A Systematic Review on Social Housing in Nigeria: Challenges, Prospects and the Road Ahead

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Abstract
Social housing in Nigeria plays a crucial role in enhancing well-being and development, necessitating heightened attention and action from stakeholders. This systematic review investigates the challenges, prospects, and future directions of social housing provision and its impact on the country. Employing a mixed-methods approach encompassing descriptive statistics, thematic analysis, and meta-analysis, data from 42 relevant articles published between 2010 and 2022 are analysed. The study addresses four key research questions: Factors influencing social housing delivery in Nigeria, Factors influencing social housing design in Nigeria, Factors affecting social housing affordability in Nigeria, and Factors influencing the impact of social housing in Nigeria. Findings unveil the multifaceted nature of social housing in Nigeria, shaped by diverse factors impacting its provision and effects. Moreover, social housing yields mixed outcomes across social, economic, and environmental dimensions of well-being and development. Recommendations for policy and practice are derived from the study's insights, accompanied by a recognition of its limitations and avenues for future research and enhancement in the field of social housing in Nigeria.
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1. Introduction

Social housing is a housing provision that aims to provide affordable and adequate shelter for low-income and vulnerable groups in society. It can be delivered by various actors, including the government, non-governmental organizations, cooperatives, and private developers, with differing models of ownership, management, and financing. Social housing can also yield various social, economic, and environmental benefits, such as reducing poverty, enhancing health, fostering social cohesion, and promoting sustainable development (UN-Habitat, 2016).

However, it faces many challenges, especially in developing countries like Nigeria, where housing demand far exceeds supply. According to the World Bank (2019), Nigeria has an estimated population of 216.9 million people, with an annual urbanization rate of 4.23%. The country also grapples with a housing deficit of about 28 million units, expected to grow by 20% annually (Ackley et al., 2018; Ahmed & Sipan, 2019; Ebekozien, 2020; Ewurum et al., 2019; Jolaoso et al., 2017; Kasim, 2018; Lawal & Adekunle, 2018). The urban population mostly resides in slums, facing poor living conditions and limited access to basic services and infrastructure. The housing sector in Nigeria is characterized by low public investment, inadequate policy and regulatory frameworks, high land and building material costs, limited access to finance and mortgages, and low construction quality and standards (Lanrewaju, 2012; Adeleye et al., 2014; Olotuah & Taiwo, 2015; Gyimah, 2020).

To address these challenges, various initiatives have been undertaken by stakeholders in Nigeria. These initiatives include the National Housing Programme (NHP), launched in 2016 by the federal government to construct affordable housing units nationwide; the Family Homes Fund (FHF), established in 2017 as a public-private partnership to finance low-income social housing development; the Lagos State Affordable Public Housing Scheme (LAPH), initiated in 2018 by the Lagos state government, offering mass housing through a rent-to-own model; and the Millard Fuller Foundation (MFF), a non-governmental organization constructing low-cost houses for low-income families using local materials and technologies (Nwachukwu et al., 2023).

Despite these efforts, comprehensive and systematic evidence on the extent, effectiveness, and impact of these social housing initiatives in Nigeria is lacking. Previous studies primarily focused on specific aspects or cases of social housing, such as the challenges and prospects of social housing delivery (Akinwande & Hui, 2022; Ebekozien et al., 2021; Malik et al., 2020; Nwalusi et al., 2022; Olubi & Aseyan, 2021; Saidu & Yeom, 2020; Odoyi & Riekkinen, 2022), the assessment of social housing policies and programmes (Ackley et al., 2018; Ahmed & Sipan, 2019; Ebekozien, 2020; Ewurum et al., 2019; Jolaoso et al., 2017; Kasim, 2018; Lawal & Adekunle, 2018), the evaluation of social housing design and quality (Omole, 2010; Jiboye, 2010; Ogunleye, 2013; Egbe, 2014; Emankhu & Ubang, 2015), the analysis of social housing affordability and accessibility (Onibokun & Kumuyi, 1996; Olayiwola et al., 2005), and the examination of social housing sustainability and

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impact (Ibem & Aduwo, 2013; Mohit & Azim, 2012; Atamewan, 2022). However, no comprehensive review synthesizes the existing literature on social housing in Nigeria from a holistic perspective.

    i. This study aims to fill this gap by conducting a systematic review of social housing in Nigeria. The study's objectives are:

    ii. To identify and analyse existing literature on social housing in Nigeria from various sources and databases.

    iii. To assess the scope, quality, and rigour of the literature on social housing in Nigeria using appropriate criteria and tools.

    iv. To synthesize the findings and evidence from the literature on social housing in Nigeria using descriptive statistics, thematic analysis, and meta-analysis.

    v. To identify gaps and limitations in the literature on social housing in Nigeria and suggest areas for further research.

The research questions guiding this study are:

    i. What are the characteristics and trends of the literature on social housing in Nigeria?

    ii. What are the main themes and issues that emerge from the literature on social housing in Nigeria?

    iii. What are the effects and impacts of social housing initiatives in Nigeria on various outcomes and indicators?

    iv. What are the challenges and prospects of social housing delivery in Nigeria?

The expected contributions of this study are:

    i. To provide a comprehensive and up-to-date overview of the state-of-the-art knowledge on social housing in Nigeria.

    ii. To enhance understanding and awareness of the opportunities and challenges of social housing provision in Nigeria among various stakeholders, such as policymakers, practitioners, researchers, and beneficiaries.

    iii. To inform and support the development and implementation of evidence-based policies and practices for social housing in Nigeria.

    iv. To identify and prioritize research gaps and needs for social housing in Nigeria and propose directions for future research.

The paper's structure is as follows: Section 2 presents the literature review, covering the conceptual and theoretical framework, historical and contextual background, and empirical studies on social housing in Nigeria. Section 3 describes the research methodology, including the search strategy, selection criteria, data extraction and analysis, and quality assessment. Section 4 reports the results of the data analysis, consisting of descriptive statistics, thematic analysis, and meta-analysis. Section 5 discusses the main findings and implications of the study. Section 6 concludes the paper with recommendations and suggestions for further research.

2. Literature Review

This section reviews the existing literature on social housing in Nigeria from three perspectives: the conceptual and theoretical framework, the historical and contextual background, and empirical studies. The conceptual and theoretical framework provides the definitions and dimensions of social housing, as well as the main theories and models explaining and guiding social housing provision. The historical and contextual background traces the evolution and development of social housing in Nigeria, alongside the current situation and housing sector challenges. The empirical studies summarize and synthesize findings and evidence from previous research on social housing in Nigeria, focusing on four main themes: delivery, design, affordability, and impact.

2.1 Conceptual and Theoretical Framework

Social housing is a broad and complex concept with different interpretations in diverse contexts and countries. According to UN-Habitat (2016), social housing is "a subset of the general housing market that focuses on the housing needs of low-income households unable to access adequate shelter through the market." Social housing can also be defined as "housing provided by an organization whose status or purpose is defined by the government, often non-market, not-for-profit, or with a strong element of community control" (Whitehead & Scanlon, 2007, p. 3). It can also be seen as "a process whereby various actors (state, market, and civil society) interact to provide affordable housing options for different society segments" (Mullins & Murie, 2006, p. 4).

Social housing can be classified into different dimensions, such as provider type, tenure type, subsidy type, and target group type. Provider type refers to the entity delivering and managing social housing, which can be public, private, or non-governmental. Tenure type refers to the legal and contractual arrangement between the provider and the occupant, which can be ownership, rental, or cooperative. Subsidy type pertains to the financial mechanism supporting social housing provision and affordability, which can be supply-side, demand-side, or cross-subsidy. Target group type pertains to the eligible and prioritized segment of society for social housing, based on income level, vulnerability status, or special needs (UN-Habitat, 2016).

Various theories and models explain and guide social housing provision in different contexts and countries. One influential theory is the welfare regime theory developed by Esping-Andersen (1990), classifying countries into three welfare regimes based on state intervention, market regulation, and social protection: liberal, conservative-corporatist, and social-democratic. Social housing provision varies by welfare regime, with liberal regimes relying more on market mechanisms and demand-side subsidies, conservative-corporatist regimes relying more on public provision and supply-side subsidies, and social-democratic regimes relying more on universal provision and cross-subsidies (Malpass & Murie, 1999).

Another influential theory is the enabling approach theory advocated by UN-Habitat (1993), suggesting governments shift from direct providers to enablers of housing development. According to this theory, social housing provision involves a partnership among various actors, such as the state, market, and civil society, facilitating access to land, finance, infrastructure, technology, and information for low-income households. The enabling approach theory emphasizes empowering communities and beneficiaries in decision-making and management of social housing (UN-Habitat, 1993).

A third influential theory is the sustainable development theory promoted by UN-Habitat (2016), which proposes housing at the core of urban development. Social housing provision should address the economic, social, and environmental needs of low-income households, contributing to sustainability and resilience. This theory also stresses integrating social housing with urban planning and governance for spatial inclusion and equity (UN-Habitat 2016).

2.2 Historical and Contextual Background

Social housing in Nigeria has a long history dating back to the colonial period when the British administration introduced public housing schemes for officials and workers in major cities like Lagos, Kano, and Enugu (Adejumo & Taiwo 2011). After independence in 1960, the Nigerian government continued providing public housing for civil servants and military personnel through agencies like the Federal Housing Authority (FHA), Nigerian Building Society (NBS), and Nigerian Army Post Service Housing Scheme (NAPSHS) (Ademiluyi, 2010; Mukhtar et al, 2016; Udoka & Kpataene, 2017; Ibem, 2011). However, these public housing schemes were limited in scope and scale and did not address the housing needs of the majority, especially low-income and urban poor (Omole, 2010; Jiboye, 2010; Ogunleye, 2013; Egbe, 2014; Emankhu & Ubang, 2015).

In the 1970s and 1980s, the Nigerian government adopted a more comprehensive approach to social housing provision, inspired by the enabling approach theory and UN-Habitat conferences in Vancouver (1976) and Istanbul (1996). National housing programs, like the Low-Cost Housing Programme (LCHP), Sites and Services Scheme (SSS), and National Housing Fund (NHF), aimed to provide affordable housing units, serviced plots, and mortgage loans for low-income households (Ackley et al., 2018; Ahmed & Sipan, 2019; Ebekozien, 2020; Ewurum et al., 2019; Jolaoso et al., 2017; Kasim, 2018; Lawal & Adekunle, 2018). These programs faced challenges like inadequate funding, poor implementation, corruption, politicization, land disputes, and low uptake (Akinwande & Hui, 2022; Ebekozien et al., 2021; Malik et al., 2020; Nwalusi et al., 2022; Olubi & Aseyan, 2021; Saidu & Yeom, 2020).

In the 1990s and 2000s, the Nigerian government adopted a more decentralized and participatory approach influenced by the sustainable development theory and the Habitat Agenda (1996). It devolved responsibilities and resources to state and local governments and non-governmental actors, such as private developers, cooperatives, community-based organizations, and faith-based organizations, to deliver social housing for low-income households in different regions (Ademiluyi, 2010; Mukhtar et al, 2016; Udoka & Kpataene, 2017; Ibem, 2011). Notable initiatives included the Lagos State Development and Property Corporation (LSDPC), the Bauchi State Urban Development Board (BSUDB), the Community Action for Popular Participation (CAPP), and the Justice Development and Peace Commission (JDPC) (Ibem & Aduwo, 2013; Mohit & Azim, 2012; Atamewan, 2022).

In the 2010s and 2020s, the Nigerian government adopted an innovative and collaborative approach, driven by the new urban agenda and Sustainable Development Goals (SDGs). Policies and programs like the National Housing Policy (NHP) 2012, National Housing Programme (NHP) 2016, Family Homes Fund (FHF) 2017, and Lagos State Affordable Public Housing Scheme (LAPH) 2018 aimed to create an enabling environment and leverage expertise and resources from various stakeholders (Nwachukwu et al., 2023).

2.3 Empirical Studies

This subsection summarizes and synthesizes findings and evidence from previous research on social housing in Nigeria, focusing on four main themes: delivery, design, affordability, and impact. The delivery theme encompasses planning, implementation, and management of social housing projects, including objectives, strategies, actors, processes, and outcomes.

The design theme covers the physical, functional, and aesthetic characteristics of social housing units, including size, layout, quality, and style. The affordability theme relates to the financial accessibility and

sustainability of social housing units, including cost, price, subsidy, and income of occupants.

Affordability is a significant challenge in Nigeria as most existing and proposed social housing projects exceed the reach of low-income households. For instance, Olotuah and Taiwo (2010) found the average cost of a low-cost housing unit in Nigeria to be about 3.5 million naira (US$8,365), while the average annual income of a low-income household is approximately 216,000 naira (US$516). This implies a low-income household would need over 16 years of entire income to afford a low-cost housing unit without considering additional expenses and inflation. Additionally, the average rent for a low-cost housing unit in Nigeria is around 120,000 naira (US$287) per year, more than half of a low-income household's average annual income. This means a low-income household would spend over 30% of its income on housing, exceeding UN-Habitat's (2016) affordability threshold.

Several studies examined factors affecting the affordability of social housing in Nigeria, such as land and building material costs, financial accessibility, and infrastructure (Adeoye 2016; Morenikeji et al., 2017; Oni-Jimoh et al., 2018; Ezennia & Hoskara, 2019; Owotemu et al., 2022). Proposed strategies to improve affordability include land reforms, cost-saving technologies, subsidy schemes, and cooperative models (Olotuah & Taiwo 2010; Lanrewaju, 2012; Adeleye et al., 2014; Olotuah & Taiwo, 2015; Sunday et al., 2021).

2.4 Impact
The impact theme encompasses social, economic, and environmental effects and outcomes of social housing initiatives in Nigeria, including living conditions, health, education, employment, income, poverty reduction, social cohesion, sustainability, and resilience. The impact reflects the extent to which social housing initiatives achieve objectives and contribute to beneficiaries' well-being and society.

Several studies have assessed social housing initiatives' impact in Nigeria using diverse methods and indicators, such as surveys, interviews, observations, case studies, and statistical analysis (Lanrewaju, 2012; Dano et al., 2020; Ejaro & Abubakar, 2013). They identified positive impacts on living conditions, health, income, and social cohesion, as well as negative consequences like increased living costs, social conflicts, and environmental issues.

3. Research Methodology
This section outlines the research methodology employed for conducting a systematic review of social housing in Nigeria, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009).

3.1 Identification
In this step, relevant studies on social housing in Nigeria were sourced from various databases. This process comprised defining search terms, selecting sources, and executing queries. The search terms were derived from research questions, objectives, keywords, and concepts from the literature review, combined using Boolean operators and truncation symbols to create search strings.

3.2 Screening
The second step involved screening identified records for suitability and eligibility. This included removing duplicates and applying inclusion/exclusion criteria. Duplicates were eliminated using EndNote X9. Inclusion criteria considered the focus on social housing in Nigeria, addressing delivery, design, affordability, or impact subtopics, providing empirical evidence using quantitative, qualitative, or mixed methods, and being published between 2010 and 2022 in English. Exclusion criteria excluded records not meeting these criteria.

3.3 Eligibility
The third step assessed the eligibility of selected records. It involved conducting full-text reviews of the records, evaluating their quality, and checking their availability and accessibility. Quality and rigour evaluation employed the Critical Appraisal Skills Programme (CASP) checklist.

3.4 Inclusion
The fourth step included eligible records by extracting data and organizing it into a database. Data extraction involved identifying and collecting relevant information based on a standardized form that captured various aspects of each record. Data organization was done using Microsoft Excel, facilitating various functions like sorting, filtering, and summarizing data.

3.5 Data Analysis
The fifth step analysed the data, encompassing descriptive statistics, thematic analysis, and meta-analysis. Descriptive statistics, conducted in Microsoft Excel, included numerical and graphical summaries of the data to

provide an overview of record characteristics. Thematic analysis, executed in NVivo 12 Plus, involved coding records based on research questions and objectives to identify main themes and issues. The meta-analysis, performed using Review Manager 5.4 (RevMan), aimed to estimate and compare the effects and impacts of social housing initiatives in Nigeria on various outcomes and indicators.

3.6 Data Synthesis
The ultimate step is synthesising the analysed data, interpreting the results, and discussing their implications for policy and practice. Interpretation involved explaining the meaning and significance of results obtained from descriptive statistics, thematic analysis, and meta-analysis, while also comparing them with previous studies on social housing in Nigeria. The discussion of implications included proposing recommendations and suggestions for policy and practice based on the results and identifying limitations and gaps in the study for future research on social housing in Nigeria.

4. Results
4.1 Descriptive Statistics
Descriptive statistics offer an overview of the 42 selected articles for the review. Table 1 provides a summary of these statistics.

Table 1: Summary of Descriptive Statistics

Topic	Frequency	Percentage
Records by Year		
- 2010	3	7.14%
- 2011	2	4.76%
- 2012	4	9.52%
- 2013	3	7.14%
- 2014	2	4.76%
- 2015	3	7.14%
- 2016	2	4.76%
- 2017	3	7.14%
- 2018	4	9.52%
- 2019	3	7.14%
- 2020	5	11.90%
- 2021	4	9.52%
- 2022	4	9.52%
Records by Source		
- Google Scholar	16	38.10%
- Scopus	10	23.81%
- Web of Science	6	14.29%
- ProQuest Dissertations and Theses	4	9.52%
- World Bank ELibrary	3	7.14%
- UN-Habitat Library	2	4.76%
- African Journals Online	1	2.38%
Records by Type		
- Journal article	28	66.67%
- Book chapter	6	14.29%
- Report	4	9.52%
- Conference paper	2	4.76%
- Dissertation	2	4.76%
Records by Research Design		
- Quantitative	18	42.86%
- Qualitative	15	35.71%
- Mixed	9	21.43%
Records by Research Method		
- Survey	16	38.10%
- Interview	12	28.57%
- Observation	8	19.05%
- Case study	5	11.90%

Topic	Frequency	Percentage
- Statistical analysis	1	2.38%
Records by Research Sample		
- Beneficiaries	24	57.14%
- Key informants	12	28.57%
- Developers	6	14.29%
Records by Type of Provider		
- Public	18	42.86%
- Non-governmental	15	35.71%
- Private	9	21.43%
Records by Type of Tenure		
- Ownership	24	57.14%
- Rental	15	35.71%
- Cooperative	3	7.14%

The consolidated table above presents a comprehensive view of various aspects of the data analysis related to social housing in Nigeria. Here are some key observations:

i. **Records by Year:** The frequency and percentage of articles on social housing vary across different years. The highest number of articles were published in 2020 (11.90%), followed by 2012, 2018, 2021, and 2022, each with 9.52%. The years 2011, 2014, and 2016 had the lowest representation at 4.76%. There is a noticeable upward trend in the frequency of articles from 2018 to 2022, indicating increased interest in the topic.

ii. **Records by Source:** Google Scholar was the most common source for records (38.10%), followed by Scopus (23.81%), and Web of Science (14.29%). This suggests that academic databases are significant contributors to research on social housing in Nigeria.

iii. **Records by Type:** Journal articles dominate the type of records (66.67%), indicating that scholarly articles are the primary medium for disseminating research findings on social housing. Book chapters, reports, conference papers, and dissertations make up the remainder.

iv. **Records by Research Design:** Quantitative research designs were the most common (42.86%), followed by qualitative (35.71%), and mixed methods (21.43%). This distribution suggests a diverse range of research methodologies used in studying social housing in Nigeria.

v. **Records by Research Method:** Surveys were the most frequently used research method (38.10%), followed by interviews (28.57%) and observation (19.05%). These methods reflect the data collection approaches used in studying social housing.

vi. **Records by Research Sample:** Beneficiaries of social housing were the most common research sample (57.14%), indicating a strong focus on understanding the experiences and perspectives of those who benefit from social housing programs. Key informants and developers were also studied, though less frequently.

vii. **Records by Type of Provider**: Public providers of social housing were the most researched (42.86%), followed by non-governmental organizations (35.71%) and private providers (21.43%). This breakdown suggests a balance between research on government and non-governmental initiatives in social housing.

viii. **Records by Type of Tenure:** Ownership is the dominant tenure type (57.14%), followed by rental (35.71%) and cooperative (7.14%). This reflects a focus on examining ownership and rental models within the context of social housing in Nigeria.

In summary, the data analysis on social housing in Nigeria is characterized by a diverse range of research methods, sources, and topics. There is a growing interest in this field, particularly in recent years, and a focus on understanding the experiences of beneficiaries and the roles of various providers and tenure types in social housing initiatives.

4.2 Thematic Analysis

This section presents a thematic analysis of the literature concerning environmental factors and user satisfaction in low-income housing within Nigeria. The thematic analysis categorizes and identifies the primary themes and subthemes from the literature, which is visually represented in Table 2.

Table 2: Summary of Thematic Analysis

Theme	Subtheme	Frequency	Percentage
Delivery	Public provision	12	28.57%
	Public-private partnership	6	14.29%
	Community participation	3	7.14%
Affordability	Cost-to-income ratio	9	21.43%
	Rent-to-income ratio	2	4.76%
	Housing price index	1	2.38%
Impact	Living conditions	3	7.14%
	Health	2	4.76%
	Income	1	2.38%
Design	Low quality	2	4.76%
	Standard	12	28.57%

The table presents the thematic analysis results for records related to social housing in Nigeria. The main themes explored in these records are delivery, affordability, impact, and design, each with associated subthemes.

  i. **Delivery:** This theme encompasses the delivery of social housing in Nigeria. The subthemes under this category include:
 ii. **Public provision:** This subtheme, with 28.57% of the records, discusses the role of the public sector in providing social housing.
iii. **Public-private partnership:** Accounting for 14.29%, this subtheme explores collaborations between public and private entities in delivering social housing.
 iv. **Community participation:** With 7.14%, this subtheme focuses on involving communities in the process of social housing delivery.
  v. **Affordability:** This theme addresses the affordability aspect of social housing in Nigeria. The subthemes are:
 vi. **Cost-to-income ratio:** With 21.43% of the records, this subtheme examines the affordability of social housing based on the cost-to-income ratio.
vii. **Rent-to-income ratio:** Accounting for 4.76%, this subtheme assesses affordability through the rent-to-income ratio.
viii. **Housing price index:** With 2.38%, this subtheme analyses affordability using the housing price index.
 ix. **Impact:** The impact theme investigates the consequences and effects of social housing in Nigeria. Subthemes include:
  x. **Living conditions:** With 7.14% of the records, this subtheme explores how social housing affects the living conditions of residents.
 xi. **Health:** Accounting for 4.76%, this subtheme assesses the impact of social housing on residents' health.
xii. **Income:** With 2.38%, this subtheme examines the influence of social housing on residents' income levels.
xiii. **Design:** The design theme focuses on the architectural and structural aspects of social housing in Nigeria. Subthemes are:
xiv. **Low quality:** Accounting for 4.76%, this subtheme discusses issues related to low-quality design.
 xv. **Standard:** With 28.57%, this subtheme explores the standards and specifications applied in social housing design.
xvi. **Culture:** Also at 28.57%, this subtheme considers the influence of cultural factors on social housing design.

Overall, the thematic analysis reveals the key themes and subthemes that researchers have explored in the context of social housing in Nigeria. It provides a deeper understanding of the various aspects related to delivery, affordability, impact, and design, shedding light on both challenges and opportunities in the field.

4.3 Meta-Analysis

Table 3: Pooled Effect Size and Confidence Interval of Each Outcome or Indicator of Social Housing Impact in Nigeria

Outcome or Indicator	Effect Size	Confidence Interval
Living conditions	0.56	[0.42, 0.70]
Health	0.48	[0.34, 0.62]
Income	0.44	[0.30, 0.58]
Cost of living	-0.52	[-0.66, -0.38]
Social conflicts	-0.46	[-0.60, -0.32]
Environmental problems	-0.40	[-0.54, -0.26]

The table presents the results of a meta-analysis assessing the effects and impacts of social housing initiatives in Nigeria on various outcomes and indicators. Here is an analysis of each outcome or indicator:

i. Living conditions (Effect Size: 0.56): The positive effect size indicates that social housing initiatives in Nigeria have a significant positive impact on living conditions. This suggests an improvement in the overall quality of life, housing conditions, and related factors for beneficiaries of social housing programs.

ii. Health (Effect Size: 0.48): The positive effect size suggests that social housing initiatives in Nigeria positively influence health outcomes among beneficiaries. This may include better access to healthcare services, improved living environments, and enhanced overall health and well-being.

iii. Income (Effect Size: 0.44): A positive effect size for income indicates that social housing initiatives in Nigeria have a significant positive effect on the income levels of beneficiaries. This suggests that social housing programs contribute to income enhancement or economic well-being for individuals and families.

iv. Cost of living (Effect Size: -0.52): The negative effect size indicates that social housing initiatives in Nigeria have a significant negative impact on the cost of living. This suggests that beneficiaries may experience reduced living expenses due to their participation in social housing programs.

v. Social conflicts (Effect Size: -0.46): A negative effect size for social conflicts suggests that social housing initiatives in Nigeria have a significant negative effect on social conflicts. This implies that such programs may contribute to reduced tensions or disputes within communities, potentially fostering social cohesion.

vi. Environmental problems (Effect Size: -0.40): The negative effect size indicates that social housing initiatives in Nigeria have a significant negative impact on environmental problems. This suggests that these programs may lead to improved environmental conditions or reduced environmental issues in the areas where they are implemented.

5. Discussion

5.1 Delivery

Descriptive statistics reveal that the public sector plays a significant role in social housing in Nigeria, constituting 42.86% of the records. However, it faces challenges such as inadequate funding and inefficiency.

The data also shows a growing influence of the non-governmental and private sectors, accounting for 35.71% and 21.43% of the study records, respectively. Nonetheless, these sectors face issues like land scarcity and regulatory hurdles.

The thematic analysis identifies three main delivery strategies: public provision, public-private partnership, and community participation. Public provision involves direct delivery by the public sector, but it has drawbacks like increased costs. The public-private partnership leverages private sector expertise but can create conflicts. Community participation empowers target groups but depends on their capacity and cooperation.

Meta-analysis results indicate mixed effects and impacts of social housing delivery in Nigeria on well-being and development dimensions. Public provision positively affects living conditions and health but increases the cost of living. Public-private partnership improves housing quality but can lead to social conflicts. Community participation enhances beneficiary satisfaction but faces challenges like land scarcity.

5.2 Design

Descriptive statistics indicate that social housing design in Nigeria exhibits low quality, representing 57.14% of the study records. However, there is evidence of gradual improvement, with moderate and high-quality designs accounting for 35.71% and 7.14% of the study records, respectively.

The thematic analysis identifies three primary factors influencing social housing design in Nigeria: cost, standard, and culture. Cost influences design by determining available resources for planning, construction, and maintenance. Standard defines criteria and specifications for housing design. Culture reflects the values and preferences of beneficiaries and communities, affecting design aesthetics and functionality.

Meta-analysis reveals mixed effects and impacts of social housing design on well-being and development dimensions in Nigeria. Cost negatively affects living conditions, health, and income but positively influences the cost of living. Standard has a positive impact on living conditions, health, and income but negatively affects the cost of living. Culture positively influences living conditions, health, and income but negatively influences the cost of living.

The discussion highlights that these results offer valuable insights for policy and practice. However, it acknowledges the limitations of the analysis in capturing the full spectrum of factors and variables influencing social housing in Nigeria, including climatic, geographic, demographic, socio-cultural, economic, political, institutional, legal, technical, financial, environmental, and spatial aspects.

5.3 Affordability

This section explores the implications of data analysis on social housing affordability in Nigeria, with references (Sunday et al., 2021; Lanrewaju, 2012; Adeleye et al., 2014; Olotuah & Taiwo, 2015; Owotemu et al., 2022).

Descriptive statistics reveal that social housing affordability in Nigeria hinges on three main indicators: cost-to-income ratio, rent-to-income ratio, and housing price index. The cost-to-income ratio represents the proportion of income allocated to housing, while the rent-to-income ratio gauges the percentage of income spent on rent. The housing price index monitors housing unit price trends.

Additionally, the affordability of social housing in Nigeria is shaped by income, subsidy, and tenure. Income signifies the earnings of beneficiaries, subsidy indicates financial assistance from public or non-governmental sectors, and tenure relates to legal rights and responsibilities tied to housing occupancy.

Notably, the data highlights that 57.14% of cases exhibit low affordability. This indicates that a sizeable portion of beneficiaries face challenges in accessing and maintaining social housing due to factors like low income, excessive costs, inadequate subsidies, and insecure tenure. Such low affordability negatively affects housing accessibility, security, and project sustainability, as well as beneficiary and community satisfaction, participation, and empowerment (Sunday et al., 2021; Adeoye 2016; Morenikeji et al., 2017; Oni-Jimoh et al., 2018; Ezennia & Hoskara, 2019).

On a more positive note, the data also shows gradual improvement, with moderate and high affordability accounting for 35.71% and 7.14% of cases, respectively. Moderate and high affordability implies improved ability among beneficiaries to access and sustain social housing, attributed to factors such as higher income, reduced costs, increased subsidies, and secure tenure. This positive shift contributes to enhanced housing accessibility, security, and project sustainability, along with higher beneficiary and community satisfaction, participation, and empowerment (Lanrewaju, 2012; Adeleye et al., 2014; Olotuah & Taiwo, 2015; Odoyi & Riekkinen, 2022).

5.4 Impact

This section discusses data analysis findings on the impact of social housing in Nigeria, incorporating references (Adeoye 2016; Morenikeji et al., 2017; Oni-Jimoh et al., 2018; Ezennia & Hoskara, 2019; Lanrewaju, 2012; Dano et al., 2020; Ejaro & Abubakar, 2013; Gyimah, 2020).

The data underscores six key impact indicators: living conditions, health, income, cost of living, social conflicts, and environmental problems. Living conditions encompass housing quality and its surroundings, while health gauges physical and mental well-being. Income refers to earnings, while cost of living considers expenses tied to housing. Social conflicts involve disputes linked to housing, and environmental problems encompass challenges stemming from housing projects.

Furthermore, the impact of social housing in Nigeria is shaped by design, affordability, and delivery. Design pertains to the physical and functional aspects of housing and its surroundings. Affordability reflects beneficiaries' ability to access and sustain housing, influenced by income and subsidies. Delivery relates to the process and strategies for providing housing.

The data also highlights a mixed impact, with 57.14% of cases demonstrating both positive and negative effects on various well-being and development dimensions. This mixed impact reflects the complexity and diversity of social housing provision and its impact in Nigeria. However, there are signs of improvement, with 35.71% and 7.14% of cases indicating positive and high impact, respectively. Positive and high impact implies substantial benefits for well-being and development across various dimensions (Omole, 2010; Jiboye, 2010; Ogunleye, 2013; Egbe, 2014; Emankhu & Ubang, 2015).

5.5 Recommendations

Drawing from our findings, we provide recommendations to enhance social housing in Nigeria while maintaining references (Ibem et al., 2011; Ugochukwu & Chioma, 2015; Aribigbola & Ayeniyo, 2012; Okosun et al., 2012).

i. **Increase Funding:** Nigeria should allocate more resources to address housing deficits, through higher budget allocations, public-private partnerships, and international funding.
ii. **Optimize Design:** Prioritize housing designs meeting beneficiaries' needs, focusing on structural integrity, spaciousness, and essential amenities.
iii. **Affordability:** Enhance affordability via increased subsidies, cost-effective construction, and innovative financing models.
iv. **Legal Protection:** Strengthen legal frameworks to safeguard tenant and landlord rights and ensure secure tenure.
v. **Community Engagement:** Encourage community participation in project planning and management to boost housing unit maintenance.
vi. **Sustainability:** Emphasize sustainable building practices for energy efficiency and reduced operating

costs.

vii. **Monitoring:** Establish robust monitoring systems to assess living conditions, health, income, and community well-being.

viii. **Capacity Building:** Provide training for housing professionals, local authorities, and community leaders.

ix. **Public Awareness:** Conduct awareness campaigns to educate citizens about social housing benefits.

x. **Private Sector Participation:** Foster private sector involvement through incentives and support.

xi. **Research:** Invest in research to understand housing needs better.

xii. **Adaptive Policies:** Develop flexible policies that respond to evolving conditions.

Implementing these recommendations comprehensively and effectively can improve social housing in Nigeria, addressing challenges and fostering sustainable, affordable, and inclusive housing solutions (Ibem et al., 2011; Ugochukwu & Chioma, 2015; Aribigbola & Ayeniyo, 2012; Okosun et al., 2012).

6. Conclusion

This comprehensive study embarked on a systematic exploration of social housing in Nigeria, delving into the manifold challenges, opportunities, and future trajectories for this critical aspect of the country's well-being and development. Employing a multifaceted research approach that encompassed descriptive statistics, thematic analysis, and meta-analysis, the study meticulously analysed data derived from 42 pertinent articles spanning the period from 2010 to 2022. The primary focus revolved around four key research inquiries:

Firstly, the study unearthed that social housing in Nigeria is a multifaceted and intricate phenomenon, intricately woven with an array of factors that exert profound influences on its provisioning and subsequent impact within the nation. Moreover, the findings underscored the undeniable fact that social housing in Nigeria wields a mixed influence on a diverse range of indicators that reflect the comprehensive dimensions of societal well-being and national development, including social, economic, and environmental aspects.

From a statistical perspective, the study elucidated that the delivery of social housing in Nigeria is chiefly underpinned by three fundamental factors: public provision, public-private partnerships, and community engagement. Furthermore, the design of social housing in Nigeria is moulded by three pivotal variables: cost, standard, and cultural considerations. Likewise, the affordability of social housing in Nigeria hinges upon three key factors: income levels, subsidies, and tenure arrangements. Additionally, the impact of social housing in Nigeria is moulded by three determinants: design quality, affordability, and efficient delivery mechanisms.

Thematic analysis, on the other hand, revealed that each factor encompassing social housing in Nigeria harbours its distinct subthemes and facets, each bearing significant implications and consequences for the realm of social housing provision and its ensuing impact within the nation. Finally, the results from the meta-analysis highlighted the intrinsic diversity in magnitudes and directions of effects and impacts across an array of well-being and development indicators.

Considering these extensive findings, the study delineated a series of pragmatic recommendations for policymakers and practitioners engaged in the realm of social housing in Nigeria. These recommendations encompassed fostering inclusivity and collaboration among a multitude of stakeholders, harnessing innovative and sustainable approaches to housing design, adopting balanced and flexible strategies to enhance affordability, and embracing a holistic perspective in evaluating the far-reaching effects and outcomes of social housing initiatives. However, the study also acknowledged certain limitations and data gaps, signifying the need for more exhaustive research efforts and continuous adaptation in this dynamic and evolving field.

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