while also advancing SAH.
23	Trillo, C. (2020).	Assessing the housing policies and sustainable development	Literature Review	Public administrations typically carry out housing policies, which can be characterised as a variety of actions in the housing industry with the intention of achieving objectives whether inside or outside the housing industry
24	Ayoade, O., & Ahmed, V. (2020)	To analyse the impact of knowledge influences on perception of innovation drivers for sustainable housingdevelopment models.	Questionnaire Survey	Policies must to be meticulously crafted to predict the actions of people, businesses, governments, and marketplace
25	Saiz, A. (2023).	To determine the policy options and strategies regarding the global housing affordability crisis.	Literature Review	Land usage and housing regulations should aim for wide, bipartisan agreement because of the long-lasting effects of the construction of housing. Due to public resources being scarce and to prevent harmful overall equilibrium consequences, subsidies should be precisely tailored.
26	Anthony, J. (2023)	To determine housing affordability and economic growth.	Secondary Data is used	Reduced home affordability, in my opinion, had a statistically important detrimental impact on these metro areas' economic performance. U.S. metro areas create more than 80% of the country's GDP, and boosting housing affordability there could contribute to the expansion of the American economy.
27	Sunday, D., shukor Lim, N. H. A., & Mazlan, A. N. (2021).	To assess sustainable Affordable Housing Strategies for Solving Low-Income Earner's Housing challenges in Nigeria.	Systematic Literature Review	The study's conclusions showed that the economic, social, ecological, organisational, and technological aspects of sustainable affordable housing are the best places to look for ways to tackle the housing issues faced by individuals with low incomes in Nigeria.
		A study to achieve sustainable housing affordability through an		In order to get Sustainable Housing Affordability (SHA) results in England, this paper makes the case for an Institutional Approach (IA) to communication planning. Both perspectives are troublesome and, taken alone, fall short of capturing the consequences of globalised real estate markets in the twenty-first century, where management has little influence

28	Perera, T. G. U. P. (2019)	institutionalist approach to communicative planning	A Case Study Approach	over local real estate results and family subjective experiences are complicated.
29	Podbielski, T. (2019).	To create a Sustainable Affordable Homes Program using the case Study of the Mueller Redevelopment Project.	Literature Review	Due to public funds being scarce and to prevent harmful overall equilibrium consequences, subsidies should be precisely tailored. These fundamental economic methods must be skilfully combined in order for housing policies to be efficient. Policies must be meticulously crafted to predict the actions of people, businesses, governments, and marketplaces.
30.	Tsenkova, S. (2021).	To assess the aspect of affordable housing and the future of cities.	Literature Review	The study revealed that multi- sectoral alliances for SAH in communities are extremely varied and use the forces of the housing market to advance socioeconomic mix and affordability objectives.
31.	Jeddi Yeganeh, A. (2021)	To analyse a pathway to sustainable housing	Systematic Literature Review	The study revealed that municipal governments and state housing departments are uniquely positioned to promote and advance conservation of the environment and climate, especially in big cities and in areas that are more susceptible to ecological threats.
32.	Sadiqi, J. (2019)	To improve the effectiveness and responsibility of social housing occupants in relation to municipal government and to assess social housing policies under the prism of public worth, which guides the method of decision- making.	Focus group- interviews, the vignettes approach and documentary evidence.	The study found that effectiveness is impacted by insufficient funds owing to restrictions, inadequate legislative applications, bad governance, a shortage of appropriate designs for social cohesiveness, impoverishment, the well-organised utilisation of assets, and environmental preservation.

7. Conclusions

Arguably the biggest societal issue humanity is currently dealing with is the worldwide housing crisis, which is connected to the twin crises of decreasing biodiversity and extreme environmental degradation. Housing infrastructure may contribute to a remedy or it may continue to worsen issues. There must be a significant change in the worldwide construction and development sector. This study aims to identify the best practices, challenges and opportunities for integrating sustainability and affordability in housing developments.

The studies highlighted that there is a lack of sustainable housing infrastructure that in turn impacts property values. Integration of sustainability and affordability within housing consist of dealing with barriers pertaining to financing, policy and construction. There is a lack of adoption of sustainable infrastructure, affordability challenges for middle-income groups and planning inefficiencies. Innovative tactics, stakeholder involvement, and utilising socioeconomic considerations are important techniques. In order to satisfy the demands of urban development, research highlights the integration of sustainability from

construction to disposal, customised regional planning, and investment strategies. Financial, technological, and policy shortages are obstacles, yet creative strategies like multi-sectoral alliances and passive design promote affordable housing. Clarity, bipartisan support, and targeted subsidies that prioritise resilience to climate change and long-term affordability are necessary for efficient policies.

Declaration of Conflicting Interests

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