

Socioeconomic Determinants Influencing the Affordability and Sustainability of Urban Housing in Nigeria

MIKE IKEMEFUNA NWAFOR¹, GIL-OZOUDEH IFECHUKWU DESMOND STEPHEN², DANIEL OBOKHAI UDUOKHAI³, ADEPEJU NAFISAT ARANSI⁴

¹*Minarc Ltd, Abuja, Nigeria*

²*Enugu State University of Science and Technology, Agbani, Enugu, Nigeria*

³*University of Lagos, Lagos, Nigeria*

⁴*Obafemi Awolowo University Osun, Nigeria*

Abstract- Urban housing affordability and sustainability represent dual challenges in Nigeria's rapidly expanding cities, where socioeconomic disparities and weak institutional frameworks have deepened the housing deficit. This study examines the key socioeconomic determinants influencing the affordability and long-term sustainability of urban housing, emphasizing the interplay between income structures, policy regimes, material costs, and demographic dynamics. This synthesizes evidence from major metropolitan areas—Lagos, Abuja, Port Harcourt, and Kano—where rapid urbanization, informal settlements, and speculative land practices have intensified the cost of shelter. Findings indicate that household income and employment status are primary determinants of affordability, particularly given the dominance of informal-sector earnings and limited access to formal credit systems. Land tenure insecurity, driven by the rigidities of the Land Use Act of 1978, further constrains ownership and investment opportunities. High construction costs, dependence on imported materials, and currency fluctuations exacerbate the affordability gap, while inadequate mortgage infrastructure limits middle- and low-income participation in formal housing markets. Beyond affordability, sustainability outcomes are shaped by economic, social, and environmental factors. Limited adoption of energy-efficient designs, weak enforcement of building codes, and minimal integration of local materials undermine environmental resilience. Social sustainability is equally challenged by spatial segregation, gentrification, and inadequate community participation in planning processes. The study highlights that addressing Nigeria's housing crisis requires a systems approach linking

affordability and sustainability through inclusive policies, local capacity development, and innovative financing mechanisms such as rent-to-own and cooperative housing models. The research concludes that achieving sustainable urban housing in Nigeria depends on balancing socioeconomic equity with ecological performance, supported by coherent governance frameworks and data-driven urban planning. This integrated understanding is essential for realizing the United Nations Sustainable Development Goal 11 on sustainable cities and communities.

Keywords: Urban Housing, Socioeconomic Determinants, Affordability, Sustainability, Nigeria, Land Tenure, Housing Finance, Policy Integration

I. INTRODUCTION

Nigeria is experiencing one of the fastest rates of urbanization in Sub-Saharan Africa, driven by population growth, rural–urban migration, and expanding economic activities in metropolitan regions. Current estimates suggest that over 50% of Nigeria's population now resides in urban centers, a figure projected to rise significantly by 2050. This rapid demographic transition has generated an unprecedented demand for housing, exerting immense pressure on urban infrastructure and land resources (Scholten *et al.*, 2018; Anyebe *et al.*, 2018). Despite growing urbanization, the nation faces a persistent housing deficit exceeding 20 million units, reflecting a widening gap between housing supply and demand. The crisis is most severe in Lagos, Abuja, Port Harcourt, and Kano, where migration inflows and speculative real estate practices have driven up

housing costs beyond the reach of low- and middle-income households.

The Nigerian housing sector thus grapples with a dual challenge: affordability and sustainability. On one hand, millions of households are unable to afford decent shelter due to rising construction costs, limited access to finance, and stagnant income levels. On the other hand, much of the existing housing stock fails to meet environmental and social sustainability standards, often being energy-inefficient, overcrowded, or constructed with materials unsuited to local climatic conditions (Osabuohien, 2017; Menson *et al.*, 2018). Achieving affordable and sustainable housing is therefore central to inclusive urban growth and the broader goal of national socioeconomic development.

Urban housing development in Nigeria is constrained by multiple, interrelated socioeconomic factors. The escalating cost of construction materials—largely influenced by inflation, import dependency, and currency volatility—has made new housing developments prohibitively expensive. Land speculation, driven by elite capture and inadequate land-use regulation, further inflates property prices and restricts access for lower-income groups (Essien *et al.*, 2019; Babatunde *et al.*, 2019). Income disparities and a high prevalence of informal employment mean that a majority of urban dwellers cannot qualify for mortgage loans or structured payment plans. In addition, policy incoherence and weak institutional coordination among housing agencies, financial institutions, and urban planning authorities have hindered effective delivery of affordable housing. The absence of a unified regulatory and financing framework continues to perpetuate inefficiencies across the housing value chain.

This aims to identify the key socioeconomic determinants that influence the affordability and sustainability of urban housing in Nigeria. Specifically, it seeks to evaluate the interaction between household income levels, policy frameworks, and urban infrastructure, as well as their collective impact on housing outcomes. By analyzing these relationships, the research intends to provide a basis for more integrated, evidence-based housing policies

that address both affordability and sustainability imperatives (Etim *et al.*, 2019; Ayanbode *et al.*, 2019). What socioeconomic factors most significantly influence urban housing affordability in Nigeria? How do these determinants affect the sustainability and inclusivity of urban housing systems?

The analysis focuses on major Nigerian urban centers—Lagos, Abuja, Port Harcourt, and Kano—representing diverse socioeconomic and ecological contexts. These cities exemplify the tension between rapid urban expansion and inadequate housing provision. The study’s significance lies in its contribution to understanding the systemic barriers to equitable housing access and sustainable development. Insights from this research align with Nigeria’s National Housing Policy and the United Nations Sustainable Development Goal 11, which advocates for “Sustainable Cities and Communities.” By linking affordability, social equity, and environmental performance, the study provides a foundation for rethinking urban housing strategies in contemporary Nigeria.

II. METHODOLOGY

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology was adopted to ensure a structured, transparent, and reproducible synthesis of existing evidence on the socioeconomic determinants influencing the affordability and sustainability of urban housing in Nigeria. The process followed the four main PRISMA stages—identification, screening, eligibility, and inclusion—applied to both peer-reviewed and grey literature from multidisciplinary sources covering urban planning, economics, environmental sustainability, and social policy.

The identification stage involved a comprehensive literature search conducted across major academic databases including Scopus, Web of Science, ScienceDirect, JSTOR, SpringerLink, and Google Scholar. Supplementary searches were carried out in institutional repositories such as the World Bank Open Knowledge Repository, the United Nations Human Settlements Programme (UN-Habitat) database, and Nigeria’s National Bureau of Statistics archives. Keywords and Boolean search strings such as “*urban housing affordability*,” “*sustainability*,” “*Nigeria*,”

“socioeconomic determinants,” “income inequality,” “land tenure,” “housing finance,” and “urban planning” were used in varying combinations to capture relevant materials. The time frame was restricted to studies published between 2000 and 2025 to ensure the inclusion of contemporary evidence reflecting recent policy developments and urban dynamics.

In the screening phase, duplicate records were removed, and titles and abstracts were assessed for relevance based on pre-defined inclusion and exclusion criteria. Studies were included if they addressed urban housing affordability, sustainability, or their socioeconomic drivers within the Nigerian context or comparable Sub-Saharan African settings. Exclusion criteria eliminated works focusing exclusively on rural housing, unrelated infrastructure, or purely technical engineering studies without socioeconomic dimensions.

During the eligibility stage, the full texts of selected studies were reviewed to assess methodological quality and thematic alignment. Both qualitative and quantitative studies were considered, provided they presented empirical or policy-based insights into determinants such as income level, employment structure, land tenure systems, construction costs, access to finance, or institutional governance. Grey literature, including policy briefs, government reports, and international agency publications, was also reviewed to complement academic findings and address data limitations prevalent in Nigerian housing research.

The inclusion stage resulted in a final dataset of 72 documents—comprising 45 peer-reviewed journal articles, 15 institutional reports, and 12 policy papers—that met all quality and relevance criteria. Data extraction followed a standardized template capturing author, year, study design, geographic scope, major determinants analyzed, and key outcomes. A thematic synthesis approach was then used to categorize findings into dominant clusters: income and employment patterns, land and tenure systems, financial accessibility, construction and material costs, demographic pressures, and policy or governance mechanisms. The synthesis also examined how these determinants jointly affect environmental,

social, and economic sustainability dimensions within Nigeria’s urban housing systems.

By adhering to the PRISMA framework, the review ensured methodological rigor, minimized selection bias, and enhanced the reliability of derived insights. The outcome provides an evidence-based foundation for policy recommendations aimed at balancing affordability, sustainability, and inclusivity in Nigeria’s urban housing landscape.

2.1 Theoretical and Conceptual Framework

Understanding the socioeconomic determinants influencing the affordability and sustainability of urban housing in Nigeria requires a clear theoretical and conceptual foundation (Durowade *et al.*, 2016; Ajayi *et al.*, 2019). This framework integrates economic, social, and environmental perspectives to explain the multifaceted relationships between household characteristics, institutional conditions, and housing outcomes in rapidly urbanizing Nigerian cities.

At the core of this study are two interrelated concepts—affordability and sustainability—which together define the quality, accessibility, and longevity of urban housing systems. Affordability refers to the ratio of housing costs to household income, representing the economic burden of securing adequate shelter. In practical terms, a house is considered affordable when the cost of rent, mortgage, or ownership does not exceed 30% of household income, enabling households to meet other essential needs such as food, education, and healthcare. In Nigeria, however, the majority of urban dwellers—particularly those employed in the informal sector—spend a disproportionately high share of their income on housing due to inflation, limited access to formal credit, and speculative land pricing (Popescu *et al.*, 2012; BABATUNDE *et al.*, 2014). This imbalance reflects not only economic constraints but also deep structural inequities in land governance and housing finance.

Sustainability, in contrast, encompasses the long-term balance of economic, social, and environmental dimensions in housing design and delivery. Economically sustainable housing ensures cost efficiency across its life cycle—construction,

maintenance, and operation—while minimizing financial vulnerability for occupants. Social sustainability emphasizes inclusivity, community integration, and cultural appropriateness, ensuring that housing developments foster equitable urban growth rather than social segregation. Environmental sustainability focuses on resource efficiency, energy conservation, and resilience to climate impacts through the use of local materials, passive design strategies, and low-carbon technologies (Solomon *et al.*, 2018; Durowade *et al.*, 2018). Together, affordability and sustainability represent complementary goals: affordable housing must remain environmentally responsible and socially equitable to achieve long-term viability.

The theoretical foundation of this study draws from three key frameworks that collectively illuminate the socioeconomic dynamics of urban housing systems in Nigeria. The Housing Affordability Theory (Stone, 2006) provides the first lens, defining affordability not merely as the cost of housing but as a reflection of the balance between housing expenditure and residual income after essential needs are met. Stone’s “residual income approach” highlights that affordability is contextual—dependent on household income, cost of living, and access to public infrastructure. This theory is particularly relevant to Nigeria, where structural inflation, underemployment, and inadequate public services elevate household expenditure, leaving little residual income for housing investment (Durowade *et al.*, 2017; Dare *et al.*, 2019).

The second framework, the Sustainable Livelihoods Framework (SLF), extends the analysis beyond monetary measures to include social assets, human capital, and institutional support structures. Originating from development studies, the SLF views housing as a component of livelihood security, linking household capacity to economic opportunities, social networks, and environmental stability. In Nigeria’s urban context, the framework explains how access to stable employment, credit facilities, and community-based networks enables households to secure and sustain housing. It also highlights the vulnerability of informal workers and low-income households, whose limited access to institutional support often forces them into precarious living conditions (Dogho, 2011; Ajayi, 2019).

The third theoretical lens, the Urban Political Economy and Social Stratification Theory, situates housing within broader systems of power, inequality, and governance. This perspective argues that housing outcomes reflect the distribution of economic and political power within society. In Nigerian cities, land allocation, zoning regulations, and housing finance systems often favor higher-income groups, reinforcing spatial inequality and urban segregation. The theory thus provides a critical framework for understanding how institutional biases, policy fragmentation, and market-driven housing development perpetuate exclusion and constrain access for vulnerable populations (Durowade *et al.*, 2017; BUKHARI *et al.*, 2018).

Integrating these perspectives, the conceptual model of this study posits that the affordability and sustainability of urban housing are products of dynamic interactions among socioeconomic variables—such as income, employment, education, and household size—and institutional and environmental factors. Income and employment determine purchasing power and access to credit; education influences awareness of sustainable practices and housing investment decisions; and household size affects demand patterns and space utilization. Institutional variables—including governance efficiency, land tenure security, and policy implementation—mediate these relationships by shaping the accessibility and quality of housing supply (Ho, 2018; Zhang and Zhao, 2018). Environmental factors, such as climate resilience and resource availability, further determine the long-term sustainability of housing systems.

This integrated model thus recognizes that urban housing outcomes in Nigeria are not determined by isolated economic or physical parameters but by complex interdependencies among social, institutional, and ecological systems. It provides a comprehensive framework for analyzing how socioeconomic inequalities and governance structures collectively influence both the affordability and sustainability of urban housing, thereby guiding policy interventions toward inclusive and resilient urban development (Islar *et al.*, 2017; Macintyre *et al.*, 2018).

2.2 Socioeconomic Determinants of Urban Housing Affordability

Urban housing affordability in Nigeria is a multidimensional issue influenced by a complex interplay of socioeconomic, institutional, and demographic factors. Rapid urbanization, coupled with economic inequality and weak policy enforcement, has created a housing environment where supply fails to meet demand, and costs outpace income growth as shown in figure 1 (Zhang, 2016; King *et al.*, 2017). The determinants outlined below explain the structural and behavioral dynamics shaping the affordability landscape across Nigerian cities such as Lagos, Abuja, Port Harcourt, and Kano.

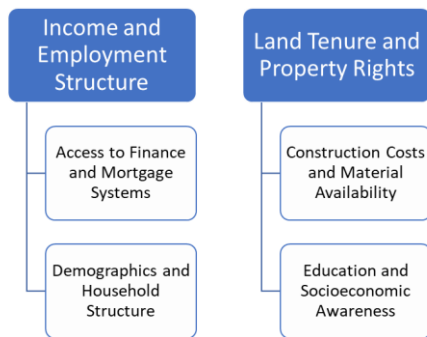


Figure 1: Socioeconomic Determinants of Urban Housing Affordability

Income remains the most critical determinant of housing affordability. In Nigeria, the urban labor force is heavily concentrated in the informal sector, where earnings are typically low, irregular, and unprotected by labor regulations. These income instabilities constrain the capacity of households to access formal housing finance or sustain long-term mortgage payments. Moreover, wage stagnation has not kept pace with the rising costs of rent, land, and construction materials. For example, while minimum wage adjustments occur infrequently, housing costs have escalated annually due to inflation, speculative property markets, and high construction expenses. Consequently, a significant share of urban dwellers spend over 40% of their income on housing, far exceeding the global affordability threshold of 30%. This imbalance perpetuates the cycle of informal settlements, overcrowding, and housing insecurity.

Land accessibility and ownership are central to housing affordability. The Land Use Act of 1978, which vests land ownership in the state, was intended to streamline land administration but has, in practice, created barriers for ordinary citizens. Complex bureaucratic procedures, high acquisition costs, and discretionary allocation powers have limited access to secure land titles (Phuhlisani, 2017; Wubneh, 2018). Corruption within land registries and opaque documentation processes further inflate transaction costs, discouraging private investment and formal homeownership. In cities like Abuja and Lagos, land speculation and elite capture have driven land prices beyond the reach of middle- and low-income earners, exacerbating spatial inequality and informal settlement proliferation.

Nigeria's formal housing finance system remains underdeveloped and inaccessible to most urban residents. Institutions such as the National Housing Fund (NHF) and Federal Mortgage Bank of Nigeria (FMBN) have limited reach, constrained by administrative inefficiencies and insufficient capitalization. High interest rates—often exceeding 20%—and stringent collateral requirements exclude low- and moderate-income households from formal mortgage markets. Furthermore, most workers in the informal sector lack verifiable income documentation, which disqualifies them from conventional loan schemes. Consequently, many Nigerians resort to incremental building, community savings associations, or informal loans, which, while adaptive, slow the pace of adequate housing delivery and compromise construction quality.

The cost of construction materials is another major factor shaping affordability. Nigeria's heavy dependence on imported cement, steel, and finishing materials exposes the housing sector to currency fluctuations and trade disruptions. Inflationary pressures and foreign exchange volatility significantly increase project costs, making formal housing development unaffordable for the average citizen. However, promoting local production and embracing circular economy principles—such as recycling construction waste, using locally sourced materials like laterite blocks or bamboo, and integrating modular construction—offer viable pathways for cost reduction. Supporting local industries and research

into alternative materials can strengthen economic resilience while promoting environmentally sustainable construction practices (Ismail *et al.*, 2017; Aguiñaga *et al.*, 2018).

Nigeria's urban demographics further complicate the housing landscape. Rapid rural–urban migration and a youthful population create persistent demand pressures. With over 60% of Nigerians under the age of 35, the demand for affordable rental and starter homes continues to outstrip supply. Household size also influences affordability dynamics; larger households require more living space, increasing costs per unit. Additionally, gender disparities remain evident, as women face social and financial barriers to property ownership due to cultural norms and discriminatory credit systems. These demographic and gender dimensions reinforce inequality in access to decent and affordable housing.

Education and financial literacy play vital roles in housing affordability. Higher education levels correlate with improved access to formal employment, higher income stability, and greater understanding of credit mechanisms. Conversely, low literacy rates and limited awareness of housing finance opportunities hinder informed decision-making and participation in formal housing markets. Financial literacy initiatives can empower households to plan savings, access mortgage instruments, and evaluate long-term housing investments.

The affordability of urban housing in Nigeria is shaped by interdependent socioeconomic determinants that reflect broader structural inequalities. Addressing these requires integrated policy interventions that enhance income security, reform land governance, expand housing finance access, promote local construction material innovation, and strengthen education and gender inclusion (Turok, 2016; Rutherford, 2017). Only through such multidimensional strategies can Nigeria achieve equitable and sustainable housing affordability across its urban centers.

2.3 Determinants of Urban Housing Sustainability

Urban housing sustainability in Nigeria embodies a multidimensional framework encompassing environmental, socio-cultural, economic, and

institutional dimensions. It reflects the capacity of housing systems to meet present needs without compromising the ability of future generations to access safe, affordable, and resilient living spaces as shown in figure 2. As Nigerian cities continue to expand rapidly under the pressures of population growth, resource scarcity, and climate change, sustainable housing has become a critical policy and development priority. Achieving sustainability requires a balance between ecological efficiency, social inclusion, and economic viability, supported by strong institutional frameworks and governance mechanisms (Gupta and Vegelin, 2016; Eizenberg and Jabareen, 2017).



Figure 2: Determinants of Urban Housing Sustainability

Environmental sustainability in urban housing centers on reducing ecological footprints through design, construction, and operational strategies that conserve energy, water, and natural resources. Energy-efficient building design—emphasizing passive ventilation, natural lighting, and optimal orientation—can significantly reduce dependence on artificial cooling and lighting systems, which are major energy consumers in Nigeria's tropical climate. The incorporation of climate-responsive materials such as compressed earth blocks, insulated roofing, and reflective coatings can moderate indoor temperatures and improve occupant comfort.

Furthermore, integrating green infrastructure—such as vegetated rooftops, urban gardens, and permeable pavements—enhances biodiversity and mitigates the urban heat island effect. Water conservation technologies, including rainwater harvesting and greywater recycling systems, can reduce stress on municipal water supply networks. Despite growing awareness, however, the widespread adoption of these

practices in Nigeria is constrained by limited technical expertise, weak regulatory enforcement, and the perception that sustainable building solutions are expensive. Promoting awareness, capacity building, and incentives for green certification are therefore essential for embedding environmental sustainability within the housing sector.

Socio-cultural sustainability emphasizes the importance of preserving community cohesion, local identity, and inclusive participation in housing development. In Nigeria, traditional architecture and building techniques—such as courtyard layouts, thick earthen walls, and shaded verandas—offer valuable insights into sustainable design adapted to local climatic and social conditions (Farragher, 2017; Maina *et al.*, 2018). Preserving these traditions, while integrating modern technologies, can enhance cultural continuity and reduce dependence on imported materials.

Equally important is the need to prevent social exclusion and gentrification. Urban renewal and private real estate developments often displace low-income residents, undermining social stability and access to urban services. Sustainable housing must therefore prioritize inclusivity, ensuring that affordable housing projects are integrated into city centers rather than relegated to peripheral zones. Community participation in planning and decision-making enhances ownership, strengthens social networks, and ensures that housing solutions reflect local aspirations and cultural norms. Maintaining socio-cultural sustainability thus requires a people-centered approach that values cultural heritage and social equity alongside physical infrastructure.

Economic sustainability relates to the long-term affordability and cost-effectiveness of housing throughout its life cycle—from construction to operation and maintenance. Sustainable housing minimizes lifecycle costs through the use of durable, low-maintenance materials and energy-saving technologies. Affordable energy bills and reduced repair costs contribute to financial stability for occupants while improving housing longevity.

Local job creation is another essential dimension. Encouraging domestic production of construction

materials such as stabilized laterite bricks, bamboo composites, and recycled aggregates can lower costs and stimulate employment within the housing value chain. Construction innovations, including prefabrication and modular design, can shorten building timelines, reduce waste, and optimize resource use. However, achieving economic sustainability requires coherent policy frameworks that link housing provision with industrial development and skills training. Without such alignment, Nigeria risks perpetuating dependency on imported materials and technologies, undermining both affordability and local economic resilience (Akinyetun, 2018; Cartwright *et al.*, 2018).

Institutional structures and governance mechanisms serve as the backbone of urban housing sustainability. Effective urban planning, regulatory enforcement, and coordination among housing agencies are vital for ensuring compliance with building codes, environmental standards, and safety regulations. Weak governance, corruption, and fragmented policy implementation have historically undermined sustainable housing initiatives in Nigeria. Strengthening institutional accountability through transparent land administration, digital permitting systems, and urban planning reforms can improve efficiency and public trust.

Public-private partnerships (PPPs) and cooperative housing models also play pivotal roles in expanding access to sustainable housing. PPPs leverage private investment for large-scale developments while ensuring public oversight to safeguard affordability and environmental standards. Cooperative models, on the other hand, empower communities to pool resources and manage housing collectively, fostering both social and economic sustainability. Encouraging these models requires supportive legislation, access to affordable credit, and technical assistance from government agencies and non-profit organizations.

Urban housing sustainability in Nigeria depends on the integrated functioning of environmental stewardship, socio-cultural preservation, economic resilience, and effective governance. Strengthening these determinants through coherent policy frameworks, community participation, and capacity development will ensure that Nigerian cities evolve into inclusive,

resource-efficient, and resilient urban environments aligned with Sustainable Development Goal 11 “Sustainable Cities and Communities (Cobbinah and Darkwah, 2017; Rode *et al.*, 2017).”

2.4 Interlinkages Between Affordability and Sustainability

The relationship between housing affordability and sustainability in urban Nigeria is complex, dynamic, and deeply interdependent. While affordability focuses on reducing the economic burden of acquiring or maintaining housing, sustainability seeks to ensure that housing systems are environmentally sound, socially inclusive, and economically resilient over time. The two concepts often intersect in policy and practice, but they can also conflict when affordability initiatives overlook long-term environmental and social considerations, or when sustainability measures increase upfront costs. Understanding these interlinkages is essential to designing coherent housing strategies that address Nigeria’s growing urban challenges in a balanced and equitable manner.

Affordability and sustainability can either complement or undermine each other, depending on the design, implementation, and financing of housing policies. On one hand, affordability strategies that rely solely on cost minimization—such as the use of low-quality materials, high-density development without adequate infrastructure, or exclusion of green technologies—can undermine sustainability objectives. Poor-quality construction often leads to higher maintenance costs, shorter building lifespans, and environmental degradation. In Nigeria, several low-cost housing projects have failed to achieve durability or comfort due to neglect of energy efficiency and climate responsiveness (Akhimien *et al.*, 2017; Bhikhoo *et al.*, 2017).

Conversely, there are significant synergies when affordability and sustainability are pursued concurrently. Incorporating passive ventilation, local materials, and energy-efficient designs can reduce operational costs and improve household well-being over time. Though sustainable materials and technologies may increase initial construction costs, they offer long-term savings through lower utility bills and maintenance expenditures. For example, the use

of stabilized earth blocks, bamboo composites, and solar energy systems can deliver both affordability and ecological benefits.

A comparative analysis of low-cost housing and eco-housing initiatives illustrates these trade-offs. Conventional low-cost housing in Nigeria has traditionally prioritized immediate cost reduction over environmental performance. Such projects, while initially cheaper, often become unsustainable due to rapid deterioration, energy inefficiency, and limited adaptability to climatic conditions. In contrast, eco-housing initiatives integrate affordability with sustainability by employing resource-efficient construction, renewable energy, and community participation. Projects incorporating green infrastructure, such as water recycling and natural ventilation, demonstrate that long-term affordability can coexist with environmental responsibility when supported by enabling policies and technical capacity.

Achieving a balance between affordability and sustainability requires an integrated policy framework that connects housing finance mechanisms, environmental standards, and social equity principles. Fragmented approaches—where financial institutions, housing agencies, and environmental regulators operate in isolation—have historically undermined Nigeria’s housing outcomes (Wahab and Falola, 2017; Pitcher, 2017). For instance, housing finance policies often fail to account for lifecycle costs or environmental performance, while building codes and planning regulations inadequately address affordability concerns.

A holistic framework should therefore link access to finance with incentives for sustainable construction. Green financing mechanisms, such as reduced-interest loans for energy-efficient buildings, tax rebates for local material use, and grants for renewable energy installations, can bridge the gap between affordability and sustainability. Furthermore, integrating social equity into housing policy ensures that low-income groups benefit from sustainable housing innovations. Inclusionary zoning, rent-to-own schemes, and cooperative housing models can promote mixed-income communities and prevent socio-spatial segregation. Such integrated frameworks align with the principles of Sustainable Development Goal 11,

emphasizing “inclusive, safe, resilient, and sustainable cities.”

Two key Nigerian initiatives—the Lagos Home Ownership Mortgage Scheme (LagosHOMS) and the Family Homes Fund (FHF) under the National Housing Programme—illustrate practical attempts to link affordability with sustainability.

The LagosHOMS program, established by the Lagos State Government, was designed to address the affordability crisis through mortgage-based homeownership for middle-income earners. While it has improved access to formal housing finance, critics argue that the scheme’s units remain unaffordable for lower-income households, and sustainability measures such as energy efficiency and climate resilience are often secondary considerations. Nonetheless, LagosHOMS demonstrates institutional innovation by combining public funding with private development, showing potential for future integration of green standards in large-scale urban housing projects.

The Family Homes Fund (FHF), a federal initiative, takes a broader approach by targeting low- and middle-income households through partnerships with state governments, private developers, and cooperative societies. The Fund promotes cost reduction via bulk procurement and local material utilization, while incorporating community-based approaches that enhance social sustainability. The National Housing Programme, operating under similar principles, emphasizes local content and job creation, thereby addressing economic and environmental sustainability dimensions concurrently.

Both initiatives reveal that integrating affordability and sustainability requires more than financial innovation—it depends on coordinated governance, transparent land administration, and enforcement of green building standards (Voegtlin and Scherer, 2017; Carter *et al.*, 2018).

The interlinkages between affordability and sustainability in Nigeria’s urban housing system highlight the need for policies that transcend short-term economic considerations. When pursued together, these goals reinforce each other by ensuring that housing remains accessible, durable, and environmentally responsible. The future of Nigerian

cities depends on institutionalizing such synergies through integrated financing, participatory planning, and adaptive governance frameworks that balance affordability, equity, and sustainability for all urban residents.

2.5 Policy Implications and Strategic Recommendations

Addressing the intertwined challenges of urban housing affordability and sustainability in Nigeria requires a multidimensional and coherent policy approach. The evidence from socioeconomic and environmental analyses underscores that fragmented interventions—whether through finance, land policy, or construction technology—have not yielded equitable or enduring solutions. Instead, systemic reforms are needed to harmonize land administration, financial access, construction practices, and governance mechanisms. This section outlines policy implications and strategic recommendations across four interdependent domains: policy and planning reform, financial innovation, capacity building, and institutional coordination.

Reforming Nigeria’s land governance framework is a fundamental prerequisite for improving housing affordability and sustainability. The Land Use Act of 1978, which centralizes land ownership under state governors, has become a major constraint to equitable land access. Its rigid structure limits tenure security, discourages private investment, and facilitates bureaucratic inefficiency. A revision of this Act should focus on decentralizing land governance to local councils, enhancing transparency in land allocation, and simplifying title registration. Digital land cadastre systems can further reduce corruption and transaction delays while improving public access to land records (Themistocleous, 2018; Ewendt, 2018).

Beyond land reforms, urban planning policies must promote mixed-income and inclusionary housing models. Zoning regulations should require developers to allocate a proportion of units to low- and middle-income groups within new residential projects. This approach mitigates socio-spatial segregation and encourages community integration, preventing the concentration of poverty in peripheral informal settlements. Moreover, embedding sustainability

requirements—such as green building codes and energy efficiency standards—into national and municipal housing regulations can ensure that affordability does not compromise environmental integrity. Urban master plans should also adopt transit-oriented and climate-resilient designs, aligning housing development with public transportation and green infrastructure networks.

Transforming housing affordability depends on expanding the reach and diversity of housing finance mechanisms. Conventional mortgage systems remain inaccessible to most Nigerians due to high interest rates, stringent collateral demands, and income informality. Micro-mortgages, rent-to-own schemes, and housing cooperatives provide viable alternatives that accommodate the financial realities of low- and middle-income earners. Micro-mortgages, supported by mobile banking and community credit systems, can enable incremental homeownership for informal workers. Rent-to-own programs, where rental payments gradually convert into ownership equity, offer flexible pathways to secure tenure.

In addition, promoting green financing mechanisms can link affordability with sustainability. Financial institutions should introduce low-interest loans and tax incentives for developers using eco-friendly materials and energy-efficient technologies (Mohd and Kaushal, 2018; Rathore *et al.*, 2018). Establishing green housing funds and carbon credit programs can attract private investment while reducing environmental impact. The Central Bank of Nigeria and development partners can also support sustainable housing through blended finance models that de-risk private sector participation in low-cost housing projects.

Sustainable housing development requires skilled labor and technological innovation rooted in local contexts. Targeted skills development programs for local builders, artisans, and small-scale contractors can enhance the quality and efficiency of construction processes. Integrating sustainability principles—such as material optimization, waste reduction, and renewable energy use—into technical training curricula will ensure that workers contribute to long-term environmental and economic goals.

Support for research and development (R&D) in affordable eco-materials is equally critical. Public

universities, research institutes, and private developers should collaborate on developing cost-effective local materials such as stabilized earth blocks, bamboo composites, and recycled aggregates. Government incentives for innovation, including grants and intellectual property protection, can accelerate the adoption of indigenous solutions. Empowering communities to participate in design and construction processes fosters local ownership, preserves traditional knowledge, and enhances social cohesion within urban settlements.

Effective housing reform depends on robust governance and coordination across multiple sectors. Inter-agency collaboration between the ministries of housing, environment, and finance must be institutionalized through joint policy frameworks, shared databases, and integrated project planning. This alignment ensures that housing initiatives simultaneously address environmental standards, financial accessibility, and infrastructural provision. Establishing monitoring frameworks for housing sustainability indicators—including metrics for affordability, energy efficiency, and social inclusivity—can guide evidence-based policymaking and accountability (Lynch and Mosbah, 2017; Raymond *et al.*, 2017).

Moreover, decentralizing implementation to state and municipal authorities encourages adaptive governance responsive to local needs. Creating multi-stakeholder housing councils involving government, private developers, civil society, and research institutions can facilitate participatory decision-making and continuous feedback. Transparent procurement, open data platforms, and periodic public reporting will further enhance accountability and trust in the housing sector.

Achieving sustainable and affordable urban housing in Nigeria requires an integrated policy transformation anchored on land reform, financial diversification, local capacity strengthening, and institutional synergy. By aligning affordability with sustainability goals through coordinated reforms, Nigeria can transition toward inclusive, resilient, and resource-efficient urban housing systems that advance national development and the United Nations Sustainable

Development Goal 11—“Sustainable Cities and Communities.”

2.6 Limitations and Future Research Directions

Despite the significant insights derived from the analysis of socioeconomic determinants influencing the affordability and sustainability of urban housing in Nigeria, this study, like others in the field, faces notable limitations that constrain the generalizability and depth of its findings. These limitations arise primarily from data availability, methodological challenges, and contextual variability inherent in Nigeria’s rapidly evolving urban landscape. Recognizing these constraints is essential to guiding future research toward more comprehensive, data-driven, and comparative investigations that can inform inclusive and sustainable housing policies (Abbasi *et al.*, 2016; Datnow and Hubbard, 2016).

One of the major limitations encountered in assessing urban housing systems in Nigeria is the limited availability of disaggregated, high-quality housing data. National housing statistics often aggregate rural and urban indicators, masking regional disparities in affordability, infrastructure quality, and tenure security. Furthermore, periodic inconsistencies in population censuses, weak record-keeping, and inadequate institutional coordination among agencies—such as the National Bureau of Statistics (NBS), the Federal Mortgage Bank of Nigeria (FMBN), and the Federal Housing Authority (FHA)—hinder the development of a unified housing database. The absence of spatially disaggregated data also makes it difficult to examine intra-urban differences across cities like Lagos, Abuja, Port Harcourt, and Kano, where socioeconomic and environmental contexts vary considerably.

Moreover, much of the available data focuses on formal housing markets, while informal housing sectors, which accommodate a majority of low-income urban dwellers, remain under-documented. This creates a skewed understanding of affordability and sustainability, as informal settlements—though often lacking formal tenure—represent adaptive responses to affordability pressures. The lack of reliable datasets on informal rental markets, self-built housing, and community-led housing initiatives limits researchers’ ability to capture the full complexity of urban housing

dynamics. Improved data collection through satellite imaging, geospatial mapping, and community-based enumeration could substantially enhance the precision of future analyses.

Methodological challenges also constrain the capacity to evaluate the interplay between affordability and sustainability within Nigeria’s urban housing systems. Quantifying informal sector housing dynamics remains particularly problematic due to the fluidity of tenure arrangements, unregistered property transactions, and irregular income streams. Conventional econometric or survey-based models often fail to reflect these realities, leading to underestimation of the actual housing deficit or misinterpretation of affordability metrics (Rademaekers *et al.*, 2016; Osberg, 2018). For instance, the standard affordability ratio—housing cost as a share of household income—does not adequately capture households that rely on incremental or communal building approaches, which are common in Nigerian urban peripheries.

Additionally, most studies, including the present synthesis, depend heavily on secondary data sources and qualitative reports. This reliance constrains causal inference and the ability to evaluate dynamic interactions between variables such as policy interventions, environmental constraints, and socioeconomic behavior. Limited longitudinal studies further weaken the understanding of temporal trends in affordability and sustainability. Another challenge lies in the integration of cross-disciplinary methodologies—urban planning, economics, sociology, and environmental science—which are necessary for a holistic understanding of housing systems but are rarely combined effectively due to institutional silos and disciplinary boundaries.

Future research should adopt multi-scalar, data-driven, and interdisciplinary approaches to bridge these gaps. A critical area for exploration is the impact of digital housing platforms and smart city initiatives on affordability and sustainability. Emerging digital technologies—such as property management apps, blockchain-based land registries, and online mortgage platforms—are transforming access to housing finance, transparency in land transactions, and urban service delivery. However, their effects on low-

income and informal housing markets remain largely unexplored. Empirical studies should investigate whether digital innovations exacerbate or mitigate existing inequalities in housing access, particularly in megacities like Lagos that are embracing smart city paradigms.

Comparative studies across Sub-Saharan African urban contexts also hold promise for generating broader theoretical and policy insights. Countries such as Kenya, South Africa, and Ghana share similar demographic pressures, informal housing patterns, and governance challenges. A comparative framework can help identify region-specific determinants of affordability and sustainability, while also revealing transferable best practices in financing models, land administration, and green housing innovations (Dąbrowski *et al.*, 2018; Wu *et al.*, 2018). Such comparative analyses should incorporate mixed-method approaches—combining geospatial mapping, big data analytics, and participatory research—to ensure both empirical depth and contextual relevance.

Additionally, future research should engage in longitudinal impact assessments of ongoing Nigerian housing programs such as the Family Homes Fund (FHF), Lagos Home Ownership Mortgage Scheme (LagosHOMS), and the National Housing Programme (NHP). Understanding how these interventions evolve over time, and their effectiveness in integrating affordability with environmental sustainability, will provide valuable feedback for policy refinement.

While current research illuminates key socioeconomic determinants of Nigeria's urban housing crisis, it remains constrained by data scarcity, methodological limitations, and contextual diversity. Future studies must prioritize systematic data collection, methodological innovation, and regional comparison to deepen understanding and inform evidence-based housing policy (Snilstveit *et al.*, 2016; Haby *et al.*, 2016). Strengthening research infrastructure and fostering collaborations between academia, government, and the private sector will be pivotal to achieving sustainable, inclusive, and data-driven housing systems aligned with Nigeria's urban development agenda and the United Nations Sustainable Development Goal 11: *Sustainable Cities and Communities*.

CONCLUSION

This has examined the multifaceted socioeconomic determinants influencing the affordability and sustainability of urban housing in Nigeria, emphasizing the deep interconnections between economic, social, and environmental dimensions. The synthesis of evidence reveals that socioeconomic inequalities and institutional inefficiencies remain central barriers to affordable and sustainable housing delivery. Persistent income disparities, informal employment structures, and limited access to housing finance continue to constrain the capacity of low- and middle-income households to secure adequate shelter. Moreover, inefficiencies in land governance, bureaucratic bottlenecks, and weak policy enforcement have perpetuated inequitable access to land and formal housing markets. These factors collectively reinforce a cycle of exclusion, compelling millions of urban residents to rely on informal and substandard housing solutions.

Equally critical is the recognition that sustainability cannot be achieved in isolation from social equity. Sustainable housing extends beyond energy-efficient technologies and green materials—it encompasses the affordability, cultural relevance, and inclusivity of urban living environments. Integrating environmental performance with socioeconomic considerations is thus essential to creating resilient and livable cities. Affordable housing must not compromise long-term durability or ecological balance; conversely, sustainability initiatives must be designed to remain financially accessible to diverse income groups.

To address these intertwined challenges, the study underscores the urgent need for integrated, multi-stakeholder action. Collaboration among government agencies, private developers, financial institutions, community organizations, and academic researchers is indispensable. Evidence-based urban planning—grounded in robust, disaggregated housing data—should guide the formulation of policies that align affordability objectives with environmental and social goals. Strengthening institutional coordination, promoting inclusive financing mechanisms, and investing in local innovation are strategic imperatives for Nigeria's urban future. Ultimately, achieving sustainable and affordable urban housing requires a

paradigm shift toward a holistic, data-driven, and equity-centered approach, consistent with the United Nations Sustainable Development Goal 11: *Sustainable Cities and Communities*.

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