



This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Odoyi, Emmanuel Joseph; Riekkinen, Kirsikka

# Housing Policy : An Analysis of Public Housing Policy Strategies for Low-Income Earners in Nigeria

Published in: Sustainability (Switzerland)

DOI:

10.3390/su14042258

Published: 01/02/2022

Document Version
Publisher's PDF, also known as Version of record

Published under the following license: CC BY

Please cite the original version:

Odoyi, E. J., & Riekkinen, K. (2022). Housing Policy: An Analysis of Public Housing Policy Strategies for Low-Income Earners in Nigeria. Sustainability (Switzerland), 14(4), Article 2258. https://doi.org/10.3390/su14042258

This material is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.





Article

# Housing Policy: An Analysis of Public Housing Policy Strategies for Low-Income Earners in Nigeria

Emmanuel Joseph Odoyi 1,\* and Kirsikka Riekkinen 1,2 and Kirsikka Riekkinen 1,2

- Department of Built Environment, School of Engineering, Aalto University, Otakaari 4, P.O. Box 12200, Aalto, 02150 Espoo, Finland; kirsikka.riekkinen@aalto.fi
- <sup>2</sup> National Land Survey of Finland, P.O. Box 84, 00521 Helsinki, Finland
- \* Correspondence: emmanuel.odoyi@aalto.fi; Tel.: +358-469336068

Abstract: This article evaluates the Global South housing policy for low-income earners by utilising the Nigerian example to analyse public housing policy strategies used to provide housing to low-income earners. The materials employed in the study were housing policy programme documents provided by various ministries that are linked to housing between 1991 and 2020. The housing policy documents were subjected to qualitative content and thematic analysis. The analysis of the selected housing policy documents showed seven key policy strategies that are intended to strengthen affordable housing development. These strategic themes are funds, schemes, governments, implementation, development, land, and rurality. The findings indicated that the existence of housing policy strategical themes does not translate to affordable housing development and housing affordability for low-income earners, though the effective activation and implementation of strategical themes will promote affordable housing development.

**Keywords:** housing policy; Nigeria; strategies; housing tenure; affordable housing; low-income earners; sustainability



Citation: Odoyi, E.J.; Riekkinen, K. Housing Policy: An Analysis of Public Housing Policy Strategies for Low-Income Earners in Nigeria. Sustainability 2022, 14, 2258. https://doi.org/10.3390/su14042258

Academic Editors: Grazia Napoli and Maria Rosa Trovato

Received: 20 December 2021 Accepted: 11 February 2022 Published: 16 February 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

# 1. Introduction

Housing is a multi-faceted issue and fundamental to the well-being, survival, and health of human beings. A house may be spoken of in relation to people obtaining and having access to a house or being housed [1], and the development of housing units plays a major role in providing accommodation or space for different uses, regardless of income, class, and societal status. Conversely, the role played by governments in housing provision varies across countries in terms of the level of interventions and the kind of intervention made [2], through policies, programmes, or schemes. An ineffective housing policy for low-income households can lead to housing shortages and unaffordable housing.

In general, housing policies and programmes are aimed at promoting housing affordability for low- and middle-income households [3–5] and at national and regional levels of governments. An adequate housing policy has different intervention mechanisms and strategies that can be utilised to provide housing to low-income households. Thus, these strategies and intervention mechanisms often take different forms, including regulation, subsidisation, and accountability, in the definition of issues of non-intervention, information, and direct provision [6]. These different policy strategies and mechanisms can be employed as solutions intended to solve housing shortage issues amongst low-income earners. Subsequently, using effective policy strategies and mechanisms might help in reducing a quantitative housing deficiency where housing is only used as cover [7].

Therefore, the existence of an ineffective housing policy strategy can lead to housing shortages, slum spread, and unaffordable housing, which can be major obstacles to the well-being of low-income earners [8]. It hinders their access to affordable housing and has severe social effects and negative impacts on economic development [9]. An effective

Sustainability **2022**, 14, 2258 2 of 27

implementation of housing policy strategies provides affordable housing to low-income earners and improves their living standards [10]. The housing policy strategies in the Global South have been criticised for not making housing accessible, available, adequate, and affordable to low-income earners. For example, scholars have noted that the present housing policy in the Global South has failed to provide affordable housing to low-income earners [11–16]. Furthermore, other scholars have also noted that most governments in the Global South are directing efforts towards solving these housing shortage problems [17–19].

An effective housing policy is not essentially about the nature of housing alone, it also entails the link between housing as a consumption good and housing as an economic good with a market value [20]. In a similar vein, Della Spina et al. [21] noted that social housing (SH) initiatives are an opportunity to pursue sustainability goals. Thus, social housing policies ought to be tailored to the economic opportunities, construction processes, geographic region, cultural context, and material needs of a certain society [22]. This is in line with the concept of sustainability. According to the Brundtland report (World Commission on Environment and Development, WCED, 1987), sustainability is defined as the long-term balance between the environment, economic growth, and the social aspect to meet the needs of a society. It is also essential in environmental preservation and the quality of urban development [23]. For example, environmental sustainability promotes ecologically oriented lifestyles and social cohesion and discourages the exclusion that has created slum neighborhoods.

Sustainability is a multifaceted concept that integrates economic, environmental, and social aspects. Therefore, an effective housing policy that is in line with the concept of sustainability must be centered primarily on policies related to regional and urban development, governance, finance, and taxation [24]. In the context of housing, housing policies based on sustainability criteria must first and foremost meet the basic housing needs. However, connecting housing policies to sustainability involves actions that integrate the overall quality of living spaces, social aspects, and spatial aspects [22]. In other words, connecting housing policies to sustainability involves integrating sustainability objectives with housing policy to meet the housing needs of a society. Thus, ineffective implementation of housing policy and the lack of an integrated sustainability concept in urban planning strategies may make housing policies unsustainable and, as such, result in a housing shortage with severe social effects and negative impacts on economic development [9].

UN-HABITAT has emphasised that the housing shortage in the Global South is the manifestation of failures in housing policies, implementation systems, legislation, and national urban policies [25–27]. Ezennia and Hoskara [16] have also attributed the housing shortage to housing supply not having been able to meet housing demand. They emphasised that the issue of affordable housing supply centers on shortage and poor distribution in most developing countries. This is in line with an earlier study by Makinde [7], which noted that housing demand in Nigeria outweigh housing supply. However, in Nigeria, the government forms the only legal entity empowered to make housing policies and provides housing to low-income households in terms of tenant and place or project base subsidies.

The government of Nigeria provides national level policy guidelines and legislation for urban planning and housing development. Through the constitution, all tiers of government, both state and local, need to implement and adopt the national housing policy to pursue public partnership that could help the actualization of their housing objectives [28]. To deliver on housing policy objectives, various strategies have been used by governments, e.g., tenant-based and place-based programmes in Finland (see [5,29]) and housing vouchers in the US [30] and in the Global South. For example, in Nigeria, the federal and state governments have constructed low-cost estates for low-income earners [27,31,32]. This led to the massive construction of housing units, where the basic objective was to provide residential accommodation in the 23 local government areas (LGAs) of the state. The Nigeria government also made a paradigm change from direct provision to enablement policy, as promoted by the United Nations since 1991; however, despite the change, the

Sustainability **2022**, 14, 2258 3 of 27

housing problem remains a major challenge, with many urban residents forced to live in poor housing conditions and slums.

That having been said, there has been much discussion of the issues relating to a Nigerian affordable housing policy [16,32–39]. Presently, no empirical research has explored the Nigerian housing policy strategies utilised to provide housing to low-income earners in Nigeria using a qualitative content and thematic analysis of housing policy documents. Previous research has not answered the research questions which need to be addressed to provide understanding of the strategies used in the promotion of affordable housing. To fill this gap, the aim of this article is to study Global South housing policies, using the Nigerian example to analyse public housing policy strategies utilised to provide affordable housing to low-income earners. This article does not focus on the rental-based type of public housing. Instead, the focus is on the purchase ownership systems of public housing. (In this type of housing scheme, the houses are sold at subsidised or below-market housing rates to middle- and low-income earners in a society, e.g., low-cost housing scheme. For example, in Finland affordable housing or social housing is rent-based (place or tenant), while affordable housing in Nigeria takes the form of purchase ownership systems through a low-cost housing scheme.

First, this article contributes to an international discussion of the issue of housing policy to critically address the role of policy in addressing the instability faced by housing systems across the world [40,41]. This article also makes an input to the international discussion on housing development for safe and affordable housing as described by the United Nations' principles for the Sustainable Development Goal 11 target. Secondly, this article contributes to understanding of housing policy strategies for the development of affordable housing [42] and also contributes to the discussion and understanding with concrete examples of housing policy strategy development in the Global South using the Nigerian example. The article presents a method to categorise the variety of housing policy strategies to deepen theoretical understanding of housing policy strategies. Thirdly, this article contributes to the discussion of the issues of housing policy formulation and implementation in a developing countries context [27,37,43-45]. Subsequently, the results of this article can be utilised by decision makers to improve the housing conditions of low-income earners through housing policy formulations and effective implementations aimed at the provision of affordable and decent housing. This article answers the following research question:

**RQ1.** What are the strategic themes used in the housing policy aimed at providing housing to low-income earners in Nigeria?

In this article, we explain the identified strategical themes in the housing policy implemented by the Nigerian government to provide affordable housing. However, it is essential to specify that the question identified strategical themes in housing policies and initiatives at the national level. The reasons for using the Nigerian example as a case study is explained in the Materials and Methods section (Section 4) via the Nigerian housing policy context. Moreover, this paper does not focus on middle-income earners but rather focuses exclusively on low-income earners. To this end, this article used a qualitative document analysis of housing policy papers collected from various ministries that are linked to housing in the years 1991–2020 and housing programmes data from the Rivers State Ministry of Housing and Urban Development, the Department of Urban and Regional Planning, the Federal Ministry of Power, Works, and Housing. The remainder of the paper is organised as follows. Section 2 describes a conceptual framework for housing policy factors that influence success and failure. Section 3 reviews the Nigerian housing policy context and details the materials and methods used to collect and analyse the data. Section 4 presents the results of the study. Section 5 discusses the results of the analysis and Section 6 elaborates on their significance within the larger context of housing policy development and provides areas for future research.

Sustainability **2022**, 14, 2258 4 of 27

# 2. Housing Policy Factors of Success and Failure: Conceptual Framework

This section provides a framework for understanding the factors of success and failure in public housing. Housing policy strategies that are targeted at low-income groups must be analysed as a multifaceted set of policy strategies established in different economic, institutional, and social-environmental contexts across the world. In understanding housing policy strategies in order to provide affordable housing for low-income earners, scholars and policy makers have come up with different types of successful housing policy strategies [46]. For example, land policy promotes the provision of housing in Germany, Belgium, and the Netherlands [47]. In addition, organization, urban planning, land allocation, and financial subsidies are the policy tools used to provide successful affordable housing supply in Berlin, Hamburg, Stockholm, and Gothenburg [48]. However, other success factors have also been reported by scholars, such as affordability, good governance, adequate funding, economic design, efficient management, appropriate technology, and effective legal and legislative frameworks [49]. Mukhtar et al. suggested that a proper structure of housing finance can lead to the improvement of affordable housing delivery [18], while others have emphasised that economic, social, and environmental and political factors promote successful provision of sustainable affordable housing [50,51]. Furthermore, Saidu and Yeom [39] emphasised that the process of assessing success criteria to achieve sustainable housing models from the perspectives of households is to be made through accessibility, adaptability, utility, technology, community, affordability, and acceptability.

However, several critical factors are reported to be responsible for inadequate housing delivery, and scholars have mentioned unsold properties and abandoned houses due to housing choice [16,52,53]. The inability of housing supply to satisfy demand is linked to shortages of affordable housing [16]. Other major constraints on the delivery of affordable housing include issues related to housing finance, lack of access to land with secure tenure, the high cost of building materials, limited skilled manpower, poor infrastructural conditions, and lack of maintenance culture [18]. Additionally, Trangkanont and Charoenngam [54] have emphasised that lack of housing finance, policies, administration and regulations and their ineffective implementation, as well as defective legal and institutional frameworks are critical factors of failure in public–private partnerships in low-income housing programmes.

In the analysis of the reviewed text, the conceptual framework highlighted various strategic issues relating to achieving successful affordable housing. These strategic issues are linked to social, economic, and political issues. For instance, social factors are concerned with issues of good housing location, accessibility, cultural utilities, design and flexibility, and the involvement of low-income earners. The economic issues center around promoting the economic environment and influencing access to funds and affordability in financing housing delivery. Political issues are concerned with government modes of support and the provision of an enabling environment through land access and provision, secure land tenure, infrastructural development, skill development, and a good regulatory and legal framework, in addition to government support for local building material production. For example, the government can provide land and infrastructure to make possible the delivery of affordable housing to low-income earners. Finally, the success of any housing policy strategies or programmes depends on how effectively these influencing factors are implemented and how the policymakers, in designing the housing policy strategies, understand the interrelation of these factors.

# 3. Housing Policy Interventions to Increase Housing Supply in Nigeria

Housing policy programmes in Nigeria date back to the colonial era, in which housing units were built for the expatriate staff and other selected workers of Nigerian origin [18]. Since then, housing programmes and schemes have been regularly addressed in the national housing policies, with newer housing schemes initiated and more housing funds allocated for the development of housing. Different housing policies have been implemented in some countries in the Global South, including Nigeria, that are aimed at reducing housing

Sustainability **2022**, 14, 2258 5 of 27

shortages among low-income earners [18,19,40]. For example, the Nigerian government has adopted and implemented various housing policies and programmes in support of affordable housing that have focused on producing houses for low- and middle-income earners since the country gained independence, between 1960–1990, and from 1991 to the present day [27,32,55]. According to Aliu et al. [27], these include the direct provision of low-cost housing (LCH) by the government, assisted self-help housing (ASH) by individuals, and site and service (SAS) housing, as provided by the Nigerian National housing policy of 1991 [27,56].

The housing policy objectives are implemented through programmes aimed at providing housing to low-income earners. The objective of these housing policy programmes is to provide affordable housing and meet the housing needs of low-income earners through federal, state, and local governmental low-cost housing programmes [32,35]. For example, the 1991 housing policy aimed at providing decent housing at an affordable cost by the year 2000. The failure of the state-led housing system to meet the low-income housing needs led to the formulation of a new housing policy in 2006 [15]; this was due to the housing policy's inability to meet its primary objectives [37].

The focal objectives of the 2006 housing policy were to allow the government and private sector to be the drivers in delivering affordable housing [15]. Despite these different housing policies, housing reforms, housing programmes, and strategies that have been implemented by the federal, state, and local governments in Nigeria [56,57] to meet the housing needs of low-income earners [32], a housing shortage has persisted in Nigeria. However, the Nigerian housing policy from the post-independence era, i.e., from 1960 onwards [31], aimed at meeting the housing needs of expatriate staff and other selected workers of Nigerian origin [14] and was subsequently utilised to provide housing to low-income earners through public housing provision [13]. According to Ibem and Amole [11], housing programmes in Nigeria are meant to enhance or improve the existing poor housing conditions of low-income persons.

Despite the policies, the Nigerian housing deficit currently stands at 17 million housing units, and only about 200,000 units are built annually [57]. The provision of housing by the government to low-income earners is seemingly impossible for now. To deliver on housing policy objectives, various strategies have been adopted by the government. For example, the federal and state governments have constructed low-cost estates for low-income earners [27]. However, in line with the housing policy objectives, the federal and Rivers State governments have constructed low-income housing units in Rivers State. The Rivers State government and the federal government of Nigeria have pursued partnerships aimed at housing the low-income earners in Rivers State. Moreover, Governor Odili's administration of Rivers State (1999–2007) recognised the shortage of residential accommodation in the entire state and the need to provide shelter (especially for low-income earners).

This led to a massive construction of housing units, and the basic approach was to provide residential accommodation in the 23 local government areas (LGAs) of the state. A total of 3142 two-bedroom flats were constructed in the 23 LGAs of the state as provided by the housing programme, out of which 1096 were executed to completion and allocated to the public by balloting. However, the outcomes of the federal and Rivers State government housing programmes are an example of failure of the strategy. For example, Table A1 presents the housing programme outcomes in Rivers State. Furthermore, the results provide a summary of public housing units built between 1972 and 2019 in Rivers State. The housing programme's intended outcomes indicate that a total number of 12,142 housing units were to be built in Rivers State, while only 3029 housing units (24.95%) of the predefined outcome were built and allocated. The housing objective has not been achieved, as the predefined outcome does not equate with the realised programme outcome. The number of realised units is much lower than the number of units indicated in the housing policy. Hence, the outcomes of these housing policy strategies have not yielded the desired result.

There has been a considerable amount of literature produced by various authors on housing policy programmes in Nigeria (see [7,16,27,35–38,58–60]). For example, Ikejio-

Sustainability **2022**, 14, 2258 6 of 27

for [61] examined the housing policy in Nigeria with particular emphasis on public housing programmes. The study established that the provision of public housing failed to meet the public housing demand nationally as a result of bureaucratic mismanagement and unaffordability [38]. For instance, Iheme, Aribigbola [35,44] and Daniel and Hunt [26] attributed the failure of the public housing policy to its implementation processes. Ibimilua and Ibitoye [36] found the implementation process, scarcity of land, insufficient mortgages and finance for housing as the cause of housing policy failure. In addition, Iheme [35] and Ezennia and Hoskara [16] identified poor distribution, shortages, corruption and nepotism, and allocation processes as reasons for the failure of the government housing policy. Similarly, Ebekozien [62] found that housing demand was far higher than supply, and that the problem of affordable housing supply centers on shortage and poor distribution [16]. Furthermore, Aliu et al. [27], in a study on Lagos, Nigeria, identified cost and affordability, policy objective implementation, mortgage finance, and government–community conflicts as factors influencing public housing programme failure. The study also questioned the efficacy of housing programmes in developing countries as they have proven inefficient.

According to Adeshina and Idaeho [63], rapid urbanisation, long-term housing finance, bureaucracies in land acquisition, weak institutional frameworks, ineffective governmental programmes and policies, as well as problems associated with policy implementation in the Nigerian housing sector, are contributing factors to public housing programme failure in Nigeria. Other scholars have also identified issues related to the implementation, formulation, and execution of policies, ineffective housing finance, inadequate research and funding, shortages of skilled manpower, and insufficient infrastructural amenities [44,64], corruption and nepotism, security challenges, issues of political interference, ineffective project inspection, poor distribution and allocation, government policy structures [35], and weak institutional frameworks, as well as inappropriate legislation on land tenure system [37]. In other African countries, for example, Ghana, Ethiopia, Malawi, Kenya, Senegal, Algeria, and Togo, among others, housing affordability has also been a major problem experienced by low- and middle-income earners [10,28,65,66].

A great amount of research has been conducted on housing policy globally that has addressed the motivation and dynamics of housing policies, affordable housing policy frameworks, policy implementation and state policy models [45,67–74]. For, example, Fernandez and Martin [74] examined the effectiveness of affordable housing policy in Auckland, New Zealand by assessing the outcomes of a set of affordability policies to gain an idea of how much affordable housing these policies can deliver. The study established that the numerous parameterisations of the model demonstrate potential contradictions between policy goals. A study by Cai et al. [68] found that housing policy in terms of improving housing conditions remains uneven across China.

Similarly, Cia and Wu [70] examined factors affecting the implementation of affordable housing policies in China and the studies found intergovernmental support from the central government, city development strategies, implementation perceptions of local governments, and land supply as the factors that impact affordable housing programmes. In India, building regulations have been acknowledged as one of the barriers to affordable housing [69]. Sabela and Isike [71] investigated the effectiveness of existing housing delivery approaches used for human settlements in developed municipalities in South Africa. In addition, Balmer and Gerber [67] examined recent developments in Swiss housing policy and they found housing cooperatives to be a housing support instrument that agrees with the political spectrum. They emphasised that housing policy changes primarily focus on the supply side of housing.

Furthermore, housing affordability at the level of household and affordable housing stock is in decline for low-income renters and low-income homeowners in most countries of the world and in Australia [75] and the United States [76,77]. Regarding this issue of housing affordability, Hansson found that there is a severe shortage of housing in Germany and Sweden, but both governments have aimed at increasing housing supply using an approved multi-family housing model for the development of affordable housing [78].

Sustainability **2022**, 14, 2258 7 of 27

However, understanding whether a housing policy is effective is also a pertinent practical issue, as the focus on affordable housing for middle- and low-income earners is a global problem and finding solutions to these challenges has constantly been an issue of public debate among academicians, governments, and international organizations [45,73,79].

Thus, the reviewed articles on housing policy in the Global South were linked to issues of finance, institutional and policy implementation, land, housing supply and shortage, and ineffective governmental programmes, while in the Global North the issues are linked to issues of housing supply, housing shortage, and housing policy support structures. Finally, Coupe [73] emphasised that the housing affordability crisis is a global crisis and that the concern for housing affordability is widespread across countries, the extent of these concerns depending significantly on each country's context and on the particular subgroup and indicator analysed.

#### 4. Materials and Methods

This article is focused on identifying strategical themes in efforts to promote the development of affordable housing for low-income earners in the Global South. By means of the Nigerian example, this article applies the qualitative content and thematic analysis method to identify key strategical themes emanating from the housing policy domain in Nigeria. The research data for this study consists of 11 policy documents, which were collected from various ministries associated with housing policy development. While six national policy documents and a report were retrieved from the websites of government ministries (e.g., https://worksandhousing.gov.ng/, accessed on 13 December 2021), the remaining four documents were retrieved from the e-portal of the Nigerian Investment Promotion Commission (www.nipc.gov.ng, accessed on 13 December 2021). Our criteria in the data collection were that the policy documents used in this study had to be published by the government on issues relating to public policy actions on housing provision and development. These documents are related to policies supporting housing developments in Nigeria between 1991 and 2020. These websites are utilised by the Nigerian government for publicly sharing information concerning policy development. The data gathering took place between January and February 2021. (See Appendix A, Table A2 for selected policy documents from various ministries.)

The collected data may not be the only form of data used in exploring housing policy issues, but these documents were the available options suitable for the analysis of housing policy strategies in the Nigerian policy context. The documents were evaluated in light of the research questions and, based on the evaluation, one document was removed from the dataset. The reason for choosing this period was related to the fact that these periods included both the military and the democratic governing systems. During the military regime in 1991–1999, the Nigerian military regime launched "housing for all" programmes as a response to the United Nations' demand for housing. The 1991 housing policy was a purely government-driven housing system aimed at providing decent housing for all at an affordable cost by the year 2000, which subsequently failed to produce the expected outcome. The failure of the government-driven housing system to meet low-income housing needs led to the formulation of a new housing policy in 2006. The focal objectives of the 2006 housing policy were to allow the government and private sector to act as the drivers to deliver affordable housing [15], which has continued until the present.

#### Data Analysis

The data analysis for the housing policy strategies followed a qualitative content and thematic analysis of the extracted housing policy documents. The main objective of this process was to gain a comprehensive understanding of the studied phenomena [80]. The analysis of the textual data involved a wide range of logical procedures [81], such as the reading, manual coding, sorting, and classification of the data (see Appendix A, Figure A1, Data selection process, classification, and analysis flow chart). In the first stage of the data analysis, the data was read to determine its relevance to the research question.

Sustainability **2022**, 14, 2258 8 of 27

This was then followed by a re-reading of the data, with each description of the documents including sentences that addressed the research question. The analysis in the second stage was conducted by utilizing NVivo to see the theme associated with the housing data and to understand the frequencies of words and text in the data. The raw data was taken out to be manually coded in a Word document to compare what was originally shown in NVivo with the objective of identifying the real inspiration for the policy story. The third stage involved the sorting and categorisation of the data by classifying them into various thematic categories and by connecting the emergent themes for significant classification of housing policy strategies for low-income earners in Nigeria (see Appendix A, Figure A2, Word cloud of the most frequently used words in housing policy documents). These frequent themes were analysed by means of thematic analysis to provide the evidence for housing policy strategical themes for the low-income groups in our case study area. The fourth stage involved the exploration of the themes that resulted from the textual data. Eight themes appeared in the housing policy document material for analysis.

#### 5. Results

This section is divided into two parts. The first describes housing policy strategy in the Nigerian context. The second part focuses on the description of the outcome of the housing policy programmes in the case of Rivers State. The analysis of the selected housing policy documents answered the questions of housing policy strategy for low-income earners in Nigeria. The analysis of the selected housing policy documents shows eight key policy strategies to strengthen housing development. These eight key strategies are funding schemes, housing schemes, governments, implementation, development, land, and rural, but these housing policy strategies do not translate to the reality of solving the real issues of low-income housing in the Nigerian policy context.

# 5.1. Funding

Housing finance is one of the most important strategical themes in any housing programme [27,44,82], as can be observed in the case of Nigerian housing policy. The analysis confirmed funding as a key policy strategy for housing development through proper organization of financial mortgage institutions. The government utilises funds as a strategy for bringing together cooperatives and housing associations to access funds through the Federal Mortgage Bank of Nigeria, with aims to promote long-term sustainable and inexpensive funding options for the housing sector. For example, the government wants to commercialise and recapitalise mortgage institutions to provide linkages between the mortgage market and the capital market in order to drive low-income housing development.

The funding strategic theme also includes strengthening and reviving the national housing fund contribution through contributions from both public and private sectors. This is designed to enhance the ability of the beneficiaries to repay their loans in reasonable periods with less financial strain. Moreover, the funding strategical theme aims to establish a well sustained secondary mortgage market to enhance greater accessibility to a long-term housing fund for house ownership for all. It also seeks to establish an efficient foreclosure system that will provide more guarantees to lenders in cases of default. The Nigerian housing policy strategy on funding is based on creating a conducive policy environment for housing loans, housing financing institutions, smooth lending conditions, household income, and savings that will produce financial policies to aid access to finance for housing development.

# 5.2. Housing Schemes

The issue of social housing is a significant element of social welfare policy and affordable housing provision. The strategical theme of housing schemes in housing policy refers to the implementation of exceptional measures to deliver housing through the development of different types of housing schemes. For example, one of the Nigerian government's policy strategies for housing is the development of different types of housing tenure, such as

Sustainability **2022**, 14, 2258 9 of 27

cooperative ownership, rental, and co-ownership. Other types of schemes include models for the renovation of housing units, resettlement schemes, on-site upgrading, building in stages or extendable units, and slum upgrading schemes. The third aspect of this theme is a model for the execution of building projects through public–private partnership and incorporation of micro-enterprises to promote social housing schemes, such as agro-housing pilot schemes as a means of generating employment opportunities and as an income-generation strategy for mortgage repayment for no-income and low-income groups.

This theme includes programmes aimed at strengthening and completing abandoned housing programmes and projects for low-income groups and establishing co-operatives and housing associations that meet the needs of low-income earners as well as the implementation of pilot schemes and programmes of about one million new housing units across the country to support and encourage the inclusion of communities for urban upgrading programmes and schemes for replication by rural dwellers. Moreover, the Nigerian government policy strategy for housing is aimed at collaboration through public–private partnerships (PPPs) in order to design, construct, and maintain about 600,000 housing units. Furthermore, this strategy also provides sites and services' schemes for housing to embark on and sustain appropriate urban renewal programmes in blighted areas nationwide.

#### 5.3. Land

The land strategical theme relates to providing, delivering, and developing land for affordable housing development. This theme also calls for the development of an effective land administration system to make land ownership available, accessible, and easily transferable at affordable rates that are beneficial to all stakeholders in both the private and public sectors to support housing provision. A common feature of the land strategy for housing development is its marginal significance as it mandates governments at different levels, i.e., federal, state, and local, to allocate land for no- and low-income housing projects for effective housing development. The strategic theme of land for housing provision in the policy documents is also linked to issues of use rights and disposal rights on land for housing development. The strategic theme of land suggests possible land advocacy that simplifies the process of land registration by integrating all land registries into a national land depository. It aims to provide secure, registerable, and marketable titles on land with secure tenure that is easily available, accessible, transferable, and at an affordable price for housing development in Nigeria for all income groups. The land delivery system is engineered by the traditional authorities, such as monarchs, chiefs, and landlords, and the state government. According to Rakodi and Leduka [83], the land delivery system in sub-Saharan Africa is also organised through formal and informal institutions. For example, formal and informal institutions decide the land delivery system in Nigeria in the context of allocation and distribution of land rights. The Land Use Act of 1978 gives the state the right to own and administer land subject to the state's jurisdiction, while the traditional authorities are empowered by customary rules, conventions, and norms passed down from one generation to another to own and administer land in the traditional setting.

# 5.4. Research and Development

The development of the housing industry through policy mechanisms has been one of the main strategies of the Nigerian government policy plan in the provision of adequate, effective, and affordable housing. The government policy strategy has been to invest in programmes that are focused on research and development and work towards the production of local material resources to stimulate effective housing development and economic growth. The strategic theme of research and development seeks to modernise all existing professionals in technical and vocational training centres in terms of building a newly sustainable and productive skilled manpower base for the housing industry by expanding training in construction skills that will enhance the production and quality of local building materials. This aimed at helping reduce the cost of production of houses by developing

Sustainability **2022**, 14, 2258 10 of 27

and helping in the promotion of appropriate designs and production technologies for the housing sector.

There are other strategies that target the provision of adequate funding for the improvement of research and development (R&D) in order to solve the issues of availability and affordability of building materials using technologies. The strategic theme of research and development focuses on the commercialisation process for research and development via the institute of building and road research. In addition, the development and promotion of the national housing market aims to ensure the growth and development of small- and medium-scale industry in the building material subsector, which should result in employment and wealth creation.

#### 5.5. Implementation

The implementation strategical theme as a policy strategy for housing development in Nigerian housing policy is focused on the issue of implementing legislation and regulations. This is intended to enforce the control and monitoring of housing delivery, such as the National Housing Commission, that would regulate and control the housing provision and development activities. The strategy directs the actions of all stakeholders in the housing sector who administer policies and programmes affecting housing provision and development. The strategic theme of implementation focuses on the legal and regulatory framework. It provides a legal and regulatory environment and incentives that are meant to attract public–private partnership (PPP) in mass housing development to meet the desired outcomes of the housing policy. For example, the implementation strategy determines what, where, and how housing programmes and schemes should be erected by enforcing the provision of the National Building Code (NBC).

Therefore, the implementation strategy also requires government at all levels (i.e., federal, state, and local governments) to designate sufficient space for housing for various income groups and persons with disability. Further, the implementation strategy helps in the strengthening of public institutions involved in the housing delivery at all levels of the government through institutional frameworks for effective housing delivery.

# 5.6. Governments

The role of government at all levels (i.e., federal, state, and local governments) in the housing sector is very much emphasised as a policy strategy in strengthening the housing sector. The strategic theme of government as a body aims to assemble all stakeholders, such as architects, builders, and cooperatives, to facilitate approved land-use and building designs. This strategy can be achieved through the state and local governments' implementation strategies for building low-income housing projects. The federal government through its housing policy strategy wants to promote an effective institutional mechanism across the country to ensure the provision and maintenance of low-income housing for a decent, safe, and healthy environment.

The government incentives aim to foster collaboration and partnership at sub-national levels and among implementing agencies and entities to develop guidelines. The strategic theme of government encourages a participatory approach, involving all important stakeholders in the state and local government areas to produce and implement a unified and integrated infrastructure development for housing. The federal government plans to ensure the use of relevant and fully registered Nigerian professionals to provide appropriate designs and management among research institutes and private organisations to encourage partnership in housing delivery. In addition, the government strategy aims to encourage the establishment of cooperative housing associations to enable rural dwellers to have access to funding for housing development. Furthermore, the strategic theme of government seeks to enhance the socio-economic status of rural dwellers across the country through regional economic and infrastructural planning programmes.

Sustainability **2022**, 14, 2258 11 of 27

#### 5.7. Rural

The government wants to ensure that all formulated strategies of low-income housing are strongly pursued in rural areas, especially by giving special attention to the housing needs of those living in marine coastal and waterway areas. The rural policy strategies are also aimed at encouraging research into rural planning to develop and promote appropriate models of rural settlement and to empower rural dwellers through the introduction of economic activities to promote employment creation and social housing to address the needs of rural dwellers. The policy also aims to promote housing cooperatives and housing associations as a means of providing access to mortgages and credit facilities to protect housing in rural areas. Moreover, the policy strategy aims to provide training opportunities for professionals and artisans in the built environment in rural areas. This aims to help foster traditional and innovative responses to meeting the housing needs of rural dwellers.

#### 6. Discussion

The primary questions introduced in this article seek to identify strategical themes utilised in housing policies in the Global South through the Nigerian example and how these identified strategical themes translate into practice. This analysis demonstrates that housing policy strategy is recognised through strategical themes with a specific focus on funding, schemes, governments, implementation, development, land, and rurality. The strategical themes are used as a means of combatting the housing shortage and enhancing housing provision for low- and middle-income earners. Therefore, housing shortage challenges can be solved primarily through the effective implementation of strategical themes. In Section 3, we presented the strategical themes in general, and the strategic use of the strategical themes in the housing policies, which are essential for answering this research question. This article does not only reveal the effect of the identified strategical themes on affordable housing development and provision, but its impact is indeed very different in reality. Within these seven themes, the most frequent themes are funding and development. The appearance of these themes was not a shock, as scholars have previously highlighted the issue of housing policy challenges in Nigeria [35,37,63].

The research and development, implementation, funding, government, and land strategical themes are intended to realise housing planning and development in Nigeria. These strategical themes strengthen developmental control and the mortgage finance system through the entrenchment of a sustainable mortgage system that is vital to balance housing supply and demand in terms of quantity. The funding strategical theme is also aimed at improving low earners' access to finance, which can help to improve housing financing capability. This assertion is congruent with Liu and Ong's study [84], which found that employing various housing financing models can help improve home financing. For example, the implementation of the funding strategical theme as a strategy was aimed at bringing together cooperatives and housing associations to access funds through the Federal Mortgage Bank of Nigeria and the Nigeria Mortgage Refinance Company (NMRC), with measures to promote long-term sustainable and inexpensive funding options for the housing sector.

The funding strategical theme of the housing policies also encourages the government to promote several housing financing schemes for low- and middle-income earners in order to promote home ownership among all income classes. For instance, the Nigerian Mortgage Refinance Company (NMRC), housing loan scheme, federal integrated staff housing program, and financing under the National Housing Fund are housing financing schemes aimed at improving low- and middle-income earners' ownership of affordable housing. The funding strategical theme is intended to establish a highly sustainable secondary mortgage market to enhance accessibility to long-term housing funding for house ownership among all segments of the Nigerian population. The document analysis shows that a lack of funding hinders low- and middle-income earner access to affordable housing. This interpretation means that improving low- and middle-income earners' access to funding can help enhance the housing affordability of low- and middle-income earners

Sustainability **2022**, 14, 2258 12 of 27

in the Global South. This is supported by the findings of Ebekozein [37] and Ibem [85] that the implementation of participatory and mortgage-based housing policies, along with suitable and sustainable housing loans, enhanced low-income earners' quality of life.

Moreover, Aliu et al. [27] identified mortgage finance as one factor influencing public housing programme failures. The land strategical theme made serviced land with secure tenure easily available, accessible, transferable, and at an affordable price—thus, enabling affordable housing development. Further, the strategical theme, if adequately implemented, is intended to effectively improve housing development and affordability by delivering more affordable housing units, improving home financing capabilities, and lowering housing costs. Regarding the scheme strategical theme, the low-income earners are not well off when it comes to the provision of homes and housing ownership, especially in the Global South. The lack of decent and sustainable housing schemes stands as a vital challenge to low- and middle-income earners; thus, an effective housing scheme is seen as an option for housing ownership. The scheme strategical theme in the Nigerian housing policy context is aimed at the direct housing provision of low-cost housing (LCH) by the government, assisted self-help housing (ASH) by individuals, and sites and services (SAS) housing as provided by the government [26,27]. The scheme strategical theme of housing policy refers to the implementation of exceptional measures to deliver housing through the development of different types of housing schemes and different types of housing tenure, such as cooperative ownership schemes, rental schemes, and co-ownership schemes that aim to improve an individual's ability and assist them by ensuring housing affordability and ownership.

An adjustment of land prices through an effective approach is required to ensure land supply for housing development as well as to improve housing affordability [84,86]. The lack of access to land stands as a vital challenge to housing development for low-income earners, as land is seen as an asset in housing development. The development of an effective land administration system helps to make land available, accessible, and easily transferable at affordable rates that are beneficial to all stakeholders in both the private and public sectors to support housing provision [87,88]. Scholars, such as Ebekozien et al. [60], agreed that a functioning land administration system will encourage developers to develop low-cost houses that are suited to low- and middle-income earner ownership. A common feature of the land strategy for housing development is its marginal significance as it mandates governments at all levels (i.e., federal, state, and local) to allocate land for no- and low-income housing projects for effective housing development.

The development strategical theme is targeted at the provision of adequate funding for the improvement of research and development (R&D) in solving the issues of availability and affordability of building materials using current technologies. The government policy strategy has been to invest in programmes that are focused on research and development and towards the production of local material resources to stimulate effective housing development and economic growth. However, the application of a developmental strategy requires an effective implementation of housing policy. The focus on an implementation strategical theme entails implementing legislation and regulations that aim to enforce the control and monitoring of housing delivery that would regulate and control housing provision and development activities to increase the supply of affordable units. Thus, an effective and efficient implementation strategy is vital for the implementation of multifaceted interventions, schemes, and programmes [89].

From the analysis of the policy documents, the government strategical theme aims at solving the issue of a lack of collaboration and weak institutional frameworks in the Nigerian housing sector, as identified in [63]. The development of rural areas is one of the main policy strategies of governments; in the Nigerian housing policy documents, rural housing provision is one of the key policy strategies for a sustainable rural development that intends to aid housing provision. However, this has not had much impact on housing ownership and affordability, as there still exists a high prevalence of homelessness and unaffordability of housing. Thus, the issue may not be housing policy per se, but rather

Sustainability **2022**, 14, 2258 13 of 27

the ways in which strategy and inconsistencies in housing policy processes have adversely affected low-income earner housing affordability. As such, an effective and efficient implementation strategy is vital for the implementation of multifaceted interventions, schemes, and programmes [89] aimed at achieving the desired outcome of the policy programmes. Conclusively, an effective housing policy in line with the concept of sustainability must be centered primarily on policies related to regional and urban development, governance, and finance [24].

Sustainability is a multifaceted concept that integrates economic, environmental, and social aspects. In the context of housing, housing policy strategical themes based on sustainability criteria must meet the basic housing needs. However, connecting housing policies to sustainability involves actions that integrate the overall quality of living spaces and the social and spatial aspects [22] with a consideration of natural resource consumption in housing development. In other words, connecting housing policy strategical themes to sustainability involves integrating sustainability objectives to housing policy to meet the housing needs of a society. Thus, ineffective housing policy and a lack of an integrated urban planning strategy may make housing policies unsustainable and, as such, result in a housing shortage with severe social effects and negative impacts on economic development [10].

#### 7. Conclusions

This article has explored public housing policy strategy as set forth in Nigerian housing policy documents. In the analysis of these documents, we have analysed the strategies utilised by the federal government in housing policy to provide affordable housing to low-income earners in Nigeria, using the national housing policy papers, national housing fund acts, the Nigeria Vision 2020 plan, the national integrated infrastructure master plan, and documents from the Federal Ministry of Power, Works, and Housing (FERMA), along with housing policy programme documents from the Rivers State Ministry of Urban and Housing Development to unravel the overall housing policy strategies. We focused on the question of what strategical themes are used in housing policy in order to provide housing for low-income earners.

The analysis shows that the housing policy strategies do not really translate to the reality of solving the real issues of low-income housing in Nigeria. For example, words and themes arising from the policy text data relate to solving the general issues of housing, using seven key strategies, such as funds, schemes, governments, implementation, development, land, and rural. This analysis confirms that housing finance is a major strategy for funding housing schemes through the implementation of government and stakeholder partnerships in providing land for affordable housing development for low-income groups for both rural and urban dwellers. However, these seven key strategies are still a major issue militating against affordable housing delivery in Nigeria.

From the analysis of the data, it is clear that the strategy of finance in funding affordable housing development was a result of the challenges associated with the general housing finance system and the role of financial institutions in creating an effective and sustainable mortgage system to enable access to credit for affordable housing development. The use of housing schemes was to solve issues of affordable housing ownership, and the role of government in the policy was to provide collaboration through public–private partnerships to improve the housing sector, by creating economic growth and development. Moreover, the lack of implementation creates a weak legal and regulatory framework for affordable housing development. The land strategy for housing development was due to issues of ineffective land administration associated with land use rights and disposal rights.

From the above discussions and conclusions, through an identified parameter in analysing the collected data and literature reviewed, it is obvious that the Federal Government of Nigeria, saddled with the responsibility of providing affordable housing to Nigerians, has not been able to meet the housing needs or provide affordable housing to low-income earners. This is in line with the study carried out by Iheme et al. [31], where the

Sustainability **2022**, 14, 2258 14 of 27

data presented showed flawed policies implemented by the government. Ebekozien [37] also confirmed the worrying state of the housing policies in Edo Sate, Nigeria. According to Oyo-Ita [38], this is due to the failures of past governments in formulating and utilizing functional policies to benefit the people of the state. This finding reveals that the targeted group, i.e., the low-income earners, find it difficult to access the public housing system, as the intended allocated housing units failed to reach them due to such factors as the poor implementation of housing policy strategies. The findings also indicated that the outcomes and effects of the strategical theme of housing schemes for housing policy programmes have been unreliable, making housing unaffordable for low-income earners.

Further, the authors acknowledge several limitations of this article. Personal bias and choices may have inadvertently influenced the identification of policy documents, the selection of text, and the policy programmes that were utilised for the analysis as we only included policy documents informing the discussions on housing policy in Nigerian context. However, given the enormous number of available public policy documents, we recognise that we may have missed out some public policy documents in this article. Moreover, subjective bias may be inherent in the qualitative content and thematic analysis, which may have generated insignificant differences in the analysis of the data used in this article. Further, the question of how these themes translate into practice or how these themes are used in practice to provide affordable housing to low-income earners was beyond the scope of this article.

The findings also suggest important policy implications. Firstly, the implementation of ineffective public policies may hinder the strategies of public policies in meeting the housing demands for low-income earners. Secondly, housing policy strategies should be carefully implemented with consideration of all income classes, with an emphasis on the cultural setting of the people, as Nigeria is a complex state. Finally, within the context of housing policy research in Nigeria, the findings of this article identified thematic strategies that will likely help in specifying some future research areas. While these limitations are not critical in defining the research outcomes or results, they would have amplified the standard of validity and reliability.

Finally, this study contributes to future housing policy literature not only by evaluating federal and state government practices and actions in implementing national housing policy programmes but also by describing housing policy strategy and how the federal and state governments respond to policy programmes. Moreover, the results show that the mere availability of housing policy strategy is not sufficient for the efficient and effective provision of affordable housing and that the strategic activation of the housing policy strategy is very important in fulfilling the housing policy objectives. These findings also suggest that policies made by governments across the world will have different outcomes depending on each country's context.

However, this article has shown an innovative approach in the exploration of housing policy discussion using a qualitative content and thematic analysis to ascertain strategic themes used in the housing policy to promote affordable housing for low- and middle-income earners. The outcome of this research implies that funds, land, research and development, housing schemes, government, and considerations of rurality were important to the provision of affordable housing. This article is also important for policy makers and other stakeholders, for the investment of relevant funds and the application of appropriate and efficient strategic policies in the housing sectors.

This article recommends a proper process of policy formation and implementation of appropriate policies which should focus on implementing legislative and regulative frameworks to monitor and control housing provision delivery and development. These legal and regulatory frameworks should also direct all actions of the stakeholders in the housing sector. We recommend a four-stage housing policy implementation framework for low- and middle-income earners that includes:

Sustainability **2022**, 14, 2258 15 of 27

Firstly, the implementation of a framework that enables low- and middle-income earners to afford and access private-led market homes. This will ensure that low- and middle-income earners have reasonable access to homes they can pay for.

Secondly, the implementation of a framework that promotes and produces affordable housing units; this will place a mandate (legal restrictions) on affordable housing units produced for low-and middle-income earners to remain affordable to low- or middle-income earners. Thirdly, the implementation of a framework that protects against eviction and displacement. This will ensure that low-and middle-income earners are not displaced because of foreseen and unforeseen circumstances by setting legal restrictions that protect low-and middle-income earners from displacement and evictions. Fourthly, the implementation of a framework that sustains housing supply and aligns it with the housing market. This will promote housing affordability by making it easier for thriving private housing development to increase the general housing supply to meet the housing demand of low-and middle-income earners.

Therefore, the findings from this study propose several avenues for future research. First, there is a need for understanding how these housing policy strategical themes translate into practice or how these identified strategical themes have been implemented to achieve housing development in the Global South. This will help in understanding the outcomes of housing policy with regards to low-income earners. Secondly, the land strategical theme and land policy has a considerable impact on both the supply and demand of housing. Therefore, more research is needed to focus on the way in which land policy instruments promote affordable housing or the way in which the land needed for housing is provided via the land strategical theme and land policy instruments. Furthermore, future research that addresses other housing models for all income classes is necessary to gain more insights. Finally, further studies can look at how sustainable development goals (SDGs) are integrated in the selected policy documents.

**Author Contributions:** Conceptualization, E.J.O.; methodology, E.J.O.; software, E.J.O.; validation, K.R. and E.J.O.; formal analysis, E.J.O.; resources, E.J.O.; writing—original draft preparation, E.J.O.; writing—review and editing, K.R. and E.J.O.; supervision, K.R.; project administration, K.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Aalto University School of Engineering, Finland.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

**Data Availability Statement:** Data is contained within the article.

Acknowledgments: This work was supported by Aalto University School of Engineering, Finland.

Conflicts of Interest: The authors declare no conflict of interest.

#### Appendix A

**Table A1.** Housing programme outcomes in Rivers State.

Year of Provision	Policy and Programmes	Predefined Outcome	Realised Outcomes
1972–1978	National Council on Housing	Target of 1000–4000 dwelling units to be sited in Rivers State	None were constructed
1979–1985	National LCH program and National Housing Program	4000 housing units to be sited in Rivers State	978 housing units were built, which is about 24.45% of the planned units

Sustainability **2022**, 14, 2258 16 of 27

Table A1. Cont.

Year of Provision	Policy and Programmes	Predefined Outcome	Realised Outcomes
1986–1999	Federal Housing Authority (FHA) was launched in 1980 to champion the National Housing Programme. The 1991 National Housing Policy was launched.	4000 housing units were the predefined outcome by the National Housing Program	955 housing units were built
2000–2019	Presidential Housing Mandate and Odili Administration Housing Program	4142 housing units were the predefined outcome	1096 housing units were built
Total		12,142	3029 is about 24.95% Realised outcome

Source: Rivers State Property Development Authority, 2020 and Department of Urban & Regional Planning, Federal Ministry of Power, Works and Housing, Port Harcourt, 2020.

Table A2. Housing Policy Strategy documents text.

#### **Coded and Categorised Themes**

Channel sizable parts of pension fund and other funds in housing sector

Commercialising and recapitalising the Federal Mortgage Bank of Nigeria to provide a linkage between the mortgage market and the capital market

Co-operative Societies and Housing Associations access to funds via the Federal Mortgage Bank of Nigeria Develop and promote measures that will mobilise long-term sustainable and inexpensive funding for the housing sector

Energised and reinvigorate the national housing fund contribution

Enforcing National Housing Fund contributions for both public and private sectors

Enhancing the ability of the beneficiaries to repay their loans at reasonable periods with less strain

Establish and sustain a secondary mortgage market to enhance greater accessibility to long-term housing funding for house ownership among all segments of the population

Establishing an efficient foreclosure system that will give more guarantees to lenders in cases of default

Financial sector operators and regulators to develop an effective primary housing finance system

Financing of housing development, in particular low-cost housing for low-income workers Funding for the provision of houses for Nigerians at affordable prices

Funding of site and service plots at affordable prices

Government to reduce the cost of building a house

# **Funds (35)**

Grant's fiscal incentives to small- and medium-scale local manufacturers of building materials

Incentives for the capital market to invest in property development

Instituting default prevention mechanisms in mortgage finance

Long-term loans to mortgage institutions for on-lending to contributors to the Fund

Mobilisation and the investment SWEAT Capital and Equity

Mobilisation of other pools of funds through internal and external sources

Nigeria Mortgage Refinance Company (NMRC) to develop the mortgage market and provide affordable housing

Provide easy access to long-term, affordable, and adequate housing finance

Provide fiscal incentives (e.g., tax waivers, duty waivers, etc.), service land, and expeditious

Providing funds for detailed empirical study of the establishment of an efficient primary mortgage market Providing targeted subsidies and housing finance credit guarantees to facilitate home ownership by lower income groups/people with disabilities and establishing a mortgage

Provision of seed money by the Federal Government, and other interested contributors, for the

implementation of the initial and subsequent phases of the scheme

Putting in place an enabling housing finance structure

Recapitalisation of the Federal Mortgage Bank of Nigeria

Recapitalise the Federal Mortgage Bank of Nigeria for a secondary mortgage market and strengthen the primary mortgage institutions

Sustainability **2022**, 14, 2258

Table A2. Cont.

Strategy	Coded and Categorised Themes
Funds (35)	Strengthening the mortgage finance system through the entrenchment of a sustainable mortgage regime Supply of loans for the purpose of building Title insurance system that will mitigate credit risk To eliminate problems associated with finance to encourage sufficiently long-term mortgage repayment for no and low-income earners, and rural dwellers To facilitate linkage of that market to the capital market to provide long-term financing and facilitate affordable and sustainable liquidity for housing To improve access to mortgage credit and partner the private sector
Development (26)	Invest in programmes geared towards research, development, and production of materials Local resources, with a view to stimulating effective housing development and economic growth Rehabilitating all existing professional, technical, and vocational training centres and building new ones to ensure sustainable production of skilled manpower for the housing industry Rehabilitating all existing professional, technical, and vocational training centres and building new ones to ensure sustainable production of skilled manpower for the housing industry Reducing the cost of production of houses by developing and promoting appropriate designs and production technologies for the housing sector Providing adequate funding for R&D to improve the availability and affordability of building materials and technologies Commercialising the products of R&D of the Nigeria Building and Road Research Institute, and other allied institutes Develop and promote the use of certified locally produced building materials as a means of reducing construction costs Develop and promote a national housing market Develop and promote the use of appropriate technology in housing construction and materials production To promote the growth and development of small- and medium-scale industry in the building material subsector Encourage and fund the training of skilled manpower required for the building industry Encourage the use of conventional building systems as a means for mass housing to stimulate employment and wealth generation Devise simple and affordable techniques for upgrading existing housing stock Provide statistical data for the effective process of housing delivery in Nigeria Establish a reliable and comprehensive database for generating statistical information for housing Adopt rural technology in the provision of low-cost housing Develop low-cost building materials and technologies Encourage and popularise the use of local building materials in all building construction projects Develop and promote improved and cost-effective building t
Housing Schemes (22)	Ownership schemes, including cooperative ownership schemes Rental schemes and co-ownership schemes Private sector involvement through public–private partnership Encouragement of public–public partnership Home improvement schemes Resettlement schemes and on-site upgrading Building in stages or extendable units Slum upgrading schemes Incorporation of micro-enterprises in the housing scheme for generating employment opportunities No-income and low-income housing estates To efficiently complete abandoned housing programmes and projects for low-income groups

Sustainability **2022**, 14, 2258

Table A2. Cont.

Strategy	Coded and Categorised Themes
Housing Schemes (22)	To promote the establishment of micro-enterprises in social housing schemes Agro-housing with pilot schemes as means of income and Mortgage repayment for low-income groups To encourage and establish co-operatives and housing associations for meeting the housing needs of the low-income earners Support and encourage the inclusion of Community Urban Upgrading Programmes adopt and produce pilot no-income and low-income housing schemes for replication by rural dwellers Implementation of pilot schemes across the country, with a provision of not less than 10% of the targeted one million new housing units Planning, design, construction, and maintenance of 600,000 housing units through public-private partnerships (PPPs) Planning, design, construction, and maintenance of 240,000 affordable housing units by the Federal Housing Authority (FHA) and other reputable developers and planning, design, and construction of other key housing initiatives Embark on and sustain appropriate urban renewal programmes in blighted areas Provide a sites and services scheme for housing nationwide
Implementation (20)	Promote appropriate legislation to facilitate the enforcement of the rights of the rural people when their environment is degraded  Adopt functional design standards that will facilitate cost reduction, affordability, acceptability, and sustainability, which will respond to the cultural and regional peculiarities of potential users by 2023  Establishing an effective legal and regulatory framework to enforce the control and monitoring of housing delivery, such as a National Housing Commission, that would regulate and control the housing sector Providing incentives and the necessary legal and regulatory environment to attract public—private partnership (PPP) in mass housing development  Enforcing the provision of the National Building Code (NBC) and  Mandating local communities to designate sufficient space for housing for various income groups and persons with disabilities  Develop and sustain the political will of the government for the provision of housing for all citizens  Strengthen all existing public institutions involved in the housing delivery at the federal level Institutional framework for housing delivery  Strengthen the institutional framework to facilitate effective housing delivery  Enact laws and make regulations to prevent and control fire incidence in Nigeria  Strengthen and sustain the Federal Ministry of Housing and Urban Development to harmonise and monitor housing delivery  Maintain and strengthen the department in the standard organisation to monitor and set minimum performance standards in the building industry  Restructure and adequately capitalise all federal institutions under housing to effectively perform their statutory roles  Restructure and adequately fund the Nigerian Building and Road Research Institute to perform its statutory role  Nominate relevant professional bodies, stake holders and organise private sector into the policy making structures  Review all necessary provisions of the Mortgage Institutions Act, Federal Mortgage Bank of Nigeria Act, Trustee Investment Act, Insura
Government (20)	Encourage all non-governmental organisations to build and facilitate the building of social housing estates with possible government incentives Stakeholders' involvement in designing affordable housing or low-income housing, such as Architectural designs to meet the socio-cultural needs of low-income groups To encourage and establish co-operatives and housing associations for meeting the housing needs of low-income earners

Sustainability **2022**, 14, 2258

Table A2. Cont.

	Table A2. Com.
Strategy	Coded and Categorised Themes
Government (20)	State and local governments' implementation of social housing projects with approved land-use and building designs to meet different socio-cultural needs with considerable concessions on approval and fees  Encourage the establishment of Housing Co-operatives and Associations  Ensure the establishment of appropriate institutional machinery in all communities for efficient maintenance of infrastructure  Encourage and support through Housing Co-operatives and Housing Associations in the provision and maintenance of low-income housing for a decent, safe, and healthy environment  Securing the buy-in of State Governors, Local Government Chairpersons and other strategic partners, through voluntary accession  Government incentives to foster collaboration, partnership at sub-national levels, and among implementing agencies and entities  Developing of guidelines for the operationalisation of schemes through a participatory approach, involving all important stakeholders  States and local governments to produce and implement a unified and integrated infrastructure development for housing  Promote active participation of other tiers of government in housing delivery  Ensure the use of relevant and fully registered Nigerian professionals to provide appropriate designs and management in housing delivery  Promote and encourage partnership between research institutes and private organisations  Establish regional economic and infrastructural planning programmes to enhance the socio-economic status of the rural dwellers across the country  Encourage the establishment of cooperatives or housing associations to enable rural dwellers has access to funding  Seeking international bilateral and multilateral assistance for promoting housing and urban development
Land (18)	All government levels (i.e., federal, state, and local) allocate land for no- and low-income housing projects for effective housing development Reverse unutilised public lands in the country for social housing Provision of land at low prices in support of social housing Simplify the process of registration and documentation of landed property and make serviced land with secure tenure easily available, accessible, transferable, and at an affordable price, for housing development Provide secure, registerable, and marketable titles on land Computerise the various land registry systems Developing an effective land administration system to make land ownership available, accessible, and easily transferable at affordable rates Provision of secure, registrable, and marketable titles on land Computerise the various land registry systems and develop an efficient national land information system Implement reform policies towards the development of a more effective land administration system Establishment of an efficient and transparent land title transfer system that simplifies existing land procedures for effective title and consent delivery  To open up new layouts and provide sites and services for the private sector to develop affordable and decent mass housing  Make land for housing development easily accessible and affordable  Encourage the establishment of and sustain land registries in all tiers of government across the country Promote modernisation, computerisation, and Strategy Coded and Categorised Themes  Funds (35) Channel sizable parts of pension fund and other funds in housing sector  Commercialising and recapitalising the Federal Mortgage Bank of Nigeria to provide a linkage between the mortgage market and the capital market  Co-operative Societies and Housing Associations access to funds via the Federal Mortgage Bank of Nigeria Develop and promote measures that will mobilise long-term sustainable and inexpensive funding for the housing sector  Energised and reinvigorate the national housing fund contributi

Sustainability **2022**, 14, 2258 20 of 27

#### Table A2. Cont.

#### Strategy

# **Coded and Categorised Themes**

Establish and sustain a secondary mortgage market to enhance greater accessibility to long-term housing funding for house ownership among all segments of the population

Establishing an efficient foreclosure system that will give more guarantees to lenders in cases of default

Financial sector operators and regulators to develop an effective primary housing finance system

Financing of housing development, in particular low-cost housing for low-income workers

Funding for the provision of houses for Nigerians at affordable prices

Funding of site and service plots at affordable prices

Government to reduce the cost of building a house

Grant's fiscal incentives to small- and medium-scale local manufacturers of building materials

Incentives for the capital market to invest in property development

Instituting default prevention mechanisms in mortgage finance

Long-term loans to mortgage institutions for on-lending to contributors to the Fund

Mobilisation and the investment SWEAT Capital and Equity

Mobilisation of other pools of funds through internal and external sources

Nigeria Mortgage Refinance Company (NMRC) to develop the mortgage market and provide affordable housing

Provide easy access to long-term, affordable, and adequate housing finance

Provide fiscal incentives (e.g., tax waivers, duty waivers, etc.), service land, and expeditious

Providing funds for detailed empirical study of the establishment of an efficient primary mortgage market Providing targeted subsidies and housing finance credit guarantees to facilitate home ownership by lower income groups/people with disabilities and establishing a mortgage

Provision of seed money by the Federal Government, and other interested contributors, for the

implementation of the initial and subsequent phases of the scheme

Putting in place an enabling housing finance structure

Recapitalisation of the Federal Mortgage Bank of Nigeria

Recapitalise the Federal Mortgage Bank of Nigeria for a secondary mortgage market and strengthen the primary mortgage institutions

Land (18)

Strengthening the mortgage finance system through the entrenchment of a sustainable mortgage regime Supply of loans for the purpose of building

Title insurance system that will mitigate credit risk

To eliminate problems associated with finance to encourage sufficiently long-term mortgage repayment for no and low-income earners, and rural dwellers

To facilitate linkage of that market to the capital market to provide long-term financing and facilitate affordable and sustainable liquidity for housing

To improve access to mortgage credit and partner the private sector

Development (26) Invest in programmes geared towards research, development, and production of materials Local resources, with a view to stimulating effective housing development and economic growth

Rehabilitating all existing professional, technical, and vocational training centres and building new ones to ensure sustainable production of skilled manpower for the housing industry

Rehabilitating all existing professional, technical, and vocational training centres and building new ones to ensure sustainable production of skilled manpower for the housing industry

Reducing the cost of production of houses by developing and promoting appropriate designs and production technologies for the housing sector

Providing adequate funding for R&D to improve the availability and affordability of building materials and technologies

Commercialising the products of R&D of the Nigeria Building and Road Research Institute and other allied institutes

Develop and promote the use of certified locally produced building materials as a means of reducing construction costs

Develop and promote a national housing market

Develop and promote the use of appropriate technology in housing construction and materials production To promote the growth and development of small- and medium-scale industry in the building material subsector

Encourage and fund the training of skilled manpower required for the building industry

Encourage the use of conventional building systems as a means for mass housing to stimulate employment and wealth generation

Sustainability **2022**, 14, 2258 21 of 27

#### Table A2. Cont.

#### Strategy

# **Coded and Categorised Themes**

Devise simple and affordable techniques for upgrading existing housing stock

Provide statistical data for the effective process of housing delivery in Nigeria

Establish a reliable and comprehensive database for generating statistical information for housing development

Adequate incentives and an enabling environment for greater private sector participation in the provision of housing

Adopt rural technology in the provision of low-cost housing

Develop low-cost building materials and technologies

Encourage and popularise the use of local building materials in all building construction projects

Develop and promote improved and cost-effective building technologies

To improve their skills in the application and maintenance of local building materials

Accelerate development of appropriate capacities to achieve sufficiency in the production of basic building materials

Develop and execute a system of regularly scheduled maintenance actions to prevent premature failure of building components

Ensure effective monitoring and coordination of all building maintenance work

Housing Schemes (22) Ownership schemes, including cooperative ownership schemes

Rental schemes and co-ownership schemes

Private sector involvement through public-private partnership

Encouragement of public-public partnership

Home improvement schemes

Resettlement schemes and on-site upgrading

Building in stages or extendable units

Slum upgrading schemes

Incorporation of micro-enterprises in the housing scheme for generating employment opportunities

No-income and low-income housing estates

To efficiently complete abandoned housing programmes and projects for low-income groups

To promote the establishment of micro-enterprises in social housing schemes

# Land (18)

Agro-housing with pilot schemes as means of income and

Mortgage repayment for low-income groups

To encourage and establish co-operatives and housing associations for meeting the housing needs of the low-income earners

Support and encourage the inclusion of Community Urban Upgrading Programmes

adopt and produce pilot no-income and low-income housing schemes for replication by rural dwellers Implementation of pilot schemes across the country, with a provision of not less than 10% of the targeted one million new housing units

Planning, design, construction, and maintenance of 600,000 housing units through public–private partnership (PPPs)

Planning, design, construction, and maintenance of 240,000 affordable housing units by the Federal Housing Authority (FHA) and other reputable developers and planning, design, and construction of other key housing initiatives

Embark on and sustain appropriate urban renewal programmes in blighted areas

Provide a sites and services scheme for housing nationwide

Implementation (20) Promote appropriate legislation to facilitate the enforcement of the rights of the rural people when their environment is degraded

Adopt functional design standards that will facilitate cost reduction, affordability, acceptability, and sustainability, which will respond to the cultural and regional peculiarities of potential users by 2023 Establishing an effective legal and regulatory framework to enforce the control and monitoring of housing delivery, such as a National Housing Commission, that would regulate and control the housing sector Providing incentives and the necessary legal and regulatory environment to attract public–private partnership (PPP) in mass housing development

Enforcing the provision of the National Building Code (NBC) and

Mandating local communities to designate sufficient space for housing for various income groups and persons with disabilities

Develop and sustain the political will of the government for the provision of housing for all citizens Strengthen all existing public institutions involved in the housing delivery at the federal level Institutional framework for housing delivery

Sustainability **2022**, 14, 2258 22 of 27

Table A2. Cont.

#### Strategy

# **Coded and Categorised Themes**

Strengthen the institutional framework to facilitate effective housing delivery

Enact laws and make regulations to prevent and control fire incidence in Nigeria

Strengthen and sustain the Federal Ministry of Housing and Urban Development to harmonise and monitor housing delivery

Maintain and strengthen the department in the standard organisation to monitor and set minimum performance standards in the building industry

Restructure and adequately capitalise all federal institutions under housing to effectively perform their statutory roles

Restructure and adequately fund the Nigerian Building and Road Research Institute to perform its statutory role

Nominate relevant professional bodies, stake holders and organise private sector into the policy making structures

Review all necessary provisions of the Mortgage Institutions Act, Federal Mortgage Bank of Nigeria Act, Trustee Investment Act, Insurance Act, National Housing Fund Act, Employees Housing Scheme (special provision) Act, Federal Government Staff Housing Board Act, Urban Development Bank Act, and Land use Act, to make them more effective and enforceable

Ensure the enforcement (government example) of the provisions professional practice in the building industry Planning approval process to encourage private sector participation in housing delivery

Provide incentives and the necessary legal and regulatory environment to attract PPP in mass housing development

Government (20) Encourage all non-governmental organisations to build and facilitate the building of social housing estates with possible government incentives

Stakeholders' involvement in designing affordable housing or low-income housing, such as

Architectural designs to meet the socio-cultural needs of low-income groups

To encourage and establish co-operatives and housing associations for meeting the housing needs of low-income earners

State and local governments' implementation of social housing projects

#### Land (18)

with approved land-use and building designs to meet different socio-cultural needs with considerable concessions on approval and fees

Encourage the establishment of Housing Co-operatives and Associations

Ensure the establishment of appropriate institutional machinery in all communities for efficient maintenance of infrastructure

Encourage and support through Housing Co-operatives and Housing Associations in the provision and maintenance of low-income housing for a decent, safe, and healthy environment

Securing the buy-in of State Governors, Local Government Chairpersons and other strategic partners, through voluntary accession

Government incentives to foster collaboration, partnership at sub-national levels, and among implementing agencies and entities

Development of guidelines for the operationalisation of schemes through a participatory approach, involving all important stakeholders

States and local governments to produce and implement a unified and integrated infrastructure development for housing

Promote active participation of other tiers of government in housing delivery

Ensure the use of relevant and fully registered Nigerian professionals to provide appropriate designs and management in housing delivery

Promote and encourage partnership between research institutes and private organisations

Establish regional economic and infrastructural planning programmes to enhance the socio-economic status of the rural dwellers across the country

Encourage the establishment of cooperatives or housing associations to enable rural dwellers has access to funding

Seeking international bilateral and multilateral assistance for promoting housing and urban development to promote the establishment of building societies as sources of credit for housing construction

Land (18) All government levels (i.e., federal, state, and local) allocate land for no and low-income housing projects for effective housing development

Reverse unutilised public lands in the country for social housing

Provision of land at low prices in support of social housing

Sustainability **2022**, 14, 2258 23 of 27

Table A2. Cont.

Strategy	Coded and Categorised Themes
Land (18)	Simplify the process of registration and documentation of landed property and make serviced land with secure tenure easily available, accessible, transferable, and at an affordable price, for housing development Provide secure, registerable, and marketable titles on land Computerise the various land registry systems Developing an effective land administration system to make land ownership available, accessible, and easily transferable at affordable rates Provision of secure, registrable, and marketable titles on land Computerise the various land registry systems and develop an efficient national land information system Implement reform policies towards the development of a more effective land administration system Establishment of an efficient and transparent land title transfer system that simplifies existing land procedures for effective title and consent delivery To open up new layouts and provide sites and services for the private sector to develop affordable and decent mass housing Make land for housing development easily accessible and affordable Encourage the establishment of and sustain land registries in all tiers of government across the country Promote modernisation, computerisation, and human resources development of land registry across the 'country Development of coordinated and comprehensive registries for all land belonging to the government and agencies Networking of all land registries into a national land depository Rural (11) Conserve the rural environment for sustainable development in rural housing provision Ensure all earlier formulated strategies regarding no-income and low-income housing are strongly pursued in rural areas Give particular attention to the housing needs of rural areas located in the marine coastal areas as well as along waterways Encourage research into rural planning to develop and promote appropriate models of rural settlement Promote the formation of housing cooperatives and housing associations in rural areas Expourdage research into rural planning to develop and pro
Rural (11)	Conserve the rural environment for sustainable development in rural housing provision Ensure all earlier formulated strategies regarding no-income and low-income housing are strongly pursued in rural areas Give particular attention to the housing needs of rural areas located in the marine coastal areas as well as along waterways Encourage research into rural planning to develop and promote appropriate models of rural settlement Promote the formation of housing cooperatives and housing associations in rural areas as a means of providing access to credit facilities Provide training opportunities for professionals and artisans in the built environment in rural areas Expand the activities of mortgage banks to cover housing in rural areas Empower the rural dweller by introducing economic activities in rural areas Encourage employment generation and promote social housing to address the needs of rural dwellers Traditional and innovative responses to meeting the housing needs of rural dwellers Improve the quality of rural housing, rural infrastructure, and the environment

Sustainability **2022**, 14, 2258 24 of 27



 Identification of data from ministries associated with housing policy development https://worksandhousing.gov.ng/) and www.nipc.gov.ng



Inclusion: National Housing policy, National Housing Fund Act CAP. N45, National Integrated Infrastructure Master Plan, Central
Bank of Nigeria (CBN) housing plan (My Own Home). Social Protection Policy, Federal Ministry of Power, Works and Housing
(Ferma), Rivers State Ministry of Housing and Urban Development and Department of Urban & Regional Planning, Federal Ministry of
Power, Works and Housing Nigerian Vision 2020 plan. Exclusion: National Human Rights Commission

Screening o

- •11 collected national policy documents were screened to determine if the documents answer the research questions.
- Removal of one policy document, as it did not answer the research question.

Data set

Data screening resulted in 10 policy documents.

Data readin

•The collected documents were read and underlined with the key sentences coded, •transferring the textual materials as textual data to Microsoft word, and were later transfered to NVIVO for analysis of the key variables in the data.

Word cloud

The NVIVO program was then used in systematising data keywords and the frequently used words for analysis to understand the key relationships in the housing policy data.

•The mapping of the frequencies of most used words and most used keywords as a word cloud document was done.

extual data

- Screening of the textual data; close reading of the textual data analysis of the textual data in NVIVO program.
- . Manual coding, sorting the categorised data, and understanding the frequencies in the emerged themes in word.

Emerged themes analysis  First emerged themes (i.e., strategy) were analysed, the data were classified together in the same categories; after which, 8 themes emerged.

Final themati analysis • Final textual data were categorised with about 158 emerged theme key words that formed the basis for analysis of housing strategy in Nigerian housing policy documents.





Figure A2. Word cloud of the most frequent words in the selected housing policy documents.

Sustainability **2022**, 14, 2258 25 of 27

#### References

- 1. Ruonavaara, H. Theory of Housing, From Housing, About Housing. Hous. Theory Soc. 2018, 35, 178–192. [CrossRef]
- 2. Kemeny, J. Comparative housing and welfare: Theorising the relationship. J. Hous. Built Environ. 2001, 16, 53–70. [CrossRef]
- 3. Hansson, A.G. Inclusionary Housing Policies in Gothenburg, Sweden, and Stuttgart, Germany: The importance of Norms and Institutions. *Nord. J. Surv. Real Estate Res.* **2019**, *14*, 7–28.
- 4. Yang, Z.; Wang, S. The impact of privatization of public housing on housing affordability in Beijing: An assessment using household survey data. *Local Econ.* **2011**, *26*, 384–400. [CrossRef]
- 5. Eerola, E.; Saarimaa, T. Delivering affordable housing and neighborhood quality: A comparison of place- and tenant-based programs. *J. Hous. Econ.* **2018**, 42, 44–54. [CrossRef]
- Clapham, D. Housing Theory, Housing Research and Housing Policy. Hous. Theory Soc. 2018, 35, 163–177. [CrossRef]
- 7. Makinde, O.O. Housing delivery system, need and demand. Environ. Dev. Sustain. 2014, 16, 49–69. [CrossRef]
- 8. El-Hadj, M.B.; Faye, I.; Geh, Z.F. Housing Market Dynamics in Africa; Palgrave Macmillan: London, UK, 2018.
- 9. Barker, A. Improving well-being through better housing policy. In *OECD Economic Surveys: New Zealand 2019*; OECD Publishing: Paris, France, 2019. [CrossRef]
- 10. Boamah, N.A. Housing Policy in Ghana: The Feasible Paths. Ghana J. Dev. Stud. 2014, 11, 1. [CrossRef]
- 11. Ibem, E.O.; Amole, O.O. Evaluation of Public Housing Programmes in Nigeria: A Theoretical and Conceptual Approach. *Built Hum. Environ. Rev.* **2010**, *3*, 88–117.
- 12. Ubale, M.Y.; Seow, T.W.; David, M. Comparative study between Malaysia and Nigeria Formal low-cost housing policy issues. *Asian Econ. Financ. Rev.* **2013**, *3*, 923–947.
- 13. Obi, N.I.; Ubani, O. Dynamics of Housing Affordability in Nigeria. Civ. Environ. Res. 2014, 6, 79-84.
- 14. Mukhtar, M.M.; Bin Amirudin, R.; Sofield, T.; Bin Mohamad, I. Critical success factors for public housing projects in developing countries: A case study of Nigeria. *Environ. Dev. Sustain.* **2017**, *19*, 2039–2067. [CrossRef]
- Wapwera, S.D.; Mallo, D.M.; Choji, C.M.; Bature, Y.A. The Affordable Housing Policy in Jos Nigeria: A Diminishing Dream Four Decades After! Glob. J. Hum.-Soc. Sci. E Econ. 2017, 17, 1–12.
- 16. Ezennia, I.S.; Hoskara, S.O. Exploring the severity of factors influencing sustainable affordable housing choice: Evidence from Abuja, Nigeria. *Sustainability* **2019**, *11*, 5792. [CrossRef]
- 17. Fernández-Maldonado, A.M.; Bredenoord, J. Progressive housing approaches in the current Peruvian policies. *Habitat Int.* **2010**, 34, 342–350. [CrossRef]
- 18. Mukhtar, M.M.; Amirudin, R.; Mohamad, I. Housing delivery problems in developing countries: A case study of Nigeria. *J. Facil. Manag.* **2016**, *14*, 315–329. [CrossRef]
- 19. Kampamba, J.; Kachepa, S.; Nkwae, B.; Matlhogojane, N.G.; Outule, T. Housing delivery to the low income in Botswana. *Int. J. Hous. Mark. Anal.* **2018**, *11*, 356–385. [CrossRef]
- 20. Smets, P.; van Lindert, P. Sustainable housing and the urban poor. Int. J. Urban Sustain. Dev. 2016, 8, 1–9. [CrossRef]
- 21. Della Spina, L.; Calabrò, F.; Rugolo, A. Social housing: An appraisal model of the economic benefits in Urban regeneration programs. *Sustainability* **2020**, *12*, 609. [CrossRef]
- 22. Lucciarini, S.; Galdini, R. Social Innovation and Environmental Sustainability in Social Housing Policies: Learning from Two Experimental Case Studies in Italy. In *Different Strategies of Housing Design*; Çakmaklı, A.B., Ed.; IntechOpen: London, UK, 2019; pp. 33–35.
- 23. Choguill, C.L. The search for policies to support sustainable housing. *Habitat Int.* 2007, 31, 143–149. [CrossRef]
- 24. Tosics, I. European urban development: Sustainability and the role of housing. J. Hous. Built Environ. 2004, 19, 67–90. [CrossRef]
- 25. Gilbert, A. Rental Housing: An Essential Option for the Urban Poor in Developing Countries; UN-Habitat: Nairobi, Kenya, 2003.
- 26. Daniel, M.M.; Hunt, R.J. Changing housing policies and housing provision in Jos, Nigeria. *Habitat Int.* **2014**, 42, 203–213. [CrossRef]
- 27. Aliu, I.R.; Towry-Coker, L.; Odumosu, T. Housing policy debacle in Sub-Saharan Africa: An appraisal of three housing programs in Lagos Nigeria. *Afr. Geogr. Rev.* **2018**, *37*, 241–256. [CrossRef]
- 28. Ebekozien, A. Community participation in affordable housing provision in developing cities: A study of Nigerian cities. *J. Hum. Behav. Soc. Environ.* **2020**, *30*, 918–935. [CrossRef]
- 29. Eerola, E. Low-income housing policies: Affordability and integration. *Nord. Econ. Policy Rev.* **2021**, 157–178. Available online: https://www.doria.fi/bitstream/handle/10024/180954/nord2021-022-low-income-housing-policies-affordability-and-integration-essi-eerola.pdf?sequence=5&isAllowed=y (accessed on 13 December 2021).
- 30. Collinson, R.; Ganong, P. How do changes in housing voucher design affect rent and neighborhood quality? *Am. Econ. J. Econ. Policy* **2018**, 10, 62–89. [CrossRef]
- 31. Iheme, J.O.; Effiong, J.B.; Ekung, S.B. The Effect of Government Policy on Housing Delivery in Nigeria: A Case Study of Port Harcourt Low Income Housing Programme. *Int. Lett. Soc. Humanist. Sci.* **2015**, *61*, 87–98. [CrossRef]
- 32. Ebekozien, A.; Bin Abdul-Aziz, A.-R.; Bin Jaafar, M. Comparative Analysis of Low-Cost Housing Policies in Malaysia and Nigeria. *Int. Trans. J. Eng. Manag. Appl. Sci. Technol.* **2017**, *8*, 139–152.
- 33. Lawal, A.O.; Adekunle, I.A. Access to Land and the Delivery of Affordable Housing in Nigeria: An Assessment of the Federal Housing Authority (FHA) in Abuja, 1991 to 2013. *SAGE Open* **2018**, *8*, 2158244018777281. [CrossRef]

Sustainability **2022**, 14, 2258 26 of 27

34. Muazu, J. Affordable Housing within the Context of Sustainability: Challenges and Prospects in Yola, Nigeria. Master's Thesis, Eastern Mediterranean University, Famagusta, Northern Cyprus, 2010.

- 35. Iheme, J.O. Factors for the Implementation of Affordable Federal Public Housing Policies in South-South Region of Nigeria. Ph.D. Thesis, University of Salford, UK, 2017.
- 36. Festus, I.A.; Amos, I.O. Housing Policy in Nigeria: An Overview. Am. Int. J. Contemp. Res. 2015, 5, 53-59.
- 37. Ebekozien, A. A qualitative approach to investigate low-cost housing policy provision in Edo State, Nigeria. *Int. Plan. Stud.* **2021**, 26, 165–181. [CrossRef]
- 38. Oyo-Ita, E.W. Tackling the housing affordability challenge: Nigeria experience. In Proceedings of the 30th International Union for Housing Finance (IUHF) World Congress on "Global Opportunities in Housing Finance", Washington, DC, USA, 27 June 2017.
- 39. Saidu, A.I.; Yeom, C. Success criteria evaluation for a sustainable and affordable housing model: A case for improving household welfare in Nigeria Cities. *Sustainability* **2020**, *12*, 656. [CrossRef]
- 40. Fields, D.J.; Hodkinson, S.N. Housing Policy in Crisis: An International Perspective. Hous. Policy Debate 2018, 28, 1–5. [CrossRef]
- 41. OECD. Housing Policy Objectives and Obstacles. 2021. Available online: https://www.oecd.org/els/family/PH1-2-Housing-policy-objectives-and-obstacles.pdf (accessed on 13 December 2021).
- 42. Skjæveland, A. Housing Policy Strategies—What is Best Practice? OECD Housing Policy Toolkit: Paris, France, 2021.
- 43. Danso-Wiredu, E.Y. Housing strategies in low income urban communities in Accra, Ghana. *GeoJournal* **2018**, *83*, 663–677. [CrossRef]
- 44. Aribigbola, A. Housing Policy Formulation in Developing Countries: Evidence of Programme Implementation from Akure, Ondo State, Nigeria. *J. Hum. Ecol.* **2008**, *23*, 125–133. [CrossRef]
- 45. Agarwal, S.; Singh, T.P.; Bajaj, D.; Pant, V. Affordable housing in urban India: A review of critical success factors (CSFs) addressing housing adequacy with affordability for the urban poor. *Hous. Care Support* **2021**, 25, 61–79. [CrossRef]
- 46. Gonzalez, L.; Lima-Silva, F.; Pozzebon, M. Improving public housing policies that target low-income households: The value of adding proximity to discretion. *Environ. Plan. C Polit. Space* **2021**, 39, 1567–1585. [CrossRef]
- 47. Shahab, S.; Hartmann, T.; Jonkman, A. Strategies of municipal land policies: Housing development in Germany, Belgium, and Netherlands. *Eur. Plan. Stud.* **2021**, 29, 1132–1150. [CrossRef]
- 48. Granath Hansson, A. City strategies for affordable housing: The approaches of Berlin, Hamburg, Stockholm, and Gothenburg. *Int. J. Hous. Policy* **2019**, *19*, 95–119. [CrossRef]
- 49. Oyebanji, A.O.; Liyanage, C.; Akintoye, A. Critical Success Factors (CSFs) for achieving sustainable social housing (SSH). *Int. J. Sustain. Built Environ.* **2017**, *6*, 216–227. [CrossRef]
- 50. Oluleye, I.B.; Ogunleye, M.B.; Oyetunji, A.K. Evaluation of the critical success factors for sustainable housing delivery: Analytic hierarchy process approach. *J. Eng. Des. Technol.* **2020**, *19*, 1044–1062. [CrossRef]
- 51. Musa, M.M.; Bin Amirudin, R.; Sofield, T.; Musa, M.A. Influence of external environmental factors on the success of public housing projects in developing countries. *Constr. Econ. Build.* **2015**, *15*, 30–44. [CrossRef]
- 52. Ganiyu, B.O.; Fapohunda, J.A.; Haldenwang, R. Sustainable housing financing model to reduce South Africa housing deficit. *Int. J. Hous. Mark. Anal.* **2017**, *10*, 410–430. [CrossRef]
- 53. Mulliner, E.; Maliene, V. Austerity and reform to affordable housing policy. J. Hous. Built Environ. 2013, 28, 397–407. [CrossRef]
- 54. Trangkanont, S.; Charoenngam, C. Critical failure factors of public-private partnership low-cost housing program in Thailand. *Eng. Constr. Arch. Manag.* **2014**, *21*, 421–443. [CrossRef]
- 55. Weje, I.I.; Obinna, V.C.; Oboh, F.A. Challenges of Social Housing Implementation and Consumer Satisfaction in River State, Nigeria. *Int. J. Sci. Res. Publ.* **2018**, *8*, 426–435. [CrossRef]
- 56. Olufemi, O.A.; Pauline, W.A. Regeneration—A Pragmatic Approach to Informal Settlement Development of Abesan Lagos, Nigeria. *Sociol. Anthropol.* **2018**, *6*, 717–728. [CrossRef]
- 57. Raschke, C. Affordable Housing in Nigeria; Best Practices; MFW4A: Abidjan, Cote d'Ivoire, 2016; pp. 1–20.
- 58. Ayotamuno, A.; Owei, O.B. Housing in Port Harcourt, Nigeria: The Modified Building Approval Process. *Environ. Manag. Sustain. Dev.* **2014**, *4*, 16. [CrossRef]
- 59. Waziri, A.G.; Roosli, R. Housing Policies and Programmes in Nigeria: A Review of the Concept and Implementation. *Bus. Manag. Dyn.* **2013**, *3*, 60–68.
- 60. Ebekozien, A.; Abdul-Aziz, A.R.; Jaafar, M. Housing finance inaccessibility for low-income earners in Malaysia: Factors and solutions. *Habitat Int.* **2019**, *87*, 27–35. [CrossRef]
- 61. Ikejiofor, U. The God that Failed: A Critique of Public Housing in Nigeria, 1975–1995. Habitat Int. 1999, 23, 177–188. [CrossRef]
- 62. Ebekozien, A. An appraisal of home ownership for senior citizens in Nigeria. *Prop. Manag.* 2021, 39, 54–70. [CrossRef]
- 63. Adeshina, T.; Idaeho, R. *Analysis of Nigeria's Policies on Housing*; JEE Sector Thought Leadership Series; JEE: Lagos, Nigeria, 2019; pp. 1–10.
- 64. Akeju, B.; Andrew, A. Challenges to Providing Affordable Housing in Nigeria. In Proceedings of the 2nd Emerging Urban Africa International Conference on Housing Finance in Nigeria, Abuja, Nigeria, 17–19 October 2007; pp. 1–5. Available online: http://mban.org.ng/wp-content/uploads/2011/12/Challenges\_affordable\_housing\_update\_Akeju.pdf (accessed on 13 December 2021).
- 65. Tipple, G. Housing policy-making in Africa: Ten common assumptions. *Habitat Int.* **2015**, 49, 413–418. [CrossRef]

Sustainability **2022**, 14, 2258 27 of 27

66. Kieti, R.M.; K'Akumu, O.A. Critical factors affecting affordability of mortgage housing in Kenya. *J. Hous. Built Environ.* **2018**, 33, 111–131. [CrossRef]

- 67. Balmer, I.; Gerber, J.D. Why are housing cooperatives successful? Insights from Swiss affordable housing policy. *Hous. Stud.* **2018**, 33, 361–385. [CrossRef]
- 68. Cai, X.; Tsai, C.; Wu, W. Are They Neck and Neck in the Affordable Housing Policies? A Cross Case Comparison of Three Metropolitan Cities in China. *Sustainability* **2017**, *9*, 542. [CrossRef]
- 69. Patel, B.; Byahut, S.; Bhatha, B. Building regulations are a barrier to affordable housing in Indian cities: The case of Ahmedabad. *J. Hous. Built Environ.* **2018**, 33, 175–195. [CrossRef]
- 70. Cai, X.; Wu, W.N. Affordable housing policy development: Public official perspectives. *Int. J. Hous. Mark. Anal.* **2019**, 12, 934–951. [CrossRef]
- 71. Sabela, P.T.; Isike, C. Appraising the effectiveness of South Africa's Low-Cost Housing Delivery approach for beneficiaries in uMhlathuze village and Slovos settlement. *Afr. Renaiss.* **2018**, *5*, 9–31. [CrossRef]
- 72. Anacker, K.B. Introduction: Housing affordability and affordable housing. Int. J. Hous. Policy 2019, 19, 1–16. [CrossRef]
- 73. Coupe, T. How global is the affordable housing crisis? Int. J. Hous. Mark. Anal. 2020, 14, 429-445. [CrossRef]
- 74. Andres Fernandez, M.; Martin, S.L. Affordable housing policies in a post-COVID aftermath. *Int. J. Hous. Mark. Anal.* **2022**, *15*, 126–144. [CrossRef]
- 75. Pawson, H.; Milligan, V.; Martin, C. Building Australia's affordable housing industry: Capacity challenges and capacity-enhancing strategies. *Int. J. Hous. Policy* **2019**, *19*, 46–68. [CrossRef]
- 76. McClure, K. The allocation of rental assistance resources: The paradox of high housing costs and high vacancy rates. *Int. J. Hous. Policy* **2019**, *19*, 69–94. [CrossRef]
- 77. Richter, F.G.C.; Barkley, B.; Higgins, A. Do low-income rental housing programmes complement each other? Evidence from Ohio. *Int. J. Hous. Policy* **2019**, *19*, 17–45. [CrossRef]
- 78. Hansson, A.G. Institutional Prerequisites for Affordable Housing Development a Comparative Study of Germany and Sweden. Ph.D. Thesis, KTH Royal Institute of Technology, Stockholm, Sweden, 2017.
- 79. King, R.; Orloff, M.; Virsilas, T.; Pande, T. Confronting the Urban Housing Crisis in the Global South: Adequate, Secure, and Affordable Housing; Working Paper; World Resources Institute: Washington, DC, USA, 2017; 40p.
- 80. Creswell, J.W. Qualitative, Quantitative and Mixed Methods Approaches; SAGE: New York, NY, USA, 2014.
- 81. Saldaña, J. The Coding Manual for Qualitative Researchers; SAGE: New York, NY, USA, 2021.
- 82. Gibb, K.; Whitehead, C. Towards the more effective use of housing finance and subsidy. Hous. Stud. 2007, 22, 183–200. [CrossRef]
- 83. Rakodi, C.; Leduka, C.R. *Informal Land Delivery Processes and Access to Land for the Poor: A Comparative Study of Six African Cities*; University of Birmingham: Birmingham, UK, 2004.
- 84. Liu, J.; Ong, H.Y. Can Malaysia's national affordable housing policy guarantee housing affordability of low-income households? *Sustainability* **2021**, *13*, 8841. [CrossRef]
- 85. Ibem, E.O.; Aduwo, E.B. Assessment of residential satisfaction in public housing in Ogun State, Nigeria. *Habitat Int.* **2013**, 40, 163–175. [CrossRef]
- 86. Calder, V.B. Zoning, Land-Use Planning, and Housing Affordability; Cato Institute Policy Analysis No. 823; Cato Institute: Washington, DC, USA, 2017.
- 87. Gerber, J.-D.; Hartmann, T.; Hengstermann, A. Instruments of Land Policy: Dealing with Scarcity of Land; Routledge: London, UK, 2018.
- 88. Meijer, R.; Jonkman, A. Land-policy instruments for densification: The Dutch quest for control. *Town Plan. Rev.* **2020**, *91*, 239–258. [CrossRef]
- 89. Watson, D.P.; Young, J.; Ahonen, E.; Xu, H.; Henderson, M.; Shuman, V.; Tolliver, R. Development and testing of an implementation strategy for a complex housing. *Implement. Sci.* **2014**, *9*, 138. [CrossRef] [PubMed]