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**AN INTEGRATED FRAMEWORK FOR  
EFFECTIVE AFFORDABLE HOUSING  
PROVISION IN NIGERIA**

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**An Integrated Framework for Effective Affordable Housing Provision in Nigeria**

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**A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of  
Philosophy**

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**Signature:**.....

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## **DEDICATION**

This dissertation is first dedicated to my Lord Jesus Christ, my Saviour and my everything. Secondly, I dedicate this thesis to my loving late mother – Mrs. Victoria O. Akinwande, who served humanity passionately as a school teacher. I am grateful to be in the education sector as she was and taking her passion to higher levels. I also dedicate this thesis to my beloved late father, Engr. Johnson O. Akinwande and my beloved late stepmother, Mrs. Christiana O. Akinwande. Lastly, I dedicate this thesis to all the urban poor in developing countries and across the world. This research begins my commitment to amplifying the voice of the urban poor towards sustainably housing the homeless.

## **ABSTRACT**

Many studies have been carried out on affordable housing across developed and developing countries of the world. These studies have made insightful contributions to knowledge and also policy-oriented recommendations that informs practice. Despite numerous research efforts, housing the urban poor has continued to be a global challenge, with more research emphasis on novel, realistic and pragmatic approaches. An extensive review of literature reveals a prevailing variance in AH between demand and supply. For pragmatic solutions to these constraints, it is apposite to thoroughly examine solutions from demand and supply sides toward consolidating solutions from these bilateral viewpoints. Further, a conceptual gap in literature is the common practice of investigating AH provision challenges without making a case for the key elements of housing supply value chain (HSVC). Addressing the challenge of affordable housing provision in an effective manner will require pragmatic approaches that investigate the key elements of HSVC as individual elements and realistically as interconnected elements that influence the success or failure of effective affordable housing (EAH) provision.

This study is conceptualized around these identified lacunae to investigate solutions to prevailing AH provision constraints across the entire HSVC. This study aimed at integrating affordable housing solutions from both users and experts' perspectives vis a vis the major components of HSVC for EAH provision. On the one hand, informal settlers were rigorously examined to ascertain how informal housing strategies of the urban poor can impact on HSVC toward EAH provision for the urban poor. On the other hand, housing experts were thoroughly investigated to ascertain significant expert solutions to prevailing AH provision challenges across the entire HSVC. Thus, the study is bilateral in approach integrating both user-oriented (demand) and expert-oriented (supply) viewpoints to achieve EAH provision. The research enquiry is: "What pragmatic framework of integrated solutions can enhance the achievement of effective affordable housing provision for the urban poor in Nigeria?"

To critically explore this research question, five complementary objectives were derived: (i) to investigate strategies developed by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations. (ii) to examine how informal housing strategies of the urban poor can inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria. (iii) to ascertain experts' solutions to constraints in affordable land acquisition, affordable housing finance and affordable housing construction in Nigeria. (iv) to examine the nexus between demand-oriented solutions deduced from the urban poor's strategies and experts' housing solutions towards EAH provision in Nigeria; and (v) to consolidate findings to develop and propose a pragmatic framework (that envelopes both users and experts' solutions) for EAH provision for the urban poor in Nigeria.

The five research objectives were achieved using qualitative methods with robust data, such as semi-structured interviews and focus group discussions. The data analysis processes utilised were systematic thematic analysis, content analysis, deductive analysis, comparative analysis, integrative analysis and descriptive statistics using NVivo and Microsoft Excel. Findings from this study are that there are concealed and untapped resources within the housing strategies of the urban poor that might inform suitable AH provision approaches. Findings show that 100% of sampled urban poor are casually employed where they earn little irregular income or zero income, limiting their housing finance capacities and creditworthiness. The urban poor are involved in community savings and employ microfinance institutions within the informal settlements to tackle their housing finance predicaments. Incremental housing, alternative housing, improvised housing, shared housing and low-budget rental housing are housing construction strategies common among the urban poor. The urban poor are mostly renters and are therefore less involved in land acquisition. These are informal housing strategies of the urban poor that can inform demand-oriented solutions to prevalent AH provision challenges.

Study findings reveal that informal housing strategies of the urban poor can influence HSVC towards EAH provision approaches. If deliberate efforts are made by government to modify and enhance informal strategies of the urban poor, they can be incorporated into housing policies to improve AH finance, land acquisition and housing construction which will consequently enhance the suitability of AH provision. Deliberate government policies that recognise and include the housing realities of the urban poor were found to be the most significant AH expert solution consistent across the entire HSVC. This study provides insights into critical solutions to AH constraints and are informative for best approaches to achieve EAH provision for the urban poor in Nigeria; an essential ingredient for sustainable development goals (SDGs). Findings established solutions from both users and experts' standpoints that were consolidated into more effective affordable housing provision solutions in developing economies. The integrated framework for EAH provision developed in this study has capacity to eliminate the persistent misalliance between AH demand and supply, thereby enhancing effectiveness in AH provision for the urban poor in developing economies.

Study findings have several theoretical, policy, practical and propaedeutic implications. The study is first to investigate informal housing strategies of the urban poor along the entire HSVC. It is first to explore experts' housing solutions along the entire HSVC to produce an equation model of critical solutions to AH provision challenges. This study is novel in consolidating AH solutions from users (demand) and experts' (supply) viewpoints, especially in relation to the major components of HSVC to develop a pragmatic framework for EAH provision. The integrated framework for EAH provision in developing economies formulated in this study is significant for the achievement of SDGs, especially goal 11 for sustainable, resilient and inclusive cities.

**Keywords:** Affordable housing solution; Effective affordable housing; Housing policy; Housing studies; Sustainable affordable housing; Sustainable development goal

## LIST OF RESEARCH PUBLICATIONS

Below is a compilation of research publications published by the author of this thesis during his PhD. Study. as shown within the text, chapters of this thesis are products of these publications which have either been fully or partially published in reputable journals.

### A. Refereed journal papers (Published)

1. Akinwande, T., Hui, E. C. M., & Dekker, K. (2024). Effective affordable housing strategies for the urban poor in Nigeria. *World Development*, 173 (2024) 106438. <https://doi.org/10.1016/j.worlddev.2023.106438>
2. Akinwande, T., & Hui, E. C. M. (2023). Effective affordable housing provision in developing economies: An evaluation of expert opinion. *Sustainable Development*, 1 - 6. <https://doi.org/10.1002/sd.2702>
3. Akinwande, T., & Hui, E.C. (2022). Housing supply value chain in relation to housing the urban poor. *Habitat International*, 130, 102687. <https://doi.org/10.1016/j.habitatint.2022.102687>

### B. Refereed journal papers (Under review)

1. Akinwande, T., & Hui, E. C. M. Effective affordable housing provision in developing economies: A deductive analysis of informal housing strategies. Manuscript Number: JCIT-D-23-01964 (Under 2<sup>nd</sup> review at Cities journal).
2. Akinwande, T., & Hui, E. C. M. Effective affordable housing provision in developing economies: A comparative analysis of users and experts' solutions. Manuscript Number: PIP-D-23-00063 (Under review at Planning journal).

### C. Refereed conference papers

1. Akinwande, T., Hui, E., & Dekker, K. Housing Strategies of the Urban poor in Nigeria in relation to Suitable Affordable Housing Finance. *Paper presented at PRSC, 8<sup>th</sup> – 9<sup>th</sup> May 2023. Hong Kong.* <https://scholar.google.com/scholar?oi=bibs&hl=en&cluster=18312211855079016968>
2. Akinwande, T., Hui, E. Expert solution to affordable housing finance challenges in developing economies. *Paper presented at International*

*Research Conference, 24<sup>th</sup> – 25<sup>th</sup>, July 2023. London, United Kingdom.*

[https://attachments.waset.org/23/papers/23GB070133\[4\].pdf](https://attachments.waset.org/23/papers/23GB070133[4].pdf)

3. Akinwande, T., Hui, E., & Dekker, K. Pragmatic framework for effective affordable housing provision in developing economies. *Paper presented at Livable Cities Conference, 14<sup>th</sup> – 16<sup>th</sup> June 2023. New York, United States.*
4. Akinwande, T. Effective affordable housing finance in developing economies: A comparative analysis of demand and supply solutions. *Paper presented at the International Conference on Sustainable and Inclusive Urban Development in Global South: International Experiences and Future Strategies, 10<sup>th</sup> – 12<sup>th</sup>, August 2023. New Delhi, India.*

#### **D. Refereed Journal papers (Published) for which I co-authored**

1. Adediran, A., Oladejo, S. O., **Akinwande, T. O.**, Ajibade, S. S. M., & Moveh, S. (2020). Housing quality standard and Covid-19 pandemic: A call for attention in Nigeria. *Journal of Science, Engineering, Technology and Management* ISSN: 2795-3955, 2(2).

#### **E. Awards and Recognitions during the PhD Study: 2020 – 2023**

1. **One-off Cash Award of HK\$20, 00.00 (Max.)** in June 2023 under the PolyU Top Conference Attendance Grant, The HK PolyU, Hong Kong.
2. **One-off Cash Award of HK\$10, 00.00 (Max.)** in September 2023 under the PolyU International Competition and Conference Participation Scheme, The HK PolyU, Hong Kong.

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## ABBREVIATIONS

<b>Acronym</b>	<b>Explanation – Full form</b>	<b>Acronym</b>	<b>Explanation – Full form</b>
<b>ACHR</b>	Asian Coalition for Housing Rights	<b>KPI</b>	Key Performance Index
<b>AH</b>	Affordable Housing	<b>LASURA</b>	Lagos State Urban Renewal Agency
<b>AHSEWS</b>	Affordable Housing Scheme for Economically Weaker Section	<b>LCH</b>	Low-cost housing
<b>AMAP</b>	AutoNavi Electronic Navigation Map	<b>LEDB</b>	Lagos Executive Development Board
<b>ANSHK</b>	Association of Nigerian Scholars in Hong Kong	<b>LG</b>	Local Government
<b>AR</b>	Affirmative Repositioning	<b>LIG</b>	Low-income Group
<b>BNG</b>	Breaking New Ground	<b>LSDPC</b>	Lagos State Development Property Cooperation
<b>BSUP</b>	Basic Services for the Urban Poor	<b>LVC</b>	Land Value Capture
<b>CAQDAS</b>	Computer-assisted Qualitative Data Analysis Software	<b>MCHF</b>	Micro-credit to Housing Finance
<b>CBMHF</b>	Community Based Mutual Housing Finance	<b>MFIs</b>	Microfinance Institutes
<b>CBN</b>	Central Bank of Nigeria	<b>MMDAs</b>	Metropolitan, Municipal and District Assemblies
<b>CDC</b>	City Development Committee	<b>NGO</b>	Non-Governmental Organizations
<b>CDF</b>	Community Development Fund	<b>NHB</b>	National Housing Bank
<b>CHDF</b>	Community Housing Development Fund	<b>NIESV</b>	Nigerian Institution of Estate Surveyors and Valuers
<b>CMC</b>	Community Mortgage Cooperative	<b>NITP</b>	Nigerian Institute of Town Planners
<b>CONAVI</b>	National Housing Commission	<b>NPC</b>	National Pension Commission
<b>CSHD</b>	Centre for Sustainable Housing Development	<b>PHP</b>	People’s Housing Process
<b>CULD</b>	Community Urban Land Development	<b>PMAY</b>	Pradhan Mantri Awas Yojana
<b>EAH</b>	Effective Affordable Housing	<b>PPP</b>	Public-Private Partnership
<b>ESVARBON</b>	Estate Surveyors and Valuers’ Registration Board of Nigeria	<b>RBI</b>	Reserve Bank of India
<b>EWS</b>	Economically Weaker Section	<b>RDP</b>	Reconstruction and Development Programme
<b>FES</b>	Faculty of Environmental Sciences	<b>REDAN</b>	Real Estate Development Association of Nigeria
<b>FGD</b>	Focus Group Discussion	<b>REITs</b>	Real Estate Investment Trusts

<b>FHFS</b>	Federal Housing Fund Scheme	<b>RMIT</b>	Royal Melbourne Institute of Technology
<b>FHOG</b>	First Home Owner Grant	<b>SAH</b>	Sustainable Affordable Housing
<b>FMBN</b>	Federal Mortgage Bank of Nigeria	<b>SAHF</b>	Shelter Advocacy to Housing Finance
<b>GDP</b>	Gross Development Product	<b>SAHPF</b>	South African Homeless People's Federation
<b>HDAT</b>	Housing Development Administration of Turkey	<b>SDG</b>	Sustainable Development Goal
<b>HK</b>	Hong Kong	<b>SEWA</b>	Self-Employed Women Association
<b>HUDCO</b>	Housing and Urban Development Corporation	<b>SHF</b>	Federal Mortgage Company
<b>HSVC</b>	Housing Supply Value Chain	<b>SSA</b>	Sub-Saharan Africa
<b>IGR</b>	Internally Generated Revenue	<b>SSI</b>	Social Security Institution
<b>IH</b>	Inclusionary housing	<b>UNDESPD</b>	United Nations, Department of Economics and Social Affairs, Population Division
<b>JNNURM</b>	Jawaharlal Nehru National Urban Renewal Mission	<b>UNDP</b>	United Nations Development Programme
<b>KIPTAS</b>	An association of Istanbul Metropolitan Municipality	<b>UN-Habitat</b>	United Nations Human Settlements programme
		<b>UPPRP</b>	Urban Partnerships for Poverty Reduction Project

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## CHAPTER 1: INTRODUCTION

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### 1.1 Background to the study

Several scholars of urban and development across the world have established that urbanization in developing countries is closely associated with slumnization which is characteristically a challenge for urban management and sustainability (Bolay, 2006; Owusu et al., 2008; Patel et al., 2014; Roy, 2005; Roy et al., 2018; Srivastava & Singh, 1996). Though more than half of the world population already reside in cities, urbanization is still in progress as Un-Habitat report projects that by 2030, 60% of the world population will live in cities. United Nations, Department of Economics and Social Affairs, Population Division (UNDESPD) in 2016 opined that of these urban dwellers, nearly 1.2 billion dwell in precarious informal settlements. According to United Nations Human Settlements programme (UN-Habitat), the highest percentage of urban population dwelling in slums are found in developing countries such as the Sub-Saharan Africa (SSA) (World-Health-Organisation, 2016). As urbanization continues in developing countries as a result of rural-urban migration and natural population growth, urban sprawl continues to form; limiting the achievement of the Sustainable Development Goal (SDG) 11 to make cities and human settlements inclusive, safe, resilient and sustainable; making a case for better planning and management towards a sustainable urban space (Desai et al., 2015; Fraser et al., 2017).

These estimates constitute a disturbing housing challenge. However, it is even more disturbing to realize that despite the numerous political and social initiatives taken by most developing countries, most of their urban dwellers still live in substandard housing. This is the situation in Nigeria, where government housing interventions date back to 1928 with the creation of the Lagos Executive Development Board (LEDB), and where, in spite of the several government interventions in housing provision, the housing problem in the country is still very much out

of control; mostly due to poor policy implementation among many other reasons. (Ademiluyi, 2010). Despite the series of government policies targeted at improved housing provision and delivery, it is evident that the successive governments in Nigeria have not been able to actualize these policies.

As cities grow, housing the growing population becomes an important need. The demand for housing increases without commiserate supply, causing a surge in house prices and rent (Ademiluyi, 2010). In recent times, many researchers in urban and political economics have highlighted that cities become increasingly unaffordable as population grows (Arundel, 2017; Arundel & Doling, 2017; Hochstenbach & Musterd, 2018). Several scholars have also examined the root causes of surging house prices and house rents in cities, most pointing towards population increase (Aalbers, 2019; August & Walks, 2018; Druta & Ronald, 2017; Savini & Aalbers, 2016). The housing sector is a major player in any country's Gross Development Product (GDP), the income stability of the people, status, family growth, health, security among many others. As a result, housing requires more focus to actualize housing development, housing affordability and sustainability, particularly in developing countries.

Affordability of housing is one of the major challenges facing the urban poor, it is measured by the relation of household income to housing cost (Abed, 2012) and in relation to transportation cost (Renne, 2009). Cox et al. (2017) in their study of 293 housing markets across Australia, Singapore, Hong Kong, New Zealand and Ireland, found only 63 housing to be affordable. Housing affordability is a major concern in every part of the world, both developed and developing economies. In response to the increasing unaffordability of housing, many countries have taken proactive steps in addressing the situation. Scholars have suggested innovative approaches such as incorporating cooperative societies into housing supply in Nigeria (Oyalowo et al., 2018a), Land Value Capture (LVC) for the housing situation in

Burkina Faso (Korbéogo, 2021), Inclusionary housing to tackle housing affordability issues in the United States of America (Wang & Balachandran, 2021), Community Urban Land Development models (CULD) in Germany (Koetter et al., 2021) and so on. All these are initiatives to improve housing affordability by system and policies in developed and developing countries as housing is an important source of macroeconomic growth for a nation and can positively influence all other sectors by its ripple effects (Adabre et al., 2020). Oyalowo et al. (2018a) found cooperative society to be effective for housing affordability in many countries such as USA, Austria, Portugal, Egypt among others. However, the prevailing nature of challenges in affordable housing (AH) provision across the world, despite several housing intervention programmes and research attention suggests a variance between AH demand and what is supplied as AH. This may be resulting from paucity of studies that concurrently investigate AH provision from both demand and supply points of view.

Drexhage and Murphy (2010) explained that sustainable affordable housing (SAH) requires a smooth operation and interaction of economic, environmental and social subsystems to bring sustainable housing development to being. The economic benefits must be ascertained, the environment preserved and social equity also established. Thus, for the housing need of the urban poor to be met, there is need for clear economic benefits, social equity and the environment of the stakeholders preserved. Many recent studies have examined SAH but only few of these studies have isolated the urban poor as major research focus (Adabre & Chan, 2019; Adabre et al., 2020; Chan & Adabre, 2019; Ihuah & Eaton, 2014; Lee, 2020; Oyeibanji et al., 2017; Said et al., 2016). Hamid et al. (2018) averred that critical success factors for socially SAH includes, stakeholder's participation in the development process, enhancing public knowledge and awareness of sustainable lifestyle, and good quality social housing that creates the sense of place to live. This suggests that it is necessary to examine the urban poor in order to provide housing deliberately designed to service the urban poor in developing

economies. Though Menshawy et al. (2016) examined informal settlements in developing countries in their study on AH, the study focused on general policies with no attention given to housing approaches of the urban poor.

Many studies have investigated AH over the years, and have made remarkable and insightful contributions that positively influenced housing situation and policy decisions across the world (Adabre & Chan, 2019; Adabre et al., 2020; Brown & McGranahan, 2016; Chan & Adabre, 2019; Ihuah & Eaton, 2014; Lee, 2020; Oyebanji et al., 2017; Patel et al., 2014; Patel, 2013; Said et al., 2016). However, the challenge of AH provision is seemingly persistent despite previous contributions to knowledge and policy interventions, this suggests an urgent need for a paradigm shift in approaches to AH research, discussions, policies and practices (Ademiluyi, 2010; Desai et al., 2015; Fraser et al., 2017; World-Health-Organisation, 2016). A study that investigates the components of housing supply value chain (HSVC) in relation to AH provision is non-existent which constitutes a conceptual gap in housing literature. It is indispensable that future AH investigations employ innovative and pragmatic methods to achieve effective affordable housing (EAH). Affordable housing will be effective if affordable housing provision considers the informal housing strategies of the urban poor to inform suitable and sustainable approaches to meet the housing needs of the urban poor. Tackling AH provision challenges in an effective manner will require pragmatic approaches that investigate the three key components of HSVC i.e., housing finance, land acquisition and housing construction (Akinwande and Hui, 2022; Lea, 2000; Porter, 2008) as independent elements and realistically as interdependent elements that have major impacts on the success or failure of AH provision.

Given the foregoing, this study intends to investigate the possibility of effectively housing the urban poor in Lagos, Nigeria through an investigation of housing characteristics, housing situations, socioeconomic activities and the informal housing strategies of the urban poor in

Lagos along the main components of HSVC to ascertain prospects for suitable and effective AH provision within informal settlements. This should provide AH solutions across the entire HSVC from users' perspective, on the one hand. On the other hand, this study intends to investigate experts' solutions to prevailing AH challenges also across the entire HSVC, to inform solutions to AH provision constraints from experts' perspective. Finally, the study intends to consolidate both experts' remedies and demand-oriented remedies to develop a synthesized unit of pragmatic and realistic framework for EAH provision for the urban poor in Nigeria. This study is conceptualized around the identified conceptual gap in literature to investigate solutions to prevailing AH provision constraints across the entire HSVC. This study intends to adopt an international comparative perspective that could impact on policy decisions across the world. Findings and recommendations will be integral to international policymaking and will be pivotal to the achievement of sustainable development goals (SDGs) in developing countries of the world.

## **1.2 Research scope and Statement of problem**

The Nigerian economy has constantly diminished through the years and poverty rate continually increasing amongst the Nigerian populace (Enwin & Okorosa, 2021). Stanley et al. (2020) argues that Nigeria is the capital of poverty in the world as about 40% Nigerians live below \$1 a day. The Nigerian economy like that of other countries has recently suffered the impact of covid19 with crash in oil prices and massive unemployment, consequent upon lockdown among other crises (Enwin & Okorosa, 2021); worsening the already poor economic condition of the people. Yet, the Nigerian cities are all growing at rapid rates due to rapid natural growth in population and due to massive rural-urban migration (Bredenoord et al., 2014; Lee, 2020). All these complicate the housing challenges of the urban poor in Nigerian cities. The urban poor cannot afford housing at market price, making affordable housing investigations an urgent need.

Lagos state being the economic hub of Nigeria and arguably Africa's most urbanized metropolitan city is the geographical delimitation of this study. The Lagos population has increased from about 700 thousand people at independence in 1960 to over 18 million people in 2010 (Elias & Omojola, 2015; Moore, 2019; Ojapinwa & Adegioriola, 2022), where more than 70% of her inhabitants are the urban poor dwelling in the state's over 200 urban sprawl communities (Adesina-Uthman et al., 2022; Lagos-State-Government, 2021b; World-Health-Organisation, 2016). The situation of housing deficit in Nigeria has gone from bad to worse as a deficit of 7 million in 1991 has grown to about 17 million in recent times (Elias & Omojola, 2015; Moore, 2019). World Bank reports that Nigeria is in need of 700,000 housing units annually to span through a 20 year period in order to accommodate the continually growing population (Ekpo, 2019). Bredenoord et al. (2014) and Gu (2019) opined that urbanization is on rapid increase across the world and particularly in developing countries due to rural-urban migration amongst other reasons. Thus, the urgent need for research centred on effectively housing the urban poor in Lagos, Nigeria.

To approach the issue of urban sprawl and housing affordability sustainably, there is need for innovative housing provision approaches. Many scholars have researched on possible housing approaches, however they scarcely examine the informal sectors; causing a neglect of the urban poor in affordable housing studies. The battle for SAH for the urban poor warrants a thorough examination of the informal sector and its resources. Recent research works have identified SAH as the most proactive and effective solution to the growing housing demand in the face of continuous urbanization (Crowley, 2020; Lee, 2020), of which SAH is still at infancy stage across the world (Adabre et al., 2020). There is yet to be an investigation of components of housing supply value chain in relation to successful affordable housing provision and this constitutes a major conceptual gap in literature. If EAH provision for the urban poor will be a reality, there is a crucial need for a paradigm change in AH policy decisions and discussions to

be more realistic and pragmatic. The connections and interconnections of the main components of HSVC need to be examined in relation to AH provision.

In as much as AH is targeted at the urban poor who are usually informal settlers in cities, there is yet to be a study that investigates the housing need of the urban poor concurrently with an investigation of AH providers, which may leave AH solutions lopsided, asymmetrical and unrealistic (Muniappa, 2022). This situation makes a case for more research emphasis on balanced studies that investigate affordable housing solutions from the bilateral viewpoints of demand and supply. Policy decisions should be better when both demand and supply-side interventions are included (Feather, 2019). This investigation requires some urgency as World Health Organisation (2016) submits that by 2030, 60% of the world population will dwell in cities and according to United Nations (UN), over 1.2 billion of these are urban sprawl dwellers.

Literature review shows that previous studies have adopted interviews, questionnaires, and observation as data collection methods, with very few studies engaging other important data collection and validation approaches like focus group meetings, consultation of experts, professionals, and experienced respondents as well as workshops (Aalbers, 2019; August & Walks, 2018; Druta & Ronald, 2017; Savini & Aalbers, 2016). This limits the validity and reliability of research findings because data sourced from experts or professionals enhances research output (Abowitz & Toole, 2010).

In light of these, this study intends to investigate the possibility of achieving effective affordable housing for the urban poor in developing countries by carefully examining the informal housing strategies of the urban poor for hidden lessons to inform demand-oriented remedies to prevalent AH provision challenges across the entire HSVC. In an attempt to ascertain supply-side solutions, this study intends to thoroughly investigate housing experts across the main components of the HSVC (housing construction, housing finance and land



acquisition) to determine significant expert solutions to prevailing AH provision challenges. Thus, the study investigates AH solutions from both users and experts' standpoints across the entire HSVC towards developing a pragmatic framework of EAH provision for the urban poor in Nigeria. The research enquiry is: "What pragmatic framework of integrated solutions can enhance the achievement of effective affordable housing provision for the urban poor in Nigeria?" To answer this research enquiry, four major research questions are critically considered in this thesis as follows;

### **1.3 Research questions**

- a. What strategies are deployed by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations?
- b. How can informal housing strategies of the urban poor inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria?
- c. What are experts' solutions to constraints in affordable land acquisition, affordable housing finance and affordable housing construction in Nigeria?
- d. What nexus exists between demand-oriented housing solutions deduced from the urban poor's strategies and experts' solutions, that can be consolidated into more effective housing solutions towards developing a pragmatic framework for EAH provision for the urban poor in Nigeria?

### **1.4 Aim and objectives**

This study aims at integrating affordable housing solutions from both users and experts' perspectives along the major components of housing supply value chain, with a view to investigate whether a pragmatic framework to effectively house the urban poor in Nigeria can be developed.

Accordingly, the objectives of this thesis are to:

#### 1.4.1 Objectives

1. Investigate strategies utilized by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations.
2. Examine how informal housing strategies of the urban poor can inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria.
3. Ascertain experts' solutions to constraints in affordable land acquisition, affordable housing finance and affordable housing construction in Nigeria.
4. Examine the nexus between demand-oriented housing solutions deduced from the urban poor's strategies and experts' housing solutions towards EAH provision in Nigeria.
5. Consolidate findings to develop and propose a pragmatic framework (that envelopes both users and experts' solutions) for EAH provision for the urban poor in Nigeria.

#### 1.4.2 Connections of the research objectives

The five research objectives of this study complement one another. The connections are presented in Fig. 1.1. **Objective 1** investigates the urban poor to explicitly ascertain their housing situation, housing characteristics and all activities that provide useful information about their responses to their unfavourable housing situations. For **objective 2**, the data gathered in objective 1 are subjected to a thorough thematic deductive analysis to establish the connection between informal housing strategies of the urban poor and the major components of HSVC - housing finance, land acquisition and housing construction. Both objectives (1 and 2) jointly provided demand-oriented solutions to prevailing affordable housing provision constraints in Nigeria. **Objective 3** investigates housing experts to carefully establish their

expert solutions to affordable housing provision challenges across the entire housing supply chain. The objective ascertained experts' solutions to constraints in affordable housing financing, affordable land acquisition and affordable housing construction; thereby providing experts' perspective on solutions to prevalent affordable housing provision constraints in Nigeria.

**Objective 4** subjects the findings from both objectives 2 and 3 to a comparative analysis, juxtaposing both informal housing solutions of the urban poor with experts' housing solutions. This analysis identifies mutual grounds between the bilateral viewpoints of housing solution, seeking to synthesize these solutions into one compound solution. These synthesized solutions form the basis for the pragmatic framework for effective affordable housing provision. **Objective 5** consolidates the findings of objectives 1 – 4 into the pragmatic framework for effective affordable housing provision in Nigeria. The framework consolidates housing solutions from the bilateral viewpoints of users and experts across the entire HSVC. It carefully and realistically interconnects all the main components of HSVC towards a pragmatic framework that can enhance the effectiveness of affordable housing provision in Nigeria.

### **1.5 Significance and value of the study**

Affordable housing provision for the urban poor has continued to be a global challenge and especially in developing economies. This extensive situation has attracted research attention for many years, yet a study that consolidates affordable housing solutions from both users and experts' viewpoints towards formulating a framework for EAH provision is lacking in literature. Findings from this study and the framework for EAH developed in this study have theoretical, policy, practical and propaedeutic significance to AH provision in developed and developing economies.

First, the implications of HSVC and its interconnected levels on successfully housing the urban poor has prior not been acknowledged, discussed and analysed in housing literature. This study is first to realistically analyse AH provision vis a vis the main components of HSVC to ascertain the challenges encountered at each level of HSVC and the solutions to these identified challenges. Thus, this study introduced best practice in AH discussions and analyses while emphasizing the importance of multidisciplinary and multidimensional approaches in AH interventions and policy decisions.

Second, this study rigorously examined the urban poor to identify their housing situation, housing characteristics and the informal housing strategies they employ to tackle their housing predicaments. These were analysed to determine useful lessons that can inform suitable AH provision strategies that can be modified and repackaged to deliberately service the urban poor in developing economies. Therefore, the data from this study can be useful resources for all stakeholders interested in AH provision in developing economies.

Third, there has been continued mismatch between AH demand and supply, despite the research attention on AH provision. This study attempts to bridge this gap by carefully investigated how the informal strategies of the urban poor can impact on AH provision along the main components of HSVC - housing finance, land acquisition and housing construction. This revealed the informal housing finance, housing construction and land acquisition strategies of the urban poor. These are insightful findings that are particularly policy-oriented and are specific on suitable solutions to AH provision constraints across the entire HSVC from a demand (users) standpoint. This demand-oriented solutions can inform policies on AH provision to eliminate the variance between demand and supply of AH; a significant finding for AH developers and suppliers.

Fourth, this study thoroughly investigated housing experts to ascertain experts' solutions to prevalent AH provision challenges along the entire HSVC. This study extends housing literature being first to develop an equation model that evinces the significant solutions to AH constraints in developing economies from the experts' perspective. This model provides crucial information on approaches that should be deployed to alleviate AH provision challenges across the entire HSVC, from experts' standpoint. The identified expert solutions were juxtaposed with demand solutions to determine mutual grounds that can be reconciled and integrated for more effectiveness. This integrated solutions to AH constraints are vital for EAH provision and are significant to all stakeholders of AH provision accordingly.

Ultimately, this study analysed and synthesized AH solutions across the entire HSVC to develop frameworks for effective affordable housing finance, land acquisition and housing construction. These frameworks provide practical solutions to challenges that affect the independent elements of HSVC. These frameworks were further consolidated into a realistic framework for EAH provision, encapsulating all main elements of HSVC to recognise their interdependence and interconnectedness. This novel contribution extends housing literature and provides a pragmatic strategy for addressing the difficult challenge of AH provision in developing economies. This study combines both scientific and practical significances of academic research, leading to substantial contributions to knowledge and intelligent approaches to effectively house the urban poor in developing economies.

## **1.6 Research process**

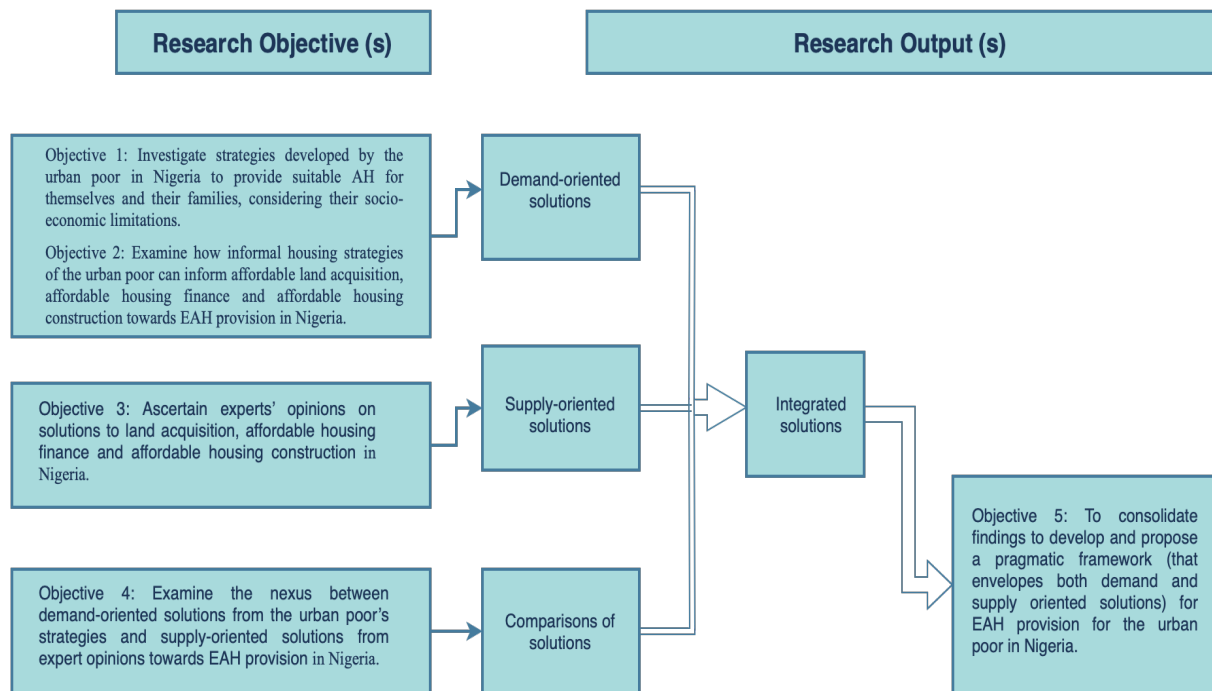
The research plan for this study is broken down into 5 stages. The stages begin with extensive literature review with varying research activities which include, but not limited to understanding the research area, the scholarly discussion, the research trend, geospatial characteristics, temporal characteristics, methodological characteristics, scope, top journals in

the research area, popular themes and many other activities. Stage 1 of this research also includes conducting a scoping review and publication of a systematic review article in reputable journals such as Habitat International. The stage 2 of this research involves a pilot survey to have a basic understanding of the field survey, the respondents and other stakeholders that may be involved in data collection. Pilot survey assisted the researcher to establish the appropriate research instrument and allocate adequate time for data collection. At this stage the research instrument was designed for the actual field survey. The pilot survey also enables the researcher gather some empirical data useful for research purposes.

This stage continued with the actual data collection, where the researcher was on field for semi-structured interviews with 40 randomly selected residents of Makoko in Yaba local government (LG), Majidun in Ikorodu LG, Ojota in Ikeja LG, Alaba-rago/Alaba-international in Ojo LG and Abule-osun in Amuwo/Oriade LG areas of Lagos state. The researcher conducted a 12 member focus group discussion (FGD) with housing experts in Nigeria and concluded data collection with semi-structured interviews with 5 housing experts in Nigeria to strengthen findings from the FGD. These experienced housing experts were carefully and purposively sourced to be representative of the major components of HSVC, thus experts were recruited from Lagos State Ministry of Housing, Lagos State Lands Bureau, Lagos State Land Valuation Office, Mortgage Banks (servicing affordable housing), Federal Mortgage Bank of Nigeria (FMBN), Lagos State Development Property Cooperation (LSDPC), Private development companies (involved in affordable housing development), and the academia [Faculty of Environmental Sciences (FES) and Centre for Sustainable Housing Development (CSHD), University of Lagos]. The data collection process was between June and September, 2022.

Stage 3 entails the analysis of the collected data with appropriate analytical tools. Data interpretation and discussion of findings were done within this period. Audio recordings from

the semi-structured interviews and FGD were transcribed, coded and analysed through a thorough thematic analysis and content analysis using NVivo. The recordings were examined all over again by the researcher to avoid decontextualising data interpretation and any forms of loss of data. Data were further subjected to careful screening and systematic thematic content analysis to establish the level of significance of expert solutions, using Microsoft excel. The objectives 1 - 3 were achieved in this stage of the research. Stage 4 involves the reconciliation, compilation and integration of research findings. The compilation of research findings assisted the achievement of research objective four. The compiled findings were reconciled and consolidated to develop the framework for effective affordable housing provision in Nigeria which achieved the objective five and final objective of this study. This stage also includes the development and testing of hypotheses. Stage 5 and final stage of this thesis involves the compilation of thesis, drawing conclusions from the research findings, highlighting the contributions of this study, elucidating the research limitations and making recommendations for future studies. This stage also includes the validation of research finding among experts in the Nigerian built environment. Fig.1.1 summarizes the research process and structure of thesis for this study while the research framework is presented in Fig. 1.2.



**Figure 1.1:** Connections among research objectives



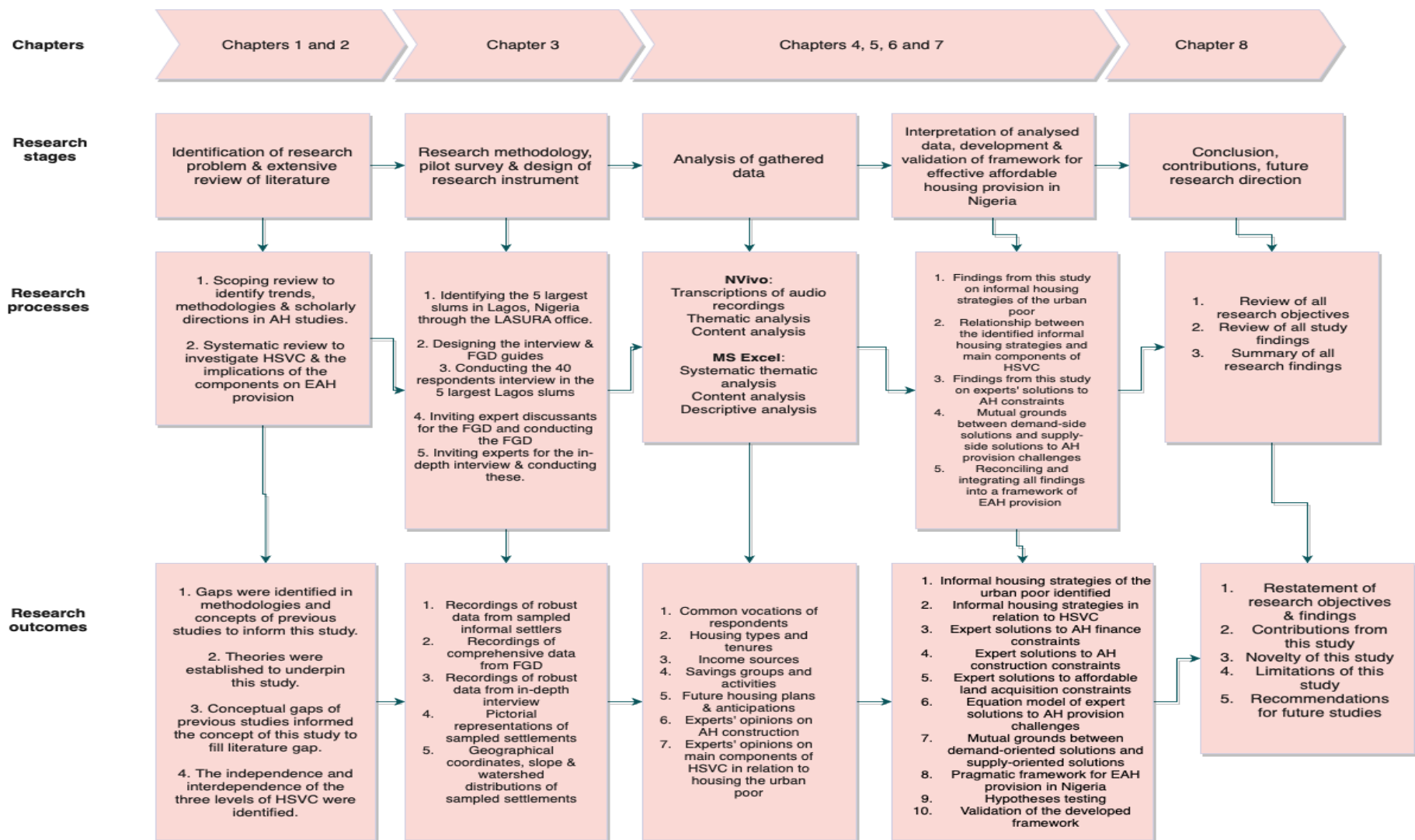


Figure 1.2: Research framework for this study

## 1.7 Structure of thesis

This thesis is made up of eight complementary chapters, catalogued as follows;

*Chapter 1 – General Introduction:* This chapter presents a background to this study which is a general introduction of the central themes of this research. The chapter identifies the research problem and the geographical scope for this study. The study aim and the complementary objectives to achieve this aim are highlighted in this chapter. The chapter further explains the scientific and practical relevance of this study. The chapter presents the research process, the thesis structure, an operational definition of terms and closes with a brief chapter summary.

*Chapter 2 – Literature review, theories and conceptual frameworks:* Owing to the nature of this study, the literature review chapter opens with an elaborate description of study area. The chapter progresses by reviewing AH scholarly discussions to highlight the existing state of affairs and future research directions . Further, this chapter discusses theories that underpin this study and investigates the individual components of the HSVC to ascertain the implications of the interconnection of these elements on EAH provision for the urban poor. The chapter identifies the trend in housing literature, highlight the successes, the limitations, the ways forward and recommendations in literature towards formulating conceptual frameworks that guide this study to enhance the achievement of effective affordable housing provision in developing economies.

*Chapter 3 – Research methodology:* This chapter presents the methodology deployed to achieve the aim and objectives of this study. A detailed analysis of the mode of data collection and the statistical tools that was employed in the analysis of the gathered data in the course of this research are presented in this section.

*Chapter 4 – Informal housing strategies of the urban poor in Nigeria:* This chapter examines informal housing strategies of the urban poor in informal settlements in Lagos, Nigeria. This

chapter focuses on the research question that; “what strategies do the urban poor develop in order to provide effective affordable housing for themselves and their families, taking into account their socioeconomic limitations?” and answered it by rigorously investigating the livelihood and housing activities of the urban poor in some of the largest Lagos slums to identify their strategies for housing themselves and families, clustering these identified strategies towards formulating a framework of potentials for EAH provision from a demand-oriented viewpoint. A comprehensive demand-oriented analysis to AH provision challenges in developing economies is provided in this chapter.

*Chapter 5 – Deductive analysis of informal housing solutions across the entire HSVC:* This chapter investigates how the housing strategies of the urban poor can inform AH provision along the entire HSVC - land acquisition, housing finance and housing construction. Analyses in this chapter disintegrated HSVC into its three major components and thoroughly examined how each component can be structured based on the informal housing strategies of the urban poor, to extend housing literature from a demand-oriented viewpoint towards developing a demand-oriented framework for effective affordable housing provision in Nigeria. In this chapter, 40 slum dwellers in the five largest slums in Lagos, Nigeria were thoroughly investigated to identify their informal housing strategies and responses to their urgent housing needs. The identified strategies were analysed vis-à-vis the major components of HSVC to strengthen the demand-oriented analysis provided in chapter 4 of this thesis, towards effectively housing the urban poor in Nigeria.

*Chapter 6 – Assessment of experts’ solutions to AH provision constraints across the entire HSVC:* This chapter examines experts’ opinion on solutions to AH challenges in Nigeria from three major perspectives of land acquisition, housing construction and housing finance which are major elements of HSVC. This fundamentally extends housing literature by determining

and aggregating expert solutions for AH constraints across the entire HSVC through an in-depth study. It provides a comprehensive supply-oriented analysis to AH provision challenges in developing economies.

*Chapter 7 – Integration of AH solutions across the entire HSVC to develop a framework for EAH provision:* This chapter carefully compares user-oriented and expert-oriented AH solutions in developing economies along the fundamental elements of HSVC. This significantly contributes to housing literature by juxtaposing AH solutions from bilateral viewpoints towards unifying them into consolidated units of effective solutions to the housing challenges of the urban poor along the entire HSVC. In this chapter, the interdependence of the major components of HSVC is considered and incorporated to ingeniously develop a pragmatic framework for effective affordable housing provision in developing economies, integrating both users and experts' points of view. This provides a circumstantial analysis of solutions to AH provision challenges in developing economies. The framework for EAH provision in developing countries developed in this chapter, if adequately deployed, should be able to eliminate the divergence between AH supply and demand. Hypotheses were developed and tested in this chapter and finally, the formulated pragmatic framework was validated using feedbacks from housing experts in Nigeria.

*Chapter 8 – Conclusion, contributions and future research direction:* The research loop is closed in this chapter and it makes conclusions based on study findings. The chapter reviews research objectives along with findings that answer each research query. The significant contributions of this study are outlined and the research novelty is emphasized. Research is a never-ending science, thus this chapter explicates the limitations of the study and closed with recommendations for future research.

## 1.8 Operational definition of terms

1. **Informal settlement:** In this study, this refers to settlements that emanate around urban centres to accommodate and provide housing for urban poor who cannot afford housing prices in planned communities. This does not refer to illegally occupied lands and communities.
2. **Slumnization:** The continuous formation of squalid and overcrowded settlements characterized by highly substandard housing, mostly inhabited by very poor people.
3. **Urban poor:** For the purpose of this study, these are informal settlers in cities mostly involved in vocations where they earn their living. The urban poor refer to the lower-income category of the urban poor who either earn no income at all or earn little income

## 1.9 Chapter summary

An overview of this thesis is presented in this chapter. It gave a detailed background to the study and illuminated the statement of problem as well as geographical delimitation for this study. The study aim, objectives and research questions were presented. The significance of study, research process and thesis structure followed while the chapter closes with an operational definition of terms. The next section (i.e., chapter 2) describes the study area and extensively reviews literature to identify gaps in affordable housing discussions.

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## CHAPTER 2: LITERATURE REVIEW, THEORIES AND CONCEPTUAL FRAMEWORKS <sup>1</sup>

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### 2.1 Introduction

Chapter one presented a general background to this study, it elucidated the research problem, the aim and the objectives for this study. This chapter is a detailed review of related literature, description of theories relevant to this study and a proposition of conceptual frameworks that guide this study. The chapter begins with a detailed description of the study area, then proceeds with reviews of literature to showcase scope, methodologies, and a general picture of scholarly discussions on affordable housing provision. The chapter discusses theories that underpin the various components of this research. This was followed by a systematic review of HSVC as it relates to housing the urban poor and a review of affordable housing discussions. These reviews of theories and literature led to the formulation of some conceptual frameworks evaluated in this thesis. This chapter concludes with a brief chapter summary.

### 2.2 Study area

Lagos state, Nigeria is situated on latitude 6° 27' North and longitude 3° 28' East along the West African coast of the Atlantic Ocean. The settlement was used as a harbour by the Portuguese who christened the location as Lagos de Kuramo in 1492 (Folami, 1982). Lagos became the first capital of Nigeria at independence in 1960 but the capital was later relocated to Abuja. Lagos remains a focal point of regional, national and international trade because it's a coastal city with reasonably advanced road, rail, ocean and transport facilities; it is the major commercial centre of the country (Aluko, 2010).

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<sup>1</sup> This chapter is largely based on the following publications:

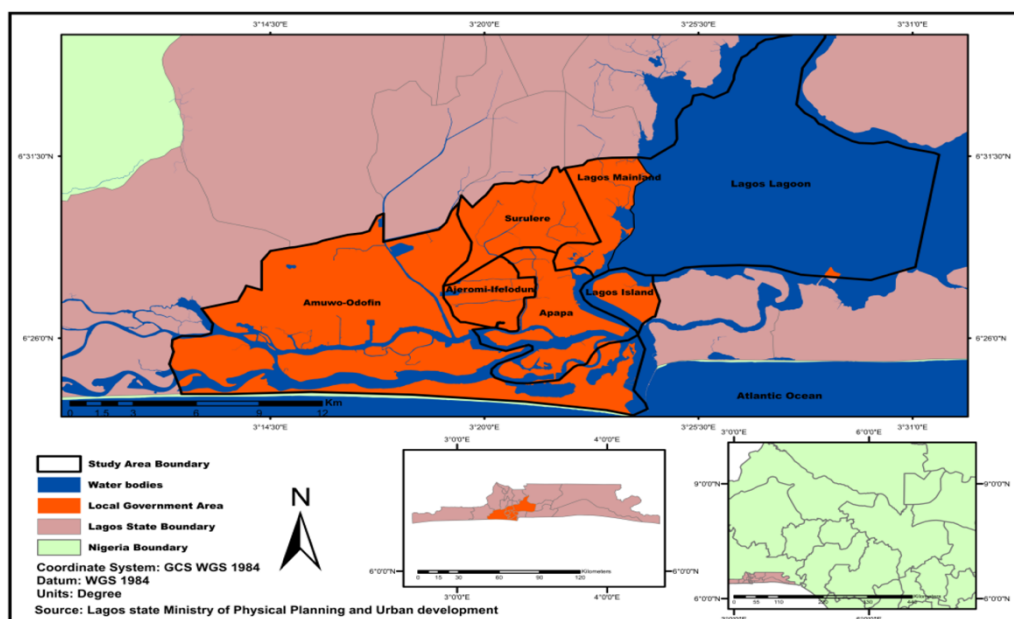
- Akinwande, T., & Hui, E. C. (2022). Housing supply value chain in relation to housing the urban poor. *Habitat International*, 130, 102687. <https://doi.org/10.1016/j.habitatint.2022.102687>
- Akinwande, T., & Hui, E. C. Effective affordable housing strategies for the urban poor in Nigeria. Manuscript Number: WD-26894
- Akinwande, T., & Hui, E. C. Effective affordable housing provision in developing economies: A deductive analysis of informal housing strategies. Manuscript Number: JCIT-D-23-01964

The economic influence of Lagos is traceable to 1898 when the first railway construction was completed, and this resulted in continuous urbanisation and vast metropolitan expansion (Akinwande & Umeh, 2018; Mabogunje, 1968).

Urbanisation in Lagos attracted rural-urban migration with an annual population growth rate of 13.6% when national growth rate is 2.8% (about 5 times less than Lagos' growth) (Aluko, 2010). Lagos state has grown from 763,000 people in 1960 to 18, 864,000 people in 2010 (Elias & Omojola, 2015). Elias and Omojola (2015) stated that Lagos has the largest urban agglomeration, and it is the most populated city in Sub-Saharan Africa with population estimated at 18 million and by United Nations (UN) projections, the population will be 25 million by 2025, making Lagos the fastest growing megacity in the world (Lagos-State-Government, 2010; UN-HABITAT, 2004). Lagos population is currently estimated to be over 20 million (10% of the total population of Nigeria), with all ethnic groups in Nigeria well represented in the metropolitan city (Adewuya et al., 2023; National Bureau of Statistics, 2014). Despite Lagos state being the largest economy in Nigeria and one of the largest economy in Africa with ₦50 billion internally generated revenue (IGR) which is almost 30% of the gross domestic product (GDP) in Nigeria (Agence-France-Presse, 2023; The-Sun-Newspaper, 2023), over 70% of Lagos inhabitants are poor and the state has over 200 urban sprawl communities (Adesina-Uthman et al., 2022; Aliu et al., 2021; Ekpo, 2019; Lagos-State-Government, 2021b; World-Health-Organisation, 2016).

Literature shows that housing deficit in Nigeria has worsened as a deficit of 7 million in 1991 has grown to about 17 million in recent times (Ekpo, 2019). World-Bank (2018) reported that Nigeria needs 700,000 housing units annually to span through a 20-year period to accommodate the continually growing population. These make a study on Lagos state representative of the situation of the urban poor in Nigeria and other developing economies.

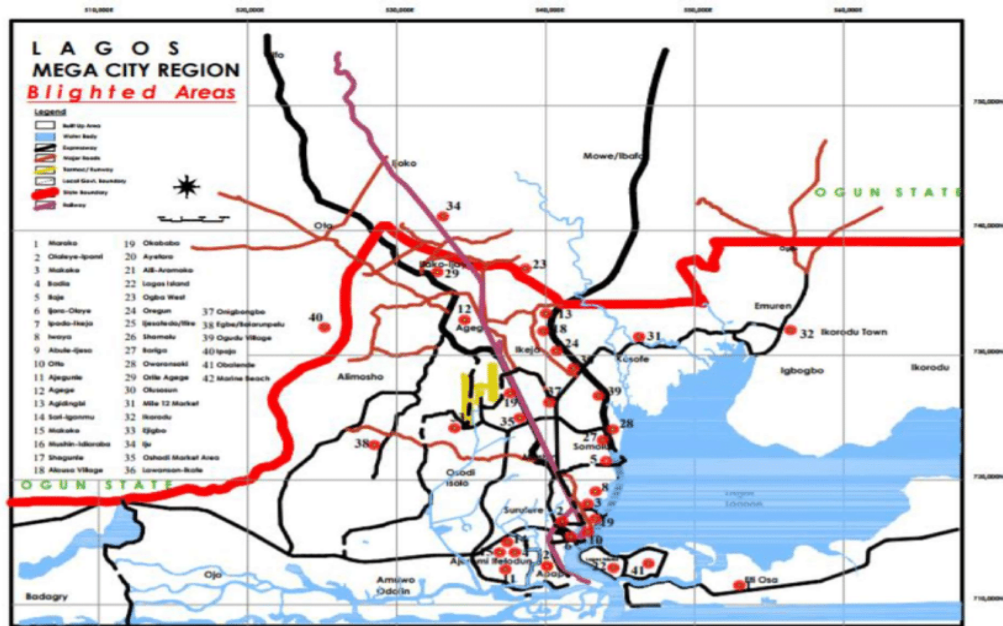
Fig. 2.1 is a map of Lagos state showing some of the local government areas. Fig. 2.2 is a map showing the slums and blighted areas of Lagos state, the population from which the study sample was taken. Fig. 2.3 and 2.4 display the survey points of all 40 respondents and the topography of the study area respectively, in terms of watershed into the ocean. It reveals that sampled localities vary across highlands and lowlands, with high elevation areas such as Ojota and Ikorodu falling in the north while low elevation areas such as Ojo, Ajegunle and Makoko fall in southern Lagos and are prone to flooding. Fig. 2.5 shows the survey points and evinces slope analysis of the study area in a map, depicting that the survey points vary across slopy lands and level lands. The sampled settlements are sufficiently representative of and spread across the Lagos metropolis. Figs. 2.6 and 2.7 show the deplorable state of some of the sampled slums, many of the localities were exceedingly difficult to access due to erosion, poor road networks, poor drainage system, lack of social amenities and other typical attributes of slums. The literature review section of this thesis presents the general characteristics and status quo of AH research in the nest subsection.



**Figure 2.1:** Map of Lagos state showing the local government areas

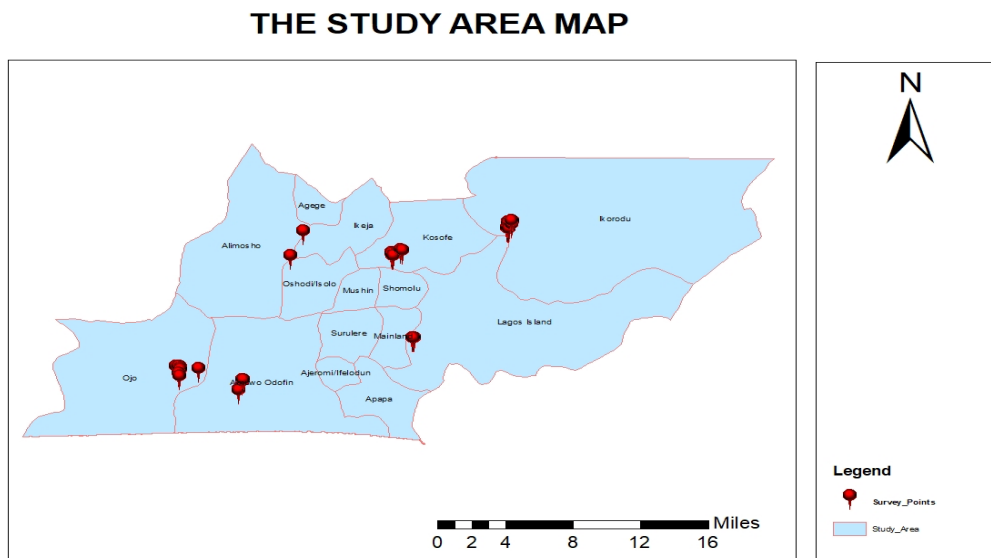
Source: (Badmos et al., 2018)





**Figure 2.2:** Map of Lagos state showing slums

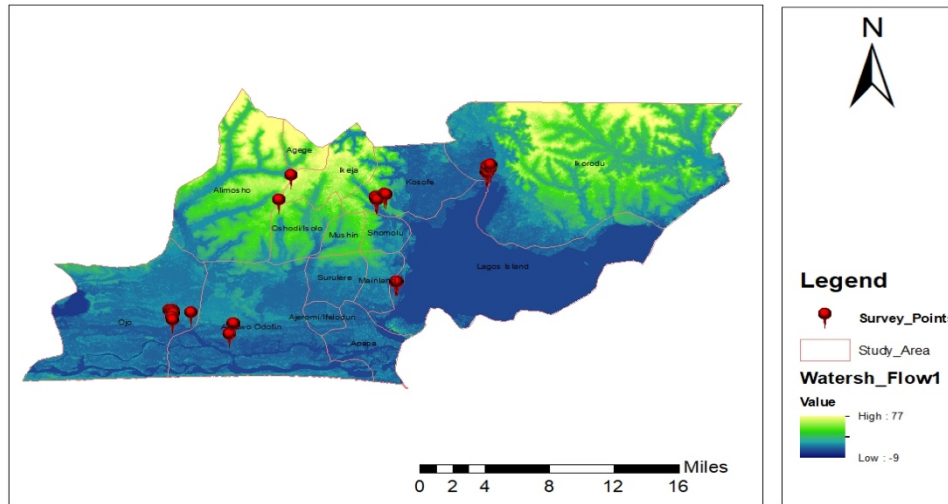
Source: (Agbola & Agunbiade, 2009)



**Figure 2.3:** Map showing the survey points of respondents

Source: Researcher, 2023

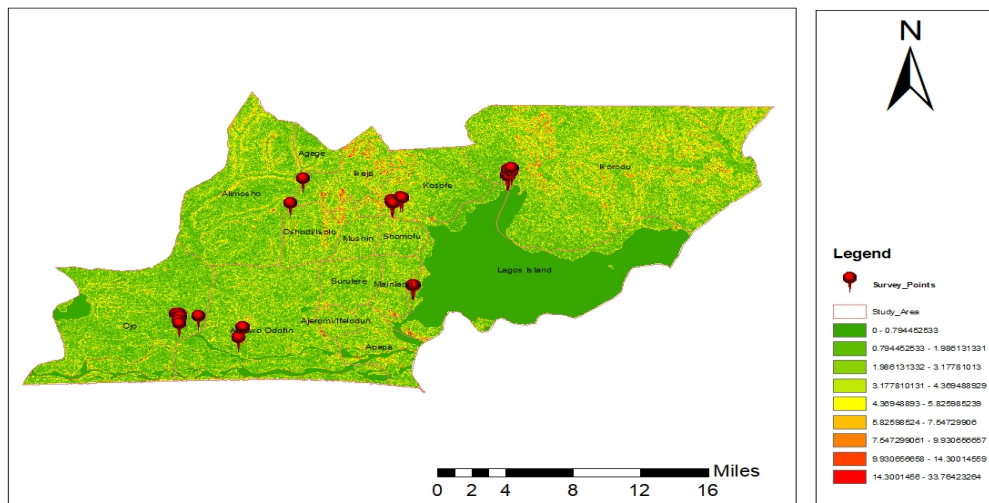
## WATERSHED MAP OF THE STUDY AREA



**Figure 2.4:** Map of Lagos state showing watershed of the study area

Source: Researcher, 2023

## SLOPE ANALYSIS MAP OF THE STUDY AREA



**Figure 2.5:** Map of Lagos state showing slope analysis of the study area

Source: Researcher, 2023



**Figure 2.6:** A picture of one of the sampled slums at Iyana-Iba, Satellite town, Abule-osun  
Source: Researcher, 2022



**Figure 2.7:** A picture of one of the sampled slums at Majidun Street, Majidun, Ikorodu  
Source: Researcher, 2022

### 2.3 General characteristics and status quo of affordable housing research

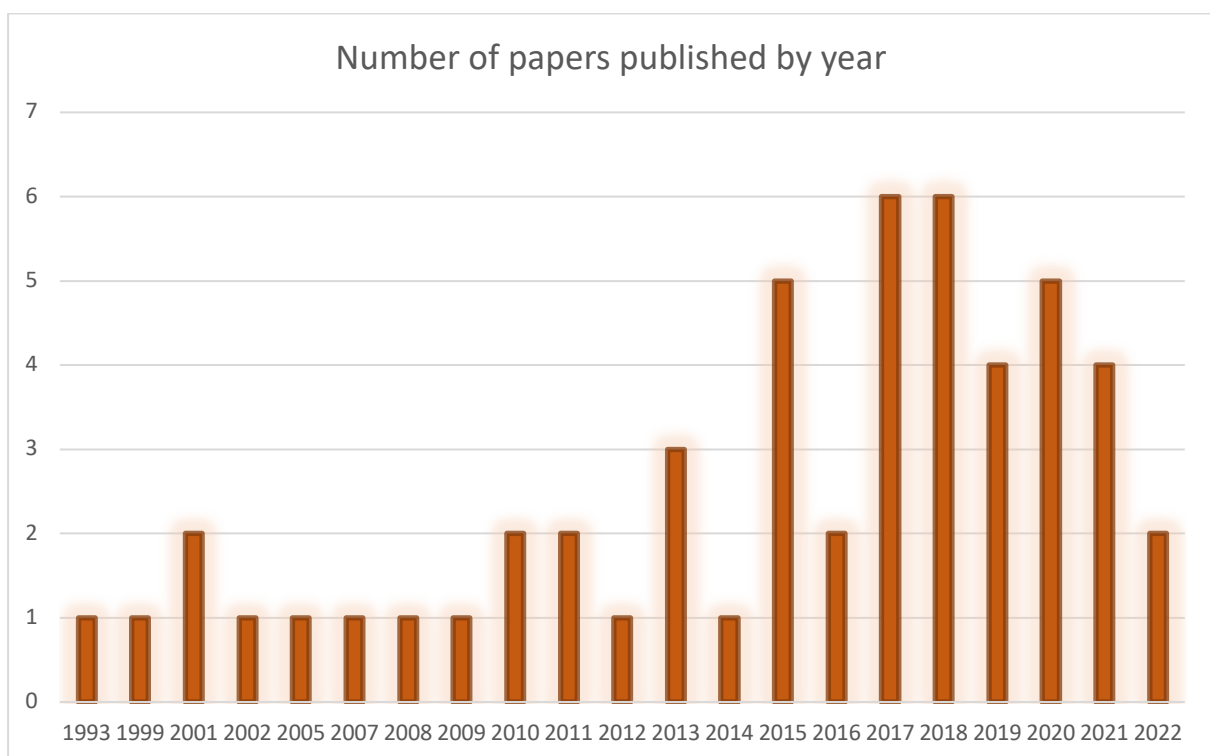
Review of past housing literature shows that one of the earliest study on AH provision was in 1993, where Izeogu (1993) investigated the relationship between public policy and AH for the

urban poor in Nigeria. This implies that AH discussion has been around for the past three decades, yet the problem persists as rapid urbanization continues across the world, accompanied by slumnization (World Health Organisation, 2016); suggesting a need for continued research focus on AH. Fig. 2.8 evinces the temporal distribution of published studies from 1993 to 2022. It reveals that affordable housing started gaining popularity in scholarly discussion in 2013, though it enjoyed subtle research attention between 1999 and 2012, with no studies published at all in some years, 1994 – 1998, 2000, 2003, 2004 and 2006. Though the trend in affordable housing studies is inconsistent, there was an evident decline in 2014 followed by an upsurge in 2015. The studies on AH suffered another decline in 2016 but rose to the highest number of studies within a year so far, with 6 studies each in 2017 and 2018.

Studies fluctuated between 2019 and 2021 with 2022 likely to experience a spike in publications later in the year (review was conducted in March, 2022). It is not surprising that there is a noticeable increase in research attention on AH studies in recent years, however, it is yet unsatisfactory considering the prevailing SAH challenges across the world. There is an urgent need for more research focus on AH and more importantly, SAH relating to the urban poor, which is hitherto largely under-researched. The steady growth in affordable housing studies in recent years suggests that it is a topical issue that deserves to be further explored.

In terms of geospatial distribution of studies (Fig. 2.10), Asia made the most contribution with 27 papers, representing 50% of total reviewed articles. This is followed by Africa and Latin America, each with eight studies. Europe contributed five studies, Australia and North America contributed two studies each, while studies that investigated more than one continent (intercontinental) also contributed two studies. It is not surprising that most of the studies focused on Asia, which were mostly on India in particular, as Asia has a very large population of urban poor across many Asian countries. Africa and Latin America experiencing large

research attention is also expected, though the research focus is low, considering the fact that Sub-Saharan Africa houses the largest population of slum dwellers in the world (World Health Organisation, 2016). This may be due to lack of research funding and limited exposure of most African and Latin American Universities and research institutions, limiting the ability of their researchers to compete globally in carrying out and publishing research efforts. This is a call for more research support in funding and research attention on investigating SAH for the urban poor in developing countries, where the problem appears prevalent and complex.



**Figure 2.8:** Temporal distribution of affordable housing studies

### 2.3 Methodological characteristics of affordable housing research

Tables 2.1, 2.2, 2.3, and Fig. 2.9 display the methodological characteristics of the reviewed studies, which includes the various data collection and analysis techniques, target audiences, and scope for study sampling. Table 2.1 evinces that interviews, observations, case study examples, literature review and review of published data are found to be most widely adopted

data collection methods in previous housing studies. Literature review accounted for over 28% of reviewed studies, 25% used interviews to gather data, 23.08% used observation while another 25% reviewed published data. Other methods used by previous studies for data collection includes, questionnaires, focus group discussion (FGD), expert consultations, workshops, reports, AutoNavi Electronic Navigation Map (AMAP) and case study example, while 7% of reviewed studies did not disclose data collection methods. It is not surprising that interviews, observations, and reviews constitute the most widely used methods in reviewed studies, considering that AH studies are largely qualitative in nature and usually would involve investigating settlements, where findings will be generalized from a sample to the population. Survey generally involves data collection from respondents through observations, questionnaires, or interviews with intentions to generalize findings from sample to a population (Creswell, 2014). Observation is also used to overcome the bias of interviews and questionnaires (Boyd et al., 2016). It is however surprising that only 7.69% of previous housing studies employed FGD, a lesser proportion of 5.76% consulted experts and a much lesser percentage of 1.92% organized workshops to gather data. This may be due to time limitations, funding, or the general difficulty in reaching and probably clustering expert respondents for research purposes, unfortunately these limit research findings in terms of practical applications and validation (Abowitz & Toole, 2010; Fontana & Frey, 1994; Morgan, 1993, 2002; Plummer-D'Amato, 2008; Tong et al., 2007).

This review found that previous studies adopted different methods for data analysis as presented in Table 2.2. The analytical methods used include, descriptive analysis, qualitative analysis, binomial logistics analysis, statistical analysis, ArcGIS, cluster analysis, simulation, and mixed methods. Most studies used descriptive analysis (61.54%), followed by qualitative analysis (30.77%) and mixed methods (26.92%). Statistical methods also accounted for a significant 11.54% of reviewed studies while other methods were rarely used (below 6%). This

popularity of descriptive analysis, qualitative analysis and mixed methods is as expected as these methods are most applicable for analysing qualitative data gathered through interviews, observations, workshops, and group discussions. Mixed methods are useful for studies that adopt pluralistic approaches (quantitative and qualitative methods) to derive knowledge (Christensen, 2014; Creswell, 2009; Creswell, 2014; Creswell & Clark, 2017; Creswell & Creswell, 2017; Oyalowo, 2018). It is far from expectation that modern analytical tools such as Computer-assisted qualitative data analysis software (CAQDAS) was seldom used in data analysis in reviewed studies. CAQDAS such as the NVivo program is useful for analysing data generated from interviews, observations, discussions, consultations, and questionnaires, it is also functional for validation and reliability tests (Wong, 2008).

Table 2.3 reveals that 25% of previous AH studies sampled slum dwellers, studies with case studies accounted for 13.46% of total reviewed studies. Some studies gathered data from a fair number of urban authorities and institutions (7.69%), it is also worthy of note that 5.77% of reviewed studies sampled property developers, while 3.85% sampled engineers and key informants each. Other personnel included as target audiences in AH studies are Estate managers, service workers, dwellers in case study examples, and properties (observation). It is unsatisfactory that only 25% of previous housing studies sampled slum dwellers who are the beneficiaries of AH. There is an urgent need for AH discussions and policies to be balanced between supply-oriented and demand-oriented interventions; this will be achieved if more research attention is centred on two-sided research approaches that concurrently investigate the housing characteristics of slum dwellers along with investigations on AH suppliers. It is not surprising that some reviewed studies adopted case study examples as target audience because AH discussion can be location based as housing challenges are usually not homogenous in nature (Gülter & Basti, 2014).

Fig. 2.9 presents the sample scope of reviewed AH studies that engaged in field surveys. This review found that 50% of previous AH studies sampled either one settlement or case study, 25% of studies sampled two settlements and/or case studies, only 9% of reviewed studies sampled three settlements and/or case studies, only 8% sampled four settlements and/or case studies, while another minority 8% sampled more than five settlements. In as much as AH challenges vary from location to location and require individual investigations according to (Gülter & Basti, 2014), the need for larger scope of study cannot be overemphasized for more robust research findings and also to enhance generalizability of study findings. The trends in annual publications, the geospatial distribution of studies and the methodological characteristics of studies are explored in this review.

It constitutes a methodological gap that only few studies engaged in expert consultations which limits the validity of study findings. Another methodological gap is that most of past housing studies have not deployed computerized data analysis tools which further undermines validity of results. It is a conceptual gap in housing literature that most studies do not balance AH supply-oriented investigations sufficiently with demand-side investigations. Further, a conceptual gap exists in that there is yet to be an investigation of AH provision constraints and solutions across the three levels of HSVC. This research aims to address these identified conceptual and methodological gaps in housing literature. A content analysis of articles reviewed in this section of the thesis are presented in Table 2.7 while Housing theories that underpin the components of this study are discussed in the next subsection of the literature review chapter.

**Table 2.1:** Data collection methods in affordable housing studies

Data collection methods	Number of papers	Percentage (%)
Literature review	15	28.85
Observation	12	23.08
Interview	13	25



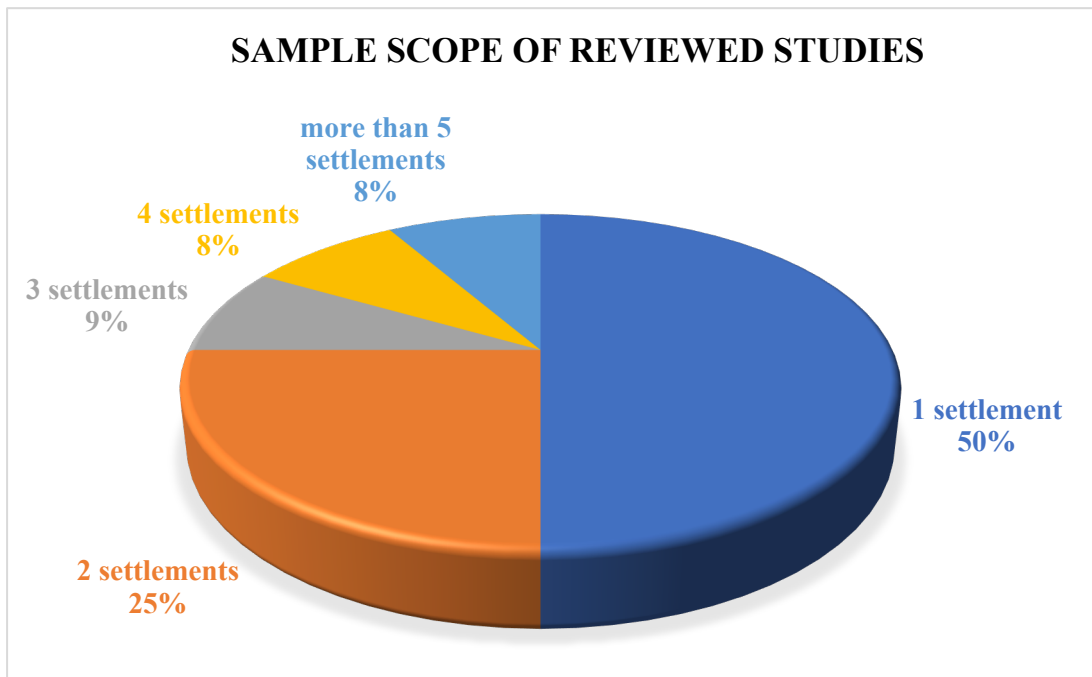
Data collection methods	Number of papers	Percentage (%)
Questionnaire	5	9.62
AMAP	1	1.92
Review of published data	13	25
Case study	11	21.15
Focus group discussion	4	7.69
Consultations	3	5.77
Workshop	1	1.92
Not specified	4	7.69
Reports	4	7.69

**Table 2.2:** Data analysis methods in affordable housing studies

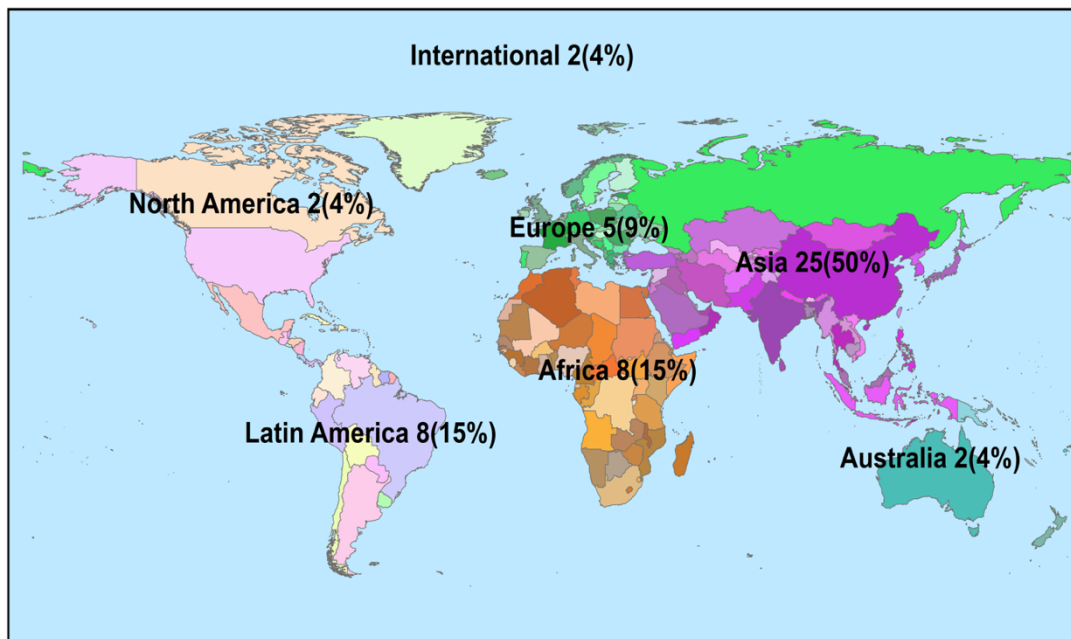
Data analysis	Number of papers	Percentage (%)
Descriptive analysis	32	61.54
Qualitative analysis	16	30.77
Binomial logistics model	1	1.92
Statistical analysis	6	11.54
ArcGIS	2	3.85
Cluster analysis	2	3.85
Simulation	3	5.77
Mixed methods	14	26.92

**Table 2.3:** Respondents in affordable housing studies

Target audience	Number of papers	Percentage (%)
Slum dwellers	13	25
Estate managers	1	1.92
Service workers	1	1.92
Urban authorities/institutions	4	7.69
Key informants	2	3.85
Properties	1	1.92
Engineers	2	3.85
Property developers	3	5.77
Case study	7	13.46



**Figure 2.9:** Sample scope of affordable housing studies



**Figure 2.10:** Geospatial distribution of AH studies showing numbers and percentage (percentages are rounded off).

Source: Researcher, 2022

## **2.4 Housing theories**

### **2.4.1 Housing deficit**

Housing deficit refers to the inadequacy of housing supply to satisfy housing demand in a particular economy at any given time (Morris & Winter, 1975). The housing deficit phenomenon can be explained with many economic models such as the institutional theory, structural theory and the housing market theory among other theories.

#### **2.4.1.1 Housing market theory**

The housing market theory views housing deficit from a market oriented perspective where housing responds solely to the demand and supply mechanisms of the market. This theory is more direct and individual in its explanations. It advocates that housing deficit is a function of insufficient housing supply or inadequacies in housing demand. Considering housing deficit from this perspective is accurate and market solutions to housing deficit will include policy interventions that enhance housing supply and demand such as tax incentives, subsidies and others (Arnott, 1987; Olsen, 1969; Whitehead, 1999).

#### **2.4.1.2 Structural theory**

Structural theory tends to explain issues from a general point of view. This theory explains housing deficit from the perspective of structural imbalances in the economic condition of a country. The theory opines that housing deficit is as a result of systemic challenges like unemployment, unequal wealth distribution, inequality in people's income, unequal distribution of social amenities, unequal access to education, poverty and other issues that frustrate the dwellers from having access to adequate housing. This theory accurately explains that the urban poor in developing economies have limited access to adequate housing due to structural imbalances in the developing economy (Clapham, 1997; Morris & Winter, 1975; Witte et al., 1979).

#### 2.4.1.3 Institutional theory

The institutional theory claims that a challenge identified at a higher level can be used to explain results and consequences or outcomes at a lower level of analysis. This is a similarity between the institutional theory and the structural theory as both theories avoid individual based explanations of any identified challenges (Amenta, 2005; Amenta & Ramsey, 2010; Clemens & Cook, 1999). Thus, this theory explains housing deficit from institutional perspective, believing that it is an outcome of institutional inadequacies in the housing sector. According to institutional theory, housing deficit is a consequence of inadequate housing policies and lack of proper implementation of housing policies. The theory propounds that deliberate policies as well as modifications and reformation of institutional frameworks will solve housing deficit challenges.

These theories provide foundational solutions to the investigations in this study. The theories expose the complicated nature and interconnectedness of economic, institutional and social factors in housing deficit challenges of any economy. An efficient solution to affordable housing challenges in developing economies will require a multidisciplinary, comprehensive and properly coordinated approaches that will envelope all important factors in the economy (Akinwande & Hui, 2022).

#### 2.4.2 Housing affordability

Housing affordability has been defined differently by many scholars over the years. Mumtaz (1991) relates housing affordability to housing solution at a cost that will be bearable by the payer without too much burden placed on his resources. This standpoint relates to home renters more than it does to homeowners. An all-encompassing definition by (MacLennan & Williams, 1990) is that housing affordability is an ability to buy or rent a standard housing without unreasonably stretching the household income in agreement with government standards.

Housing affordability is usually an interplay between household income and housing expenditure (Whitehead, 1991). In a mortgage housing system, housing affordability is the ability to settle periodic mortgage commitment without denying the family of food and health (Agbola, 1990; Olatubara & Agbola, 1992). For rental housing, the ability to pay rent for the least standard housing without jeopardizing other non-housing needs will define housing affordability. Housing affordability can be further explained with many theories such as shelter-based theory, price-based theory, income-based theory among many others.

#### 2.4.2.1 Income-based theory

This theory opines that affordability is dependent on household income. The popular rule of thumb is that 30% of household income should be the maximum expenditure on housing (Adegoke & Agbola, 2020), but this is complicated as it is difficult to ascertain if households exceed the 30% mark on housing expenditure by personal choice or not (Gabriel et al., 2005). The income-based theory is linkable to the fundamental economic theory of demand, where effective demand is ability and willingness to purchase a commodity at a specific price. Housing affordability in a broader sense is the ability of the household to pay house rent or house price or mortgage down payments along with periodic obligations without jeopardizing health and feeding for the household (Adegoke & Agbola, 2020).

#### 2.4.2.2 Price-based theory

This theory relates housing price with other household consumption goods and services and concludes that housing affordability depends on housing price relative to other goods and services that the household consumes. This theory is closely related to the consumer-demand theory which is based on the market mechanism of demand and supply.

According to Stone et al. (2011), affordability is not exactly about housing but a relationship between people and housing. He advanced that it is necessary to investigate housing

affordability for specific income groups as affordability means different things to different groups. Stone et al. (2011) compared affordable housing with affordable rents and concluded that even when social housing does not generate profit to the investor, it should generate rent sufficient to cover the running costs for the social housing. Comparing housing affordability and affordable living, housing can be affordable while living condition is unaffordable. A typical example is affordable housing provided in outer cities with inadequate transport system to access such housing. Comparing housing affordability with housing standards, Stone et al. (2011) submitted that if housing affordability is achieved but requires the household to live in unsafe and congested settlements with insecure tenures, then that is not real affordability. This standpoint relates to the shelter-based theory.

#### 2.4.2.3 The shelter-based theory

This theory advocates that housing affordability is achieved by quality and suitability of housing unit. Housing is considered affordable when it successfully makes adequate shelter available while also meeting basic housing quality and safety standards. The viewpoints of the shelter-based theory is related to the social theory for housing need (Dziegielewski et al., 1996; Fitzpatrick et al., 2014; Pohl et al., 2022).

The discussion in this section of the thesis exposes the multifaceted nature of housing affordability and establishes that effective affordable housing solution will integrate all necessary factors like housing price, household income and the housing quality as suitability requirements. Effective affordable housing solution must also incorporate the specific needs and characteristics of the investigated income groups.

#### 2.4.3 Housing supply value chain

Value chain is defined by Michael Porter as the full range of activities required for the creation of a product or delivering a service. It is the entire process through which a producer adds value to his product, ranging through production, marketing, and all post-sales activities (Porter,

2008). For housing as a product there are several activities that can be considered as its value chain, however, for housing supply the activities that make the housing supply value chain are in three levels. These main activities are:

- 1) Housing finance
- 2) Housing construction
- 3) Land acquisition

To properly address housing provision for any groups, the value chain for housing supply must be understood and well-articulated. This will deepen the understanding of housing challenges from source. It will highlight the interconnectedness of these activities, the urgency of each activity, the current loopholes in literature and practice about each activity among other relevant information; thereby fortifying scholars to make holistic recommendations that can inform policymakers, the research community, professionals, and all stakeholders involved towards effective, sustainable affordable housing provision for the urban poor.

#### 2.4.3.1 Housing finance

Lea (2000) opines that housing finance refers to systems put in place to ensure the expectations of both borrowers and lenders are met. Housing projects are capital intensive and most individuals and organisations require some forms of financial support to meet their housing needs. The aim of housing finance systems is to make funds available through private and public institutions to customers who have housing needs but lack sufficient funds to make effective demand on housing (Boleat, 1985; King, 2009). Regardless of the multiple methods of achieving this, the main goal is to reach a confluence point between borrowers and lenders (Lea, 2000). To achieve this agreement between the borrower and the lender, there must be an effective housing finance system in place, so that all stakeholders' goals are met satisfactorily. This requires an institutionally harmonious and coordinated relationship between government, finance institutions, insurance companies, housing development companies and households

(Boleat, 1985; Kömürlü & Önel, 2007; Leece, 2008; Renaud, 1984). There are generally four types of housing finance systems, these are:

- Informal finance methods
  - a. The direct financing method

This is when an individual whose finance is insufficient decides to get funding from friends, relatives, and the likes, majorly based on trust between the parties. This is an informal finance route, common in developing economies (Boleat, 1985; Güler & Basti, 2014; Lea, 2000).

- b. The contractual financing method

In this method, depositors make periodic contributions to a specialized agency for some years; within these years the depositors take turns in collection of lump sum at lower interest rate than market interest rate (Boleat, 1985). This is an informal method which has different traditional names such as “ajo” and “esusu” in Nigeria, “susu” in Ghana among others (Asare & Whitehead, 2006). This finance route is common practice for housing finance in countries with stabilized economies (Güler & Basti, 2014; Lea, 2000).

- Formal finance methods
  - c. The deposit finance method

This is a formal finance system anchored on the concept that financial institutions accumulate finance from depositors and then lend all or part of these stored up deposits to borrowers who need housing loans. This finance route is the most popular method. It is frequent practice in developed countries because of their effective money and capital markets (Boleat, 1985; Güler & Basti, 2014).

- d. The mortgage bank method

This formal finance route usually varies from one country to another depending on the socioeconomic characteristics, but aim to provide long-term fixed interest rate housing loan to borrowers for housing finance purposes (Lea, 2000). This finance method functions effectively



in developed economies where the bond market is well advanced (Boleat, 1985; Gültér & Basti, 2014; Lea, 2000).

#### 2.4.3.2 Housing construction

Housing construction activities refer to the practice of housing production and all activities involved in housing production by government agencies, private developers, non-governmental organizations (NGO), individuals and stakeholders involved. Government is usually involved in housing construction through the formation and implementation of policies while other players either actively build or finance the building. Housing development is formal when the construction process is legal and carried out according to government regulations. Informal housing on the contrary is the urban poor's response to urgent housing needs in the face of unfavourable policies leading to formation of urban sprawl and informal settlements characterised by inadequate housing, squalid and substandard living conditions (Imrie, 2003; Rahman & Ley, 2020; Richardson, 1871).

#### 2.4.3.3 Land acquisition

This refer to all activities entailed in obtaining land approval from government and all land documentation processes involved in land ownership for all purposes, including housing development. Land in most countries are governed by statutory and customary laws, statutory laws for urban lands and customary laws for rural lands. Organizations, societies, and individuals in need of urban land for any purposes will have to secure land title through the land tenure system, from government, else it becomes an illegal possession. Government dictates and controls development by zoning regulations and planning laws. Vested in government is an authority called eminent domain to compulsorily acquire land for overriding public interest. The costs of land and titling as well as the bureaucracy involved in the process constitute the bottlenecks that adversely affect housing development in developing countries.

Rapid population growth and informal land delivery system are also challenges to land acquisition in developing countries (Morgan et al., 2013; Owoeye & Adediji, 2015; Qian, 2015). The literature review section of this thesis continues with a detailed systematic review of AH literature across developed and developing economies of the world, within the last decade (2012 – 2022).

## **2.5 Affordable housing discussions in Asia**

### **2.5.1 Housing interventions in India**

In 2019, Gohil and Gandhi (2019) evaluated the impact of Pradhan Mantri Awas Yojana (PMAY) affordable housing scheme for the economically weaker section (EWS) in Gujarat, India and concluded that one of the prime challenges to the Indian government in terms of housing is the rapid increase in urban population and the consequent shortage in housing and slum formation. In their review of past literature on government housing schemes in India, they established that despite over 70 years of gaining independence and several housing intervention schemes, India still struggles with housing the growing urban poor. Rural-urban migration is a global problem and India is not left out as the 2011 census confirms a 2.8% growth between 2001 and 2011, with a projection to have 41% of Indian population dwelling in cities by 2030. The study reviewed literature (Gill & Sharma, 2014; Kumar, 2015; Sarkar et al., 2016; von Puttkamer, 2016) amongst others and identified the 21 AH schemes in India since independence in 1947, starting with the Integrated Subsidised Housing Scheme for Industrial workers and Economically Weaker Sections in 1952, Low Income Group Housing Scheme in 1954, Subsidized Housing Scheme for Plantation Workers and the Slum clearance and Improvement both in 1956, Middle Income Group Housing Scheme, Village Housing projects Scheme, Land acquisition and Development Scheme and the Rental Housing Scheme for State Government Employees all in 1959, through to recent government housing interventions such

as the Pradhan Mantri Adarsh Gram Yojana in 2009, Rajiv Awas Yojana in 2011 and the Pradhan Mantri Awas Yojana- Housing for all (Urban) in 2015.

Gohil and Gandhi (2019) highlighted the strengths and weaknesses of these government housing schemes but concluded that these programmes were devoid of continuity and mutual connections; making a case for the urgent need to assess the Pradhan Mantri Awas Yojana (PMAY) Affordable Housing Scheme for Economically Weaker Section (AHSEWS) in Ahmedabad, Gujarat state, India. Some concepts worthy of note about the PMAY are the target on two categories of urban poor: the Low-income Group (LIG) and a poorer group termed as the Economically Weaker Section (EWS); and a demand-oriented approach to housing supply through credit-linked subsidies (von Puttkamer, 2016).

In 2005, the Indian government initiated the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) to ensure proper administration and improved governance in municipalities as well to support shelter provision, provision of basic services and other civic amenities through the Basic Services for the Urban Poor (BSUP) programme in 11 Indian cities. Patel (2013) assessed the progress of this initiative and argued that even though BSUP document highlighted the relevance of community participation in all districts, in reality, the community participation is extremely limited with no proper integration of the community into the project. Patel (2013) opines that slum upgrade programmes should be anchored on proper consultation, dialogue and agreement between all agencies and the slum residents. If focus is on project quantity and not quality, this process may seem time consuming, however, the benefits will be in a less hostile community working in a cooperative manner, enhanced implementation and sustainability of the projects when completed, in agreement with (Patel & Bartlett, 2016) who submitted that community participation enhances real learning and engagement among residents. Patel (2013) suggested that institutional structures to support

slum upgrade at the district, state and national levels should be put in place. Community-led processes are often accompanied by challenges such as mismanagement owing to the numerous players involved, elements of complication, opportunism and selfishness, conflicts among members and other issues. To overcome these challenges, government, communities, and all stakeholders must be willing to continue to learn, take risks, adapt, modify, refine, expand, and improve (Patel & Bartlett, 2016).

Sandhu (2013) evaluated the access of formal housing finance by the urban poor in India and documented that urban housing shortage in India increases averagely by 17.5% within 10 years and according to INDIA (2007), 26.7% of the total poor in India are urban poor, housing shortage is bound to increase considering the increasing rate of rural-urban migration across the world. Sandhu (2013) put forward that housing finance institutions in India experienced rapid growth as the peoples' income increased and government also made policies favourable for housing finance institutions. Housing finance was majorly an affair of the informal sector in India until in the late 1988 when the National Housing Bank (NHB) was established as a Reserve Bank of India (RBI) to regulate and provide government support to housing finance institutions. In the late 1990s, commercial banks in India began to offer real estate retail portfolio finance services, however, most commercial banks focused on the middle to high income groups, with the low-income groups neglected. The RBI and NHB have initiated several techniques to promote formal housing finance in India over the years, yet formal housing finance can only boast of financing 25% of housing in India (Habitat, 2008), implying that 75% of housing in India are financed through informal finance institutions.

Government in an attempt at AH provision in India had established Housing and Urban Development Corporation (HUDCO) in 1970. This effort could not cater for the lowest income groups in India (LIG and EWS), this is partly due to their lack of mortgage insurance (Habitat,

2008) and the fact that commercial banks are profit oriented. The Indian government had made significant efforts towards affordable housing and affordable finance in recent past, but the housing shortage situation reveals that there is urgent need for more intensified efforts (Sandhu, 2013). Affordable housing provision for the lowest income group is tough across the world due to issues like clumsy titling and registration processes, poor credit records, lack of adequate regulations, absence or inadequacy of secondary market, irregularity of income among many others making it tough for the urban poor to gain access to housing finance requirements (Un-Habitat, 2012, 2013b). Though the Indian government in recent times has been able to overcome some of these highlighted challenges, INDIA (2009) opines that housing finance is still at infancy stage in the financial market and highly inaccessible. This challenge requires urgent attention as the informal finance sector lacks capacity to support new projects, it is mostly limited to renovation works (Sandhu, 2013).

Sandhu (2013) in his evaluation of formal housing finance sector in India, concluded that the Indian government should be applauded for the many initiatives towards affordable housing provision, however, there is need for all stakeholders such as Non-Governmental Organisations (NGOs) and private sectors to join forces together to combat the difficult challenge of housing finance for the urban poor. It is worthy of note that India boasts of several initiatives like the Self-Employed Women Association (SEWA) Bank model, the Micro-credit to Housing Finance (MCHF), the Shelter Advocacy to Housing Finance (SAHF) all initiated by NGOs towards pro-poor housing finance.

All these are commendable. However, the private housing finance institutions should be encouraged to join the mission of housing the urban poor while government is urged to intensify efforts for larger reach. The lasting solution may be to harness the strengths of all stakeholders into the existing formal housing finance structure (Sandhu, 2013). In a similar

study on Indian Alliance, Patel and Bartlett (2016) established that formal housing institution in India do not have the wherewithal to finance housing for the urban poor, government strict land policies also complicate issues for the urban poor but the Indian Alliance negotiations influenced better finance strategy where group savings (such as women's savings group) is used as guarantee for individual loans. Thus, alleviating housing finance challenges for the urban poor in India.

### **2.5.2 Housing finance in Thailand**

Community-based funding is said to be an inventive and unconventional source of housing finance for the urban poor developed around community participation, which can support the housing microfinance, government funding and private institutions in housing provision for the urban poor (Habitat, 2007). Sripanich et al. (2015) in their research on city development fund (CDF) as a financial mechanism to support housing and livelihood needs for the urban poor in Thailand, argued that the establishment of community fund entails three important steps which are connecting the people together to form community organizations, linking the people and the resource funds, and finally creating mechanisms to connect the people and money. According to Sripanich et al. (2015), city development funds as a concept was first introduced in Thailand in 2010, though the origin dates back to the 1940s, the transition in the housing finance approaches in Thailand within the last decade is as a result of changes in national housing policies and also the prominence of sustainable housing development and finance for the urban poor, in today's world.

By March 2012, Thailand has only 65 CDFs rooted in the housing construction process as saving groups and cooperatives. The CDF mechanism operates on the wings of four essential parts, these are the members, committees, funds, and supporters. These elements are further networked at community, city, provincial, regional, and national levels to enhance

communication and coordination. The four essential components of CDF can be subdivided into two, these are the people (members, community, and supporters) and money (funds). Thus, the CDF can be said to operate on the administration of people and money. Considering the size of the people and money involved, there is need for proper monitoring, planning and control through concepts, such as networking, collectivity, decentralization, and integrative management (Sripanich et al., 2015).

The CDF implementation began in one community in Thailand and within 2 years had broadened to 6 communities, empowering the urban poor by increasing household incomes and improving their livelihood. The strengths of the CDF include increased chances for cooperation and community partnership, amplified mutual interests, increased sense of belonging and responsibility, encouraged self-empowerment and sense of ownership and many more. Additionally, the CDF combines both the bottom-up approach where the community is involved in decision-making and the top-down approach where professionals are introduced to set guidelines. This combined strategy introduces a form of balance that enhances benefits to community members (Sripanich et al., 2015).

Nevertheless, the CDF has an inherent challenge in the size of membership as this can complicate cooperation, communication, management, and transparency. Sripanich et al. (2015) successfully examined the history, mechanisms, benefits, and challenges of the Community Development Funds in Thailand, however, important matters such as sustainability of the CDF was not investigated. There is need to examine the continuity of CDFs and how CDF will respond to the ever-changing needs of the urban poor.

### **2.5.3 Affordable housing discussions in Bangladesh**

Begum et al. (2018) in their study on assisted community housing initiative in Dhaka, where they evaluated the roles of NGOs in affordable housing development, found that participatory

approach to housing provision has the capacity to address the increasing housing demand in Bangladesh; a developing country with resource-limitations. They established that the assisted community housing is productive, logical and especially sustainable. The study argued that the challenges faced by the community and NGOs in achieving affordability can be overcome by simple government intervention in policies. Thus, with government intervention, participatory approach for SAH provision is achievable in Dhaka, Bangladesh. Arefin and Rashid (2021) in more recent study on the urban poor in Dhaka argued that the urban poor are frustrated from accessing their rights to the city and are denied the opportunity of fully utilizing the urban space. They are of the opinion that for a city to be just for all, careful considerations must be given to these socioeconomic relationships. Murshed and Keya (2017) in their research on participatory approach for promoting resilient housing and secure tenure highlighted that lack of inclusive governance is the reason behind the emergence of informal settlements in Bangladesh. They argued in consonance with (Hamid et al., 2018) that if the urban poor are better informed, mobilized and empowered to be involved in their resettlement processes, they can be of good influence to housing decisions and policies; thereby ensuring sustainability in these decisions and consequently enhance SAH.

Housing for the urban poor is related to the provision of housing finance (Rahman & Ley, 2020). Literature reveals that microfinance is an effective alternative source of housing finance for the urban poor. Rahman and Ley (2020) in their investigation on different pathways to promoting affordable housing improvements in urban areas of Bangladesh found micro-credit provided by NGOs to be a major pathway but mostly used to support the means of livelihood of the urban poor. According to (Rahman & Ley, 2020), the Bangladesh government had evicted 138 households dwelling in an informal settlement earmarked for a stadium construction. 60 of these households were relocated to a new development at Mandartola- the Mandartola housing resettlement project, through the activities of different actors like the City



Development Committee (CDC), Gopalganj Municipality, Asian Coalition for Housing Rights (ACHR) among many others (Rahman et al., 2016; Rahman & Ley, 2020).

A group savings programme was initiated in 2012 and managed by the CDC which they named the Community Housing Development Fund (CHDF), the activities of the CHDF included disbursing loans to successful applicants, overseeing constructions and other management services. Investigating another case study in Bangladesh, Rahman and Ley (2020) identified Khulna to be one of the largest metropolitan cities in Bangladesh having over 5,000 informal settlements with over 98,000 households dwelling there for over three decades, according to an unpublished Urban Partnerships for Poverty Reduction Project (UPPRP), 2011 census record (Rahman & Ley, 2020). Sikder et al. (2015) postulated that infrastructure were provided by NGOs and through international aid such as the United Nations Development Programme (UNDP). Later, CDCs were formed in Khulna but unlike the Gopalganj case, it is without a group savings scheme. Households depend on micro-credits provided by microfinance institutes (MFIs) initiated by NGOs (Rahman & Ley, 2020). Findings are in consonance with (Karim, 2011) that microfinance schemes in informal settlements has capacity to empower women and are mostly women-led.

In comparing both housing finance schemes in Bangladesh, Rahman and Ley (2020) argued that both are effective in housing finance for the urban poor, though the group savings programme in Gopalganj seems limited in terms of sustainability and flexibility of loans. The micro-credit initiative on the other hand is more useful for house improvement, easy to access but prone to future risks as MFIs do not have strict measures in place to monitor the use of collected loans. As a result, it has become a common trait among beneficiaries to collect loans from different microfinance institutions to refund prior loans. Both initiatives are limited in terms of tenure security and the non-application of micro-credits to housing development

suggests that the loans are too low and requires some form of technical support. The group saving scheme performs better at empowering the urban poor because of the government involvement through the CDC, in alignment with (Harvey, 2005a, 2005b) who opined that the group saving model is more advanced than the micro-credit model. In consonance with literature (Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012), the group savings scheme is found to be more interdisciplinary in its approach to tackling informality in urban areas owing to the collaboration of different players. Based on the exploration of these two models, Rahman and Ley (2020) disagrees with literature by suggesting that these models can complement each other regardless of their varying philosophies. They concluded that both schemes can be merged in order to offset the individual limitations of each scheme.

#### **2.5.4 Post-disaster housing construction and finance in Pakistan**

Pakistan had suffered multiple terrible disasters within the past ten years and this makes housing provision by traditional means more difficult, particularly with the surging housing demand that follows series of disasters (Tariq, 2012). The costs resulting from disasters are more in developing countries as 95% of disaster mortality happens in underdeveloped countries and losses consequent upon natural disasters are at least 20 times more than in developed countries (Dilley, 2005). The situation in Pakistan as an underdeveloped country is very much in alignment with this, as World Health Organization cited in (Tariq, 2012) reports that 11 million Pakistanis were displaced by the 2010 devastating flood and more have contracted waterborne diseases as a result, with high mortality rate. There were post-disaster housing construction and other miscellaneous efforts by government of Punjab such as the National Disaster Management Authority of Pakistan, NGOs, and the UN-HABITAT arm of Pakistan. There were different construction activities in different scales and scopes in response to disaster (Comfort et al., 1999). These constructions are mostly temporary, sometimes due to the urgent housing need and the cost of constructing permanent structures. Johnson (2007) opines that

disaster victims need a private housing where they can settle and start their lives over again rather than temporary housing which are crucial but disputable.

Tariq (2012) advocates for the need for an upgrade in strategies for post-disaster housing responses in Pakistan. While reviewing some of the challenges of Pakistan, Dorosh et al. (2010) argued that the Pakistani government agencies lack coordination and this limits the effective implementation of policies. Despite several government agencies being involved in Pakistani housing sector, their approaches are unfavourable for the urban poor as interest rates are often too high and housing locations too distant from the city, limiting access to city benefits and as a result, increasing slum formation (Alvi, 1997). The urban poor cannot access the formal financing provided by government institutions as they lack the requirements like credit records, collateral, regular income and so on (Tariq, 2012). Riaz (2009) postulated that well over 80% of the Pakistan people do not have capacity to meet up with financing conditions of finance institutions in the country. In response to series of disasters in Pakistan, Lizarralde (2002) suggests that post-disaster reconstruction should be a continuous sequence as an immediate and a long-term strategy, while Davidson et al. (2007) opines that community participation is key to the successful low-income housing provision.

United Nations Human Settlements Programme (2005) in the 2005 global report on human settlement established that finance is pivotal to the achievement of sustainable affordable housing, bridging the gap between the inadequate affordable housing provided and adequate affordable housing provision (Un-Habitat, 2013b). Literature confirms that housing microfinance has been a great support to the urban poor in constructing incremental housing in Thailand, Malawi, Namibia, Colombia among other countries. Pakistan also has some of these microfinance organisations in place, examples of such with microloans supply to the poor are Akhuwat, Khushaali bank and others. The Pakistani microfinance approach is influenced by

culture and dictates of Islamic religion like Zakat and the zero interest principle, making it more pocket-friendly for the poor (Tariq, 2012).

In proffering solutions to the post-disaster housing challenges in Pakistan, Tariq (2012) opined that there is an urgent need to amalgamate both formal and informal housing providers. While highlighting the roles of all stakeholders such as government, NGOs, researchers, professionals, building material suppliers and the households; worthy of note is the responsibility of the households as they understand their own needs and priorities better. This agrees with Turner (1977) who argued that when dwellers have a say in housing provision, it may be more sustainable. Microfinance is a financing approach that originated from the people's culture, built around their peculiarities and strengths; thus will be suitable for financing housing for the poor (Datta & Jones, 1999). United Nations Human Settlements Programme (2005) reported that housing microfinance is vital to housing provision for the urban poor. As a way forward, Tariq (2012) recommended that post-disaster housing provision should also include plans for resilience against probable future natural disasters.

#### **2.5.5 Affordable housing discussion in Indonesia and Malaysia**

Kusrini et al. (2018) examined housing as envisioned by the urban poor in Jakarta, Indonesia and found that informal workers mostly prefer to own a home in their informal settlements due to social and economic ties. This suggests that social ties may not be totally separable from economic ties, as most dwellers of informal settlements often have social relationships in their neighbourhood that is intertwined into their economic state. Corburn et al. (2020) in their research on slum health and covid-19 examined the global south and advocated for the urgent need for multidisciplinary research that focuses on how to improve social and economic lives of the urban poor, who are most vulnerable to the pandemic.

SAH is a proactive and preventive approach to disaster, where the extent and magnitude of disasters are controlled beforehand rather than reactive and corrective approaches. In 2021, Kushendar et al. (2021) reviewed the Rusunawa policy in Cimahi city, Indonesia and one of the topmost recommendations was for the classifications of residents within the public housing based on their socioeconomic status and income levels. This suggests the importance of socioeconomic considerations to sustainable affordable housing provision for the urban poor in Indonesia. Rusli and Adianto (2019) examined regional development policy through housing programs for the urban poor in Pekanbaru city of Indonesia and identified that housing quota targeted at the urban poor could not meet the existing needs yet and suggested that government should restructure the housing provision system. The need for restructuring is apparent, however housing challenge requires more specific solution that directly addresses the uniqueness of the sampled cities.

Ebekozien et al. (2018) in an empirical study on the root causes of leakages in LCH in Malaysia and found that the wide gap between demand and supply of LCH provision is caused by under-declared income from non-eligible persons who were allowed to bid for LCH. This limits access of the urban poor to LCH. The study suggested multifaceted pragmatic solutions such as government separating LCH from political games, policies targeting enhancement of LCH provision, strict enforcement of these policies, legal provision for quick eviction of defaulters and many more. Literature across developed economies reveal that SAH is a global problem that requires urgent intervention. It is worthy of note that developed countries are addressing the problem better as anticipated, developing countries should take a clue, learn from their strengths and weaknesses to adopt global best practices in solving SAH provision problems for the urban poor.

### **2.5.6 Housing finance in Turkey**

Gülter and Basti (2014) examined the housing finance system in Turkey and established that the Turkish government had explored different housing policies and systems since Turkey came into being in 1923. Coskun (2011) in alignment with literature opines that the housing finance systems in Turkey can be subdivided into two broad groups of systems, which are: (1) The non-institutional structure where people use personal savings for housing construction, this is the largest source of homeownership in Turkey (Öztürk & Doğan, 2010) and, (2) The institutional structure where housing provision is by government or private institutions, this has been in practice as far back as the 1920s in Turkey with different organizations like commercial banks, real estate banks, local municipalities, Real Estate Investment Trusts (REITs), Social Security Institution (SSI), Mortgage law among others (Ayan, 2011; Aydın, 2006; Aydinoglu, 2004; Erol & Patel, 2004, 2005; Gürbüz, 2002; Hepşen, 2010; Kömürlü, 2006; Öztürk & Doğan, 2010). All these institutions have contributed to housing provision in Turkey over the years.

Despite the contributions of these institutions to housing in Turkey, there are still inadequate housing and squalid settlements due to the inability of these finance systems to cater for the housing need of the urban poor. In response to this, the government established the Housing Development Administration of Turkey (HDAT) to avert illegal housing development with the new housing construction and financing techniques Gülter and Basti (2014). The Turkish government established HDAT in 1984 to target housing provision for the urban poor (low- and middle-income groups) and eradicate slum formation. Till date the HDAT has played the active housing production, financing, and regulatory roles in Turkey Gülter and Basti (2014). Eşkinat (2012) postulated that HDAT encouraged planned development and urbanization by engaging in mass housing construction with several construction phases, adopting various construction methods and targeting various income categories of people. Gülter and Basti

(2014) enumerated and reviewed literature on some of these various methods adopted by HDAT which are mass-housing production on its own lands for the lower-income groups, renovation of informal settlement areas in cooperation with local government, resource development projects based on a PPP model, housing production in disaster areas, provision of immigrant housing units and support for immigrants cooperative societies, provision of loans and credit support to individuals, cooperatives and districts; finally HDAT also are in charge of land development since 2004.

Elliot (2010) opined that Istanbul city has the highest rate of rural-urban migration due to the opportunities in the city. As expected, Istanbul easily became the city with the highest number of slums and shanty towns (Turk & Altes, 2010). According to Gülder and Basti (2014) government responded to the situation by establishing KIPTAS in 1995, an association of Istanbul Metropolitan Municipality. KIPTAS was established to resolve the issues of informal settlements by affordable housing provision with extended payment period, minimal interest rates and down payment which are flexible based on housing size, quality, and location. Gülder and Basti (2014) in his study on housing finance system in Turkey, asserted that as at 2012 KIPTAS has built almost 60,000 affordable housing units through initiatives such as KIPTAS urban transformation projects, KIPTAS resource development projects and KIPTAS social housing projects (Coskun, 2011; Mutman & Turgut, 2011; Tuhral & Psilander, 2005; Turk & Altes, 2010). Gülder and Basti (2014) argued that housing finance has a positive influence on social life and housing in Turkey still requires a well-structured housing finance system targeting all aspects with a secondary market to meet the demands of the primary market.

According to Gülder and Basti (2014), the Turkish government housing initiatives tackled affordable housing production and finance concurrently. The system had legal arrangements in place to support mortgage system, secondary and primary markets operating within the housing

finance sector. This enhanced the success of the HDAT and KIPTAS affordable housing initiatives, highlighting the interconnectedness of the components of the housing supply value chain. Gültür and Basti (2014) recommended that ways of producing alternative cheap lands should be explored in Turkey, establishing land acquisition as the limitation and the missing housing supply value chain component in the Turkish housing initiative. Success in affordable housing provision will be more remarkable, if the three main activities of the housing supply value chain (land acquisition, housing production and housing finance) are addressed pragmatically by giving cognizance to the mutual dependence of the activities.

The efforts of HDAT and KIPTAS in Turkey are applaudable and can inform policies in other countries of the world on housing finance and urban renewal approaches. Literature reveals that housing finance strategies are bound to differ by country, it is therefore important to apply the most suitable housing finance system and then adapt the system, accordingly, based on distinctive market conditions Gültür and Basti (2014). Gültür and Basti (2014) suggested that alternative finance approaches to accommodate all income categories like the poorest urban poor, alternative ways to produce affordable lands and cost issues in urban renewal projects should be explored.

Some studies investigated Asia in general to draw generic conclusion. Yap (2016) examined low-income housing policies and practices in Asia and observed private sectors to be the major player in mid-income housing and have improved the housing provision situation. He opined that despite the many shortcomings of informal housing, it still has some advantages such as closeness to employment centres, adaptability to changing needs of the urban poor, variety of housing types, variety of tenure forms, enabling income generation from home and of course relatively cheaper among other benefits. He argued that most government housing schemes usually target slum upgrade but fail to initiate proactive strategies that will eliminate the needs



for informal housing, and they supply housing that are inconsistent with demand by not learning from informal settlements. If government pays attention to the benefits derivable to dwellers from informal settlements, there may be lessons that can inform decision-making towards rendering informal settlements redundant. Yap (2016) recommended that decision-making should be urgently decentralized as local government are more familiar with the challenges at the bottom and with technical support can tackle these issues more innovatively by targeting citywide strategies that supply affordable housing at various locations with various tenure types, reaching secondary cities and ensuring affordable transportation or nearness to sources of income generation.

## **2.6 Housing interventions in Latin America**

Grubbauer (2019) critically examined housing microfinance in Latin America, focusing on deregulation and re-regulation of mortgage markets, securitization, and changes in ownership structures in general. The study explored ways in which countries within this region have recently expanded the housing microfinance markets. Grubbauer (2019) argued that from the 1990s housing policies in this region, particularly in Mexico became largely market-based with an aim to increase homeownership and expand the housing finance systems in alignment with World Bank and the International Monetary Fund policies (Datta & Jones, 1999; Jones & Datta, 1998). The market-based housing policy is centered around expansion of primary markets, disbursement of mortgage loans and the operation of secondary markets. However, mortgage loan is usually not accessible by the poorest urban poor as loan requirements are difficult and government subsidies are deficient (Gilbert, 2004; Klink & Denaldi, 2014).

Literature reveals that corruption limits the reach of housing policies in this region, most urban poor are subject to market pressure, many resulting to renting rather than owning; making a case for a need to restructure the existing housing provision strategies (Ward et al., 2015). In

response to this, many governments in Latin America have introduced innovative approaches such as the National Housing Commission (CONAVI) and the Federal Mortgage Company (SHF) in Mexico providing micro-credit to aid self-help home construction (Grubbauer, 2019). UN-Habitat in their 2005 report on housing finance had listed micro-credits provided by MFIs as vital to housing finance in the last ten years (United Nations Human Settlements Programme, 2005). Grubbauer (2019) argued that it is inadequate to examine the connection between housing and financial markets in Latin America based on mortgage financing and securitization alone. For instance, an investigation on microfinance institutions in 2011 established that housing microfinance makes up below 2% of the total microfinance sector (Shelter & Finance., 2015).

Martínez (2015) in a study on nine major MFIs in Mexico opined that only 13% of total credits obtained from major MFIs in Mexico were used for housing purposes between 2009 and 2014. Grubbauer (2019) argued that private sectors expand housing microfinance for reasons such as diversification of their loan portfolio, social impact of housing loans on their clients (customer satisfaction and loyalty) and as a tactics to expand their clientele base. However, the private sectors are discouraged by certain obstacles such as the inconsistent income of the potential clients, higher administration costs than the other loan types, organizational challenges amongst others (Chongo & Laufer, 2016). Grubbauer (2019) propounded innovative techniques to address these obstacles to include partnering with other housing construction professionals like CEMEX in Mexico where MFIs partnered with cement industries, partnering with international institutional investors to generate and secure capital for large scale development, among others.

In Colombia, Wainer and Vale (2021) examined the complex sociology of homeownership at peripheral housing in Cartagena, arguing that the urban poor becomes wealthier but poorer.

They advocated that for most urban poor in the global south, relocating to an owned house is economically relieving, however it constitutes another economic stress as occupants get to live farther from the city centres; limiting their economic opportunities. This suggests that the urban poor will prefer to retain their original locations for obvious economic reasons and possible social ties, in consonance with (Young, 2018). Often times, the income of settlers in informal settlements is tied to their locations and social relationships within the neighbourhood. Stephen Ezennia and Hoskara (2019) in a study on measurement approaches and concept of housing affordability used in housing research globally, they found methodological weaknesses and opined that housing affordability measurement requires better approaches that tackles both affordability and sustainability concerns. Housing affordability is beyond housing price and personal income, thus better approaches must consider a range of environmental and socioeconomic criteria centred around housing suitability elements such as affordability, accessibility, amenity, compatibility and adequacy for users' quality of life.

## **2.7 Housing interventions in African countries**

### **2.7.1 Affordable housing in Ghana**

Mohammed et al. (2017) investigated the implementation challenges and prospects of pro-poor urban housing provision in Ghana and suggested a strong political will and hard-headed intelligence in the implementation of government housing provision programmes in Ghana. These are recommendations in the right direction, but solving housing problems in developing economies will require more specific and pragmatic approaches for it to be sustainable. Acheampong and Anokye (2015) while aiming at providing an understanding of the housing market situation in Ghana, established that self-build incremental housing accounts for over 90% of housing in Ghana, private employer housing and government-owned housing accounted for only 4% and 2.2% respectively; with a trivial 0.2 increase in the latter within the past decade. A total of 47.2% of housing in Ghana are owner-occupied, 31.1% are rented

housing, 20.8% live in family houses without rent payment and 1.4% live in improvised housing like containers, mostly in the major cities of Accra and Kumasi (Service, 2012). These findings are in alignment with Amoako and Boamah (2017) and Walley (2010) who also opined that housing in developing countries are incremental and financed by various informal means such as personal savings, remittance, community savings scheme (susu), cooperative financing and many others (Asare & Whitehead, 2006; Boamah, 2009, 2014; Karley, 2002; Korboe, 1992). These data suggest unaffordability of housing in Ghana as Acheampong and Anokye (2015) opined that there is a major gap between disposable household income and house prices in Ghana with the urban poor enjoying very limited access to housing finance facilities in accordance with literature (UN-Habitat, 2011; Walley, 2010).

Considering the strict requirements and modalities of the traditional mortgage finance system, Acheampong and Anokye (2015) argued that low-income earners will find it difficult to ever own a home through the traditional mortgage finance, this corroborates with Service (2012) which reports a decline (1.1% - 0.8%) in mortgage-financed housing in Ghana over the past ten years. Most other scholars argued similarly that high debt-income ratio, high cost of down payment, and lengthy repayment period make traditional mortgage finance quite inaccessible to the urban poor (Datta & Jones, 2001; Ferguson, 1999; Ferguson & Smets, 2010). An additional challenge in most African countries is that the formal housing finance and mortgage systems remain nascent (Warnock & Warnock, 2008), while formal finance institutions shy away from small, short-term loans as it is relatively un lucrative (Acheampong & Anokye, 2015; Ferguson, 2003).

In a quest for innovative solutions to pro-poor housing finance challenges, Acheampong and Anokye (2015) investigated the usefulness of subsidies in enhancing the housing conditions of the urban poor and found it not applicable in developing economies, contrary to the situation

in developed economies. This is because of the informality of housing industry in developing economies, Ghana inclusive, negating the usefulness of supply-side subsidies to the urban poor. Similarly, unlike in other developing countries where some urban poor have stable income, demand-side subsidies cannot really benefit the urban poor in Ghana as they rarely earn regular income being workers in informal sector (Acheampong & Anokye, 2015).

In addition, Datta and Jones (2001) argues that housing subsidies are insensitive to individual housing needs and generally distort housing and finance markets by pressures on exchange rates and fiscal balances. While considering housing tax reliefs as an unexplored option to alleviate housing poverty, Acheampong and Anokye (2015) postulated that the beneficiaries will be beneath 1% of homeowners who are wealthy enough to take part in the mortgage market, and landlords will easily transfer any additional costs to their tenants (urban poor) owing to the inadequate regulations in the housing market in developing countries. Acheampong and Anokye (2015) concluded with a proposition of three alternative strategies for housing development specifically for only the urban poor in Ghana. These include the use of spatial planning system and housing finance through the local government structures of Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, making housing microfinance accessible to the urban poor for rental housing as most urban poor will choose rental housing to meet immediate housing needs over homeownership (Datta & Jones, 2001) and lastly, mobilizing existing pool of relatively cheap labour within the community for building construction to lessen the high cost of construction (Konadu-Agyemang, 2001).

In a similar study on the alternative means of housing finance for the urban poor in Ghana, Amoako and Boamah (2017) postulated that promoting Community Mortgage Cooperative (CMC) and Community Based Mutual Housing Finance (CBMHFS) can be effective in solving housing finance challenges of the urban poor, in agreement with (Boamah, 2010; Karley, 2002).

In an investigation of the multiple and continually evolving housing development and financing approaches in urban sprawls, sampled Ayigya-Zongo and Dakodwon communities in Ghana and found that both communities adopt personal savings, communal savings, informal loan systems, rents, and others as housing financing sources. In agreement with (Acheampong & Anokye, 2015), personal savings was discovered to be the most used source of housing finance in these communities, while communal savings and informal loan systems are still at infancy stages.

Amoako and Boamah (2017) opined that financing urban informal housing in third world countries is not as complicated as it seems if formal planning agencies desist from the usual hostile attitude towards non-conventional housing finance approaches and rather consider it as the people learning as they earn- an innovative and flexible response to the difficult formal urban planning and housing financing requirements. Policymakers should take a clue from the prevalent informal finance approaches to inform policies that are inclusive of the urban poor and suitable for their socioeconomic conditions.

### **2.7.2 Housing interventions in South Africa**

Ziervogel (2019) in his research on urban poor in South Africa, opined that majority of governments do not consider the urban poor while formulating policies, making such policies quite non-inclusive of the urban poor. He further submitted that this may be due to African cities being mostly informal, thus complicating issues for governance. His submission corroborates that of (Brown & McGranahan, 2016) who argued that low-income earners in South African cities appear excluded from city governance policies. South African cities are subject to inequality due to their history of apathy which forcefully dislocates many towns to the city outskirts, resulting in informal settlements. As a way forward, these patterns have to be recognized, highlighted, urgently challenged and restructured in alignment with (Romero-

Lankao et al., 2018). Furthermore, Ziervogel (2019) suggested a good and active rapport between local governments and the urban poor through partnerships, transdisciplinary efforts, experimentation and the likes that can aid deliberations between the two parties for transformative policies, as earlier postulated in Hordijk et al. (2014). Marutlulle (2021) while critically analysing housing inadequacy in South Africa and its ramifications advocated that housing must be regarded not as a product but rather as a process. This will warrant a policy change to include targeted solutions and committed multidimensional approach to solving the housing challenge in South Africa.

Fieuw and Mitlin (2018) reviewed government's efforts in housing policies towards an effective housing for the urban poor and argued that the South African government made commitment to improve housing supply since 1994 when the African National Congress resumed office with significant approaches such as the Section 26 of the Bill of Rights- recognizing the right to housing in the constitution, the plan to build one million residential houses within five years, and the Reconstruction and Development Programme (RDP) among others (Baumann & De Villiers, 2003). South African government established the People's Housing Process (PHP) in 1998 in recognition of the relevance of community-driven housing activities (Landman & Napier, 2010; Mthembi-Mahanyele, 2001), as persuaded by a civil society group called the South African Homeless People's Federation (SAHPF) along with its sister NGO- People's Dialogue (Appadurai, 2015; Baumann & Mitlin, 2003). Oldfield (2004) criticized the design and the implementation of this housing subsidy strategy, arguing that it causes a relocation of the urban poor to outer cities, far from city opportunities, enhancing spatial, racial and income inequality. Government made attempts to eliminate these issues in 2004 by establishing Breaking New Ground (BNG)- a revised housing strategy, nonetheless, slum upgrade and urban regeneration activities have been quite challenging, requiring multidisciplinary approaches with strong community involvement (Fieuw & Mitlin, 2018).

While discussing the lessons from housing policies and the effect on the poorest urban poor, Fieuw and Mitlin (2018) is of the opinion that community participation is frustrated when government considers project time and decides to use commercial development companies for housing development, other challenges include government's unwillingness to offer new contracts nor pay for completed projects, government playing the politics of development, where they develop with intentions to get political votes from the districts, government willing to engage community-driven process but unwilling to institutionalize the process (Khan & Pieterse, 2006). Fieuw and Mitlin (2018) concluded that despite government agencies' engagement with grassroot organizations in South Africa, there is yet to be a substantial incorporation into policies and strategies. The study advocated for policies that will be inclusive and in support of community-led development, government should support the informal housing sector rather than emphasizing on standards and lastly government should engage civil society alliances to champion pro-poor housing dialogues and implementations.

### **2.7.3 Affordable housing in Nigeria**

Many scholars have recently researched on AH provision in Nigeria, some of the most related to this study are reviewed in this section. Saidu and Yeom (2020) evaluated the success criteria for sustainable housing model in Nigerian cities and highlighted a number of success criteria, topmost on the list was security and welfare in housing. Security and welfare in housing are social consideration and will be better achieved if the community is involved in the housing production processes. They also discovered community participation as one of the success criteria. If affordable housing provision and distribution will be equitable and unbiased, social participation becomes inevitable as earlier suggested in (Olotuah & Aiyetan, 2006). Saidu and Yeom (2020) also found acceptability of housing by the target audience as a success criterion in Nigeria. For housing to be acceptable to the end users, it becomes pertinent to involve them from the beginning of the process, making a case for community participation in consonance



with Pullen et al. (2010) who averred that sustainable affordable housing should not focus on economic considerations alone but should include and cater for social issues. Olagunju (2014) opined that stakeholders' participation can be a medium to solve the problem of political interference in housing provision and supply. Aliyu et al. (2017) evaluated affordable housing provision for the urban poor in Lafia, Nasarawa state of Nigeria. The study advocated that housing affordability may never be achieved if holistic approach is not adopted, involving all stakeholders; though they did not highlight these stakeholders. The topmost stakeholders of sustainable affordable housing should be the end users, the target audience of SAH supply.

Olanrele et al. (2018) investigated the causes of failure at meeting with the set-target of the housing policies in Nigeria despite the numerous activities of developers. The research found that government in developing economies generally do not consider the socioeconomic peculiarities of target group before formulation of policies and this plays out in the activities of developers who apparently do not give proper considerations to the urban poor before embarking on affordable housing provision. The study advocated for inclusive governance where members of the community are incorporated into policy formulation activities. Ackley et al. (2018) examined the factors that affect the shortage and/or provision of SAH in developing countries, using Cross-river State of Nigeria as a case study and found that most low-income housing in Calabar are now occupied by mid-income and high-income earners as government housing plan fails to respond to the housing demand of the target urban poor in the long-run. Sooner or later, the properties are taken over by the rich that can afford the housing. Study argued that to put an end to this recurrence, the community should be integrated into the housing design and implementation process, making sure they are fit for the target audience. Study further opined that community participation may enhance the suitability of the housing provision for the changing needs of the urban poor; advocating that SAH is that housing that considers and promotes the culture and lifestyle of the people.

In 2017, Oladokun and Komolafe (2017) in a similar study investigated the drivers of rural housing development in Edo state and highlighted that norms and the cultural values of the Edo people largely influence their housing development choices and for sustainable national development purposes, it is wise to cater for these social demands in SAH provision. Another opinion they had was in consonance with most other studies like (Ackley et al., 2018; Saidu & Yeom, 2020), that the community should be properly integrated into the housing finance system as this will enhance the people's access to finance and also give them a sense of belonging. A sense of belonging will motivate them to work towards the success of the system. All these recommendations point towards inclusive governance and community participation.

In another similar study on the challenges of accessing affordable housing by low-income civil servants in Abuja, Ajayi and Oyewobi (2019) suggested that government was not ready for the massive population growth that accompanied Abuja's becoming a capital city. This resulted in a sudden hike in housing prices, making it unaffordable for the urban poor. It is imperative that government should take a clue from this to become proactive about the needs of the urban poor in future cities. This is in consonance with (Chirisa et al., 2020) who opined that in light of the Covid-19 pandemic, Sub-Saharan African cities require rapid risk control in planning, particularly the informal settlements that have tendencies to be overcrowded. This will enhance our city resilience and enable proper disaster management. Proper proactive approach to SAH provision will require community participation and inclusive governance.

Akpan (2020) in an attempt to assess social housing programme of the present Nigerian administration suggested that housing policies should be handled by grassroot government instead of the federal government. This will enhance inclusive governance, where the target urban poor are better considered. Study also suggested that government should empower private organisations such as Real Estate Development Association of Nigeria (REDAN) to

carry out active property construction while government focuses on making land available for development, though study did not identify how these recommendations can be achieved in specifics. A pragmatic housing solution warrants some more specific solutions as to how public-private partnership can be maximized without jeopardizing affordability, such as arrangements like land value capture (LVC) and inclusionary housing (IH) suggested in literature (Nzau & Trillo, 2020). Ebekozen et al. (2019) while investigating Low-cost housing (LCH) policies and squatter struggles in Nigeria proposed that the Nigerian government should follow best practices in solving affordable housing problems. This involves treating housing not as a product but as a welfare scheme and to ensure sustainability, a well-designed institutional framework is required. Policies should be enacted to impose affordable housing provision at controlled prices on genuine private developers, stating the accompanying compensation for compliance and penalties against defaulters; while government provides the land, not private land owners who often hold land for speculative investment purposes. This arrangement is similar to LVC earlier suggested in literature. The Federal Housing Fund Scheme (FHFS) should be reviewed by the governing body (Central Bank of Nigeria, CBN) to be urban poor considerate. The National Pension Commission (NPC) should adjust the Nigerian Pension Act to allow low-income earners access part of their pensions while in active service; in order to make initial payment for housing, similar to practices in Malaysia (Ebekozen et al., 2018). These are holistic and sustainable solutions to housing challenge for the urban poor in Nigeria.

John et al. (2018) in an attempt to enhance housing affordability investigated the use of cargo containers as an alternative housing strategy for low-income earners in eastern Nigeria. Study advocated that this non-conventional approach to affordable housing provision may solve housing affordability problem in Nigeria. However, certain key socioeconomic elements of housing as culture, legacy, status statement, collateral among others. are ignored in this

recommendation. Recommendations from most literature point towards the importance of socioeconomic considerations

Anierobi and Obasi (2021) in an investigation of the involvement of the catholic church in pro-poor housing delivery in Enugu city of Nigeria argued in alignment with literature that government policies across the world mostly ignore the urban poor. The study established that the Enugu populace are mostly catholic Christians with the church playing a vital role in the socioeconomic activities of the people. Further, urbanization is also a challenge in Enugu with an ever-increasing population of majorly urban poor, complicating housing provision challenges. The study discovered that the catholic church has vibrantly participated in affordable housing provision in the city like the Nwanne Di Na Mba low-cost social housing for the urban poor. This suggests that a collaborative scheme between the government and the church can be pathway to housing the urban poor in the city of Enugu. Anierobi and Obasi (2021) proposed that such collaboration can be anchored on strategy such as “single unit” interest loan for housing finance, cooperative societies can be employed to enhance access to housing finance for associations and individuals, government should make land available for affordable housing development at favourable locations and lastly, local building materials should be considered for sustainable affordable housing.

#### **2.7.4 Affordable housing discussion in other African countries**

##### **2.7.4.1 Namibia**

Karuaihe and Wandschneider (2018) in an empirical study to examine the relationship between land tenure and municipal services in informal settlements found that legalized land tenure is a requirement for the urban poor to have access to basic district services in Namibia. Though land was not the research focus, Karuaihe and Wandschneider (2018) argued that access to land for the urban poor deserves more attention both in academic and policy-oriented discussions.

Disho (2015) as cited in (Karuaihe & Wandschneider, 2018) reported that a document titled “Affirmative Repositioning” (AR) recently mobilized the Namibian youths to take possession of lands considered as illegal by the Namibian government, advocating that since land is an urgent need for social development, it deserves more attention in government discussions and that of all other stakeholders. According to De Vries and Lewis (2009), land regulation and regularization complicate land allocation in urban areas, Karuaihe and Wandschneider (2018) opined that this is because land policies are formulated at central government level while implementation is responsibility of local governments; creating inconsistencies.

This is the situation in most African countries as public sectors are often characterized by corruption, inadequacies in capacity and lack of political will. To successfully tackle this challenge of land supply to the urban poor, literature suggests public-private partnership in provision of land, fund allocation for collective land acquisition, implementation of policies that are inclusive of the urban poor, urban renewal programmes should be inclusive of government, the community, private sector and all stakeholders, partnership between communities, government and finance institutions among other innovative approaches (Karuaihe & Wandschneider, 2018; Kironde, 1995).

#### 2.7.4.2 Kenya

Nzau and Trillo (2020) researched on how an innovative hypothesis can be used to regenerate urban slum in Kibera- the largest slum in Nairobi, Kenya by harnessing the vibrant real estate market. They proposed that market forces such as Land value capture (LVC) and Inclusionary housing (IH) should be adopted to solve the problem of affordable housing provision for the urban poor. They additionally opined that this will be an avenue for bottom-up approaches in addressing affordable housing provision by encouraging community participation- involving community leaders to negotiate with their own people and also protecting their social interests

such as culture, heritage, norms and others. This will ensure sustainability of the affordable housing provision. The IH approach will enhance social inclusion in the cities of Nairobi.

#### 2.7.4.3 Ethiopia

Barka and Kumar (2020) conducted a critical analysis on supply and affordability of condominium housing in Adama city of Ethiopia and established that the condominium housing that was originally designed for the urban poor are now occupied by the mid-income and high-income earners, while the target low-income earners are left out as they cannot afford it; quite similar to findings of (Ackley et al., 2018) in Calabar, Nigeria. As a way forward they advocated for community participation where government will include the urban poor in the process of policy formation and implementation. Additionally, they opined for capacity building of the urban poor to enable them improve on financial capacity.

#### 2.7.4.4 Uganda

Young (2018) researched on de-democratisation and the rights of street vendors in Kampala, Uganda and found that socioeconomic rights are fundamentally rooted in political rights. He argued that being denied political rights makes street vendors who are largely urban poor more marginalized and vulnerable as denial of their political rights also robs them of the right to carry out their economic activities. Young (2018) highlighted the attachment of the urban poor to their present locations. This information should enlighten against policies that relocate the urban poor while providing housing. Young (2019) researched on the root cause of informality in Uganda and established that government creates informality by enacting strict policies which force the urban poor to result to informal alternatives to survive. Government inconsistently turn around to serve punishment against those involved in the informal sphere. Young (2019) opined that beyond creating interventions that can encourage inclusive governance, there is urgent need to address government roles in causing informality in cities. Young (2020) in his

research on urban informal economies in peacebuilding, suggested that informal economic governance can be improved by incorporating the marginalised groups into decision-making process from which they had been excluded in the past. Young's findings and submissions in Uganda are quite similar to the findings in South Africa (Brown & McGranahan, 2016; Romero-Lankao et al., 2018; Ziervogel, 2019). Both economies need to incorporate the end users of SAH into the decision-making process for better results.

#### 2.7.3.5 Zimbabwe

Average (2019) carried out an empirical research on low-income housing problems and solutions, the opportunities and challenges; where he sampled the urban poor in Bulawayo city of Zimbabwe. The study reiterated that housing is a major problem in developing economies, including Zimbabwe. The findings established that there are untapped resources in the many positive initiatives of the urban poor who are already making efforts towards housing provision for themselves. Such initiatives of these urban poor can be harnessed if other stakeholders such as government, non-governmental organisations, multilateral agencies among others can join the community in housing provision. This way, affordable housing will be provided in a more sustainable way. Study suggested participatory approach as the feasible, viable, affordable and flexible way to achieve SAH provision, targeting the urban poor as beneficiaries.

### **2.8 Affordable housing discussions across developed economies**

Housing problems differ by geographical locations, thus housing problems require government interventions that location based and targeted at specific geographical locations (Dufty-Jones, 2018). Thus, to further enhance generalizability and the international and comparative relevance of this study; the research proceeds by investigating solutions proffered to SAH challenges in developed economies. This section focuses on European countries while subsequent sections discuss Australia and developing economies in other parts of the world.

### **2.8.1 Germany**

Bohnenberger (2021) investigated if “sufficiency” policy can be used to reconcile disparity between social and environmental goals in German housing policy and found that this to be effective under certain circumstances. The policy adopts strategies such as the following: (a) reducing housing space from ‘wanted’ to ‘needed’ (b) substitution of housing needs with cluster flats, community guest rooms among others (c) flexibilization of temporal and spatial supply and demand of housing such as reuse of existing buildings, conversion or modification of existing building and so on (d) optimization of the spatial and temporal match of housing consumption by efficient allocation of available housing spaces based solely on housing needs.

### **2.8.2 England**

Oyebanji et al. (2017) examined sustainable social housing (SSH), highlighting the critical success factors for achieving SSH in England. The study recommended that steps are to be taken to promote users’ welfare and quality of life. This is better achieved when the users are incorporated into the decision-making process and their housing needs taken into consideration. Gianfrate et al. (2017) in a study to rethink social housing with particular interest in behavioural patterns and technological innovations in Italy, suggested that end users’ behaviours should be ascertained before technological designs and innovations are incorporated into social housing. This will enhance the sustainability of social housing.

### **2.8.3 Israel**

Beenstock et al. (2020) in their empirical study of long-term housing affordability in spatial equilibrium in Israel since 1987, showed that regions’ interdependence limits the study of regional affordability in isolation. Study also proved that policies unrelated top housing can improve affordability, for instance regional capital investment policies positively influence regional income while having lesser positive impact on house prices, thereby increasing



housing affordability. Study argued that improving housing affordability does not necessarily improve social welfare. Implying that social welfare goes beyond affordability, covering empowerment and regeneration of the urban poor to cater for future income elasticity; thereby ensuring sustainability of affordable housing. It is worthy of note that Israel is a developed economy, however with evident inequality in income distribution as there exists a significant gap between the rich and the poor. Literature reveals that socioeconomic consideration is also popular among recommendations for SAH in Europe.

#### **2.8.4 Australia**

Bangura and Lee (2019) studied the differential geography of housing affordability in Sydney, Australia. They disaggregated Sydney into six (6) regions based on spatial and socioeconomic characteristics, conducting an in-depth analysis for the period of 25 years (1991 – 2016). The study made major findings such as the apparent difficulty of low-income earners to own housing across Sydney, particularly at entry level based on expensive initial deposit. This however usually improves from the 10th year onward but the first five years is often very stressful for low-income earners. The high income regions don't find entry as difficult and ongoing affordability is also better, underscoring geographical and socioeconomic differences of housing affordability in Sydney. They opined that the evident socioeconomic disparities makes regionally balanced housing policies necessary. They advocated that the geographical complexities across Sydney requires geographically balanced policies. Findings corroborated findings of Beer et al. (2007) that existing housing policies in Sydney are not crafted with low-income earners' interests in mind. The study agreed with Lee and Reed (2014); Randolph et al. (2013) who advocated that First Home Owner Grant (FHOG)- a housing policy in Australia, will be more effective if focused on low-income earners in Australia.

Bangura and Lee (2021) in their study on the determinants of homeownership affordability in greater Sydney, found that homeownership affordability responds mostly to house price and personal income. This is particularly so in low-income regions of Western greater Sydney. However, this region gets influenced by other determinants such as housing supply, median rent, residential population and housing investors. This corroborates findings from literature that housing problems differ from one location to another (Beenstock et al., 2020; Dufty-Jones, 2018; Galster & Lee, 2021). Findings from this study also align with Stephen Ezennia and Hoskara (2019) that housing affordability goes beyond house price and personal income. From literature review, it is evident that scholars who sampled Australia also mostly highlight the importance of socioeconomic considerations for SAH in Australia.

#### **2.8.5 Chile**

Celhay and Gil (2020) examined the function and credibility of urban slums in Santiago, Chile and established that function supersedes form in terms of housing; as slum dwellers prefer the informal settlements over home ownership at suburbs distant from urban areas and the accompanying opportunities. The urban poor often sacrifices the benefits of home ownership such as status, market value among others for access to the opportunities associated with cities as earlier postulated by (Mc Cawley, 2019). The finding corroborates submissions of Ho (2014, 2017) that if slums can provide some level of credibility and social security, slums can persist.

### **2.9 Success in affordable housing provision approaches across countries.**

The literature review shows that efforts from private sectors can impact on affordable housing provision positively as demonstrated in Asia Yap (2016). This corroborates Bredenoord et al (2014) who submitted that the urban poor cannot look towards government alone for affordable housing solutions while advocating for private sector interventions in affordable housing finance areas. Other notable successful affordable housing provision strategies in Asia includes

efforts by the Indian government where the Pradhan Mantri Awas Yojana (PMAY) targeted the (LIG and EWS) and created credit-linked subsidies to support demand for housing (von Puttkamer, 2016). Sandhu (2013) opined that government policies in India favoured housing finance institutions, for example, the establishment of the National Housing Bank (NHB) as a Reserve Bank of India (RBI) to regulate and provide government support to housing finance institutions; this enhanced the housing situation in the country. Some of the housing finance initiatives include, the Self-Employed Women Association (SEWA) Bank model, the Micro-credit to Housing Finance (MCHF), the Shelter Advocacy to Housing Finance (SAHF) all initiated by NGOs towards pro-poor housing finance. This is in alignment with literature as UN-Habitat listed micro-credits provided by MFIs as vital to housing finance in the last ten years (United Nations Human Settlements Programme, 2005).

Thailand also records successful provision of affordable housing through the CDFs networked at community, city, provincial, regional, and national levels to enhance communication and coordination. The CDF has four major components which can be grouped into two, the people (members, community and supporters) and money (funds); the CDF operates on the administration of people and money; and combines both the bottom-up approach and the top-down approach which introduces a form of balance that favours all stakeholders like increased chances for cooperation and community partnership, amplified mutual interests, increased sense of belonging and responsibility, encouraged self-empowerment and sense of ownership (Sripanich et al., 2015). In Bangladesh, group savings and micro-credit provided by NGOs was effective in supporting housing for the urban poor though the latter is mostly used to support the means of livelihood (Rahman & Ley, 2020). According to Rahman and Ley (2020) the two schemes are effective for affordable housing finance but the group savings is limited in terms of sustainability and loan flexibility.

Regardless of these limitations the group savings scheme performs better at empowering the urban poor because of the government involvement through the CDC (Harvey, 2005a, 2005b). Literature further reveals that the group savings scheme is found to be more interdisciplinary in its approach to tackling informality in urban areas owing to the collaboration of different players (Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012). It is noteworthy that the microfinance schemes in informal settlements has capacity to empower women and are mostly women-led (Karim, 2011; Rahman & Ley, 2020). In Latin America, the National Housing Commission (CONAVI) and the Federal Mortgage Company (SHF) were successful in aiding self-home construction (Grubbauer, 2019). In South Africa, the government recorded successful affordable housing provision through the People's Housing Process (PHP) established in 1998 to enhance community-driven housing activities. This is similar to self-organized communities such as Shack/Slum International SDI established in India and Zimbabwe, which are affordable housing solutions through collective action as described in Bredenoord et al (2014). A very recent study in Nigeria revealed the possibility of enhancing affordable housing provision through a collaborative scheme between the government and the church, this can be a pathway to housing the urban poor in the city of Enugu (Anierobi & Obasi, 2021).

In Turkey, literature review demonstrated massive success in affordable housing provision through the activities of HDAT and KIPTAS which were government initiatives to solve persistent problems in the past housing policies in Turkey- the non-institutional structure (where people use personal savings for housing construction) and the institutional structure (where housing provision is by government or private institutions). The HDAT encouraged planned development and urbanization by engaging in mass housing construction with several construction phases, adopting various construction methods and targeting various income categories of people. KIPTAS, on the other hand, was adopted in Istanbul to resolve the issues

of informal settlements and slum formation by affordable housing provision with extended payment period, minimal interest rates and down payment which are flexible based on housing size, quality, and location (Ayan, 2011; Aydın, 2006; Aydinoglu, 2004; Erol & Patel, 2004, 2005; Gültür & Basti, 2014; Gürbüz, 2002; Hepşen, 2010; Kömürlü, 2006; Öztürk & Doğan, 2010). The efforts, activities, and approaches of HDAT and KIPTAS in Turkey which involved handling housing production and housing finance matters synchronously were effective and can be informative for decision-making in other countries of the world. These findings in Turkey buttressed the submissions of Bredenoord et al (2014) that affordable housing solutions require targeted policies to enhance sustainability, urban management to urban governance.

## **2.10 Constraints in affordable housing provision approaches across countries**

Despite the success in the provision of affordable housing for the urban poor recorded by different governments of the world, the housing situation in the world suggests an urgent need for more work. Most schemes have one limitation or another and this section of the review discusses these limitations as demonstrated in literature.

Yap (2016) investigated housing initiatives in the continent of Asia and argued that most government housing schemes usually target slum upgrade but fail to approach it strategically, in a manner that will render informal settlements redundant, they ignore the pointers and lessons derivable from informal settlements and end up suppling housing inconsistent with the housing demand of the urban poor. Bredenoord et al (2014) earlier on argued similarly that the urban poor will be better helped when approaches are made to fit their livelihood strategies. Gohil and Gandhi (2019) opined that rapid increase in urban population and the consequent shortage in housing and slum formation are the major challenges to sustainable affordable housing provision for the urban poor. Another highlighted impediment to housing in India is the lack of continuity and interconnection between government housing programmes over the

years (Gohil & Gandhi, 2019). Regarding housing finance schemes in India, Patel (2013) argued that the community participation is hardly incorporated in and when they are, community-led processes are often challenged by mismanagement, elements of complication, opportunism and selfishness, conflicts among members and other issues. Further, the commercial banks were introduced into housing finance but could not service the urban poor, government in response initiated the HUDCO who also could not reach the urban poorest because of lack of mortgage insurance and the capitalist approach of banks (Habitat, 2008).

Other challenges of sustainable affordable housing for the poorest urban poor in India and beyond include clumsy titling and registration processes, poor credit records, lack of adequate regulations, absence or inadequacy of secondary market, irregularity of income among many others (Un-Habitat, 2012, 2013b). INDIA (2009) opined that housing finance in India is still at infancy stage in the financial market and highly inaccessible. Alliance, Patel and Bartlett (2016) established that formal housing institutions in India do not have the wherewithal to finance housing for the urban poor while informal finance sector lacks capacity to support new projects and are mostly limited to renovation works (Sandhu, 2013). The government land policies are too rigid, complicating housing provision. The situation is similar in neighbouring Pakistan as Dorosh et al. (2010) opined that the Pakistani government agencies lack coordination in policy implementation, their housing schemes are mostly unfavourable for the urban poor and formal finance requirements like credit records, collateral, regular income and so on also complicate issues for the urban poor, so much that over 80% of the Pakistan people cannot meet finance requirements of the finance institutions in Pakistan (Alvi, 1997; Riaz, 2009; Tariq, 2012).

In a study on another developing economy in Asia, Sripanich et al. (2015) successfully examined the history, mechanisms, benefits, and challenges of the Community Development Funds in Thailand and advanced that CDF has an inherent challenge in the size of membership

as this can complicate cooperation, communication, management, and transparency. Additionally, the sustainability and ability of CDF to adjust to the dynamic needs of the urban poor is not yet established. In a recent comparative study of the two housing schemes in Bangladesh, Rahman and Ley (2020) argued that the group savings programme in Gopalganj is limited in terms of sustainability and flexibility of loans. The micro-credit initiative, on the other hand is more useful for house improvement probably because the loans are extremely low, though easy to access but prone to future risks as MFIs do not have strict measures in place to monitor the use of collected loans. These two schemes have limitations in tenure security while the micro-credit particularly needs technical support. Mortgage loan in Bangladesh is usually not accessible by the poorest urban poor due to rigid loan requirements and deficiencies in government subsidies (Gilbert, 2004; Klink & Denaldi, 2014). Literature highlights corruption to be an impediment to housing policies in this region as well (Ward et al., 2015).

In Latin America, Grubbauer (2019) argued that private sectors expand housing microfinance for ulterior motives such as diversification of their loan portfolio, expansion of their clientele base, among others. Meanwhile, obstacles such as the inconsistent income of the potential clients, higher administration costs than the other loan types and organizational challenges usually discourage private sectors from attending to the urban poor (Chongo & Laufer, 2016). In South Africa, literature reveals that government approaches housing policies with lack of political will, they make promises but fail to implement. Fieuw and Mitlin (2018) is of the opinion that community participation is frustrated when government prioritizes project time and decides to use commercial development companies for housing development at the expense of community participation. Other challenges include government's unwillingness to offer new contracts nor pay for completed projects and government willing to engage community-driven process but unwilling to institutionalize the process (Khan & Pieterse, 2006).

In an earlier study, Oldfield (2004) argued that the implementation of the government housing subsidy strategy causes a relocation of the urban poor to outer cities, far from city opportunities, enhancing spatial, racial and income inequality. Fieuw and Mitlin (2018) concluded that despite government agencies' engagement with grassroot organizations in South Africa, there is yet to be a substantial incorporation into policies and strategies.

In a study in Namibia, De Vries and Lewis (2009) postulated that land regulation and regularization complicate land allocation in urban areas in Namibia. Karuaihe and Wandschneider (2018) opined that in Namibia and most other African countries, land policies are formulated by central governments but implemented by local governments, causing avoidable inconsistencies. In Ghana, like other developing countries, the urban poor finds it difficult to benefit from conventional mortgage finance system due to obvious reasons like high interest rates and so on. While formal mortgage system remains at infancy stage, they avoid small, short-term loans on grounds of unprofitability (Acheampong & Anokye, 2015; Datta & Jones, 2001; Ferguson, 1999; Ferguson & Smets, 2010; Ferguson, 2003; Warnock & Warnock, 2008). The informality of the Ghanaian housing industry frustrates it from benefiting from government interventions like tax reliefs and supply-side subsidies, while demand-side subsidies are also limited because the urban poor mostly work in the informal sector (Acheampong & Anokye, 2015). Datta and Jones (2001) adds that housing subsidies generally have negative effects on housing and finance markets.

Gülter and Basti (2014) highlighted affordable land acquisition as the limitation in the Turkish government housing approaches. Literature in Turkey demonstrated that much success has been recorded in sustainable affordable housing provision, requiring majorly maintenance and continuity. This finding is in dissimilitude with findings in developing economies where many limitations in housing provision approaches were recorded. Table 2.4 summarizes the barriers



to sustainable affordable housing provision by different countries while Table 2.5 summarizes barriers to sustainable affordable housing provision by different regions, both showing the different challenges as well as similar challenges faced by different countries/regions of the world. The tables unveil amongst other things that sustainable affordable housing is faced by multiple challenges across different regions of the world, though the challenges are more in developing economies. Findings confirm that typical challenges of the urban poor such as poor credit record and irregularity of income are consistent across the world. Findings also establish that inadequacies of land regulations, complicated titling processes and absence or inadequacies of secondary market are barriers to sustainable affordable housing across the world.

**Table 2.4:** Barriers of sustainable affordable housing provision by countries

Barriers to Sustainable affordable housing provision	Countries								
	Turkey	India	Bangladesh	Pakistan	Thailand	South Africa	Namibia	Nigeria	Ghana
Private sectors being major players in AH provision		☒							
Rural-urban migration	☒	☒						☒	
Lack of continuity and mutual connection in housing schemes		☒							
Lack of integration of community members in housing programmes		☒				☒			
Dominance of informal finance institutions without adequate government support		☒							
Clumsy titling and registration processes		☒	☒		☒	☒	☒	☒	☒
Poor credit records of the urban poor		☒	☒		☒	☒	☒	☒	☒
Lack of adequate land regulations		☒	☒		☒	☒	☒	☒	☒
Absence or inadequacies of secondary market		☒	☒		☒	☒	☒	☒	☒
Irregularity of income of the urban poor		☒	☒		☒	☒	☒	☒	☒
Inadequacy of formal finance institutions to support pro-poor housing		☒							☒
Management challenges in Community Development Fund CDF approaches					☒				
Sustainability and flexibility challenges of Group savings programmes			☒						

Barriers to Sustainable affordable housing provision	Countries								
	Turkey	India	Bangladesh	Pakistan	Thailand	South Africa	Namibia	Nigeria	Ghana
Inability to monitor the use of collected loans by microfinance institutions MFI			<input checked="" type="checkbox"/>						
Inadequacy of loans from microfinance institutions to fund housing construction			<input checked="" type="checkbox"/>						
Lack of coordination in post-disaster housing				<input checked="" type="checkbox"/>					
Lack of continuity in post-disaster housing construction				<input checked="" type="checkbox"/>					
Resilience not factored into post-disaster housing construction				<input checked="" type="checkbox"/>					
Inadequacy of housing regulations								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hostility of government against non-conventional housing finance									<input checked="" type="checkbox"/>
Inadequate access to land							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Land policy formulation not decentralized		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Corruption						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lack of political will						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Government policies ignoring the poor								<input checked="" type="checkbox"/>	
Lack of alternative finance approaches	<input checked="" type="checkbox"/>								
Lack of alternative ways to produce affordable lands	<input checked="" type="checkbox"/>								
Cost issues in urban renewal projects	<input checked="" type="checkbox"/>								

**Table 2.5:** Barriers of sustainable affordable housing provision by regions

Barriers to Sustainable affordable housing provision	Regions		
	Africa	Asia	Latin America
Private sectors being major players in AH provision		☒	
Rural-urban migration	☒	☒	
Lack of continuity and mutual connection in housing schemes		☒	
Lack of integration of community members in housing programmes		☒	
Dominance of informal finance institutions without adequate government support		☒	
Clumsy titling and registration processes	☒	☒	☒
Poor credit records of the urban poor	☒	☒	☒
Lack of adequate land regulations	☒	☒	☒
Absence or inadequacies of secondary market	☒	☒	☒
Irregularity of income of the urban poor	☒	☒	☒
Sustainability and flexibility challenges of Group savings programmes			☒
Inability to monitor the use of collected loans by microfinance institutions MFI			☒
Inadequacy of loans from microfinance institutions to fund housing construction			☒
Inadequacy of housing regulations	☒		
Inadequate access to land	☒		
Land policy formulation not decentralized	☒	☒	☒
Corruption	☒		
Lack of political will	☒		
Government policies ignoring the poor	☒		

**Table 2.6:** Cross-country comparison of affordable housing scholarly recommendations

Recommendations	Developing countries										Developed countries						
	Nigeria	South Africa	Kenya	Uganda	Zimbabwe	Ethiopia	Indonesia	Bangladesh	Columbia	Malaysia	Chile	Israel	Italy	Germany	England	Australia	International
Security and welfare in housing	☑											☑			☑	☑	
Community participation	☑	☑	☑	☑	☑	☑		☑					☑		☑		
Holistic involvement of all stakeholders in housing provision	☑	☑	☑		☑								☑	☑	☑	☑	☑
Inclusive governance	☑	☑	☑	☑	☑			☑								☑	
Proactive approaches to SAH provision and catering for housing needs of the urban poor	☑															☑	☑
Patterns of inequality in cities must be holistically restructured		☑					☑										
Good and active rapport between local govts. and the urban poor through partnerships	☑	☑	☑	☑	☑			☑									
Housing regarded as a process that includes the people, not as a product		☑														☑	
Adoption of market forces such as LVC and IH			☑	☑													
Bottom-up approaches for SAH provision to incorporate community leaders	☑	☑	☑										☑		☑		
Urban poor have socioeconomic and other ties to their locations						☑	☑		☑		☑						
Housing initiatives of the urban poor should be incorporated by govt.					☑												
Govt. interventions in favour of the urban poor				☑												☑	
Empowerment and mobilization of the urban poor, involving them in their resettlement processes	☑	☑	☑			☑		☑				☑			☑	☑	☑
Adoption of best practices in handling SAH provision challenges	☑													☑		☑	☑
Well-designed institutional frameworks	☑									☑				☑			☑
SAH provision solution should be location based												☑				☑	
Ascertain end-users’ needs before technological innovations													☑				

## **2.11 The ways forward in affordable housing interventions**

As revealed in Table 2.6, major recommendations postulated in literature show noticeable similarities across the different sampled countries with community participation, inclusive governance, empowerment of the urban poor and good partnership between local government and community leaders being consistent suggestions across many sampled countries, despite geographical and economic dissimilarities. The sampled developed countries are however more specific in their approaches to solve SAH provision problems, with multifaceted and pragmatic concepts like the “sufficiency” policy in Germany, regional capital investment policy in Israel, First Home Owner Grant in Australia, modified Pension Act in Malaysia and the Inclusionary housing and Land value capture policies already gaining cross-country popularity. These approaches can be modified and adapted in a manner that incorporates the peculiarities of each location towards achieving SAH.

Findings from this review underscores the relevance of the socioeconomic activities of the urban poor in SAH provision. Socioeconomic activities of the urban poor is an untapped resource that has capacity to enhance the provision of EAH for the urban poor across the world, particularly in developing countries. Tackling the recurring housing challenges in developed and developing economies will require all stakeholders in housing discussions across the world to take lessons from the scholarly recommendations clustered in this review. Though the articles considered in this review are insightful studies, there are limitations that should inform future research directions. These will be useful in tackling current challenges in sustainable affordable housing provisions.

Yap (2016) in his study on Asian cities opined that the informal settlement has certain qualities that attract the urban poor, government should incorporate these identified qualities into urban renewal projects to render urban sprawl redundant. Also, Yap (2016) postulated that there is

need for an urgent decentralization of decision-making as local governments are more familiar with the challenges at the bottom and with technical support can tackle these issues more innovatively by adopting citywide strategies that supply affordable housing at various locations with various tenure types, reaching outer cities and ensuring affordable transportation or nearness to sources of income generation.

Patel (2013) in his study in India opined that slum upgrade programmes should be anchored on proper consultation, dialogue and agreement between all agencies and the slum residents, this will earn a less hostile community working in a cooperative manner (Patel & Bartlett, 2016). Patel (2013) earlier added that it is necessary to put institutional structures in place to support slum upgrade at the district, state, and national levels. As community-led processes naturally encounter management issues due to the enormous number of players, Patel and Bartlett (2016) recommended that all stakeholders must be prepared and willing to continue to learn, adapt, modify, and improve as the situation warrants.

Sandhu (2013) in his evaluation of formal housing finance sector in India suggested that all stakeholders such as Non-Governmental Organisations (NGOs) and private sectors need to join forces together to combat the difficult challenges of housing finance for the urban poor. The sustainable solution will probably be to harness the strengths of all stakeholders into the existing formal housing finance structure (Sandhu, 2013). Literature demonstrated that there is need to incorporate resilience into post-disaster housing, a need for an upgrade in strategies for post-disaster housing responses, a need for continuous sequence in post-disaster reconstruction for immediate and dynamic housing needs and a need for an amalgamation of both formal and informal housing providers in Pakistan (Lizarralde, 2002; Tariq, 2012). Tariq (2012) shares a similar thought with Davidson et al. (2007); Patel (2013); Turner (1977); Yap (2016) by advocating for community participation towards successful low-income housing provision in

Pakistan. Tariq (2012) in alignment with literature Datta and Jones (1999); United Nations Human Settlements Programme (2005) advocated for the use of microfinance initiatives to finance affordable housing since it is a finance system that emanated from the people's culture.

Sripanich et al. (2015) examined housing funding strategies in Thailand and opined that community-based funding (CDF) is an inventive and unconventional source of housing finance for the urban poor developed around community participation, which can support the housing microfinance, government funding and private institutions in housing provision for the urban poor (Habitat, 2007). This recommendation is particularly consistent across reviewed literature Davidson et al. (2007); Karuaihe and Wandschneider (2018); Kironde (1995); Konadu-Agyemang (2001); Patel (2013); Patel and Bartlett (2016); Tariq (2012); Turner (1977), suggesting its relevance in scholarly discourse on sustainable affordable housing. Rahman and Ley (2020) examined the two major affordable housing finance strategies in Bangladesh- the micro-credit approach and the group savings, and suggested that these models can complement each other. They postulated that both schemes can be merged for more effective and sustainable affordable housing finance. Grubbauer (2019) in his study on housing strategies in Latin America propounded that, innovative techniques to address housing challenges in that region will include partnering with other housing construction professionals, partnering with international institutional investors to generate and secure capital for large scale development, among others.

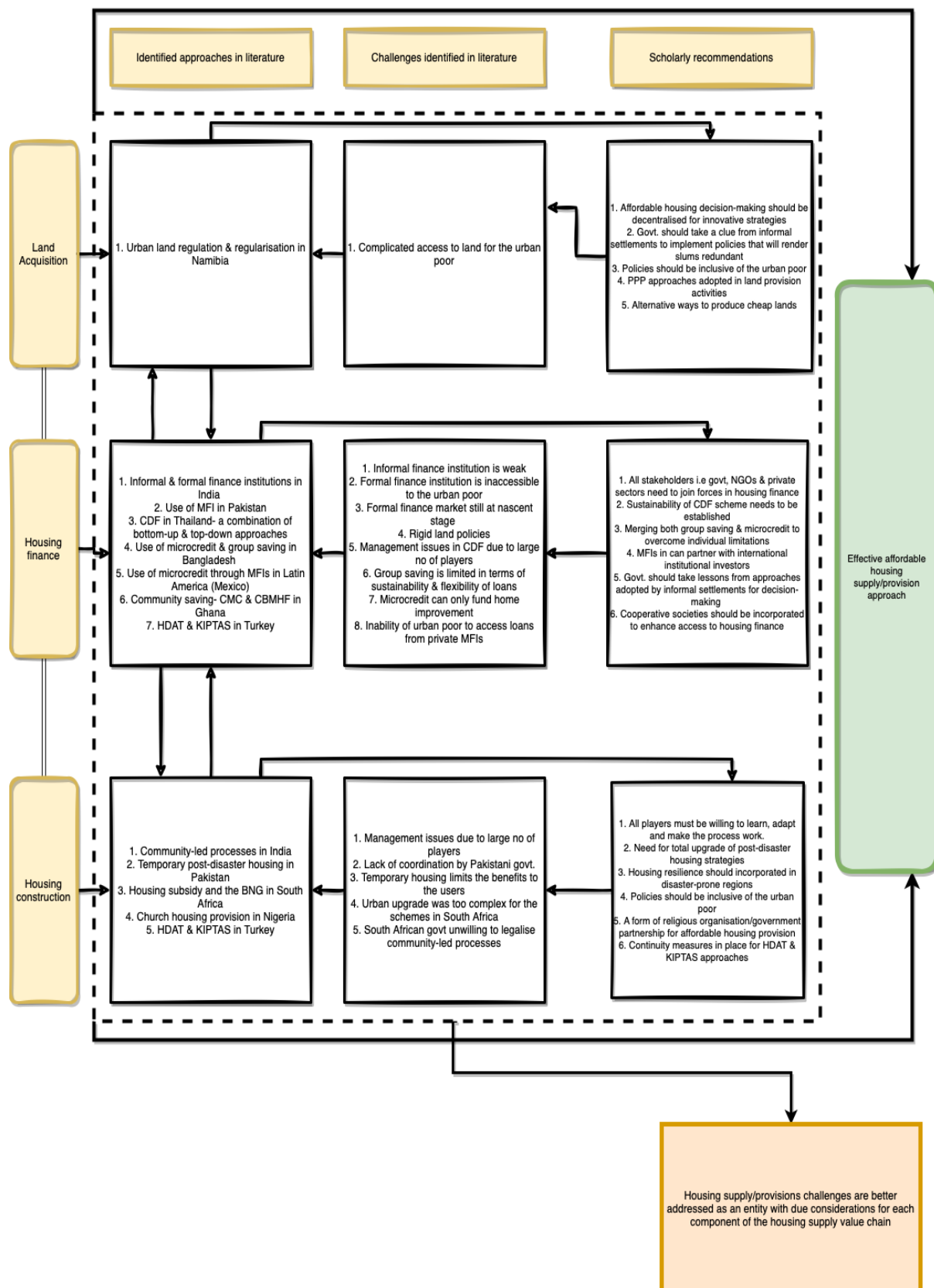
To solve the problem of land supply to the urban poor in a sustainable manner, literature suggested public-private partnership in provision of land, fund allocation for collective land acquisition, implementation of policies that are inclusive of the urban poor, urban renewal programmes should be inclusive of government, the community, private sector and all stakeholders, partnership between communities, government and finance institutions among



other innovative approaches (Karuaihe & Wandschneider, 2018; Kironde, 1995). Anierobi and Obasi (2021) in his study in Nigeria proposed a government-church collaboration, anchored on “single unit” interest loan for housing finance while cooperative societies can be employed to enhance access to housing finance for associations and individuals. Government should endeavour to supply land for affordable housing development at favourable locations while local building materials can also be used for construction to reduce cost. Acheampong and Anokye (2015) in their study on housing postulated that three alternative strategies for housing development specifically for only the urban poor in Ghana will go a long way in alleviating affordable housing challenges. These strategies are the use of spatial planning system and housing finance through the local government structures of Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, making housing microfinance accessible to the urban poor for rental housing in alignment with (Datta & Jones, 2001). Existing pool of relatively cheap labour within the community for building construction should be mobilized for housing development to reduce construction cost (Konadu-Agyemang, 2001).

Amoako and Boamah (2017) in their investigation of housing finance approaches in Ghana argued in agreement with Boamah (2010); Karley (2002) that promoting Community Mortgage Cooperative (CMC) and Community Based Mutual Housing Finance (CBMHFS) can be an effective solution to housing finance challenges of the urban poor. Further, they opined that financing urban informal housing in third world countries is not as complicated as it seems if formal planning agencies desist from the usual hostile attitude against non-conventional housing finance approaches and rather consider it as the people learning as they earn- an innovative and flexible response to the difficult formal urban planning and housing financing requirements. Policymakers should rather take a clue from the prevalent informal finance approaches to inform policies that are inclusive of the urban poor and suitable for their socioeconomic conditions. The efforts of Turkish government initiatives (HDAT and KIPTAS)

are particularly remarkable, though limited in terms of affordable land acquisition. The successes are informative for other countries to learn from. Literature demonstrates that housing finance strategies are different by country, depending on socioeconomic and market characteristics. It is appropriate that countries apply the most suitable housing finance system and then adapt the system accordingly Gültner and Basti (2014). Fig. 2.11 is a framework that summarizes the findings from literature review, highlighting affordable housing initiatives across the world, the challenges faced, the recommended solutions in literature, and the identified limitation across literature to inform future research direction. The dotted lines connect all recommendations in literature about the three main activities of housing supply value chain into a singular entity towards achieving an effective affordable housing supply/provision approach.



**Figure 2.11:** A conceptual framework of AH solutions towards EAH provision in literature

Source: Researcher, 2022

## **2.11 Contributions from review of affordable housing interventions**

Literature demonstrates that AH provision for the urban poor is a trending discussion (Adabre et al., 2020; Ajayi & Oyewobi, 2019; Akpan, 2020; Bangura & Lee, 2021; Begum et al., 2018; Bohnenberger, 2021; Celhay & Gil, 2020; Chan & Adabre, 2019; Galster & Lee, 2021; Gianfrate et al., 2017), nevertheless, the continued challenge of affordable housing provision across the world suggests a need for more research focus and more importantly, innovative approaches to addressing complicated affordable housing provision issues across developing and developed economies of the world.

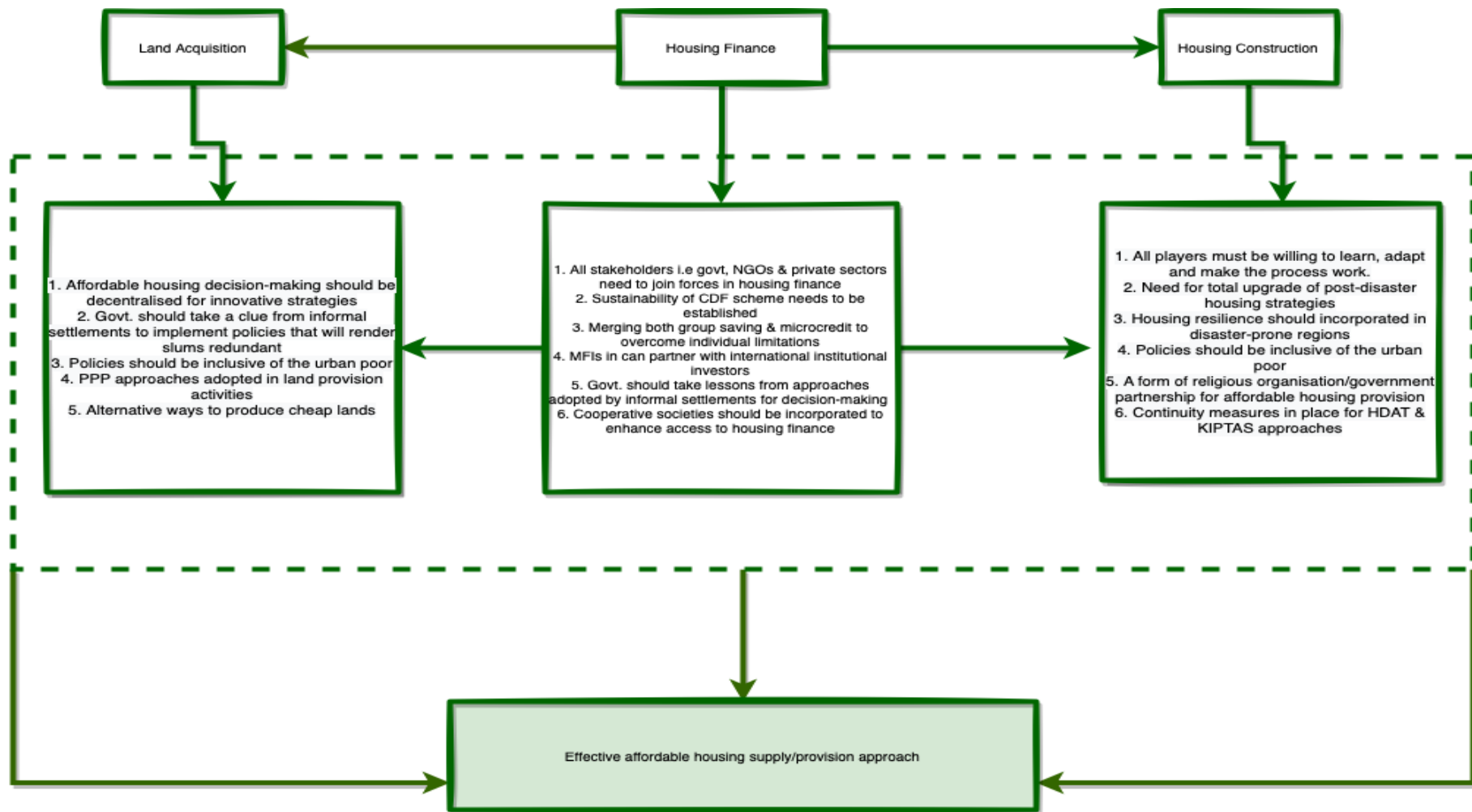
The studies considered in this review were insightful and made tangible contributions to knowledge but each focused on a singular aspect of housing supply value chain. Considering the complex nature of AH provision, the components of housing supply value chain should be identified in context and then addressed as a singular unit. Invariably, since affordable housing construction depends on affordable land acquisition and both depend on availability of affordable housing finance, it is difficult to tackle each independently while these components are interdependent in reality. For a more holistic approach, it is recommended that the three main activities of land acquisition, housing finance and housing construction which make up the components of housing supply value chain are investigated as an entity in future research, considering the interconnection of these activities. Similarly, it is recommended that housing policies capture these components of housing supply value chain as one entity, so that all aspects of the complex affordable housing challenges are addressed holistically in policymaking. Though these activities have independent challenges that must be identified, pragmatic solution will require attention to the interdependence of the activities, considering the mutually inclusive nature of these activities.

Fig. 2.12 is a conceptual framework developed based on scholarly recommendations in literature to overcome the identified challenges in affordable housing provision initiatives in developed and developing economies of the world. This framework clusters all three components of housing supply value chain into one holistic entity, highlighting the recommendations in literature for each component but demonstrating the interdependence and interconnectivity of these components towards the achievement of an effective affordable housing supply/provision approach.

Furthermore, this review finds that discussion on land acquisition for the urban poor is not popular in literature. This may be due to rigid and unfavourable land policies that complicate access to titled land for the urban poor in agreement with Amoako and Boamah (2017) who argued that formal planning agencies need to desist from the usual hostile attitude against anything informal settlements, suggesting that government should instead take a clue from their approaches to inform policies that are inclusive of the urban poor and suitable for their socioeconomic conditions. This is an area that requires more research attention in consonance with Gültür and Basti (2014) who suggested that alternative ways to produce affordable lands, alternative finance approaches to accommodate all income categories and cost issues in urban renewal projects need to be explored. The community-based funding (CDF) in Thailand as investigated by (Sripanich et al., 2015) requires further investigation to establish the continuity of CDFs and how CDF will respond to the ever changing needs of the urban poor. A limitation of this study is that it is based on literature review, future studies will seek to address this challenge by gathering empirical data at selected informal settlements to investigate the activities of the urban poor with respect to housing finance, land acquisition and housing construction; geared towards sustainable affordable housing provision for the urban poor.

## **2.12 Conceptual framework for effective affordable housing provision**

Extensive review of literature provides applicable information and guidelines to conceptualize the layout of the pragmatic framework for effective affordable housing provision (Osei-Kyei et al., 2017; Wuni, 2022). The conceptualized pragmatic framework for effective affordable housing provision in Nigeria is presented in Fig. 2.12.



**Figure 2.12:** A conceptual framework for effective affordable housing provision

Source: Researcher, 2022

**Table 2.7:** Content analysis of reviewed studies

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
1	Izeogu, C.V	Nigeria/Africa	Public policy and affordable housing for the urban poor in Nigeria: A study of squatter redevelopment programs in Port Harcourt.	Affordable housing, urban poor, urban redevelopment, Nigeria	To examine the relationship between public policy and housing affordability for the urban poor in the city of Port Harcourt, Nigeria. Study established a gap in policy in that it was neither designed nor prepared for the rapid population increase that the city witnessed as a result of urbanization.	The success of affordable housing provision is dependent upon the right policy decisions and implementation.	Government should enable the informal housing markets by utilizing the already existent self-help housing strategies. Collaboration between government, the communities, and other organizations to address housing affordability issues.
2	Smets, P.	India/Asia	Housing finance trapped in a dilemma of perceptions: affordability criteria for the urban poor in India questioned.	Housing finance, urban poor, affordability	Formal housing finance is consequent upon the mentality of the rich who are often at the helm of affairs, making policies that are unfavourable for the urban poor in India.	Incremental finance approaches will be a more realistic way to fund sustainable affordable housing.	The urban poor build incrementally, so affordable housing finance should be designed for incremental financing.
3	Kigochie, P.	Kenya/Africa	Squatter Rehabilitation Projects that Support Home-Based Enterprises Create Jobs and Housing.	Africa, Nairobi, Home-based enterprises, Housing informal sector	Housing unaffordability and unemployment are major problems of the urban poor in developing countries. Affordable housing policies without accompanying job creation policies will not be effective. Mathare 4A Housing Project successfully adopted urban regeneration approaches by constructing new and upgrading old affordable housing, adjusting building codes, using cheaper indigenous building materials, and successfully enhanced existing HBES, created jobs and improved the standards of living of the urban poor.	Mathare 4A Housing Project successfully adopted urban regeneration approaches by constructing new and upgrading old affordable housing, adjusting building codes, using cheaper indigenous building materials, and successfully enhanced existing HBES, created jobs and improved the standards of living of the urban poor.	Affordable housing programs should take the form of urban regeneration to empower the beneficiaries. This will enhance the sustainability of affordable housing provision.
4	Mitlin, D.	Brazil/Latin America	Housing and Urban Poverty: A Consideration of the Criteria of Affordability, Diversity and Inclusion	Urban poverty, poverty reduction, housing.	The interrelationship between affordability, diversity, and inclusivity. Development cannot be equitable if it is not inclusive.		Proper understanding of the activities and livelihood of the urban poor to inform strategies that will be appropriate for the housing needs of the urban poor
5	J Stewart, P.B	Latin America	Community self-help and the homeless poor in Latin America. The Journal of The Royal Society for the Promotion of Health	Homelessness, housing credit schemes, housing the urban poor, informal housing, Latin America, self-help schemes, shack settlements, social housing, squatter housing.	Realistic housing solution for the urban poor in developed world is dissimilar from solutions suitable for developing world as they have different welfare control and poverty levels. The poor across the world have achieved more affordable housing provision for themselves than government have or are willing to provide.		Housing situation in developing countries require innovative responses to ensure attainability, affordability, and sustainability. Effective housing policies will support affordable housing provision approaches conceived by the poor for themselves with appropriate government aid



S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
6	Stein, A., & Luis Castillo	Central America	Innovative financing for low-income housing improvement: lessons from programmes in Central America.	Innovative financing, low-income housing, affordable housing, urban poor, Central America.	Identification of approaches that effectively enhanced housing situations of the urban poor such as housing policies that are inclusive of the housing needs of the urban poor, integrated interventions and collective participation of multiple players, use of transparent subsidies to target demand-side challenges, use of revolving funds among others		The highlighted effective mechanisms can be adapted in other regions to enhance affordable housing provision for the urban poor
7	Grant, M.	Zimbabwe/Africa	Lodging as a migrant economic strategy in urban Zimbabwe.	Affordable housing, urban poor, migrant.	Government employed forceful eviction which heightened the plight of the urban poor through the Operation Restore Order initiative in 2005	The study is a good start in investigating the predicaments of the urban poor, future research could capitalize on these research findings to explore ways to overcome the prevalent affordable housing challenges of the urban poor in Zimbabwe.	
8	Green, R.A	Turkey/Europe	Unauthorised development and seismic hazard vulnerability a study of squatters and engineers in Istanbul, Turkey.	Risk perception, seismic hazard, squatter settlement, Turkey.	Cities of developing nations are overpopulated due to urban poor immigrants looking for income-generating opportunities in the cities which results in the growth of informal settlements that offers affordable housing to the urban poor. Urban poor in Istanbul prefer self-built housing as they perceive it to be cheaper and safer than the commercially built housing by building contractors. This perception informs the urban poor to adopt innovative ways to minimize their hazard risks by living in informal settlements.	Study demonstrated how the urban poor responds to hazard vulnerability and can inform proactive approaches to prevent a recurrence in other cities of the world.	
9	Kamruzzaman M. & Ogura, N.	Bangladesh/Asia	Review of housing delivery for the urban poor and the rationalization of tenement apartments in Dhaka City.	Affordability, cost recovery, replicability, tenement housing, urban poor.	The outcome of BSP project would be inconsistent with its intentions to alleviate housing deficit in Dhaka.		Tenement housing is more affordable for the urban poor
10	Kala Seetharam	India/Asia	Impact of Land Use Regulations: Evidence from India's Cities.	Land use regulations, affordable housing, urban poor.	Land use controls need to be relaxed to allow vertical development in cities		An increase in floor area ratio (FAR) will result in more land consumption by the urban poor as land prices will plummet and housing will consequently become more affordable.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
11	Yap, K.S., & De Wandeler, K.	Thailand/Asia	Self-help housing in Bangkok.	Self-help housing, slum, urban poor, low-income housing policy, regularization, community-based organization, informal settlement, housing, upgrading, Thailand	Strategies that support community-based organizations allow the communities have better negotiations. They are effective in land acquisition, tenure security and generally in improving the urban poor's housing condition. Strategy is limited in terms of inclusiveness, effectiveness, and sustainability.		Thailand is in urgent need of a national policy targeted at housing adequacy for all.
12	Gunter, a. & Scheepers, L.	South Africa/Africa	"Crisylida Capital": Hatching Informal Township Property Markets to Benefit Low-Income Residents in Johannesburg, South Africa.	Low-cost housing, property markets, tenure	Informal settlements emerge rapidly around the world due to unaffordability of housing for the urban poor dwelling in squalors. Slum housing has potentials that can be utilized for wealth creation	The study moved housing discussion and philosophy further from slum housing being considered as 'dead capital' with no economic prospects to 'crisylida capital' that does not only hold value but has capacity for value creation.	More research attention on slum housing across the world.
13	Gurran, N. & Whitehead, C.	Australia, Europe, Oceania	Planning and affordable housing in Australia, New Zealand and England: common culture; different mechanisms.	Affordable housing, comparative housing research, inclusionary zoning, land use planning, value capture.	England housing policies informed Australian housing policies until the Town and Country Planning Act of 1947 when the policies became divergent. Housing provision in the United Kingdom is through local authorities with dominant social rental housing while on the contrary, housing in Australia is mostly through the private sector.		For effective affordable housing provision, urban polices must be designed to support it, intermediate housing should be provided and the importance of political will cannot be overemphasized.
14	Kamath, L.	India/Asia	New Policy Paradigms and Actual Practices in Slum Housing: The Case of Housing Projects in Bengaluru.	Slum housing, housing project, affordable housing, urban poor.	Policies only target inclusiveness and efficiency on paper, the outcomes are differing from policy intentions. The promise of security of tenure is probably the defeat of the Bengaluru housing strategy.		Stating policy decisions is not as important as having an articulated understanding of government practices and variations.
15	Austin, P. & Whitehead, C.	Australia, Europe	Planning and Affordable Housing in Australia and the UK: A Comparative Perspective.	Planning, planning gain, affordable housing, inclusionary zoning	Though the affordable housing planning and delivery of these countries have a similar principle the urban regulation, property rights and housing provision approaches in each country have underlying differences. Differences in housing policies impact on the access to new affordable homes in the face of surging land values.		Affordable housing is still an urgent need in all three countries and an exchange or transfer of policies and ideas may make significant impact.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
16	Dhote, K. et al	India/Asia	Social implication assessment framework for basic services to an urban poor program in India.	Social impact assessment, basic services, urban poor, slums.	The social impacts of development interventions on communities housing the urban poor in India.		Social impact assessment (SIA) should have a methodology that includes the beneficiaries, the policy makers, government, and users; to have an inclusive framework with qualitative participation that is quantifiable.
17	Nandi, S., & Gamkhar, S.	India/Asia	Urban challenges in India: A review of recent policy measures.	JNNURM, India, urban reform, governance, policy	Identification of challenges in governance that frustrates the successful execution of Indian housing reforms.	It is sustainable to plan the needs of the urban poor within urbanization management and not tackle their needs in isolation.	Decentralization of government will aid synchronization of policy intentions and fulfilment.
18	Jakhanwal, S.P	India/Asia	Urban Development and Exclusion of the Poor: An Integrated Perspective.	Urban poverty, urban divide, MDG, Slum, informal sector, sustainable livelihood	Urban divide can be summarized into the dynamics, characteristics, and the approaches of bridging the divide. Pairing urbanization and exclusion of the poor will wrongly suggest that urbanization causes poverty which in real sense is not totally true. Exclusion may be understating the situation of the poor in many countries as the situation is rather that of exploitation of the poor.	Urban poverty originated from inadequacies in urbanization processes in India and other countries.	
19	Acheampong, R.A & Anokye, P.A	Ghana/Africa	Housing for the urban poor: towards alternative financing strategies for low-income housing development in Ghana.	Housing finance, housing microfinance, planning system, urban poor, incremental housing, affordable housing, Ghana.	Conventional mortgage finance to be too stringent for the urban poor to access due to high interest rates, high cost of down-payment and long repayment periods.		More practical spatial planning system, strategies to enhance the urban poor's access to housing microfinance and strategies for cheaper housing construction cost through community-based initiatives.
20	Chioma, I.B.U	Nigeria/Africa	Local building materials: affordable strategy for housing the Urban poor in Nigeria.	Housing need, housing provision, housing affordability.	To overcome the perplexing affordable housing challenge, there is an urgent need for good governance as well as enhanced land and credit accessibility.		Use of indigenous building materials for building construction and the use of technology to enable mass housing production to crash construction cost by at least 60%.
21	Cutts, A. & Moses, S.	Argentina/Latin America	State-community collaborative strategies to enable the right to the city in Argentina.	Assisted self-help, housing policy, Argentina, social housing, right to the city.	Collaborative strategy between the state and the community enhanced housing provision in the intermediate city of Santa Fe in Argentina.		The study postulated that this approach can be a solution to housing shortages across the world and deserves to be further explored.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
22	Dohnke, J. et al	Chile/Latin America	Achieving a socio-spatial mix? Prospects and limitations of social housing policy in Santiago de Chile.	Housing policy, affordable housing, housing market, Chile, segregation	Uneven social-spatial development leading to exclusion of the urban poor because of the dynamics of real estate investments and government housing policies in Chile.	Demand-based housing subsidies for the urban poor will consequent in a less socially mixed development where gentrification sets in, and the urban poor are displaced to outer-cities	
23	Zhang, C., & Man, J.	China/Asia	Examining job accessibility of the urban poor by urban metro and bus: A case study of Beijing.	Accessibility, job-housing mismatch, urban metro, affordable housing, Beijing.	Urban poor mostly depend on weak public transport systems which will usually prolong travel time of users.	Recent affordable housing locations are farther from city centres than earlier ones, suggesting that recent affordable housing sites are mostly located in farther outer cities	
24	Boyd, J. et al	Canada/North America	Supportive housing and surveillance.	Supportive housing, addiction and mental health, surveillance, social control, policing	The study adopted observation methodology to capture unadulterated data.	Study concluded that the excessive focus on security exposes the supportive housing to social control, limiting the rights of the occupiers of the affordable housing.	
25	Ram, P., & Needham, B.	India/Asia	The provision of affordable housing in India: Are commercial developers interested?	Affordable housing, supply constraints, India, market enabling strategies, commercial developers	The study demonstrated that private developers are willing and interested in affordable housing supply but require government support in policies that relieve these constraints.		Government should make policies that can entice private developers into investing in affordable housing development
26	Ahmed, I.	Vietnam/Asia	A Diagnosis of Urban Poor Housing in Vietnam	Vietnam, urban housing, urban poor, housing diagnosis.	An insightful documentation of the housing situation of the urban poor in Vietnam as it captured empirical data that included responses from the urban poor.	The study highlighted the current challenges in finding a common ground for housing affordability and sustainability in Vietnam.	
27	Amoako, C. & Boamah, E.F	Ghana/Africa	Build as you earn and learn: informal urbanism and incremental housing financing in Kumasi, Ghana.	Collective financing, housing financing, informal urbanism, incremental housing, Kumasi.	Financing urban informal housing in third world countries can be less complex if formal planning agencies are willing to consider non-conventional financing approaches as innovative, dynamic, and flexible responses of the urban poor to the difficult formal urban planning and housing financing requirements.		Formal planning and financing institutions should make efforts to understand the financing approaches of the urban poor to inform policies that are inclusive of the urban poor and considerate of their socioeconomic conditions towards a realistic solution to sustainable affordable housing provision.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
28	Johar, N.	India/Asia	Community Participation: A Cementing Process, Theorizing Various Dimensions and Approaches.	Community participation, slums, JNNURM, RAY, urban poor	Active involvement of affordable housing beneficiaries is essential to the success and sustainability of affordable housing provision.		Effective participatory approach will surpass just the inclusion of community labour and will include regeneration, where the community is empowered to be able to identify problems and solve it in the most suitable ways for their needs and capacities.
29	Mishra, A.K., & Mohanty, P.K	Asia-pacific	Urban policy in Asia Pacific countries: a case for inclusionary zoning and housing.	Inclusionary zoning, affordable housing, exclusionary urbanisation, planned urban development urbanisation, planned urban development	The major constraint to affordable housing provision for the urban poor is the lack of available legalized urban land at reasonable distances from job opportunities.		Policies should be implemented based on geographical and municipal differences, private developers should incentivized by government into inclusionary housing development, the inclusionary housing/zoning strategies should be rooted in urban land and housing market processes and the processes should generally capture both efficiency and equity objectives.
30	Shirgaokar, M.A.R	India/Asia	Predictors of household exposure to monsoon rain hazards in informal settlements.	India, Kolkata, informal settlement, slum, extensive risk, adaptation	Exposure to significant risk in informal settlements vary by income level, quality of building, housing location among others.		Disaster alleviation interventions should be targeted at the poorest urban poor while enhancing the provision of infrastructure and security of tenure to encourage permanent housing construction.
31	Sliwa, M.	Colombia/Latin America	Master plans and urban ecosystems: How the poor transform land-use from rigid into organic- A case from Colombia.	Land-use planning, informality, social housing, urban poor, livelihood, Latin America.	Focus of housing suppliers on housing quantity with no considerations for accessibility of location, connectivity, and functionality of housing negatively impacts on residents' income-generating opportunities and socio-economic mobility.	Dwellers of the examined social housing converted their housing to make room for income-generating activities consequent upon the far distance from city centres.	Urgent revision of the strict zoning laws that control these government social housing into more flexible regulations that enable mixed land-uses in Latin America.
32	Begum, H. et al	Bangladesh/Asia	Assisted Community Housing Initiative in Dhaka: Rethinking role of NGOs in affordable housing development.	Affordable housing, community housing, slum, NGOs, Dhaka	Assisted community housing is an effective approach for sustainable affordable housing development in developing countries.		Policy interventions to support and enable NGO-community partnership as an approach towards sustainable affordable housing.
33	De Duren, N.R.L	Latin America	Why there? Developers' rationale for building social housing in the urban periphery in Latin America.		It is unfair for housing policies to force the urban poor to choose between access to housing and access to income-generating opportunities of the urban centres.	Property market works to the tune of institutional provisions.	Housing problems should be examined from all necessary angles as one-sided analyses would usually result in incorrect suppositions on policy actions.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
34	Desmond, M.	America	Heavy is the house: Rent burden among the American urban poor.		The urban poor in America continues to get poorer while housing costs continue to rise.	Affordable housing for the urban poor is also a problem in developed countries and requires more research attention.	
35	Feather, C.	International	Municipal finance for housing: local government approaches to financing housing in cities.	Municipal finance, local government, affordable housing, fiscal policy, cities, capacity-building.	Districts should have a robust understanding of the housing conditions within the district, and this should inform a realistic and pragmatic housing provision strategy for the municipality.	A documentation of alternative financial strategies available to local governments to achieve inclusive and sustainable urban development in their municipalities.	
36	Shirgaokar, M. & Rumbach, A.	India/Asia	Investigating housing tenures beyond homeownership: a study of informal settlements in Kolkata, India.	Housing choice, housing policy, housing tenure, India, informality, slum upgrading	There is a growing majority opinion that other forms of housing tenure may benefit the urban poor more than homeownership.	Leasing or renting favours new migrants and large households more than homeownership.	Policies should support other forms of housing tenures as homeownership is not always affordable.
37	Shrestha, S.B., & Taniguchi, O.	Nepal/Asia	A Holistic Approach for Providing Affordable Housing to the Urban Poor of Nepal.	Nepal, holistic approach, affordable housing, squatter settlement, urban poor.	Housing the urban poor is a complex problem across the world.	Providing affordable housing for the urban poor requires a holistic approach with active collaborations of public organizations, private organizations, and the people.	An innovative conjunction of both public-private partnership and participatory approach to achieve sustainable affordable housing.
38	Amin, N.N	Malaysia/Asia	Housing Design for Urban Poor in Kuala Lumpur: A Literature Review.		It is essential for housing to be adequately comfortable for its users.	Most low-income housing in Malaysia may be deficient in design which impacts on users' satisfaction.	Housing design directly impacts on users' satisfaction, thus, important elements such as safety, privacy, space arrangement, layout planning, local climate, culture, and social integration should be factored into housing design.
39	Feather, C.	Korea/Asia	The Two Million Housing Drive in Korea.	Korea, construction, developing countries, real-estate, public-private partnership, housing deficit.	The study investigated The Two Million Housing Drive project in Korea.	The program was effective in enhancing the urban poor's access to affordable housing through industrialized mass housing initiative and subsequently supported demand-side housing remedies such as home loan subsidization and others.	Policies should integrate both supply-side and demand-side solutions to enable the achievement of sustainable affordable housing for the urban poor and vulnerable.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
40	Mc Cawley, D.G	Chile/Latin America	Law and Inclusive Urban Development: Lessons from Chile's Enabling Markets Housing Policy Regime.		The approach is successful in AH provision but has a major failure.	This strategy contributes to urban exclusion and limits inclusionary housing.	
41	Todd, G., et al	Tanzania/Africa	City Profile: Dar es Salaam, Tanzania.	Urban, planning, urbanization, neighbourhoods, land policy, settlements	The dynamics of the former Tanzanian capital city may be affected by the total relocation of government offices to Dodoma- the present Tanzanian capital	A major gap between policies and what is on ground regarding city planning and housing.	Government should make realistic plans for policy implementation and create databases that will enable future planning.
42	Basile, P. & Ehlenz, M.	International	Examining responses to informality in the Global South: A framework for community land trusts and informal settlements.	Informality, community land trusts, global south, land rights, informal settlements, affordable housing	Community land trusts (CLT) is an innovative bottom-up approach to affordable housing provision- as a response to informality challenges in the global south.	The strengths and limitations of this strategy were analysed to generate a framework.	
43	Gupta, N. & Kavita	India/Asia	Slum Rehabilitation Through Public Housing Schemes in India: A Case of Chandigarh.	Chandigarh, housing schemes, India, public housing, slum rehabilitation, urban poor	It is impossible to achieve sustainable development without ensuring that human settlements are sustainable.	Provisions of housing adequacy in the Indian housing policies are totally ignored in the sampled colonies.	Government should work to eliminate the identified gaps across the conception, planning and implementation of policies while NGOs are encouraged to partner with government to proactively address housing challenges in Chandigarh.
44	Malik, S. et al	India/Asia	Developing occupant archetypes within urban low-income housing: A case study in Mumbai, India.	Occupant archetype, behaviour, energy use, thermal comfort, low-income housing.	Three archetypes among the occupants- Indifferent Consumers, Considerate Savers and Conscious Conventional;	Findings established the challenges that are likely to surface when housing development schemes are not inclusive of the beneficiaries.	Building designs should be occupant-centric with due considerations for their socio-economic characteristics, ability to adapt and their energy consumption requirements and habits.
45	Rahman, M.A &Ley, A.	Bangladesh/Asia	Micro-credit vs. Group savings-different pathways to promote affordable housing improvements in urban Bangladesh.	Housing finance, micro-credit, group savings, urban poverty, Bangladesh	There is an urgent need for alternative means of funding affordable housing.	The urban poor in Bangladesh use micro-credits for housing improvement, housing activities and for other livelihood supports on the one hand and group savings program supported by international agencies for housing development on the other hand.	The two systems of microfinance and group savings can be combined so that individual limitations are overcome and the strengths of both programs can be maximized.

S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
46	Yu, S. et al	China/Asia	An assessment of urban park access using house-level data in urban China: Through the lens of social equity.	Public park, green space, accessibility, spatial differentiation, social justice, environmental equity.	Social equity is an innovative contribution to affordable housing discussion which prior had mostly focused on household income, transportation cost, housing accessibility and housing equality.	Urban redevelopment projects through the mass affordable housing projects displace the urban poor out of inner cities to locations in outer cities, limiting their access to urban parks and green facilities.	
47	Agarwal, S. et al	India/Asia	Affordable housing in urban India: a review of critical success factors (CSFs) addressing housing adequacy with affordability for the urban poor. Gendered dispossession and women's changing poverty by slum/squatter redevelopment projects: A case study from Turkey.	Sustainability, housing, critical success factors, affordability, adequacy, urban poor.	The factors of housing adequacy include but not limited to, proximity to source of income, operation costs of housing, maintenance costs of housing and other diverse expenses.	The urban poor considers housing adequacy as much as, if not higher than housing cost.	For housing to be sustainable and affordable, these factors must be considered in housing provision.
48	Borsuk, I.	Turkey/Europe		Poverty, gender, slums, urban development, dispossession.	When transition from informal to formal property causes gender, racial and marriage related issues in the land market, it is no longer empowering women's right.	Such redevelopment projects expose women to dispossession and displacement to outer cities; limiting their access to income-generating opportunities, city services, and enhancing social exclusion	
49	Mausio, A.	Fiji/Oceania/(Asia)	Spectre of neoliberal gentrification in Fiji: the price Suva's poor must pay.	Gentrification, marginalisation, neoliberal urbanism, revanchist cities, urban housing crisis.	Urban housing unaffordability are pronounced in Suva city areas in Fiji as a result of economies of scale and the limitations in Fiji's land tenure system.		Levying wealth tax on emergent asset class like corporate realtors, increasing the allocation for public housing in the budget, increasing the annual subsidies for public housing to de-commodify affordable housing.
50	Perera, U. & Lee, P.	England/Europe	A relational lens to understand housing affordability in the 21st Century.	Housing affordability, 21st century housing context, Giddens' theory of structuration, new settlements in England.	Housing affordability is beyond household income and housing cost.	Housing affordability is beyond the intrinsic rental or housing prices and household income but also involves complex household motivations and how households' trade-off these motivations with their housing costs.	The study establishes the relevance of inclusive governance and the urgent need for dynamic housing policies for sustainable affordable housing provision in a developed economy.
51	Jeetika Malik et al	Pakistan/Asia	Investigation of informal housing challenges and issues: experiences from slum and squatter of Lahore.	Squatters, slums, urban poor, informal housing, Lahore, Pakistan.	The growth of informal settlements is a result of poor governance, disparity in infrastructure, land issues, social issues, limited community participation and vulnerable living conditions.		Affordable housing challenges require an in-depth empirical study of the living conditions of the urban poor for acceptable spatial and sequential resolutions.



S/N	Author(s)	Country/Region	Title	Study scope/keywords	Study highlights	Findings	Recommendations/solutions
52	Muniappa, M.	India/Asia	Housing policy research in India: a scoping review and thematic analysis.	India, thematic analysis, housing policy, scoping review, housing research.	Past literature focused on supply-side strategies for affordable housing provision with an apparent lacuna in demand-side strategies for affordable housing provision.	Housing discussion in India focused on the emergence of housing markets and government's roles in enabling it with less attention on the philosophy that originated it.	The need for balance in demand and supply oriented investigations and remedies in AH discussions.

### **2.13 Chapter summary**

This chapter clearly provides a picture of scholarly discussions on affordable housing provision for the urban poor. The chapter displayed the temporal and geospatial distribution of past affordable housing studies as well as methodologies adopted by past studies. The chapter critically reviewed relevant theories and literature related to the study aim. It disintegrated HSVC into its three main components (housing finance, housing construction and land acquisition) and this enabled a detailed review of literature on each component, to identify and understand the trend in literature, highlight the AH provision successes as well limitations recorded by different economies, cluster the ways forward in different economies as recommended in literature and lastly, successfully formulate a conceptual framework for effective affordable housing provision approach in developing economies, based on literature. The following chapter presents the methodology deployed to address the research objectives.

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## CHAPTER 3: RESEARCH METHODOLOGY <sup>2</sup>

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### 3.1 Introduction

In the previous chapter, related literature were extensively reviewed and discussed, relevant theories were described and conceptual frameworks were proposed. This chapter presents the methodology adopted to achieve the identified aim and objectives of this study. This section begins with the research paradigm or worldview guiding the research, then presents the literature review, data collection process, the research design, the research strategy and the research methods. The connection between the research paradigm, research design and research methods are described and justified in this chapter, thereby establishing the link between the ontology, epistemology, axiology and methodology of this study. Further, a detailed analysis of the mode of data collection and the statistical tools that would be employed in the analysis of the gathered data in the course of this research is presented in this section. The methodology process would be discussed in two main categories. The first aspect would cover the data collection techniques such as the instrument of data collection, mode of data collection, and sampling technique while the second aspect would focus on data processing methods of collated data.

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<sup>2</sup> This chapter is largely based on the following publications:

- Akinwande, T., & Hui, E. C. (2022). Housing supply value chain in relation to housing the urban poor. *Habitat International*, 130, 102687. <https://doi.org/10.1016/j.habitatint.2022.102687>
- Akinwande, T., & Hui, E. C. M. (2023). Effective affordable housing provision in developing economies: An evaluation of expert opinion. *Sustainable Development*, 1 - 6. <https://doi.org/10.1002/sd.2702>
- Akinwande, T., Hui, E., & Dekker, K. (2024). Effective affordable housing strategies for the urban poor in Nigeria. *World Development*, 173 (2024) 106438. <https://doi.org/10.1016/j.worlddev.2023.106438>
- Akinwande, T., Hui, E., & Dekker, K. (2023). Housing Strategies of the Urban poor in Nigeria in relation to Suitable Affordable Housing Finance. Paper presented at PRSC, Hong Kong. <https://scholar.google.com/scholar?oi=bibs&hl=en&cluster=18312211855079016968>
- Akinwande, T., Hui, E. (2023). Expert solution to affordable housing finance challenges in developing economies. *Paper presented at International Research Conference, 24<sup>th</sup> – 25<sup>th</sup>, July 2023. London, United Kingdom.* [https://attachments.waset.org/23/papers/23GB070133\[4\].pdf](https://attachments.waset.org/23/papers/23GB070133[4].pdf)

The research methods covers the two phases of the research (qualitative and quantitative) and outlines the research population, sample size, sample unit, sampling strategy and data collection instruments. The reliability and validity test for the instruments used are discussed. It concludes with a brief summary of the chapter.

### **3.2 Research paradigm**

A research paradigm, otherwise referred to as the research worldview, theoretical lens refer to the basic set of beliefs that guide research actions (Creswell, 2009; Doyle et al., 2009). A research paradigm, according to Doyle et al is a worldview that is defined by distinct elements including epistemology (how we know what we know), ontology (nature of reality), axiology (values) and methodology (the process of research). The research paradigm guides the type of research design that is adopted for a research study. Creswell identifies four research paradigms: post-positivism, social constructivism, advocacy/participatory and pragmatism. This thesis is based on a pragmatic paradigm which arises out of actions, situations and consequences rather than antecedent conditions (Creswell, 2009). The pragmatic paradigm is concerned with applications and solutions to problems: it emphasizes the research problems and uses all approaches available to understand the problem. This could mean adopting a pluralistic approach to deriving knowledge, which in turn necessitates the use of multiple research instruments for this qualitative study (Begley, 1996). This research is ethnographic in approach as it interprets social realities and therefore based on the pragmatic paradigm (Avgousti, 2013; Creswell, 2009; Holloway, 1997; Holloway et al., 2010). The study attempts to understand the housing situations and housing realities of the urban poor. The urban poor's responses and actions to real life housing peculiarities and conditions, as well as the consequences of their actions. An hypothetical example is slumnization which is the urban poor's response to housing unaffordability with consequences such as poor living conditions among others.

### **3.3 Research design**

The outline of procedures and plans that specifies the researcher's decisions and guides the research from presumptions to methodologies and techniques deployed in the investigations is termed research design. It covers the determination of study scope, the case study, the tools for collection of data, data analysis and the reporting of findings (Creswell, 2009; Johnson et al., 2007). The research design for a study is determined by the problem statement and the audience of the research. Research design is also influenced by the researcher's experience and his research paradigm (Creswell, 2009). According to (Creswell, 2009), there are quantitative, qualitative and the mixed method designs that can be deployed in a pragmatic research paradigm. For this study, the qualitative design was employed because it requires data collection from slum dwellers who usually cannot understand questionnaires. Semi-structured interviews were better options to gather rich data, allowing respondents to speak freely without the confines of questionnaires. The data in this study were quantitated to strengthen data analysis and enhance dependability of results.

#### **3.3.1 Mixed methods design**

The mixed method design is an approach to investigations that integrates both qualitative and quantitative designs in collection of data (e.g. interviews, observations and questionnaires etc.), data analysis techniques (e.g. ethnography, experiments etc.), and philosophy (axiology, epistemology and ontology) towards achieving a greater research strength (Creswell, 2009; Creswell et al., 2007; Creswell & Tashakkori, 2007; Johnson et al., 2007; Onwuegbuzie et al., 2009). Johnson et al. (2007) described mixed method as the third research design that combines the other two research designs being the qualitative and quantitative designs. The mixed method design is scientifically rigorous, it combines core elements of qualitative and quantitative designs while these components are deployed successively to enable better understanding of the research phenomenon (Creswell, 2009; Creswell et al., 2007; Creswell &

Tashakkori, 2007; Johnson et al., 2007; Onwuegbuzie et al., 2009). Though criticised that it is impossible to mix the ontology and epistemology of qualitative and quantitative research designs, literature validates mixed method design as a means of strengthening research (Creswell, 2009; Doyle et al., 2009; Johnson, 2007; Johnson et al., 2007; Onwuegbuzie et al., 2009).

### **3.3.2 Qualitative design**

In qualitative design the research enquiries usually emanate in the process of data collection because it is designed to investigate meanings and interpretations that a group of people or individuals give to a social problem (Creswell, 2009). It is premised upon the philosophy that multiple-constructed realities abound (Oyalowo, 2018). Data analysis for qualitative design is done inductively where general themes are drawn from responses towards generating grounded theories (Creswell, 2009; Onwuegbuzie et al., 2009). It is required of the researcher to make sense and meaning from data interpretation, then present results in robust details that retain the original contexts of the respondents. It allows creativity and dynamic study of processes to be retained in research data analysis (Lee, 1991; Onwuegbuzie et al., 2009).

This thesis investigates a practical problem: effective affordable housing provision for the urban poor in developing economies, making the choice of qualitative design justified by the pragmatic nature of the research problem. This permits answers to be discovered through various techniques; observation; interviews, focus group discussions and analysis of documentaries. Deploying the qualitative design enhanced access to the required robust data, giving room for the study to be as natural, in-depth, interactive and human-centred as possible (Clark et al., 1998; Finn et al., 2000). The qualitative research method is discovery-oriented and has capacities to provide extremely inventive dimensions to prevailing issues (Finn et al., 2000). Qualitative research is rigorous and systematic in structure and requires the data collection and analysis to be interacted and progressed together (Holloway, 1997; Holloway &

Wheeler, 1996), while the emerging results should be used to refine and reorganise the study as it progresses (Dawson, 2002). To eliminate the limitations of qualitative research, it is important to carry out investigations with more flexible tools, triangulate the methodologies and deploy computerised analytical tools (Finn et al., 2000).

### **3.4 Time horizon**

This refers to the research time dimension adopted in a study which can either be the longitudinal or the cross-sectional dimensions. These dimensions determine the duration, the types and the frequency of data that would be gathered in a study. While the longitudinal approach involves the collection of data over a period of time to investigate trends and patterns of occurrence, the cross-sectional horizon on the other hand entails data collection at a specific period. The cross-sectional time horizon was utilised in this research as it examines effective affordable housing provision approaches in developing economies at a particular period. The cross-sectional time horizon adopted is favourable, considering the time limitations of a PhD study.

### **3.5 Research process**

#### **3.5.1 Extensive literature review**

A literature review is an evaluation of existing studies by scholars in a particular research field that provides a theoretical background in which new studies can make an inference (Chow & Barnsley, 2005; Tsai & Lydia Wen, 2005). The foundation of this study was built on an extensive literature review of studies in the domain of affordable housing. The review focused majorly on academic journals, conference reports, and doctoral theses. Other supporting documents include research reports from relevant institutions, textbooks and professional websites, and blogs from the internet. The reviews of literature provided the relevant information which was utilized in developing a background knowledge on AH, HSVC, the

HSVC key components, and the challenges of SAH provision for the urban poor. The theoretical basis of this study was drawn from the literature review and by extension enable the actualization of the aim and objectives of this study. The review was used specifically to achieve the following objectives; (a) investigate strategies utilized by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations; (b) examine how informal housing strategies of the urban poor can inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria; (c) ascertain experts' solutions to challenges in affordable land acquisition, affordable housing finance and affordable housing construction in Nigeria; (d) examine the nexus between demand-oriented housing solutions deduced from the urban poor's informal strategies and experts' housing solutions towards EAH provision in Nigeria, and (e) to consolidate findings to develop and propose a pragmatic framework (that envelopes both users and experts' solutions) for EAH provision for the urban poor in Nigeria. Lastly, the review informed the construction of interview and focus group discussion guides for data collection. Table 3.1 summarises the guidelines adopted for a scoping review conducted while Tables 3.2 and 3.3 outline the search algorithms deployed for the scoping and systematic reviews conducted within this study, respectively.

**Table 3.1:** The scoping review guidelines

Scope	Data sources	Retrieved information
<ul style="list-style-type: none"> <li>▪ Review duration: two months</li> <li>▪ Access to the full text</li> <li>▪ Articles written in English language</li> <li>▪ Academic publications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Scopus</li> <li>▪ Web of Science</li> </ul>	<ul style="list-style-type: none"> <li>▪ Titles, authors, years of publication</li> <li>▪ Keywords</li> <li>▪ Geospatial information</li> <li>▪ Methodologies</li> <li>▪ Study aims</li> <li>▪ Findings</li> <li>▪ Recommendations</li> <li>▪ Areas of future studies</li> </ul>



**Table 3.2:** Literature search algorithms for scoping review

S/N	Keywords
1	"Urban poor" AND "affordable housing" OR "housing policy" OR "housing research" OR "housing finance" OR "housing need" OR "housing deficit" OR "public housing" OR "social housing" OR "housing provision" OR "low-income housing" OR "housing"
2	"Urban poor" AND "urban reform" OR "urban development" OR "urban housing" OR "urban poverty"
3	"Urban poor" AND "informal settlement" OR "informal housing" OR "informal sector"
4	"Urban poor" AND "affordability" OR "informality" OR "sustainability"

**Table 3.3:** Keywords and results of systematic literature search

String	Results
TITLE-ABS-KEY	
STAGE 1	“urban poor” AND “housing finance” 34
STAGE 2	“urban poor” AND “housing construction” 15
STAGE 3	“urban poor” AND “land acquisition” 9
	58
Limited to past 10 years (2012 - 2022)	
STAGE 1	“urban poor” AND “housing finance” 12
STAGE 2	“urban poor” AND “housing construction” 3
STAGE 3	“urban poor” AND “land acquisition” 4
	19
Manual screening based on relevance of abstract to the study aim	17

### 3.5.2 Pilot study

Sequel to the development of the interview questions, a pilot survey was carried out for a comprehensive assessment of the logical flow and suitability of the questions towards achieving the research objectives before embarking on the actual field trip. Based on the peculiarity of AH study, the guides were reviewed by experts in the industry both academic and practitioners. The experts were identified based on their experience and knowledge on the topic of discussion and their availability (Owusu, 2020). The experts’ review aims to basically, evaluate the guide questions in terms of structure, coherence, the relevance of questions, clarity

and unambiguity of questions (Oyedele, 2010). The generated feedbacks from the experts were applied in revising the interview questions to improve its suitability for the actual field survey. Some of the reviews from the professionals suggested reconstruction of some statements, merging of some factors, removal of irrelevant questions, etc. to mention a few. All suggested comments were incorporated to enhance the quality and appropriateness of the final sets of interview questions and FGD guide questions deployed in this study.

### **3.5.3 Sample size and sample technique**

Sample sizing is a crucial part of statistical research which may involve the representation of an entire population with a selected fraction of that population (Lenth, 2001). According to Hakim et al. (2012), the larger population, the smaller the sample size and vice versa. Yamane (1967) on the contrary advocated that a simplified formula should determine the sampling size of any given population while in more recent years (Kothari, 2004) argued that a researcher should base his sample sizing on important factors like, population, sampling unit, financial requirements, sampling technique among others. Data collection for this study was grouped into three stages – (1) semi-structured interviews of the urban poor (demand aspect), (2) FGD with carefully selected housing experts (supply aspect) and (3) semi-structured interviews on carefully selected housing experts (supply aspect).

#### **3.5.3.1 Stratified random sampling technique**

To easily represent the characteristics of a larger population, the simple random technique is commonly used to make such statistical inferences in a manner that ensures strong internal validity and external validity while diminishing the effects of confounding variables (Stratton, 2021). The random sampling technique is most representative of the larger population, eliminating bias in research. However, it is difficult and time consuming to utilize random sampling for a very large population (Stratton, 2021). To overcome the challenges of random

sampling while retaining the objectivity it offers, the stratified random sampling can be utilized (Rahman et al., 2022). The stratified random sampling technique is an appropriate sampling tool when the researcher intends to ensure that the characteristics of the target population are represented proportionally in the sample (Rahman et al., 2022). The stratified random sampling requires the researcher to select items from the population, first based on classification and then based on random selection. The process involves breaking the population element down into segments that are homogenous and mutually exclusive. The simple random sampling is then deployed within the segments (Iliyasu & Etikan, 2021).

Based on this inference, this study targeted the 47 mapped out Lagos slums (Lagos-State-Government, 2021a, 2021b, 2021c) and purposively selected the five largest and most popular of these slums to ensure that population is representative of the Lagos slums (Akanle & Adejare, 2017; Thomson et al., 2021). The simple random technique was utilized on the 5 strata of Lagos largest slums to ensure that data are representative while limiting bias (Nguyen et al., 2021; Stephan, 1941; Wang & Cheng, 2020).

#### 3.5.3.2 Snowball and purposive sampling technique

Purposive sampling is a technique that is premised upon the researcher's perception in determining the sample size of the study. The researcher's choice of respondents can either be validated on theoretical, analytical, or logical grounds, dependent on what is best for the study (Sharma, 2017). The researcher has a responsibility to select the respondents that have capacities to provide information relevant to the subject matter, which usually depends on the research design (Tongco, 2007). A specific sample size for critical examinations that cannot be arrived at randomly will require the researcher to deploy the purposive sampling method. According to (Tongco, 2007), purposive sampling requires the following steps: 1) Identification of research problem 2) Determination of required information type 3) Definition

of characteristics of respondents 4) Identification of informants based on the predefined characteristics; 5) Consideration of the importance of reliability and competence in assessing potential respondents; 6) Adopting the data collection methods that are appropriate and 7) Acknowledging the limitations of purposive sampling in analysis and interpretation of data.

Based on this inference, experts were purposively sampled from four broad categories of professionals which included private and public developers of AH, finance institutions involved with AH financing, professionals in ministries related to lands and housing, and lastly university professors in the built environment. The recruitment was meticulously done to ensure that the focus group discussants and semi-structured interview respondents included a practitioners with wide enough spectrum experience within the three major components of housing supply value chain. Thus, the sampled respondents are representative of experts in the fields of housing construction, housing finance and land acquisition. Inclusion criteria were years of experience and willingness to participate in the research process.

Following the purposive sampling method deployed, the snowballing technique, otherwise called chain referral sampling (Etikan et al., 2016) was employed to discover additional potential resource persons for the FGD and semi-structured interviews. Expertise, knowledge and professional experience of respondents are pivotal to the validity of research findings (Abowitz & Toole, 2010), hence recruited resource persons have at least 10 years' experience in fields relevant to affordable housing provision. Hence, the non-probability sampling technique adopted for this study is snowball and purposive sampling techniques.

### **3.6 Data collection procedure**

#### **3.6.1 Development of interview questions**

The instruments of data collection adopted to solicit relevant information from respondents are semi-structured interviews and FGD. Focus Group Discussion (FGD) and semi-structured

interviews are considered appropriate for robust qualitative data collection and therefore were employed (Fontana & Frey, 1994; Morgan, 1993, 2002; Plummer-D'Amato, 2008; Tong et al., 2007). The variables used in the construct of the guide questions were extracted from the literature review conducted earlier (Malik et al., 2020; Satterthwaite et al., 2020; Zerbo et al., 2020). The research instruments developed for data collection of this study are in various forms due to the nature of the research. The first set of interview questions gathered responses from the urban poor while the other set of research instrument solicited expert responses from the FGD and semi-structured interview sessions. Finally, questionnaire was developed to validate the formulated frameworks. To gather appropriate data for the research objective from the urban poor, open ended questions such as the following were asked among many other questions:

- How long have you lived in this locality?
- Do you have a union or association in your vocation?
- If you answered YES to the question above, does your union/association assist members with housing needs e.g., rent payment, purchase of landed property, construction finance?
- If you answered YES to the question above, kindly briefly explain the nature of the assistance they offer.

Also, relevant data for this investigation were gathered from housing experts by asking the following open ended questions among many others:

- Is ownership the only way forward? Are there answers for the urban poor in leasing or renting?
- What are the challenges to expect with this and what is the way forward?
- How can the housing needs of the urban poor be incorporated to the housing supply value chain?

Ethical consideration is important to this study, in agreement with Arifin (2018); Newman et al. (2021); Pietilä et al. (2020) and (Steffen, 2016), thus ethical approval was sought before the field survey with reference number (HSEARS20231120005). High ethical standards such as ensuring that benefits outweigh risks for the proposed study, obtaining informed consent from all participants in the interviews and FGD, keeping all respondents anonymous, showing respect and honour to all participants, conducting appropriate investigation, data collection, data analysis and using study findings responsibly in a manner that does not harm or demean the participants were all considered in this study.

### **3.6.2 Data collection from the urban poor**

In accordance with the pragmatic philosophy, primary data was gathered from the users of AH who are typically the urban poor- slum dwellers in Lagos, Nigeria, for the first phase of data collection. It is crucial to thoroughly investigate the urban poor, settlers in the sampled slums who are mostly uneducated and may not adequately answer to questionnaires, while the questionnaire approach also limits respondents' expressions; thereby limiting depth of captured data (Choy, 2014; Islam et al., 2021; Tomaszewski et al., 2020). Thus, personal observation and semi-structured interviews were considered appropriate for this study (Alam, 2021; Khoa et al., 2023; Salvato & Corbetta, 2023; Tomaszewski et al., 2020; Tong et al., 2007). The choice of Lagos is premised upon the argument that it is the foremost urbanized city in Nigeria and Africa (Kasim et al., 2022; Lawanson et al., 2021; ObiefuNa et al., 2021; Xiao, 2021).

Validated and reliable information on Lagos slums was gathered from the Lagos State Urban Renewal Agency (LASURA). LASURA disclosed that there are over two hundred (200) identified slums in Lagos as of December 2021 (Lagos-State-Government, 2021b), agreeing with (Adesina-Uthman et al., 2022; Aliu et al., 2021; Ekpo, 2019; World-Health-Organisation, 2016). According to LASURA, 47 of these slums have been successfully mapped out as at the

date of data collection – June 2022 (Lagos-State-Government, 2021a, 2021b, 2021c; Owusu et al., 2008). Ensuring data sufficiency, 40 respondents were interviewed in this study; which is reasonable for qualitative investigations across sites that have relatively homogenous groups of people (Baker & Edwards, 2012; Galvin, 2015; Hagaman & Wutich, 2017; Vasileiou et al., 2018). The respondents were homogenous in terms of their housing conditions, housing solutions, casual employment, level of income among other characteristics. The homogeneity in the characteristics of the respondents suggests that their housing conditions are similar and therefore representative of the situation of Lagos slum dwellers. Thus, it was logical to limit respondents to maximum of 40 to avoid data saturation – a situation where additional data does not provide additional relevant information (Vasileiou et al., 2018).

The Lagos slums were partitioned accordingly into strata of the 47 mapped out slums to eliminate bias. The largest five of these slums in terms of land area and the most notable Lagos slums were purposively selected (Akanle & Adejare, 2017; Lagos-State-Government, 2021b; Thomson et al., 2021), and sampled to ensure robustness of data whilst operating within limited time for this study. Eight respondents were randomly selected street by street within each stratum to further eradicate bias and enhance accuracy of result (Galvin, 2015; Nguyen et al., 2021; Wang & Cheng, 2020). This makes a total of 40 interviewees across the population, ensuring that data are representative of Lagos slums (Vasileiou et al., 2018). Thus, stratified random sampling was deployed in this study to strengthen accuracy and avoid bias (Stephan, 1941).

To include respondents in this study, physical presence during field survey, living within the settlements, how long each respondent has lived and earned a living within the settlements and willingness to participate in the study were the criteria considered. Same inclusion criteria were used across the five localities. Data collection was done between June – July 2022. The sampled settlements are Makoko in Yaba local government (LG), Majidun in Ikorodu LG, Ojota (in

Ikeja LG, Alaba-rago/Alaba-international in Ojo LG and Abule-osun in Amuwo/Oriade LG areas of Lagos state. These locations were coded as A, B, C, D and E for effective analysis as presented in Table 1 and Table 3.

#### 3.6.2.1 Semi-structured interview

The semi-structured interview guide consists of comprehensive 15 open-ended questions based on literature review on informal housing strategies, informal housing conditions and socioeconomic characteristics of the urban poor across the world (Malik et al., 2020; Satterthwaite et al., 2020; Zerbo et al., 2020). Interview of local residents were administered face-to-face by 5 locally resident trilingual interviewers (Yoruba, English, and Pidgin), who understood the interview questions and communicated these in languages that best suit each respondent's expression. The study employed the Epicollect5 application for data collection, to ensure data reliability (Gnanasabai et al., 2021; Gohil et al., 2020; Harjana, 2018; Palakuru et al., 2022). Personal observation was also employed as a data collection technique in this study where necessary (Chang, 2023).

#### 3.6.3 Data collection from housing experts

For the second phase of data collection, the sample group selected consist of housing experts and practitioners engaged in all aspects of AH provision, especially relating to the three main levels of HSVC – housing finance, housing construction and land acquisition. Thus, the practitioners engaged in this study are experts from Lagos state valuation office, Lagos state lands regularisation directorate, Lagos state ministry of housing, Lagos state development property cooperation, private housing development companies (actively involved with AH provision), private mortgage bank companies (actively involved with AH financing), Federal Mortgage Bank of Nigeria and experienced academics in the built environment. For the semi-structured interviews and FGD, there is no identified comprehensive population to extract a



sample size from, hence a random sampling method cannot be utilized. Based on this situation, this study adopted a non – probability sampling technique. In this method, respondents are recruited for their professional knowledge and experience on the topic of discussion and also the level of their interest to participate in the survey (Zhao et al., 2013). These techniques have been adopted by researchers generally in the built environment (Darko, 2018; Owusu, 2020).

These two appropriate techniques were deployed to increase the population of respondents and strengthen study findings. Application of the most appropriate methodology plays a significant role in, towards the achievement of research aim and objectives (Darko et al., 2019). Specifically, within the built environment, where empirical analysis is mostly employed in conducting research, adopting the most suitable methodology is essential (Ameyaw & Chan, 2015). The input of experts or professionals in practice cannot be overemphasized in achieving significant research output, in alignment with (Abowitz & Toole, 2010) who advocated that soliciting knowledge from industry practitioners leads to a more robust research output and helps to validate research findings. Stemming from this, this study engaged industry professionals by soliciting their knowledge, experience, and perception of the current study to achieve a robust research finding.

#### 3.6.3.1 Focus group discussion

A focus group discussion can be described as a face-to-face interaction of crucial interest of social scientists and is becoming a popular research tool (Wilkinson, 1998). It can be regarded as a controlled group discussion, on the basis that the group interaction generated through discussion is of prior importance to this methodology (Kitzinger, 1995). Focus groups have been described as particularly useful at an early stage of research as a means for eliciting issues that participants think are relevant, which can then be used to inform the design of larger studies (Vaughn et al., 1996). The participants are usually within the range of 6 – 12, which are usually

drawn together particularly for research (Wilkinson, 1998). It is recommended that the groups should be relatively homogeneous, particularly concerning occupation and other binding factors (Carey & Smith, 1994). Focus groups can be used as adjuncts to other methods, primary research, and also, as a form of participatory research actions, to empower participants and promote social and political change. It is considered appropriate for investigating experts from various fields such as medicine, social sciences, building environment among others (Fontana & Frey, 1994; Morgan, 1993, 2002; Plummer-D'Amato, 2008; Tong et al., 2007). In this vein, this study employed the focus group discussion to elicit the opinion of experts towards effectively housing the urban poor.

For this aspect of the study, rigorously investigating housing professionals was essential so Focus Group Discussion (FGD) and semi-structured interview were considered appropriate and thus deployed for robust qualitative data collection (Fontana & Frey, 1994; Morgan, 1993, 2002; Plummer-D'Amato, 2008; Tong et al., 2007). There were seven experts actively in attendance of the FGD that lasted for 150 minutes – giving room for gathering robust and quality data within a reasonable time limit to avoid saturation and lack of concentration among discussants. The FGD was held with audio recording captured on zoom platform on the 2<sup>nd</sup> of August 2022 to overcome the challenge of distance and aid easy attendance and documentation of research data. The session was carefully co-moderated by a professor of housing in Nigeria along with the researcher to ensure consistency with research objectives (Hartman, 2004). In agreement with Plummer-D'Amato (2008) contributions from each participant are tagged (D1, D2, D3, D4, D5, D6, D7) accordingly and presented in Table 3.4 to enhance data clarity. To further eliminate researcher's bias and enhance traceability of research analysis, the raw transcripts, documents, audio, and video recordings from the FGD are available (Horsburgh, 2003; McDaniel & Bach, 1996).

### 3.6.3.2 Semi-structured interviews

To broaden the FGD data, source additional in-depth data, enhance data reliability and eliminate researcher biases, semi-structured interview was employed to support the FGD methodology in this study (Guion et al., 2011; Jonsen & Jehn, 2009; Natow, 2020). The respondents of these interviews include a housing finance expert from the Federal Mortgage Bank of Nigeria (FMBN), an experienced private property developer in Lagos, Nigeria, a professor of land management, a senior lecturer specialised in cooperative housing delivery research and lastly a professor of pro-poor housing and urban planning. There were five semi-structured interview sessions with each duration ranging from 50 to 90 minutes to capture rich data (Han et al., 2021). The interview sessions held between August and September 2022, one of which was conducted physically while the other four were conducted on zoom platform due to distance. Audio recordings were carefully captured for each of the interview sessions.

Contributions from each respondent are tagged accordingly to enable data clarity and traceability (McDaniel & Bach, 1996; Plummer-D'Amato, 2008). These codes are R1, R2, R3, R4 and R5 as presented in Table 3.4. To strengthen the reliability of findings from this study, raw transcripts and all other support documents from the interview sessions are available (Brink, 1993; Burnard, 1991; Horsburgh, 2003; McDaniel & Bach, 1996).

**Table 3.4:** Details of expert discussants and respondents

S/N	Date	Organisation	Years of experience	Address of organisation	Codes
1	2/8/2022	University of Lagos/Centre for housing (CHSD)	30 years	Research Management Office, University of Lagos, Akoka, Lagos.	Co-moderator
2		Lands Bureau	25 years	Land Regularisation Directorate, The Secretariat, Alausa, Ikeja, Lagos.	D1
3		Eximia Realty Company	29 years	62/64, Campbell Str, Lagos Island.	D2

S/N	Date	Organisation	Years of experience	Address of organisation	Codes
4		AG Mortgage Bank Plc.	20 years	96, Opebi Road, Ikeja, Lagos.	D3
5		Ministry of Housing	25 years	Lagos State Valuation office, State Secretariat, Alausa, Ikeja, Lagos.	D4
6		University of Lagos/Centre for housing (CHSD)	20 years	Centre for Housing and Sustainable Development, University of Lagos, Akoka, Lagos.	D5
7		Arctic Infrastructure	20 years	7, Ekololu Street, Surulere, Lagos.	D6
8		Lagos State Development Property Corporation (LSDPC)	10 years	2/4, Town Planning Way, Ilupeju, Lagos.	D7
Semi-structured interview					
1	9/8/2022	University of Lagos/Centre for housing (CHSD)	40 years	Deans Office, Faculty of Environmental Sciences, University of Lagos, Akoka, Lagos.	R1
2	10/8/2022	University of Lagos/Centre for housing (CHSD)	20 years	Centre for Housing and Sustainable Development, University of Lagos, Akoka, Lagos.	R2
3	10/8/2022	Realty Development Limited	25 years	Onigbongbo, Maryland, Lagos.	R3
4	14/8/2022	University of Lagos/Centre for housing (CHSD)	25 years	Centre for Housing and Sustainable Development, University of Lagos, Akoka, Lagos.	R4
5	21/9/2022	Federal mortgage bank of Nigeria (FMBN)	20 years	Federal Mortgage Bank, Plot 266, Cadastral AO, CBD, Abuja.	R5

### 3.7 Qualitative Data analysis Procedure

Data analysis procedure for qualitative studies differ from the technical approaches of quantitative studies, it is rather dynamic in nature, requiring the researcher to think and theorize; making use of intuitive, creative and inductive reasoning processes (Oyalowo, 2018). According to (Welsh, 2002), qualitative analysis comprise of three approaches namely; literal, interpretive and reflexive approaches. The use of exact grammatical structure and particular

language in data analysis is the focus of literal approach, while making sense of words and actions of respondents as well as adequately interpreting respondents' accounts are the focus of interpretive approach. The reflexive approach on the other hand is interested in researchers' creative contribution to the analysis process (Welsh, 2002). All three approaches are combined in this thesis, where the literal use of words are first identified and then carefully interpreted to sufficiently draw inferences from all accounts with the aid of CAQDAS.

### **3.7.1 Coding**

The process of coding or data categorization takes place at the beginning of the analysis procedure for qualitative studies (Elliott, 2018; Oyalowo, 2018). This process involves the compression of large volumes of raw information into groups of data with similarities and significant patterns that enable the researcher to easily draw inferences that can be useful as logical evidence (Oyalowo, 2018). The coding process for this study was done with NVivo 12 and it involves importing transcriptions (conversion of audio recordings to word documents) from semi-structured interviews and FGDs to an already created project file on NVivo.

Coding can either be done manually or by using Node command. Manual coding requires the researcher to read through the documents to allocate codes to words, concepts and items, creating themes as they emanate from the data (Oyalowo, 2018). Using the Node command for coding involves the use of pre-constructed coding schemes that are created with node explorer (Wong, 2008). To use node command on NVivo, the researcher will upload all concepts, words and items significant to the research on the node command file to showcase all the themes for the analysis (Oyalowo, 2018). The data collection approaches deployed in this study (semi-structured interviews and focus group discussion) provide respondents and discussants the liberty to freely express themselves in various ways, this ensured that robust data were gathered but also complicated handling of the data for analyses as there were no restrictions to use of words. All participants expressed themselves using multiple synonymous words, so much that

depending on CAQDAS alone could result into loss of data and partial data retrieval in agreement with (Welsh, 2002). To overcome this challenge, both manual and computer-assisted techniques were adopted in this study.

### **3.7.2 Content analysis**

To identify themes arising from qualitative data, the content analysis technique is often employed (Elo & Kyngäs, 2008). Content analysis method is applicable for analysing audio recordings, written documents as well pictorial documents systematically and objectively (Cole & Barrell, 1998). This technique can be employed to refine and compress large volumes of data into significant and concise data by taking counts of the frequency of major themes (Elo & Kyngäs, 2008; Fellows & Liu, 2021). For this study, this technique was utilised in analysing the data gathered through the sets of semi-structured interviews as well as analysing the data gathered from the focus group discussion.

### **3.8 Data analysis**

NVivo, a computer-assisted qualitative data analysis software (CAQDAS) was employed as the data analytical tool for this study. NVivo is recognized for its easy usage in interview transcription, descriptive analyses, and content analyses (Leech & Onwuegbuzie, 2011; Oyalowo et al., 2018b; Welsh, 2002; Wong, 2008). The NVivo software is popular for enhancing credibility and dependability of qualitative data (Bosit, 2003; Welsh, 2002; Wong, 2008). For phase 1 of this study, analyses from NVivo software were subjected to thematic analysis to identify common themes such as livelihood of respondents, housing types, housing tenure, source of income and others across the data. The identified themes were further subjected to a detailed content analysis so that no useful data was overlooked, and findings were presented in descriptive statistics.

For phase 2, data analyses from the NVivo software were broken down into three major subgroups to align with the conceptual framework for this study. These subgroups are housing construction, housing finance and land acquisition. Data were put through a thorough thematic analysis procedure to establish common themes within the responses of the experts. All identified themes were carefully examined through a content analysis process and all audio recordings were investigated thoroughly all over again. This is to ensure that all qualitative data are adequately captured, analyzed, and not decontextualized (Holloway & Wheeler, 1995, 1996), and also ensures creativity is retained (Lee, 1991). All research findings were presented in descriptive statistics.

### **3.8.1 Systematic thematic analysis**

The enquiries common across this investigation were coded and subjected to a meticulous systematic thematic analysis using the excel software. This involved listening to the audio recordings from all 40 respondents all over for multiple times and scanning the transcriptions several times to establish what exact response is given to each query without losing the context. Whilst carefully coding each response and allocating same to the appropriate strata (location) where the data was collected, excel was deployed in calculating the frequencies and percentages of responses from each strata (Akinwande & Hui, 2023), thus strengthening this qualitative study with quantitative advantages (Akinwande & Hui, 2023; Bree & Gallagher, 2016; Ose, 2016). Study findings were presented in Table 4.2 in chapter four of this thesis with descriptive statistics. These findings were further subjected to deductive content analysis to ascertain the implications of every theme on the major components of HSVC. Below is the formular utilized in this analysis:

$$[y = \left\{ \frac{x}{SR} \right\} * 100] \dots\dots\dots \text{Equation (3.1)}$$

Where: “y” represents percentage of responses per enquiry

“x” represents the total frequency of responses per enquiry across all locations (A+B+C+D+E), and

“ΣR” represents the summation of all respondents in this study (40)

For the second phase of this investigation, excel software was also employed to code and meticulously carry out a systematic thematic analysis of the common themes across all expert responses. To ascertain the housing solutions opined by our resource persons to be significant in tackling AH challenges across the entire HSVC, all similar responses were painstakingly grouped into themes of housing solutions. This process required listening to the audio recordings over and over as well as going over the transcriptions multiple times to ensure that all similar expert solutions are captured within the same theme. Whilst carefully clustering similar responses into thematic groups, the frequency of each theme of housing solution was calculated using excel; to strengthen the qualitative study by quantitating the data (Bree & Gallagher, 2016; Meyer & Avery, 2009; Ose, 2016). These computations were presented in descriptive statistics in Tables 6.1, 6.2, 6.3 and 7.1 in subsequent sections of this thesis showing frequencies and resultant percentages (%) of expert solutions which were carefully allocated to the appropriate theme on horizontal axis (rows), and appropriate sources either from a discussant (D) or a respondent (R) on the vertical axis (columns). The frequency of each theme is presented based on the number of its occurrence during the interactive discussions and interview sessions. The level of significance of each theme of housing solution is determined by the level of recurrence of the theme within the interactive FGD and the interview sessions. The percentages (%) of these themes of housing solutions were used to formulate a model showing the critical paths of expert solutions along the entire HSVC - housing construction, housing finance and land acquisition towards the achievement of EAH provision. The formular deployed in this systematic thematic analysis is presented below:



$$[y = \left\{ \frac{d+r}{sf} \right\} * 100] \dots\dots\dots \text{Equation (3.2)}$$

Where: “y” represents percentage of occurrence of the theme of expert solutions

“d” represents the frequency of the theme of expert solutions from a discussant (FGD)

“r” represents the frequency of the theme of expert solutions from a respondent (semi-structured interviews), and

“Σf” represents the summation of frequencies from a total of (d + r)

### **3.9 Credibility and dependability tests of qualitative data**

Qualitative analysis has been a major concern to scholars, with qualitative researchers being criticised for not establishing validity and reliability in their studies (Welsh, 2002). For a qualitative study credibility and dependability of data represent validity and reliability, which are terms applicable to quantitative studies (Leech & Onwuegbuzie, 2011; Wong, 2008). To establish credibility and dependability of gathered data, this study followed established guidelines in literature (Bosit, 2003; Bazeley, 2009; Wong, 2008) To enhance credibility and dependability of qualitative data, NVivo which is a CAQDAS (Computer-assisted qualitative data analysis software) was employed for data analysis.

#### **3.9.1 Computer-assisted qualitative data analysis software (CAQDAS)**

NVivo 12 is the CAQDAS deployed for the data analysis of this study. NVivo is recognized for its easy usage in interview transcription, descriptive analyses, and content analyses (Leech & Onwuegbuzie, 2011; Oyalowo et al., 2018b; Welsh, 2002; Wong, 2008). The NVivo software is popular for enhancing credibility and dependability of qualitative data (Bosit, 2003; Welsh, 2002; Wong, 2008). The CAQDAS program employed in this thesis assisted the researcher in collating themes from multiple data sources such as semi-structured interviews and FGD. CAQDAS does not do the research as qualitative data analysis requires the researcher to code data, identify patterns, and draw meanings by systematically thematizing contents;

utilizing CAQDAS however enhances accuracy while limiting tediousness in qualitative data organisation (Leech & Onwuegbuzie, 2011; Wong, 2008).

The researcher must be careful to manually interrogate the data in details to identify and interpret themes because synonymous words may exist across the data and also to avoid missing out key information or losing out on participants' contexts (Welsh, 2002). Thus, deploying NVivo 12 in the data analysis of this study strengthens the analysis, increases the rigour of this research and enhances credibility, accuracy and dependability of study findings. For example, electronic searches will eliminate human errors common to manual searches and generate more reliable results. Engaging the data electronically also allows the researcher to interrogate the data as one whole, enabling the researcher to gain an overall impression of the data.

### **3.9.2 Mean score ranking technique**

Mean score is a descriptive statistical tool that measures the central value for a probability distribution (Adegoriola, 2023; Ott & Longnecker, 2015; Wuni, 2022). It is commonly used by researchers as a measure of quantity to specify the average response from a group of assessors. It can be used to compute the relative significance of a variable among other variables, thereby determining the level of significance of such variable. It is calculated as the ratio of the summation of responses to the sum total of respondents (Adegoriola, 2023; Wuni, 2022). The mean score ranking was deployed to validate the framework for effective affordable housing provision generated in this study, similar to other recent studies (Adabre, 2021; Adegoriola, 2023; Darko, 2019; Wuni, 2022).

The mean score was calculated using the following formular:

$$\bar{x} = (\sum x_i) \div n \dots\dots\dots \text{Equation (3.3)}$$

Where  $\bar{x}$  denotes mean score

$\Sigma x_i$  is the summation of all responses (sample values) and,  
n represents the total number of respondents sampled.

### 3.9.3 Disclosure of researcher's background

The researcher is a male Nigerian of the Yoruba descent. He is a graduate of Estate management from the University of Lagos and now lectures in the same department but currently on doctoral study in the department of Building and Real estate, Hong Kong Polytechnic University, Hong Kong. His study focuses on developing a pragmatic framework for effective affordable housing provision for the urban poor in Nigeria. The researcher has no prior relationship with members of the FGD except the academic experts who are his senior colleagues in the University of Lagos. The academics investigated are experienced researchers who understand the implications of bias and thus have carefully avoided it. This frees the data collection and the subsequent data interpretation processes from any forms of researcher biases (Horsburgh, 2003; Mays & Pope, 2000; Pope et al., 2000).

### 3.9.4 Audit trail

To enhance the traceability of research analysis and to further eliminate researcher's bias, the raw transcripts, contact details of participants, documents, audio, and video recordings from the FGD and semi-structured interviews are all available (Horsburgh, 2003; McDaniel & Bach, 1996). Table 3.5 attempts to present the research methodology for this study in brief.

**Table 3.5:** Summary of research methodology

Data collection from the urban poor		Figures
Identified slums in Lagos, Nigeria		> 200
Mapped-out slums by LASURA		47
Stratified sampling	Strata of 5 largest & notable slums	
Random sampling	40 respondents	
Personal observation		
1. Semi-structured interview locations	Land area (hectares)	No of respondents
Makoko (A)	124.944	8

Majidun (B)	59.363	8
Ojota (C)	41.985	8
Alaba (D)	40.789	8
Abule-osun (E)	38.100	8
Total respondents		40
Data analyses	NVivo & Excel	
	Systematic thematic analysis	
	Content analysis	
	Deductive content analysis	
	Descriptive statistics	
Data collection from experts		
2. Focus Group Discussion		
Purposive sampling		12 resource persons
Number of active discussants		7
Duration of FGD		150 minutes
3. Semi-structured interview		
Purposive sampling		5 resource persons
Number of respondents		5
Duration of interviews		50 - 90 minutes each
Data analyses	NVivo & Excel	
	Systematic thematic analysis	
	Content analysis	
	Descriptive analysis	

### 3.10 Chapter summary

This chapter comprehensively presented the methodology deployed for this research. The research paradigm was discussed in detail and the pragmatist philosophy upon which this study is premised was justified. The research design was decomposed and the choice of qualitative research strategy with elements of mixed method was justified. The research process was elucidated, discussing the various data collection and analytical approaches. Lastly, the validation techniques deployed for this qualitative study were presented in this chapter. The next chapter presents an investigation of the informal housing strategies deployed by the urban poor to tackle their difficult housing situation.

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## CHAPTER 4: INFORMAL HOUSING STRATEGIES OF THE URBAN POOR IN NIGERIA <sup>3</sup>

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### 4.1 Introduction

The background to the study, extensive literature reviews, theories, conceptual framework, and methodology of research were discussed in previous chapters. The following sections in this thesis, beginning with this chapter are extensive reports on data analyses and findings in this study. This chapter addresses (objective 1) of this study to identify the strategies for suitable affordable housing provision within socioeconomic activities and housing characteristics of the urban poor. To achieve this objective, thematic analyses of identified socioeconomic activities, housing situation, housing characteristics and strategies of sampled the urban poor are carried out in this section. Data were group into themes and themes are further broken down into subthemes to capture all experiences on field, ensuring detailed content analyses. Findings from these analyses are discussed extensively in this chapter. The chapter closes with a chapter summary.

### 4.2 Description of respondents

In this section, the focus is to briefly describe the 40 respondents of the interview based on data collected during the field survey. The age of respondents ranges from 30 years old to 65 years old, 15 of which are females while 25 are males. The age range shows that respondents are adults and may have family to cater for within their limited income. Findings show that 45% of respondents have no education, 40% narrowly have elementary education while only 15% are fortunate to have secondary education.

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<sup>3</sup> This chapter is largely based on the following publications:

- Akinwande, T., Hui, E., & Dekker, K. (2024). Effective affordable housing strategies for the urban poor in Nigeria. *World Development*, 173 (2024) 106438. <https://doi.org/10.1016/j.worlddev.2023.106438>
- Akinwande, T., Hui, E., & Dekker, K. (2023). Housing Strategies of the Urban poor in Nigeria in relation to Suitable Affordable Housing Finance. Paper presented at PRSC, Hong Kong. <https://scholar.google.com/scholar?oi=bibs&hl=en&cluster=18312211855079016968>

Economic activities in the sampled settlements are generally casual employment where settlers engage in various vocations such as hairdressing, barbing, petty trading, tailoring, vulcanizing, laundry services, commercial bus driving, boat sailing, motorcycling among many others. Out of the 40 respondents across 5 settlements, 62.5% of respondents have lived in the location for 5 years and above, 27.5% have lived in the location for over 20 years, while only 10% of respondents have lived for less than 5 years in the settlements. This implies that 90% of respondents have lived and worked in these sampled locations for at least 5 years, they are therefore settlers who are knowledgeable about the sampled localities and can supply adequate data. These data are presented in Table 4.1.

**Table 4.1:** General descriptive information of respondents and settlements

Gender of respondents	Frequency	Percent (%)
M	25	62.5
F	15	37.5
Age range	30 – 65yrs	
Highest educational level		
No education	18	45
Primary education	16	40
Secondary education	6	15
Length of stay within settlements		
Over 20 years.	11	27.5
Over 5 years	25	62.5
Less than 5 years	4	10
Range of annual rental value in sampled settlements	N40,000 – 100,000 (\$60 - \$150)	
General economic activities in localities	Casual employment	

**Table 4.2:** Income level, housing activities and housing situations of respondents

Themes	Responses	Locations					Total(x)	y (%)
		A	B	C	D	E		
Weekly income level	I'm uncertain of my weekly income	4	5	4	4	3	20	50
	I earn less than 5,000 (< \$7.5) weekly	3	3	3	3	4	16	40
	I earn above 5,000 (> \$7.5) weekly			1	1	1	3	7.5
	I'm unwilling to disclose my income	1					1	2.5

Themes	Responses	Locations					Total(x)	y (%)
		A	B	C	D	E		
Nearness to places of work	I live and work within the neighbourhood	6	6	5	6	7	30	75
	Despite having a home far away, I stay back around			2			2	5
	I occasionally incur cost of transportation	1	1		1	1	4	10
	I always incur cost of transportation	1	1	1	1		4	10
Housing/Tenure types	I own and built my home			1	1	1	4	10
	I live in rental housing	7	7	6	7	6	33	82.5
	I share apartment with family/friend	1		1		1	3	7.5
Unions and their activities	I'm an active member of a trade union	7	7	7	6	8	35	87.5
	My union provides financial support	6	7	6	6	6	31	77.5
	My union provides no financial supports	1		1		2	4	10
	I do not belong to any trade unions	1	1	1	2		5	12.5
	The association I belonged to is now dissolved			1			1	2.5
Anticipated intervention from stakeholders	I desire financial intervention	2	4	5	6	2	19	47.5
	I desire housing construction intervention	3	2	2	2	3	12	30
	I desire assistance with my vocation	1	1	1		1	4	10
	I only look forward to divine intervention	2	1			2	5	12.5
	I desire change in the general economy	1		1	1	1	4	10
	I will be grateful for any forms of assistance		1		1		2	5

### 4.3 Sources of income and average income

A common element across all sampled settlements is that dwellers are not in a salary job where they earn monthly income, this may be because majority of the urban poor scarcely have education as evinced in Table 4.1. All respondents engage in vocations like petty-trading, meat butchering among many other activities where they make daily incomes. Only one respondent, who is middle-aged sand miner in Abule-osun, gave an unusual account that an organization regulates the regularity of his mining activities. In his explanation;

*“Like I said earlier, the employers have an association, which stipulates dates that are scheduled for their work, it is not done every day. Maybe it can be from Monday to Thursday, meaning a particular boat will go to get sand for about four or two times in a week.”*

Respondents mostly have no fixed daily wages, some days they earn no income at all. Artisans' daily income is a function of how many daily customers, subject to seasonal and economic fluctuations. When enquired about average daily income, many respondents disclosed their unfavourable experiences. A middle-aged male clothe brander in Alaba relayed that:

*“Due to the poor economic conditions in the country, I do not get customers as before again. For the past 5 months now, I have not got a single customer.”*

A similar opinion was expressed by an elderly man who sells meat at Araromi street of Majidun Ikorodu, where he relayed that:

*“It depends on market trends, and meat are sold in varied sizes and price, let's say I make like 5000 naira (about \$7.5) on favourable days which are very rare.”*

Another respondent, a female hairdresser in Ojota expressed similarly that:

*“The sales in this business are seasonal, currently we are in a favourable season. I make about 5000 naira (about \$7.5) within one week.”*

The interview revealed that about 50% of respondents cannot exactly pinpoint how much they make on daily basis; except they make conscious efforts to carefully document daily sales to arrive at an average income as shown in Table 4.2. When enquired on average number of clients per day and how much is charged per service, a female drink seller in Ikorodu explained that:

*“I cannot put a figure to it, but the fact is that, during a cold weather, I do not often get enough client compared to a warm weather when clients come in numbers.”*

Similarly, a laundry man in Makoko recounted his daily experiences, suggesting rigour in actualizing average daily income:

*“I charge around 300 to 350 naira (about \$0.5) per cloth. For complete suit, I charge around 1000 and 1200 naira (about \$1.5), but is just to iron cloth, the charges are 200 naira (about \$0.3), and for native (Top and trouser) is 500 naira (about \$0.75).”*

A food vendor in Ojota recounted similarly that:

*“Every swallow I sell have fixed price of 200 naira (about \$0.3), I do sometimes sell 300 naira (about \$0.5) own on demand. Meat and fish also start from 200 naira upward.”*



The interview further revealed that respondents struggle to earn a living but when able to earn, about 40% of them make less than 5,000 Naira (about \$7.5 USD) in a week. Recall the meat seller at Araromi who only makes about \$7.5 on rare occasions of favourable market and the hairdresser at Ojota who can only make \$7.5 in a week. A female respondent who sells provisions in Ojota disclosed that.

*“In a month I can earn like 5,000 naira (about \$7.5) because I use the money to eat and do other important things, which include catering for my children. At the end of the day, there would be nothing left to save from the money.”*

A female fashion designer in Alaba recounted that:

*“It depends on customers design requirement most times, they differ in cost. But on the average, my charges start from 2500 (about \$3.25) naira, but I usually don’t get many clothes to sew.”*

A particular male respondent who is a clothe brander in Alaba lamented about the economic situation of the country frustrating him from making any sales in the past five months:

*“Due to the poor economic conditions in the country, I do not get customers as before again. For the past 5 months now, I have not got a single customer.”*

A minority group of respondents claim to earn above 5000 Naira (\$7.5) in a week. A female provisions seller in Makoko and a male commercial boat driver in Alaba respectively recounted thus:

*“I sell sachet of plantain chips at 50-naira (about \$0.1), and a pack of 12 at a discounted price of 500 (about \$0.75) naira. On the average, I may make 15000 to 20000 (\$22.5 - \$30) naira profit in a week.”*

*“If we take passengers from here to Badagry, the charge is 2000 naira (about \$3) per person on the average. On a single trip, we can take up to 18 or 20 passengers.”*

The commercial boat sailor works along with other colleagues, the disclosed income is therefore a group income that will be shared among them.

#### **4.3.1 Discussion and implications of income level**

The source of income is a major determinant of income level and for the investigated class of urban poor, the source of income is casual employment as established by findings from the

field survey. The urban poor are generally involved in casual employment to earn a living, probably due to their level of education. Casual jobs are characterized by irregularity of income as a result of seasonal fluctuations and irregular number of customers. This finding is consistent with literature that irregular income is typical of the urban poor (Celhay & Gil, 2020; Mohamed et al., 2016; Soliman, 2012) which weakens their creditworthiness, limiting access to debt financing (Celhay & Gil, 2020; Rahman & Ley, 2020). It is also notable that casual vocations pay daily wages as established by the responses of the urban poor. Field survey established that of the sampled urban poor, 50% of respondents are uncertain of their daily income which suggests that the income is possibly low. It may be implied that 50% of respondents across all sampled settlements earn inconsistently and such earnings are low. Also, the interviews revealed that 40% of respondents earn below an average of \$7.5 in a week, i.e., below \$30 monthly. This suggests that 90% of the investigated urban poor struggle to earn a living and at best scenarios earn less than \$30 in a month. Annual rental values within the sampled informal settlements (as sourced from local agents) range from #40,000 to #100,000 (\$60 - \$150) compared to standard housing [1/2-bedroom(s) apartments] within the neighbouring cities with high annual market rents of #1,200,000 (\$1,800) (PropertyPro, 2023). Rental values within the slums are surprising, considering their deplorable states without basic amenities.

Literature provides that housing price will be deemed affordable if its within 30% of housing income (Cai & Lu, 2015; Chen et al., 2007; Kirkpatrick & Tarasuk, 2011), thus, from income perspective; affordable housing monthly price for this category of urban poor should be less than  $[30\% * \$30 = \$9]$ , to be affordable. Suitable affordable housing for the poorer urban poor will be free or near free housing. For those who may be lucky to earn income among them, housing should not exceed \$9 per month either as rent payment or repayment plan for homeownership depending on which of these tenures is found to be appropriate for the urban poor through inductive analysis explored subsequently in this study. This explains why many

government housing interventions get occupied by higher income earners while the actual urban poor gets displaced, causing the emergence of informal settlements in another location (Dovey et al., 2020; Huq & Miraftab, 2020). The investigated urban poor lack reliable income, thus suitable affordable housing for this category will be free or near free housing provision. Considering the range of rental values within the informal settlements (\$60 - \$150), the urban poor may be able to pay a little more for better housing with their current income level while they cannot afford market rent of (\$1800) (PropertyPro, 2023) in the neighbouring cities.

#### **4.4 Housing tenure, types, and situation**

Respondents were enquired about their housing types and conditions to establish the prevalent housing solutions the urban poor have adopted for their housing need. Field survey revealed that only four respondents (10%), have successfully saved up for homeownership in these settlements. They deployed self-help through incremental housing strategy to own a home, suggesting a strategy that can be explored towards suitable affordable housing construction.

An elderly male trader in Satellite town recounted that:

*“I live in my own house, and I built it from the profits and savings made from this provision store.”*

A middle-aged estate agent in Alaba responded similarly that:

*“I built my house from the savings I made from my business. Though it is not up to the standard I want yet, I managed to put up a room and parlour self-contain (1 bedroom apartment) there, and I hope to do more.”*

The field survey findings support literature that the urban poor mostly depend on rental housing for their housing needs as majority of respondents (82.5%) live in cheap rented apartments as demonstrated in their accounts. A middle-aged woman in Ojota and a middle-aged man in Makoko respectively recounted thus:

*“No, the house is not my own, I live in a rented apartment, and I pay 3,000 (about \$4.5) per month for house rent which is a face-me and face-you apartment, a single room (This is a single room in a typical cheap tenement building common in Nigeria and perhaps in other developing countries).”*

*“It is not my house; it is a rented apartment, face-me and face-you apartment. My landlord has not for once complained of me not paying house rent which is 5,000 naira (about \$7.5) per month.”*

Some of the respondents deployed self-help through alternative housing strategy to have shelter but hope for better housing in the future. In their accounts, they make do with what they have now because better housing is unaffordable. Two male respondents who are middle-aged artisans in Makoko and Alaba respectively reported painfully that:

*“It is just wooden house I constructed myself here, I’m only managing the space, it is not convenient for me.”*

*“I surely desire a better housing, and this will be the first time of me staying in a wooden house, and I know it will be the last time.”*

While some manage to pay for make-shift housing, a category of respondents cannot afford housing altogether, they resolved to shared-housing with family or in family housing. One barber in Majidun and another a launderer in Alaba recounted thus:

*“I took up residence with someone, and the person pays 5000 naira (about \$7.5) monthly. It is a single room.”*

*“I live in my brother’s house, so I do not pay rent, and I plan to move into my own apartment.”*

Some of the respondents raised concerns about the deplorable living conditions in their environment generally, two middle-aged men who live and work in Ojota disclosed bitterly thus:

*“Due to the high concentration of factories around here, we usually have constant power supply, but the dumpsite affects our water, as it is always polluted by factory wastes.”*

*“There is no clean water supply, coupled with the bad roads.”*

It is worthy of note that the urban poor have family and economic ties to their current location that should inform any housing interventions. A particular elderly fisherman in Makoko, when asked about his housing plans recounted as follows:

*“I am content with what I have, there is no place that can be better than this for me, because I was born here.”*

#### **4.4.1 Discussion and implications of housing types and tenure**

Debate about the appropriate housing tenure for the urban poor are popular in literature. Bangura and Lee (2021) advocated for homeownership, Edwards (2018); Gilbert (2003); Lonardon and Bolay (2016) for tenancy arrangements, while Kamruzzaman (2009); Shirgaokar and Rumbach (2018) argued in favour of multiformity in tenure arrangements for the urban poor. To ascertain the prevalent housing tenure among the urban poor in Nigeria, this study investigated respondents' current housing types and tenures. Field survey revealed that 82.5% of respondents live in cheap rented apartments. A further finding was that 7.5% of respondents put up with family or shared apartment because they cannot afford rent altogether. Field survey also revealed that only 10% of the sampled urban poor have homeownership. Study establishes that over 80% of the sampled urban poor live in rented apartments. This finding implies that rental housing is more favourable and suitable for the sampled urban poor in harmony with Kamruzzaman (2009), disagreeing with Bangura and Lee (2021) as only 10% of the urban poor have homeownership through incremental development. Study findings contradict Shirgaokar and Rumbach (2018): the majority of respondents (over 80%) currently live in cheap rented apartments, multiple forms of housing tenure may be unnecessary for this category of urban poor. Field survey result implies that daily/weekly rent is better for the urban poor because they are casually employed where they earn daily income. Accumulating daily income for monthly or annual rent payment may be cumbersome for the urban poor.

Field survey also revealed incremental housing among the respondents agreeing with Ferguson and Smets (2010) that incremental housing is a popular housing provision strategy in developing economies. This suggests that the urban poor can be empowered and enabled to help themselves with affordable housing construction. Owner-built incremental housing as a

realistic housing approach among the urban poor lessens housing provision burdens on government's shoulder in developing countries (Sanga & Lucian, 2016; Wainer et al., 2016) though, according to Amoako and Boamah (2017); Ferguson and Smets (2010) this strategy has downsides in lack of basic amenities, substandard housing among others but deliberate policies may be designed to enhance strengths while curtailing weaknesses of self-help incremental housing strategy. These findings will inform an effective approach to affordable housing provision for the urban poor anchored upon informal housing solutions already adopted by the urban poor, agreeing with Amoako and Boamah (2017) that government decision-making should be informed by approaches adopted by informal settlements.

#### **4.5 Transportation cost**

As demonstrated in Table 4.2, field survey investigated the daily cost of transportation to establish the proximity to workplaces among the urban poor and found that 80% of respondents either live at the same place they are casually employed or at a walking distance from their workplaces. Implying that majority of the urban poor earn their living within their living environment as demonstrated in their responses. A middle-aged female food vendor in Ikorodu relayed that:

*"I live and sell in this shop. I could not cope with the house rent I was paying in my former house, so I had to move in here."*

While a middle-aged hairdresser in Abule-osun recounted that:

*"I live on this street; my house is just a walking distance to my shop."*

Some respondents disclosed similarly that though they have a home at distant locations, they put up within the neighbourhood for the week in order to reduce travel cost. Two elderly male artisans in Alaba and Ikorodu respectively relayed thus:

*"I stay here during the week, and go home in Ogun State (a neighbouring state) every weekend, and I spend around #3000 (about \$4.5) to and from every weekend on transportation."*

*“To and from, I spend nothing less than 1000 naira (about \$1.5) every day. Sometimes I hang around here and go home at weekends. I joined a church here, where I temporarily stay anytime, I did not go home.”*

Some respondents relayed slightly differently, they can walk to and from their workplaces but may occasionally incur some transportation cost to reduce travel time. According to two middle-aged female respondents who work in Alaba and Ojota respectively:

*“Yes, it is at a walking distance, but I spend 200 naira (about \$0.3) to and from in some rare occasions.”*

*“It is arguably at a walking distance, because on occasions when I do not have money, I usually walk, though it is advisable to use commercial transport.”*

Findings show that 10% of respondents incur cost of transportation while travelling between home and work. Some of these respondents who are middle-aged artisans at Ikorodu and Abule-osun respectively recounted painfully that:

*“No, it is not at a walking distance. I spend ₦700 (about \$1) to and from work daily.”*

*“I have to take up to 3 different commercial buses on a single trip to get here, and a single trip costs 350 naira (about \$0.5), making it 700 naira (about \$1) to and from work.”*

#### **4.5.1 Discussion and implications of transportation cost**

To ascertain the actual housing cost (housing cost + transportation cost) in alignment with Coulombel (2018); Dewita et al. (2018); Saberi et al. (2017) and Yap (2016) which advocated that housing cost should be measured along with cost of transportation to establish housing affordability, this study measured the daily transportation cost incurred by the urban poor. The field survey revealed that 75% of the sampled urban poor do not incur transportation cost because they live and mostly earn their living within their informal settlement. Further findings are that some respondents (5%) avoid incurring transportation costs to their distant homes by staying back within the settlements where they earn income, while another 10% only occasionally incur minimal transportation cost. This implies that about 90% of the urban poor

earn their income within the settlements they live. This suggests economic ties to the location by respondents in consonance with literature (Kusrini et al., 2018; Wainer & Vale, 2021; Young, 2018). In the account of one respondent who is a fisherman in Makoko:

*“I am content with what I have, there is no place that can be better than this for me, because I was born here.”*

Field survey showed that only 10% of the sampled urban poor incur transportation cost on daily basis, of which their unhappiness about the situation suggests that they may be willing to take up housing at closer proximity to their working places. Finding corroborates literature by establishing that the sampled urban poor have economic ties to their locations. Finding amplifies scholarly standpoints that the urban poor should not be relocated, displaced nor forcefully evicted from their original locations during housing interventions. Their sources of income are tied to these locations and displacing them may result into downturns in their economic state (Desmond et al., 2015; Oldfield, 2004; Young, 2019), making the poor poorer. Study finding also align with Stephen Ezennia and Hoskara (2019) that housing affordability goes beyond household income and housing price. This finding is informative in determining appropriate location for affordable housing provision. Finding further suggests mixed housing strategy by the urban poor, they live in the same place they sell. This strategy can be explored to innovatively house the urban poor within the limited urban spaces while strengthening their economic condition.

#### **4.6 Associations and their activities**

This study investigated respondents' membership of any forms of unions, cooperative societies or savings' groups and found that 87.5% of respondents are members of one association or another within the settlements, over 77.5% of respondents enjoy financial and non-financial benefits of unionism, the various associations sometimes render financial assistance to



members from the periodic payment of dues by members, as evinced in Table 4.2. A middle-aged female fashion designer in Alaba disclosed thus:

*“The association that I belong to is a microfinance association that lends me money to do business and I return it.”*

While another middle-aged female respondent who works as a hairdresser also recounted similarly that:

*“The union usually assists members and if anyone has an occasion, they will assist, provided they were informed ahead.”*

Some of the respondents disclosed that whilst the association provides non-financial support, it provides them with a forum to meet other members where they are able to form cooperative societies. A middle-aged fashion designer in Ikorodu and a young barber in Makoko respectively disclosed as follows:

*“We do have an association of fashion designers, which I am a member of it. The association does not give anyone money to do anything. However, amongst ourselves, we set up a cooperative thrift.”*

*“I know someone whose shop got burnt, and we contributed money for the person, this is because he is an active member of the association.”*

Similarly, some respondents disclosed that though their vocations have no associations officially, they occasionally come together to address communal problems as relayed by male middle-aged trader of home appliances in Alaba market:

*“In cases of low cost of living, and we intend to increase our basic transaction values, or maybe money paid for some jobs is low, then you can see all workers come together to fight for what is right for them in terms of payment for jobs, and this usually happens when there is high cost of living. Once this is done, everyone goes back to minding their businesses, as there is no such thing as an organisation, association or regular meetings.”*

Some respondents (10%) disclosed lack of financial support from their association membership, especially in terms of housing provision. A female middle-aged hairdresser in Alaba, who happens to be from the eastern part of Nigeria (Igbo), and does not understand Yoruba language (the major language of South-western Nigeria) regretfully relayed thus:

*“We only contribute and have series of meetings together. They are even a Yoruba association for hairstylist whereby I do not understand their language, most times I get upset when they communicate in their language and I do not understand them. I intend to leave the association soon.”*

Another respondent, a male middle-aged forklift operator in Ojota similarly complained as follows:

*“The association does not give anyone money to do anything. But we do have regular contribution that is meant for the welfare of members, most especially when we have issues with police or any other unpleasant incidents. The money is usually sent to the Federal Capital Territory as a due from our State Chapter.”*

In addition, findings are that only 12.5% of the respondents are not members of any association, of which some of these respondents admitted that associations exist but they are yet to join.

One of the respondents a young male barber in Makoko disclosed thus:

*“There is an association, but I am not a member. I still intend joining later.”*

It is noteworthy that a particular association once existed but got dissolved due to mismanagement, as recounted by a male respondent in Alaba, an estate agent in his middle age:

*“We had one association before, but due to unmanageable dispute, the union was dissolved.”*

### Future housing plans

Further to the respondents membership of any associations, the urban poor disclosed their future housing plans. Some responses from two middle-aged women in food selling businesses at Majidun and Abule-osun respectively however showed they had no certain future housing plans in place:

*“In as much as I am able to feed myself and get basic needs from this business, I am okay. But if God provide a helper for me through this business in the future, I will be glad. But the most important for me now is ability to feed myself.”*

*“I live in a rented apartment and hope for a better housing. But whatever plan a person has, God is the only one that can perfect it. I just hope God will answer my prayers one day.”*

Another respondent, a middle-aged woman who sells provisions in Alaba, talked of being in debt while looking forward to assistance from any helper:

*“I hope for good sales to enable me to leave this area. I am in a lot of debts as we speak. I do not mind assistance from any helper.”*

Field survey revealed that personal savings and group savings are considered as a strategy towards better housing in the future by the urban poor as majority of respondents identified with this strategy as their future housing plan;

*“The only thing I am doing presently is joining a cooperative thrift where I can save up to do something tangible later in life.”*

*“I am into a cooperative thrift, and by November this year, I am expecting to collect some money which I intend to use to finance my building project.”*

*“I have been saving through thrift, and it has been sustaining me and my family, because there is no one that assists.”*

*“About my plans, there is a thrift collector around here, with whom I am saving some money.”*

### Anticipated interventions

As shown in Table 4.2, the field survey found that 47.5% of respondents look forward to financial interventions from government, non-governmental organizations (NGOs), private institutions and any interested stakeholders. One of the respondents, a middle-aged male motorcyclist in Majidun appealed thus:

*“The only way government and NGOs can help me is to give me money or provide a better job with good salary.”*

Another respondent who is a middle-aged laundryman in Alaba expressed his desires that:

*“The government and NGOs should assist me with finance to boost my business, have a bigger shop and buy all the necessary goods to make my work easier. So that I can earn more to survive and have a blissful life.”*

Field survey further revealed that 30% of the urban poor anticipate housing interventions in the area of affordable housing construction and government control to reduce cost of housing

construction. Two elderly male respondents in Ojota and Abule-osun respectively appealed that:

*“The government can please build low-cost housing estates, not these ones they advertise on TV to be cheap, but in the real sense are extremely expensive.”*

*“The government should help the poor, the poor are suffering, and I am one of them. They should please try to assist us like building houses at cheaper rates because houses in Lagos are too expensive.”*

Further finding from the field survey is that 10% of the respondents rather anticipates government support in their vocations. Some of the respondents, a young male barber in Makoko and a middle-aged male block-molder respectively appealed that:

*“If I can get my barbing salon fully equipped, I will be so glad. With that, I can become better financially.”*

*“Government can please help me with my work equipment - moulder, it will help increase my income.”*

Some respondents (12.5%) have given up their hopes for any interventions, they only rely on divine assistance. These urban poor recounted regrettably thus:

*“In all sincerity, government is not reliable. All my hopes are on God and not government. So many have already come around with lot of promises, all to no avail.”*

*“Relying on government or any human will only lead to disappointments. God is the only one we can rely on without any forms of disappointments.”*

Some other respondents (10%) anticipate interventions in the macroeconomic situation of the country, attracting foreign investors, housing rent control, drainage system and better roads. In some of their expressions;

*“Government should also implement policies that will encourage foreign investors to come in and assist people with their business ideas. Currently, government policies are either too strict or shambolic.”*

*“The first thing the government needs to do to help us is to repair all the roads that lead to this place as it is difficult for our visitors and customers to enter into the areas.”*

Lastly, some respondents (5%) are willing to accept any available help from any benevolent stakeholders interested in their plight and ready to help. In their pitiful expressions;

*“If anyone decides to help me today, why not? I would accept it for better future.”*

*“I appreciate anything at all they can do to support us for better housing, I am an old man.”*

#### **4.6.1 Discussion and implications of associations, future plans and expectations**

Savings groups and associations are avenues through which the urban poor informally tackle their housing finance challenges (Akinwande & Hui, 2022; Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012; Harvey, 2005a; Rahman & Ley, 2020; Tariq, 2012). Informed by literature, the study examined the presence of savings groups and associations in the informal settlements as well as the level of membership of these associations by the respondents. Enquiries were made about activities of the associations regarding housing finance and other financial assistances from the sampled members. Findings confirm that the sampled urban poor are members of one association or another through their various vocations. This is a positive discovery as unionism is usually a tool of solidarity (Alimahomed-Wilson, 2016; Keenan, 2015). Findings further establish that the various associations have savings groups that render financial help to members. This is an important finding that can be explored for suitable affordable housing finance, augmenting Amoako and Boamah (2017) who earlier advanced that government should device means of formalizing existent informal housing solutions of the slum dwellers rather than the usual hostility against them.

In addition to associations and savings groups, microcredit units within the informal sector are useful tools that can assist affordable housing financing. Earlier housing studies advocated that group savings perform better than microcredits in solving the challenges of informality in housing provision (Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012), while recent studies advance that combining both strategies will provide more effective affordable housing finance solutions (Akinwande & Hui, 2022; Harvey, 2005a; Rahman & Ley, 2020). Both strategies are already being employed by the urban poor in the sample informal settlements as

findings establish that majority of the urban poor engage these informal institutions to make contributions towards their better housing desires. These approaches can be merged, enhanced, formalised and institutionalised to achieve effective affordable housing finance. Some notable findings are that some respondents complained of not benefitting from the associations they belonged while a respondent, an estate agent in Alaba disclosed of a dissolved association on the grounds of mismanagement. This finding agrees with Sripanich et al. (2015) who opined that community savings' group and microfinance institutions are often subject to management issues. Institutionalising these community savings' groups and associations through deliberate government policies and legal frameworks may successfully eliminate the management challenges and enable their effective deliveries (Sripanich et al., 2015). Findings from this study amplifies Rahman and Ley (2020) who explored ways through which government, NGOs and other stakeholders supported livelihood of urban poor in Bangladesh through existent savings' group and microcredit institutions.

Field survey finding established that the urban poor anticipate financial assistance from government, NGOs, and other interested stakeholders. Meanwhile the urban poor are generally employed in vocations with opportunities for group savings and cooperative societies, suggesting a strategy of the urban poor that can be deliberately enhanced to improve their income-generating capacities in consonance with (Harvey, 2005a; Rahman & Ley, 2020). This finding suggests that housing finance is the topmost challenge of the sampled urban poor among the three components of housing supply value chain (HSVC) i.e., housing finance, housing construction and land acquisition. Finance facilities are usually inaccessible to the urban poor due to high debt-income ratio, the long repayment period, high cost of down payment, weak credit worthiness among others (Datta & Jones, 2001; Ferguson, 1999). This finding should inform policies that are incorporative of the finance strategies of the urban poor (Amoako & Boamah, 2017) as formal finance strategies may not be able to finance affordable

housing provision (Acheampong & Anokye, 2015; Ferguson & Smets, 2010; Service, 2012; Warnock & Warnock, 2008).

Findings reveal that the urban poor anticipate government interventions in affordable housing construction. This suggests the importance of housing construction solutions to the urban poor. To tackle the affordable housing construction issues, findings from this study provide potentials within the housing strategies of the urban poor that can enable effective affordable housing construction such as appropriate tenure, reasonable rental value and suitable location for affordable housing provision, alternative housing, shared housing as well as incremental housing strategy identified among the urban poor. It is necessary for government to incorporate these informal housing provision strategies of the urban poor into housing policies to eliminate the prevailing misalliance between affordable housing demand and supply (Yap, 2016).

It is worthy of mention that while some urban poor anticipate assistance in their various vocations, some of the sampled urban poor have completely lost hope in government for interventions while a few of the urban poor are willing to receive any forms of assistance just to survive. It can be implied from these findings that housing interventions should not be limited to housing provisions but should include urban regeneration, where the urban poor are empowered with free education, adult education, potable water, good roads and other social amenities as these are urgent needs among the sampled urban poor. Urban regeneration will be more effective when it is multifaceted, involving government, the NGOs, the community, private organisations, and all stakeholders. Such interventions should empower the communities by involving community leaders in decision-making and engaging dwellers as manpower and labour. All of these approaches will enhance the financial state of the urban poor whilst giving them senses of belonging and responsibility (Akinwande & Hui, 2022; Karuaihe & Wandschneider, 2018; Kironde, 1995; Yap, 2016). Past studies opine that the Nigerian government is already involved in affordable housing interventions but faced with

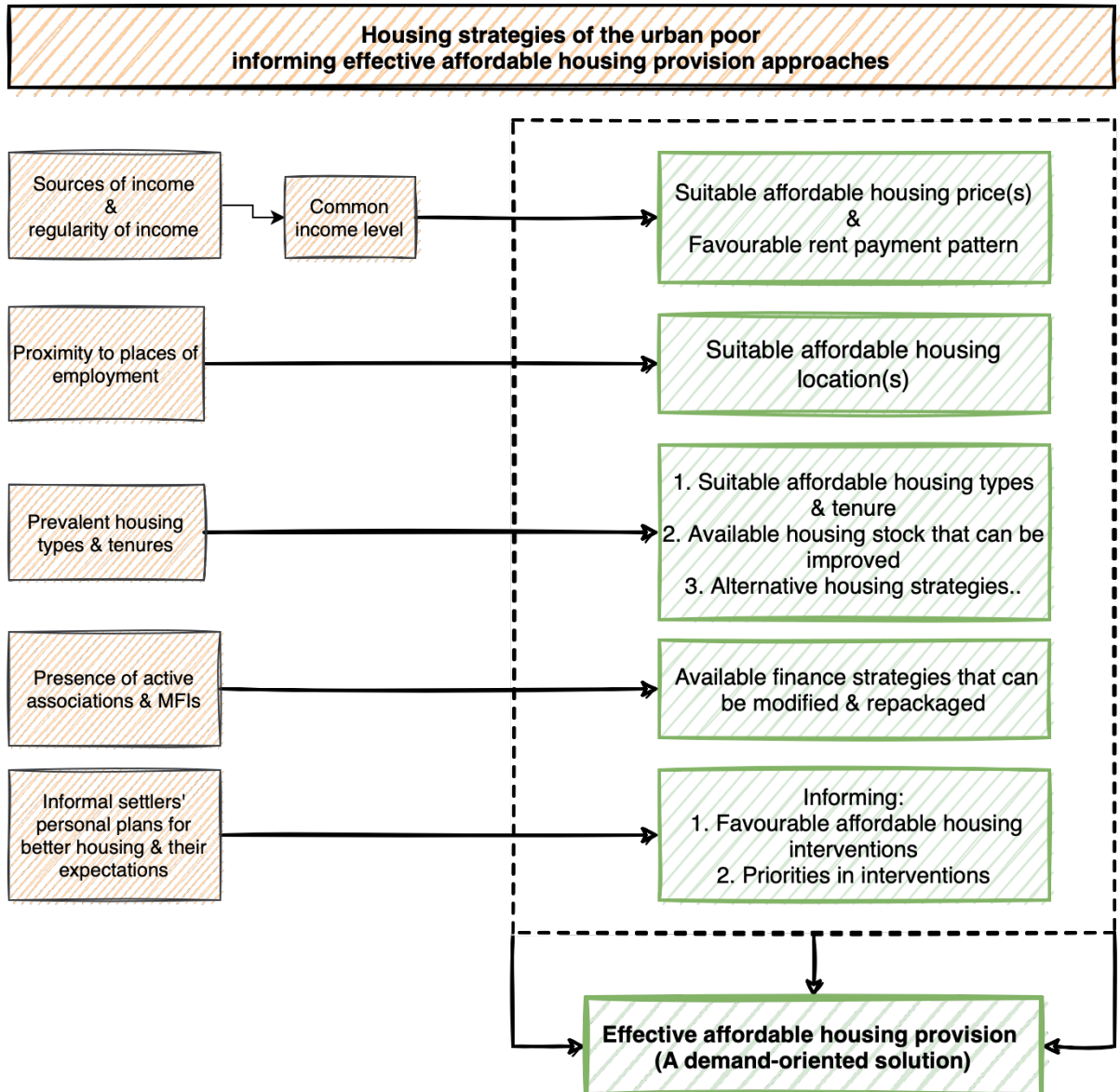
challenges such as inadequate national housing data, inadequate affordable housing policies, inadequate institutional framework (Ebekozen, 2020; Ebekozen et al., 2021; Moore, 2019). This study provides useful data on informal housing situation, strategies and solutions that can assist future housing policy decisions.

In summary, findings from this study highlight resources that can be tapped within the informal housing strategies and harnessed towards effectively housing the urban poor. Data on income sources, income level and regularity of income of the urban poor suggest how much and how regularly they can afford to pay for housing while information on proximity to their working places suggests how much they are able and willing to commute to their places of employment. These data can inform suitable affordable housing location, suitable affordable housing prices and the payment pattern that may favour the urban poor. The prevalent housing types and popular housing tenure within the slums can inform suitable housing tenure and possible alternative housing strategies that can be explored to house the urban poor effectively. The anticipations of the urban poor can assist interested stakeholders to know what housing to supply that will meet demand and how to prioritise housing interventions based on demand. Lastly, the activities of associations and MFIs within the slums suggest the availability of informal finance models that can be modified towards effective provision of housing finance for the urban poor.

Findings from this study extend past housing studies (Patel et al., 2014; Patel & Bartlett, 2016; Roy et al., 2018) that have explored the peculiarities of the urban poor in other parts of the world by documenting the characteristics of the urban poor in Lagos slums. Study findings contribute to housing literature by analysing the informal housing strategies of the urban poor to identify potentials and prospects for suitable affordable housing provision within their informal strategies. These findings provide a circumstantial demand-oriented analysis to AH



provision challenges in developing economies, an extension of Akinwande and Hui (2022) and Menshawy et al. (2016) who advanced that examining the urban poor in relation AH provision can eliminate discrepancy between AH demand and supply. Lastly, study findings provide informal housing strategies of the urban poor in Lagos slums that can be factored into AH policy decisions in favour of the urban poor, complementing Menshawy et al. (2016) who advanced that AH policies can be utilised to upgrade informal settlements in developing economies. Findings extend the contributions of Amoako and Boamah (2017) who opined that housing strategies of informal settlers can be informative of ways to eradicate slum formation in cities of developing economies. A summary of potentials for effective affordable housing provision identified within informal housing strategies of the urban poor is illustrated in Fig. 4.1.



**Figure 4.1:** Potentials for effective affordable housing provision within informal strategies

Source: Researcher, 2023

#### 4.7 Chapter summary

This chapter examined the informal housing strategies of the urban poor in the slums of Lagos, Nigeria. It evaluated the income level of the urban poor, their proximity to their places of work, the common housing types and tenures within the sampled settlements, the presence and housing activities of trade unions, associations, savings' groups, cooperative societies and

microfinance institutions within the slums as well as personal plans and housing anticipations of the urban poor. The chapter identified potentials for suitable and effective affordable housing provision within the housing strategies of the urban poor such as suitable affordable housing tenure, suitable rent for affordable housing, favourable rent pattern, suitable affordable housing location among other prospects. The chapter further developed a framework that summarises potentials for effective affordable housing provision identified within informal housing strategies of the urban poor, which is informative for stakeholders on available housing strategies within slum settlements that can be modified and repackaged towards achieving sustainable and effective affordable housing provision in developing economies. The next chapter presents deductive analyses of these identified informal housing strategies across the main components of HSVC.

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## **CHAPTER 5: DEDUCTIVE ANALYSIS OF INFORMAL HOUSING SOLUTIONS ACROSS THE ENTIRE HSVC <sup>4</sup>**

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### **5.1 Introduction**

This chapter addresses (objective 2) of this study aimed at making useful deductions from informal housing solutions of the urban poor and examine how these can impact on main components of HSVC towards effective affordable housing provision. To achieve this objective, deductive analyses of identified informative strategies of the urban poor are carried out and discussed along the components of HSVC in this chapter. This chapter makes deductions through a thematic content analysis of informal housing strategies, to showcase how the strategies imply on main components of HSVC. The themes explored are housing finance, housing construction and land acquisition. Findings highlight ways through which affordable housing provision can be realistically improved across the entire HSVC through the approaches of the urban poor. This chapter extensively discusses findings from the deductive analyses conducted. The chapter closes with a chapter summary.

### **5.2 Implications of findings on affordable housing finance**

To ascertain the housing finance strategies of the sampled urban poor, this research studied the respondents' sources of income and average income as these can reflect their creditworthiness. Their personal plans for better housing were explored to deduce their preparedness for equity contribution towards better housing. Their expected housing interventions were also examined in an attempt to deduce the actual housing needs of the urban poor.

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<sup>4</sup> This chapter is largely based on the following publication:

- Akinwande, T., & Hui, E. C. M. Effective affordable housing provision in developing economies: A deductive analysis of informal housing strategies. Manuscript Number: JCIT-D-23-01964

Lastly, the presence of savings groups and their activities within the settlements were investigated to inform solutions that the urban poor have devised within their settlements to support housing finance, these can suggest demand-oriented approaches to affordable housing finance. Study findings reveal that the prevailing sources of income in all sampled slums are menial jobs as all respondents engage in activities like hairdressing, barbing, fashion designing and many other vocations as presented in Table 4.1 in chapter four of this thesis. A common characteristic of blue-collar jobs is that incomes are earned daily and dependent on number of clients, as demonstrated in some of their responses. Recall the experience of the meat seller at Majidun area of Ikorodu, documented earlier (see chapter 4). Majority of respondents find it hard to ascertain their daily income due to inconsistencies beyond their control. Recall the ordeal of the drink seller in Ikorodu (see chapter 4). Slum dwellers mostly struggle to earn a living with many earning less than 5,000 Naira (about \$7.5 USD) in a week. Recall the narratives of the provision seller in Ojota and the tailor in Alaba (see chapter 4).

Findings align with popular scholarly standpoint that the urban poor have poor credit records and are not creditworthy as they mostly earn low and irregular incomes from menial jobs. This situation consequently attenuates their creditworthiness and restrains access to debt financing (Acheampong & Anokye, 2015; Celhay & Gil, 2020; Klink & Denaldi, 2014; Rahman & Ley, 2020; UN-Habitat, 2011, 2012, 2013a). Findings have established the miserable financial situation of these category of slum dwellers and it becomes necessary to investigate the community to identify strategies that they currently employ for their housing finance needs. Informed by literature (Karim, 2011; Rahman & Ley, 2020; Tariq, 2012; United Nations Human Settlements Programme, 2005), the existence and activities of savings groups and microfinance institutions within the settlements were explored and it was found that 87.5% of vocations of the sampled urban poor have formed one association or another and over 77.5% of these trade unions render financial and non-financial assistances to their members as

displayed in Table 4.2 (see chapter 4) and demonstrated in some of interviewees' responses. Recall the hairdresser in Alaba who disclosed how the union she belongs to often assists members that have challenges and have informed the leadership of the union. Responses gathered from the investigated settlements amplified microfinance as an alternative housing finance method common among the urban poor (Karim, 2011; Rahman & Ley, 2020; Tariq, 2012; United Nations Human Settlements Programme, 2005).

Also, findings evince that associations offer the members a platform where they can form cooperative societies and make regular contributions towards future financial needs. Recall the experiences of the middle-aged tailor in Ikorodu and the young barber in Makoko areas (see chapter 4). It is worthy of mention that some trade unions only tax members without rendering any forms of assistance while a particular association was dissolved due to irreconcilable issues, these suggest a need for modification and institutionalisation of these trade unions to eliminate corruption, management issues and other possible challenges. Findings buttress Patel (2013); Patel and Bartlett (2016); Sripanich et al. (2015) who opined that groups' savings is often associated with challenges of opportunism, selfishness, conflicts of interests among others due to large membership size which consequently may complicate cooperation, transparency and effective management. Having established the financial predicament of the slum dwellers, their housing expectations were investigated and findings show that 47.5% of respondents anticipate government interventions in the area of finance as presented in Table 4.2. Recall the desires of the middle-aged commercial motorcyclist in Majidun (see chapter 4).

Along same direction, the personal plans of respondents towards better housing were examined and findings demonstrated that 87.5% of the respondents are actively engaged in group savings towards better housing in the future as relayed in some of their accounts documented in chapter four of this dissertation. This amplifies literature that the urban poor mostly depends on group

savings for housing finance (Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012; Rahman & Ley, 2020; Sripanich et al., 2015). Functional Informal finance strategies exist within the sampled slums, that can be harnessed towards effective housing finance provision if regularized, supported, modified, and institutionalized. The prevalent challenges of poor credit records, irregularity of income among others that incapacitates the urban poor from benefiting from formal finance methods can be alleviated if their informal housing finance can be explored and enhanced to suit their peculiar finance situation in agreement with (Amoako & Boamah, 2017). Community participation is crucial for successful and suitable affordable housing interventions (Akinwande & Hui, 2022; Fieuw & Mitlin, 2018; Patel, 2013; Sripanich et al., 2015; Yap, 2016). This is easily achievable in communities with empirical evidence of the existence of unionism, which aids solidarity (Alimahomed-Wilson, 2016; Keenan, 2015).

Study findings establish that the sampled slums currently have informal strategies in place that can be harnessed and exploited by government, NGOs, private institutions, and all other interested stakeholders to enhance affordable housing finance. To tackle the challenges of lack of cooperation, language barrier, mismanagement, lack of transparency and other degeneracy that may arise within these identified strategies, deliberate efforts like legal frameworks, institutionalisation can be deployed to diminish or eradicate them.

### **5.3 Implications of findings on affordable housing construction**

Housing construction refers to all activities involved in the production of housing by government, NGOs, private developers, individual builders and all other stakeholders. Government is responsible for policy formulation and implementation while other stakeholders either build or finance housing construction. The urban poor's response to desperate housing need in the face of rising housing price as a result of unfavourable housing policies is informal

housing construction, resulting in slum formation in cities of the world (Imrie, 2003; Rahman & Ley, 2020).

To establish the housing construction approaches of the dwellers in the sampled slums, this study examined the housing types, housing situation and housing tenure of the urban poor. Findings as displayed in Table 4.2 reveal that the urban poor are mostly disposed to rental housing as 82.5% of sampled respondents are in cheap rented housing (see chapter 4). This finding is in consonance with Datta and Jones (2001); Kamruzzaman (2009) as demonstrated in their responses. Recall the narratives of the middle-aged man in Makoko and another middle-aged woman in Ojota (see chapter 4). Also, findings show that some respondents like the middle-aged artisans in Makoko and Alaba have resorted to seeking shelter in improvised housing, living in wooden houses, aligning with (Amoako & Boamah, 2017; Service, 2012). Study findings are that 7.5% of total respondents live in a form of shared apartment either living with family or in family housing. Recall the accounts of the barber and launderer in Majidun Alaba respectively (see chapter 4). Meanwhile, the four respondents who claim to have homeownership as displayed in Table 4.2 disclosed that they were able to achieve this rare feat through self-help incremental building strategy. Recall the account of the middle-aged estate agent in Alaba presented in chapter four. This establishes rental housing tenure as the popular tenure among the urban poor and cheap rental housing such as multi-tenanted apartments are the prevalent housing types in slum settlements. The appropriate housing tenure for the urban poor is a topical discussion in housing studies with options like homeownership, tenancy, shared tenancy, multiformity and others (Bangura & Lee, 2021; Kamruzzaman, 2009; Shirgaokar & Rumbach, 2018).

It is noteworthy that 30% of respondents anticipate interventions in the areas of affordable housing construction and government control to reduce cost of housing construction. This is



reflected in the accounts of the two elderly men from Abule-osun and Ojota areas (see chapter 4). The general living conditions of the environments were observed to be deplorable, and this is a concern to many of the slum dwellers. Recall the complaints of two middle-aged men in Ojota presented in chapter four. It is deductible from study findings that affordable housing construction and urban regeneration are urgent needs of the urban poor. Government partnership with NGOs and other stakeholders, anchored on a proper dialogue and connection with the community can be employed to meet the housing construction needs of the urban poor (Patel, 2013; Patel & Bartlett, 2016).

For suitable housing construction for the urban poor, efforts should be targeted at cheap housing provision for rental purposes. Rental tenure is more favourable for the urban poor in agreement with Datta and Jones (2001); Kamruzzaman (2009) disagreeing with (Bangura & Lee, 2021). Though homeownership is beneficial, what is more important to the urban poor is shelter and rental housing provides this more affordably than homeownership. Nevertheless, it may be necessary to have multiple forms of housing tenures as postulated in Shirgaokar and Rumbach (2018) as we have evidence of homeownership in the sampled slums, it is however evident that cheap shelter is the housing need of the urban poor as over 80% of sampled slum dwellers live in cheap rented housing. Further, it can be deduced from study findings that daily and/or weekly rent will be more favourable for the urban poor as they only earn daily incomes from their various vocations. Incremental housing and improvised housing/make-shift housing are housing construction strategies deployed by the urban poor towards affordable housing construction in response to their urgent housing needs (Amoako & Boamah, 2017; Service, 2012). Improvised housing is characterized by use of alternative materials like wood, metal containers, bamboo among others for housing construction.

Ways to lower housing construction cost for affordable housing interventions are deductible from the housing strategies of the urban poor. Government and all other stakeholders of housing construction can seek avenues to use cheaper but sustainable materials for affordable housing construction. A lower cost of construction will consequent into lower housing price, thereby making affordable housing interventions more realistic and suitable for the targeted urban poor. The self-help incremental housing strategy suggests that the urban poor, especially the youth in the communities can be engaged for direct labour. This approach will offer cheaper labour for housing construction, thereby empowering the urban poor to solve their housing problems themselves in agreement with (Sanga & Lucian, 2016; Wainer et al., 2016). This strategy is however challenged by limitations such as substandard housing construction, inadequate city planning among others but deliberate policies can be designed to diminish these limitations (Ferguson & Smets, 2010). It is crucial to incorporate informal settlers into their own housing construction interventions to enjoy cheaper labour and encourage sense of responsibility, sense of belonging and general community participation among many other benefits to the urban poor (Akinwande & Hui, 2022; Karuaihe & Wandschneider, 2018; Kironde, 1995; Konadu-Agyemang, 2001; Yap, 2016).

Further deductions are that shared/family housing is a strategy useful for housing the urban poor and this can be carefully explored to house the urban poor in shared housing/hostels. Study findings imply that suitable housing construction for the urban poor is cheap rental housing with deliberate policies to encourage daily/weekly rent payment, shared housing, and the use of cheaper but sustainable materials in housing construction. This is a realistic approach to affordable housing construction built around the existing housing strategies of the urban poor, this can render slums redundant and eliminate slum formation (Akinwande & Hui, 2022; Amoako & Boamah, 2017). In Nigeria, government has engaged in numerous affordable housing interventions over the years but flawed with inadequacies of national housing data

(Ebekozen, 2020; Ebekozen et al., 2021; Moore, 2019). The data and findings from this study may improve housing data and are informative for housing policy decisions.

#### **5.4 Implications of findings on affordable land acquisition**

Land acquisition refers to all activities involved in obtaining approval for land ownership towards housing development. This includes all processes involved in land titling and certification. Statutory and customary laws exist in most countries of the world which government uses to control land allocation and ownership in urban land and rural land respectively. Legal possession of land by organisations, individuals, communities and societies will require them to secure land title from government through the land tenure systems. (Morgan et al., 2013); Owoye and Adediji (2015); (Qian, 2015) all advocated similarly that high costs of land, high cost of land titling and the accompanying bureaucratic processes are major challenges to effective housing development in developing countries. Urbanisation and the consequent slum formation are also major challenges of land acquisition in developing economies.

Study findings reveal that the sampled urban poor are more disposed to rental housing, improvised housing and shared housing; which suggests the land acquisition process to be relatively of less importance to the urban poor. Other stakeholders such as government, NGOs and private developers are more involved with land acquisition and efforts to achieve effective affordable land acquisition should be directed at these stakeholders. It can be deduced from study findings that housing location is important to the sampled urban poor. This study investigated the cost of transportation incurred by each respondent to and from workplaces to establish the actual housing cost (rent + transportation cost) (Coulombel, 2018; Dewita et al., 2018; Saberi et al., 2017; Yap, 2016), but findings are that the sampled urban poor mostly live within their places of work, where they earn an income. As displayed in Table 4.2, 75% of

respondents either live at the same place they work or live nearby their workplaces (see chapter 4). Another 5% stay back within the neighbourhood to limit travel cost, when their homes are in faraway locations. Recall the accounts of the middle-aged female food vendor in Ikorodu, the narratives of a middle-aged hairdresser in Abule-osun and the elderly man who is an artisan in Alaba (see chapter 4).

Only four of the sampled urban poor incur travel costs and their complaints suggests that they would prefer to live nearby their places of work. Recall the accounts of some middle-aged artisans at Ikorodu and Abule-osun presented in chapter four. Findings demonstrate that 80% of the urban poor earn a living within the sampled slums, suggesting socioeconomic ties to the location in agreement with (Kusrini et al., 2018; Wainer & Vale, 2021; Young, 2018). Recall the experience of the fisherman in Makoko (see chapter 4). This finding amplifies existing literature that relocation, displacement and forceful evictions of the urban poor from original settlements in the name of urban regeneration or housing intervention can be counterproductive for the urban poor (Desmond et al., 2015; Oldfield, 2004; Young, 2019). It can be deduced from study findings that suitable sites for affordable housing construction will be in the urban poor's present location. Since the sampled urban poor mostly live within the space they earn income, it can be deduced that it is necessary to explore innovative means to house the urban poor within the same space where he earns a living. This can be mixed-use apartments that serves commercial purposes at daytime but serves as home at nights.

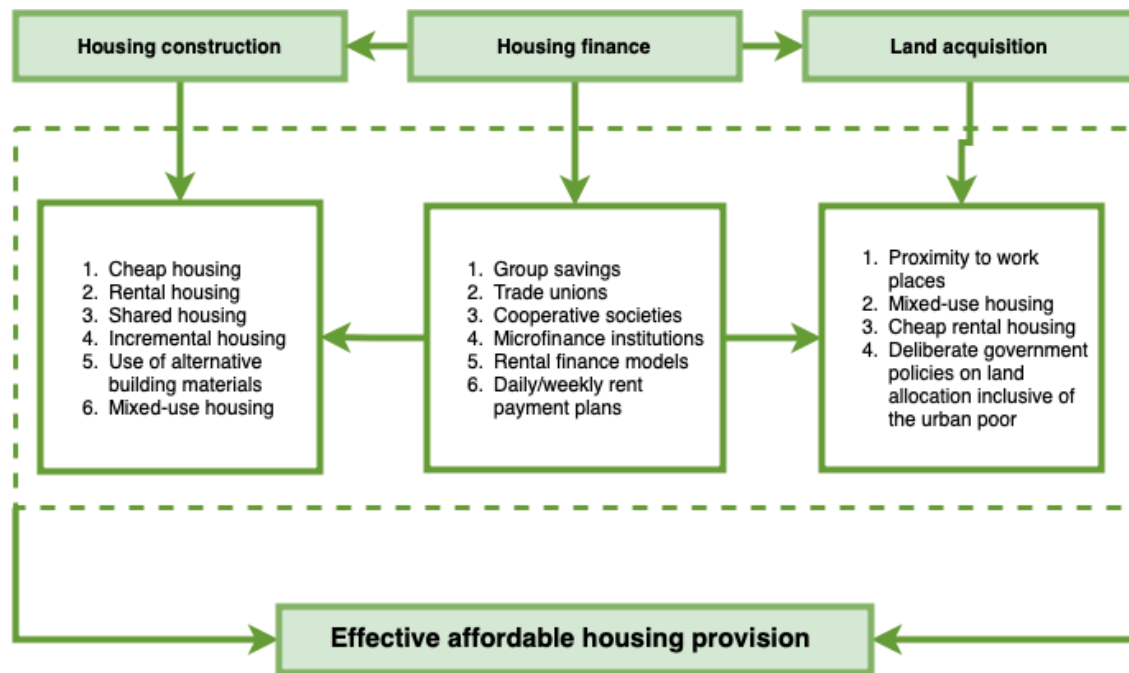
To effectively address the prevalent challenge of land provision for the urban poor in Lagos cities, there is a desperate need for harmonious partnership between government, private organizations, NGOs, finance institutions and communities, policies inclusive of the urban poor should be implemented, collective land acquisition should be encouraged with fund

allocation among many other unconventional methods determined in this chapter (Karuaihe & Wandschneider, 2018; Kironde, 1995).

## **5.5 Summary of findings**

In an attempt to summarize the implications of informal housing strategies on main components of HSVC, Fig. 5.1 clusters informal housing strategies identified in this study in relation to housing supply value chain. The framework clearly evinces informal strategies deployed for each component of HSVC whilst presenting the interrelatedness and interdependence of these components. If these identified strategies can be modified, enhanced, and institutionalized into housing policies in developing economies, it may be possible to eliminate the constraints of AH provision. This approach has capacities to render slums redundant in cities of developing countries, if properly deployed (Amoako & Boamah, 2017).

The urban poor and their housing characteristics have been investigated in past studies (Patel et al., 2014; Patel & Bartlett, 2016; Roy et al., 2018), but this study fundamentally extends housing literature by investigating the informal housing strategies of the urban poor across the entire HSVC – housing finance, housing construction and land acquisition. This provides a broader view of housing challenge to encourage multidisciplinary and multidimensional approaches in AH interventions. This serves as an extension of housing studies that have advocated for multidisciplinary approaches in housing interventions and that housing should be treated as a multidimensional system (Fieuw & Mitlin, 2018; Grubbauer, 2019; Marutlulle, 2021; Patel & Bartlett, 2016; Sandhu, 2013). Interventions that are conceived to address AH provision concurrently across the entire housing supply value chain are expected to enhance the achievement of EAH provision for the urban poor in developing economies.



**Figure 5.1:** A framework clustering informal housing strategies of the urban poor in relation to HSVC towards effective affordable housing provision.

Source: Researcher, 2023

## 5.6 Chapter summary

This chapter examined the informal housing strategies of the urban poor in the slums of Lagos, Nigeria to make useful deductions along the HSVC components. It evaluated the approaches of the urban poor vis a vis housing finance, housing construction and land acquisition to draw out avenues through which lessons from informal strategies of the urban poor can improve these independent elements towards effective affordable housing provision. The chapter developed a framework that clusters informal housing solutions of the urban poor in relation to independent components of HSVC, showcasing the interdependent nature of these elements. This chapter along with chapter 4 of this thesis provide users' viewpoint to affordable housing solutions while the next chapter presents findings from systematic thematic analyses of housing experts to provide experts' perspective to affordable housing solutions in developing economies.

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## CHAPTER 6: ASSESSMENT OF EXPERTS' SOLUTIONS TO AH CONSTRAINTS ACROSS THE ENTIRE HSVC <sup>5</sup>

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### 6.1 Introduction

This chapter addresses (objective 3) of this study to ascertain experts' solutions to prevailing affordable housing provision challenges across the entire housing supply value chain (HSVC). To achieve this objective, this chapter presents a thorough systematic thematic analysis of findings gathered from focus group discussion and semi-structured interviews with experienced housing professionals in Nigeria. For an elaborate interpretation of data in this chapter, data are subdivided into three major categories – affordable housing construction solutions, affordable housing finance solutions and affordable land acquisition solutions. Within these broad subdivisions, all significant subthemes common across expert responses are discussed in detail. Contributions from all focus group discussants and interview respondents are tagged with unique codes (Discussants 1 – 7 and Respondents 1 – 5) to enable clarity and traceability of data. These codes are: D1, D2, D3, D4, D5, D6, D7, R1, R2, R3, R4 and R5, as displayed in Table 3.4 in the chapter three of this dissertation. (McDaniel & Bach, 1996; Plummer-D'Amato, 2008).

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<sup>5</sup> This chapter is largely based on the following publications:

- Akinwande, T., & Hui, E. C. M. (2023). Effective affordable housing provision in developing economies: An evaluation of expert opinion. *Sustainable Development, 1* - 6. <https://doi.org/10.1002/sd.2702>
- Akinwande, T., Hui, E. (2023). Expert solution to affordable housing finance challenges in developing economies. *Paper presented at International Research Conference, 24<sup>th</sup> – 25<sup>th</sup>, July 2023. London, United Kingdom.* [https://attachments.waset.org/23/papers/23GB070133\[4\].pdf](https://attachments.waset.org/23/papers/23GB070133[4].pdf)

## 6.2 Expert solutions to affordable housing provision challenges

### 6.2.1 Housing construction

Experts discussed solutions to AH construction and findings show that experts are largely of the opinion that deliberate government policies to include the urban poor will be the most important solution to AH construction challenges in Lagos, Nigeria. Table 6.1 displays the statistics showing deliberate government policies to be 21.1% of total experts opinions. These are demonstrated in some expert responses;

*“Laws put in place to ensure that affordable housing development and interventions reach the target beneficiaries and not taken over by speculators. Else, the poor are left to their own devices - more spontaneous settlements.”*

*“There can be arrangement similar to "rent to own" that will provide social housing at inner cities but occupants are required to make contributions towards a retirement housing at outer cities where they can be relocated to and own after active service.”*

Study findings reveal that experts also identify use of alternative materials and strategies for construction, being certain of the housing need of the urban poor, rental housing with deliberate government control in place, inclusionary housing strategies, mixed housing strategies and mainstreaming the agencies and housing strategies of the informal sector as important solutions to the prevalent challenge of affordable housing construction. As displayed in Table 6.1, alternative materials such as containers and strategies such as adopting abandoned properties for affordable housing provision purposes make up 10.5% of total expert opinions, ascertaining the actual housing need and controlled rental housing approaches represent 8.8% each, while inclusionary housing strategies and mainstreaming informal agencies and approaches represent 7.02% each. These are demonstrated in some comments during the FGD and in-depth interviews;

*“Abandoned properties are all over the city. These can be leased and used for affordable accommodation purposes. Where there are structures on ground, they can be partitioned and used. Where there are no structures, mobile homes can be erected there like in the US and UK.”*



*“Rent is more suitable for the urban poor to avoid cost of documentation, delay in the processes, inflation on building materials, engaging professionals and so on. However, cost of rent in Lagos is high and will require deliberate policies to regulate rent and landlords' activities.”*

*“Proper definition of housing needs of each state in Nigeria must be done. This will enable us address the problems on ground better.”*

*“Inclusionary zoning to increase affordable housing production. This is a land use planning instrumentality adopted in the London, UK.”*

*“Empowering all the existent and exhibited capacities and agencies in the informal sector such as collaborative savings, incremental housing development are to be considered and taken serious by government. They should be mainstreamed into the formal housing sector.”*

### **6.2.2 Housing finance**

Experts were enquired about solutions to housing finance challenges and findings exhibit that housing experts opine that deliberate government policies considerate of the urban poor's peculiarities will be the most important solution to affordable housing finance difficulties in Lagos, making up 25.4% of total expert responses as displayed in Table 6.2. When enquired on how to improve the urban poor's access to housing finance, one of the experts while responding to another expert opinion disclosed thus;

*“The mortgage banks like some of what the discussant D3 mentioned can be further conceptualised for the urban poor, where limited contribution by these people can become equity they can use to participate in 'rent to own'.”*

Study findings also reveal that experts opine that properly implemented rental policies that accommodate the challenges of the urban poor will influence better affordable housing finance. It accounted for 15.3% of total expert responses, while deliberate public-private partnership strategies ranked next with 11.9% of total expert responses, 10.2% each of total expert responses are that empowering the urban poor to earn higher income and mainstreaming informal agencies and their housing finance strategies will enhance better affordable housing finance. These are demonstrated in some of the expert responses;

*“Rent is a good option but not yearly rent and the likes. There's a law to support that but it is not poorly implemented.”*

*“The PPP concept is great but must be designed properly and contextualised for the target audience. Market solution cannot work to solve the problem of the urban poor who almost have no income at all (Responding to D6).”*

*“The urban poor needs to be financially literate. The urban poor must be encouraged to spend wisely, save from their incomes and invest in housing.”*

*“Most informal workers belong to one association or another. These associations double as cooperative societies and these are the best ways through which the urban poor can climb out of poverty. The cooperative system should be strengthened in informal sector.”*

Additionally, study findings show that experts opine that enhancing the general economy and improving infrastructural facilities in the country will improve affordable housing finance, 6.78% of total expert responses share this opinion. Experts believe that coalition of all housing stakeholders, improving existing informal housing to increase housing stock and formalising the assets of the urban poor will enhance the urban poor's access to housing finance. These variables account for 5.08% each of total expert opinions, as showcased on Table 6.2 and some of their responses;

*“Enhancing the economy in general will enhance the earning capacity of the urban poor and this will in turn enhance their ability to afford better housing.”*

*“One way to assist the urban poor is to make sure that they do not bear unnecessary burdens of poor road networks, poor electricity and all stringent regulatory demands (building codes and other minimum standards) that limit affordability.”*

*“Platform banking - a model to collate all building stakeholders like developers, architects, building material sellers etc. in a basket of mutual relationship. This creates an avenue to mitigate some of the affordable housing provision challenges in Nigeria.”*

### **6.2.3 Land acquisition**

Regarding land acquisition for the urban poor, experts strongly opine that deliberate land allocation policies in favour of the urban poor will be the most suitable solution, making 17.1% of total expert responses as displayed in Table 6.3. Experts also agree that deliberate rental

policies inclusive of the urban poor and formalising informal agencies and strategies as solutions to land acquisition challenges. Both variables represent 11.4% each of total expert responses. More transparent land allocation and titling processes, radical approaches like giving titles to the land assets of the urban poor and improving informal housing to eliminate the need for new land allocation were identified as solutions to land acquisition problems of the urban poor. These three variables represent 8.57% of total expert opinions and demonstrated in some of the expert comments;

*“Deliberate policy to accommodate and allocate land for the poor (Responding to his colleague D1).”*

*“Mass land availability for developers handling affordable housing supply. This will require deliberate government policy, an incentive to encourage mixed housing, inclusionary housing or even social housing development (Responding to D2).”*

*“To solve the problem of land acquisition for the urban poor, the approach must be holistic because it is an ecosystem. This will warrant deliberate government policy to include the urban poor - Either for the rich to take up the burden of housing his poor workers or to make housing wherever their sources of livelihood are affordable for them.”*

*“We must consider regularising their existing approaches to land access instead of aiming for the new that hardly works across the world.”*

*“The land administration system should be strengthened so that the urban poor are able to use their housing as a tool for economic emancipation.”*

Study findings further disclose that experts opine that better transport facilities, providing incentives to encourage private developers, general economy enhancement, communal housing strategies and alternative accommodation like hostels will alleviate the prevailing land acquisition challenges of the urban poor. These variables make up 5.71% each of total experts opinions and demonstrated in their responses thus;

*“Adequate transport infrastructure to allow easy travel to the city from outer-cities.”*

*“Deliberate government policies like subsidy on supply side or allocation on the part of demand. This is the practice in other parts of the world.”*

*“One way to assist the urban poor is to make sure that they do not bear unnecessary burdens of poor road networks, poor electricity and all stringent regulatory demands (building codes and other minimum standards) that limit affordability.”*

*“Collective land acquisition is a way forward. They do global survey, communal tilting and joint fencing to reduce cost (Responding to D2, D4 & D5).”*

*“Abandoned properties are all over the city. These can be leased and used for affordable accommodation purposes. Where there are structures on ground, they can be partitioned and used. Where there are no structures, mobile homes can be erected there like in the US and UK.”*

**Table 6.1:** Solutions to affordable housing construction challenges in Lagos

	Themes	d	r	Total (d +r)	y(%)
DGP	Deliberate government policies and laws inclusive of the urban poor	2	10	12	21.1
ACM	Use of alternative construction materials and strategies	1	5	6	10.5
AHN	Ascertaining the actual housing need	3	2	5	8.77
CRH	Controlled rental housing strategies	1	4	5	8.77
HIS	Inclusionary housing strategies	3	1	4	7.02
MIA	Mainstreaming informal agencies and strategies		4	4	7.02
IPD	Incentivizing private developers adequately		3	3	5.26
PPS	PPP strategies	1	2	3	5.26
ABS	Adequate budgetary allocation of subsidies		3	3	5.26
IIH	Improving informal housing to increase housing stock		3	3	5.26
THS	Treating housing as a system with multidimensions	1	1	2	3.51
ANS	Adopting non-market solutions	1	1	2	3.51
CHS	Communal housing strategies	1	1	2	3.51
	Commodify housing	1		1	1.75
	Enhancing the general economy		1	1	1.75
	Partnership with research community for workable solutions		1	1	1.75
	Grand total			(Σf)57	100

\*Acronyms are formulated from themes of expert solutions across all tables.

**Table 6.2:** Solutions to affordable housing finance challenges in Lagos

	Themes	d	r	Total (d +r)	y(%)
DFM	Deliberate finance models and policies inclusive of the urban poor	8	7	15	25.4
RCP	Rent control policies accompanied with proper implementation	3	6	9	15.3
DPP	Deliberate Public-private partnership approaches	5	2	7	11.9

	Themes	d	r	Total (d +r)	y(%)
EUP	Empowerment of the urban poor to earn more and spend wisely	2	4	6	10.2
MIA	Mainstreaming informal agencies and strategies		6	6	10.2
EGE	Enhancing the general economy and improving infrastructure		4	4	6.78
CHS	Coalition of all housing stakeholders	3		3	5.08
RAP	Recognising the assets of the urban poor and titling same		3	3	5.08
IPD	Incentivizing private developers adequately		2	2	3.39
	Adapting transfer subsidies to the Nigerian reality	1		1	1.69
	Mass housing production and delivery	1		1	1.69
	Ascertaining the actual housing need		1	1	1.69
	Employers to provide housing and not only housing allowances		1	1	1.69
	Grand total			(Σf)59	100

**Table 6.3:** Solutions to affordable land acquisition challenges in Lagos

	Themes	d	r	Total (d +r)	y(%)
DLA	Deliberate land allocation policies inclusive of the urban poor	2	4	6	17.1
DRP	Deliberate rental policies inclusive of the urban poor	2	2	4	11.4
MIA	Mainstreaming informal agencies and strategies	3	1	4	11.4
MTL	More transparent land allocation and titling processes	2	1	3	8.57
RTA	Recognising the assets of the urban poor and titling same	1	2	3	8.57
IIH	Improving informal housing to avoid new land allocation	2	1	3	8.57
BTF	Better transport infrastructure to access outer cities	2		2	5.71
IPD	Incentivizing private developers adequately to encourage them	1	1	2	5.71
EGE	Enhancing the general economy and improving infrastructure	2		2	5.71
CHS	Communal housing strategies	2		2	5.71
ALC	Alternative accommodation		2	2	5.71
	Ascertaining the actual housing need	1		1	2.86
	Adopting holistic approaches for the housing ecosystem		1	1	2.86
	Grand total			(Σf)35	100

## 6.3 Discussion and interpretation

### 6.3.1 Affordable housing construction

Study findings are consistent with literature that deliberate government policies to include the urban poor into the city planning is a significant solution to AH construction challenges in Nigeria (Bredenoord et al, 2014; Von Puttkamer, 2016; Grubbauer, 2019). Government policies have assisted AH deliveries in Nigeria, Zimbabwe, India, Latin America, Turkey,

Australia and across other countries of the world (Anierobi & Obasi, 2021; Ayan, 2011; Grubbauer, 2019; Han et al., 2021; Öztürk & Doğan, 2010). Government policies are critical to provide platforms for all other expert solutions can thrive. If policies are not considerate of the urban poor, these policies become counterproductive by forcing the urban poor to result to informalities as the only available housing solution (Akpan, 2020; Ghazaie & Rafieian, 2022; Young, 2019). Experts opined in consonance with literature that the use of alternative sustainable building materials and the discontinuance of the popular dependence on ‘brick and mortar’ for housing production will reduce construction cost, thereby enhancing affordability and suitability for the urban poor (Edike et al., 2022; Windapo et al., 2021). This expert solution will require partnership with the research community in conformity with (Akinwande & Hui, 2022) to establish cheaper and sustainable materials that can replace ‘brick and mortar’ in housing construction as demonstrated in a recent study in Yelwa, Nigeria (Edike et al., 2022).

Findings revealed that experts considered ascertaining the actual national housing deficit and the actual housing need of the urban poor as a major step in the right direction in solving the housing challenges of the urban poor (Akinwande & Hui, 2022). This study finding amplifies a gap in literature where most studies are more supply-side focused (Owusu et al., 2008; Patel et al., 2014; Roy et al., 2018), there is an urgent need for more research attention on the urban poor in Nigeria to determine their actual housing need and investigate the housing characteristics, agencies and strategies of the urban poor for suitable housing solutions (Patel & Bartlett, 2016). Experts opine that despite the many benefits of homeownership, it may not be a suitable housing solution for the urban poor considering the cost of land acquisition, cost of building construction, cost of professionals, cost of housing maintenance among many other accompanying costs. Experts in disagreement with Bangura and Lee (2021); Shirgaokar and Rumbach (2018) opined in consonance with Kamruzzaman (2009) that rental housing will be more suitable for the urban poor but should be supported by government policies to control

cost of rent and pattern of rent payment; experts considered daily, weekly or monthly rent payment more suitable for the urban poor to eliminate the challenge of accumulating funds for annual rent payment.

In experts' opinion, inclusionary housing, other mixed housing strategies, adequately incentivizing private stakeholders, adequate allocation of subsidies and all other public-private partnership arrangements will further eliminate the challenges of housing the urban poor in agreement with (Karuaihe & Wandschneider, 2018; Nzau & Trillo, 2020). In alignment with Amoako and Boamah (2017) and Average (2019); Yap (2016) who advanced that government should take cues from informal approaches, experts posited that mainstreaming the agencies functioning within the informal sector and formalizing the urban poor's housing strategies will eliminate slum formation in Nigeria. Experts advocated that the informal housing of the urban poor can be improved and incorporated into the available housing stock. This is in similar direction with Konadu-Agyemang (2001) who argued that informal settlers can be a source of cheap labour for housing construction activities. As informal housing is being improved, the informal settlers are better engaged for best result as this will enable proper communication, enhance their economic status as well as improve their sense of belonging and sense of responsibility. Experts posited further solutions such as treating housing as a multidimensional system, adopting non-market solutions, communal housing strategies commodifying housing and enhancing the general economy. These solutions are not in deviation from scholarly standpoints that the entire housing supply value chain should be investigated thoroughly and multidisciplinary approaches engaged for sustainable housing solutions (Fieuw & Mitlin, 2018; Marutlulle, 2021; Patel, 2013; Patel & Bartlett, 2016; Sandhu, 2013). Non-market solutions require deliberate policies to set social housing provision approaches in motion through partnership with NGOs as demonstrated in (Anierobi & Obasi, 2021; Coskun, 2011; Mutman & Turgut, 2011).

Communal housing strategy will enhance housing affordability in agreement with Landman and Napier (2010) but must be institutionalized to avoid the associated limitations (Fieuw & Mitlin, 2018; Khan & Pieterse, 2004; Patel, 2013; Patel & Bartlett, 2016). Experts put forward that commodifying housing will lessen cost of housing in harmony with literature (Gutiérrez & Domènech, 2020). Commodifying housing will include mass housing production which is only achievable when infrastructure is in place. Government has an important role to play in providing infrastructure which will enable commodification of housing and enhancement of the general economy. Experts advanced in consonance with literature that the housing market is a subset of the general economy and responds to the economic dynamics in the country (Gökler, 2022). Experts submitted that enhancing the general economy will increase the income of the general populace, consequently the urban poor will have more earning power and housing becomes more affordable to them. One of the experts from the finance sector advocated thus;

*“The easier way will be for government to increase the national minimum wage to increase the income of the urban poor.”*

As much as efforts are being made to reduce housing price, efforts must be made concurrently to enhance the earning capacity of the urban poor. It is noteworthy that the most significant expert solution to affordable housing construction challenges in Nigeria is deliberate government policies, and it can be deduced that most other expert solutions revolve around deliberate government policies being more considerate and inclusive of the urban poor.

### **6.3.2 Affordable housing finance**

Similar to the most significant solution to affordable housing construction problems, findings unveiled that experts advanced that the most significant affordable housing finance solution in Nigeria will be finance models and policies that are intentional about overcoming the income limitations of the urban poor. Experts proposed similarly with literature Sandhu (2013); Un-



Habitat (2013a) that finance models can be designed and backed by policies in favour of the urban poor. Another essential solution to housing finance challenges by experts opinion is initiating rental policies which are more favourable for the urban poor than homeownership (Datta & Jones, 2001). In experts' standpoint, rental policies must be accompanied by proper implementation in agreement with Fieuw and Mitlin (2018); Karuaihe and Wandschneider (2018) who advocated that housing policies are unproductive when there are no accompanying political will and implementation of such policies. Rental policies should be formulated and implemented at local government levels, so that rental policies are consistent with the housing need of the urban poor and for adequate implementation. Experts also advocated for deliberate public-private partnership strategies to engage the private sector in a manner that favours the urban poor without shortchanging the private institutions. Successful affordable housing finance as a result of government's partnership with private institutions in different parts of the world is popular in scholarly discussions (Anierobi & Obasi, 2021; Boonyabancha & Kerr, 2018; Boonyabancha & Mitlin, 2012; Karim, 2011; Karuaihe & Wandschneider, 2018; Rahman & Ley, 2020; Sandhu, 2013; Sripanich et al., 2015; Yap, 2016).

Experts are of the opinion that sustainable solutions to the housing finance challenges of the urban poor require empowering the urban poor to earn more income and save more in agreement with Amoako and Boamah (2017); Boamah (2010); Karley (2002) who argued for community based mutual savings towards housing provision. This will require active urban renewal programmes and sensitization of the urban poor. Experts advanced other means of enhancing the earning capacity of the urban poor which included general enhancement of the economy in agreement with (Gökler, 2022), improving infrastructure in the country, radical approaches to recognize the assets in the informal sector and titling these assets. Some of the urban poor have assets that can be a source of capital for the urban poor when titled. Efforts to reduce the cost of housing finance must be accompanied by efforts to increase the earnings of

the urban poor for a sustainable housing finance solution. Another expert solution in this direction is that informal agencies and housing finance strategies of the urban poor should be mainstreamed and formalized. This is in harmony with scholastic standpoint that activities within informal settlements can inform appropriate ways to address their problems and render slum formation redundant (Average, 2019; Sripanich et al., 2015; Yap, 2016). The relevance of informal finance strategies in affordable housing is a popular scholarly opinion (Davidson et al., 2007; Karuaihe & Wandschneider, 2018; Patel, 2013; Patel & Bartlett, 2016; Rahman & Ley, 2020; Sripanich et al., 2015; Tariq, 2012).

Informal strategies will however require deliberate policies to control activities of the informal agencies to prevent management challenges (Sripanich et al., 2015). Experts proposed that a coalition of all housing stakeholders for the purpose affordable housing development will a step in the right direction in alignment with (Grubbauer, 2019; Sandhu, 2013). This will enable multidisciplinary approaches to housing solution in consonance with literature (Fieuw & Mitlin, 2018; Marutlulle, 2021; Patel, 2013; Patel & Bartlett, 2016). In experts opinion, the private institutions are essential in solving housing finance difficulties in alignment with past housing studies Boonyabancha and Kerr (2018); Rahman and Ley (2020); Sripanich et al. (2015); Yap (2016), but must be adequately incentivized in agreement with Buurman et al. (2021); Fan and Hui (2020); Makris and Brown (2020), transfer subsidies are useful lessons from developed countries but must be adapted to the Nigerian housing realities to be effective (Patel & Bartlett, 2016).

In experts' opinion, other solutions to housing finance challenges of the urban poor include mass housing production which will diminish housing finance burdens and ascertaining the actual housing need of the urban poor to eliminate the incessant mismatch between housing supply and demand in conformity with (Barka & Kumar, 2020; Nzau & Trillo, 2020; Saidu &

Yeom, 2020; Yap, 2016; Young, 2020). Mass housing delivery will lessen construction cost and enhance housing affordability but depends on adequate infrastructural framework. Lastly, experts advanced that employers of the urban poor should provide housing instead of the common practice of providing housing allowance, this will require government support in policies and incentives. Similar staff-housing arrangement already exists in many governmental organisations such as public universities, public airports and other organisations that have allocated land for housing development but in the face of typical land scarcity of the urban centres, there may be innovative ways to explore this expert solution where commercial properties for example, are built in convertible manners to serve as commercial spaces during the day and provide hostel accommodation for the urban poor workers at night. Study establishes that expert opinion propose shelter to be more suitable for the urban poor than homeownership, thus, creative hostels can be fabricated into commercial properties for housing the urban poor. A form of public-private partnership arrangement with adequate policies and legal framework can make this achievable where government provides land for interested private institution to develop properties that generate market rent at day but provide housing for the urban poor at night.

### **6.3.3 Affordable land acquisition**

Study findings show that most significant expert solution for land acquisition challenges of the urban poor is deliberate land allocation policies that are inclusive of the urban poor. Experts submitted that government needs to deliberately reserve some parts of urban land for affordable housing provision, similar to Nzau and Trillo (2020) who advocated for government allocation of urban land to private developers in inclusionary housing arrangements. One of the housing experts opined thus, when enquired about land acquisition solutions;

*“There is need for deliberate government policy to reserve some portions of urban land for the urban poor.”*

Experts further advocated for additional deliberate policies to encourage rental housing for the urban poor with arrangements that are considerate of their socioeconomic realities. Datta and Jones (2001) advances that rental housing is better for the urban poor but requires rent control policies to protect the urban poor from market rent and the usual annual rent practice. Rent for the urban poor must accommodate their daily, weekly or monthly income peculiarities. Expert opinion disagrees with Bangura and Lee (2021); Kamruzzaman (2009); Shirgaokar and Rumbach (2018) who advocated for homeownership and multiformity of tenure due to the economic benefits of land title. However, experts have the opinion that not all urban poor are poor if only their assets can be recognized and titled. One of the experts disclosed that solutions may lie in government taking the radical step of tilting assets of the poor. In his account;

*“Government can go through a radical approach to grant titles to the urban poor. Some of them have capital but the capital is dead as there are no titles.”*

Some form of alignment with homeownership and multiformity of tenure as postulated in Bangura and Lee (2021); Shirgaokar and Rumbach (2018) can be deduced from this expert opinion but can only be applicable to the few informal settlers that have homeownership.

Housing experts put forward that mainstreaming the informal agencies will enhance land acquisition for affordable housing provision purpose. Experts maintained this in consonance with past studies that the strategies of the informal settlers can be informative for suitable approaches to affordable housing provision (Average, 2019; Yap, 2016). Similar to this submission, experts advanced that improving informal houses instead of demolition will increase national housing stock and eliminate the need for new land allocation and housing production. Such improvements will enable the engagement of the informal settlers as source of cheap labour in consonance with Konadu-Agyemang (2001) and may include upgrading the titles on the lands as earlier opined by experts, to sustainably improve the economic situation of the urban poor in agreement with Amoako and Boamah (2017) who encouraged government

to take lessons from informal settlements for ways to render slums redundant and Bangura and Lee (2021) who encouraged homeownership for the urban poor. Experts posited that more transparent land allocation and documentation processes will alleviate the difficulties in affordable land acquisition. If the bureaucracy in land documentation is eliminated, the process will take lesser time, cost lesser and land affordability is consequently increased. This expert opinion is in harmony with popular scholarly opinion (Dorosh et al., 2010; Klink & Denaldi, 2014; Patel & Bartlett, 2016; Sandhu, 2013; Tariq, 2012; Un-Habitat, 2012, 2013a; Ward et al., 2015).

Experts propounded that land allocation and acquisition challenges in the inner cities will be further ameliorated if better transport infrastructure is available to access outer cities where cheaper lands are available. This conforms with Coulombel (2018); Dewita et al. (2018); Liu et al. (2021); Saberi et al. (2017); Yap (2016) who propounded that housing cost must include cost of transportation. If cheaper lands are available in outer cities, good transport infrastructure should ensure it is easily accessible and at affordable rates for commuters. One of the experts aired an innovative solution where inclusive strategies are put in place to accommodate the urban poor in social housing at inner cities when in active service but regular contributions are made towards a retirement housing at outer cities, in his account;

*“There can be an arrangement similar to "rent to own" that will provide social housing at inner cities, but occupants are required to make contributions towards a retirement housing at outer cities where they can be relocated to and own after active service.”*

This however may only be effective for the category of urban poor in paid employments, or a formal structure is established for this in partnership with informal savings groups and associations existent in informal settlements.

Other significant expert solutions include incentivizing private developers to be involved in affordable housing supply. Government needs to engage the private institution to ascertain the

best incentives for them and consider public-private partnership arrangements that are carefully designed to service the urban poor. Literature advocates for inclusionary housing, mixed housing, land value capture among others that have been successful in other parts of the world (Karuaihe & Wandschneider, 2018; Kironde, 1995; Nzau & Trillo, 2020). In consonance with literature, experts are of the opinion that enhancing the general economy and infrastructure like electricity in the country will improve the economic capacity of the urban poor and housing becomes more affordable to them (Gökler, 2022). In one expert's account;

*“Creating enabling environments to help the economy in general. Better electricity supply in the country will alleviate poverty level to the barest minimum. For instance, hairdressers, welders and others all rely on electricity.”*

Communal housing strategy will reduce land acquisition challenges on the urban poor in experts' opinion. The rigours of land acquisition, allocation and documentation are better faced as a group than as an individual, thus experts advanced in alignment with Boamah (2010); Karley (2002); Landman and Napier (2010); Sripanich et al. (2015) that associations and savings groups already existent in informal settlements can be assisted to acquire land as a community for their members. This expert solution goes hand in hand with regularisation of the informal agencies as an expert opinion. Informal agencies require adequate institutionalization to avoid all associated constraints (Fieuw & Mitlin, 2018; Khan & Pieterse, 2004; Patel, 2013; Patel & Bartlett, 2016; United-Nations, 2007)

In experts' opinion alternative accommodation like hostels, mobile homes, convertible homes among others will alleviate land acquisition constraints for the urban poor in accordance with Acheampong and Anokye (2015); Service (2012) who found that most urban poor in Ghana cities live in containers. If housing strategies of the urban poor have insightful lessons for suitable housing approaches (Amoako & Boamah, 2017; Average, 2019), then policies can be made to make the best out of alternative accommodation strategies. Experts advanced that it is essential to establish the actual housing need of the urban poor. It is necessary to engage

research to ascertain the housing deficit in Nigeria and it is important to investigate the urban poor to determine their socioeconomic peculiarities, their responses to their housing challenges, their informal housing strategies, existing agencies within the informal sector among other housing characteristics of the urban poor (Patel & Bartlett, 2016). These data will provide insights for suitable housing provision for the urban poor in consonance with Amoako and Boamah (2017); Average (2019) and the prevalent mismatch between housing supply and demand can be mitigated (Barka & Kumar, 2020; Nzau & Trillo, 2020; Saidu & Yeom, 2020; Young, 2020). Experts concluded that housing is an ecosystem and is better treated as such. Sustainable housing solution requires holistic approaches that are multifaceted, multidisciplinary, and multidimensional in nature, requiring all stakeholders to pull their weights in combating the challenging housing situation (Fieuw & Mitlin, 2018; Grubbauer, 2019; Marutlulle, 2021; Patel & Bartlett, 2016; Sandhu, 2013). In one of the expert's accounts;

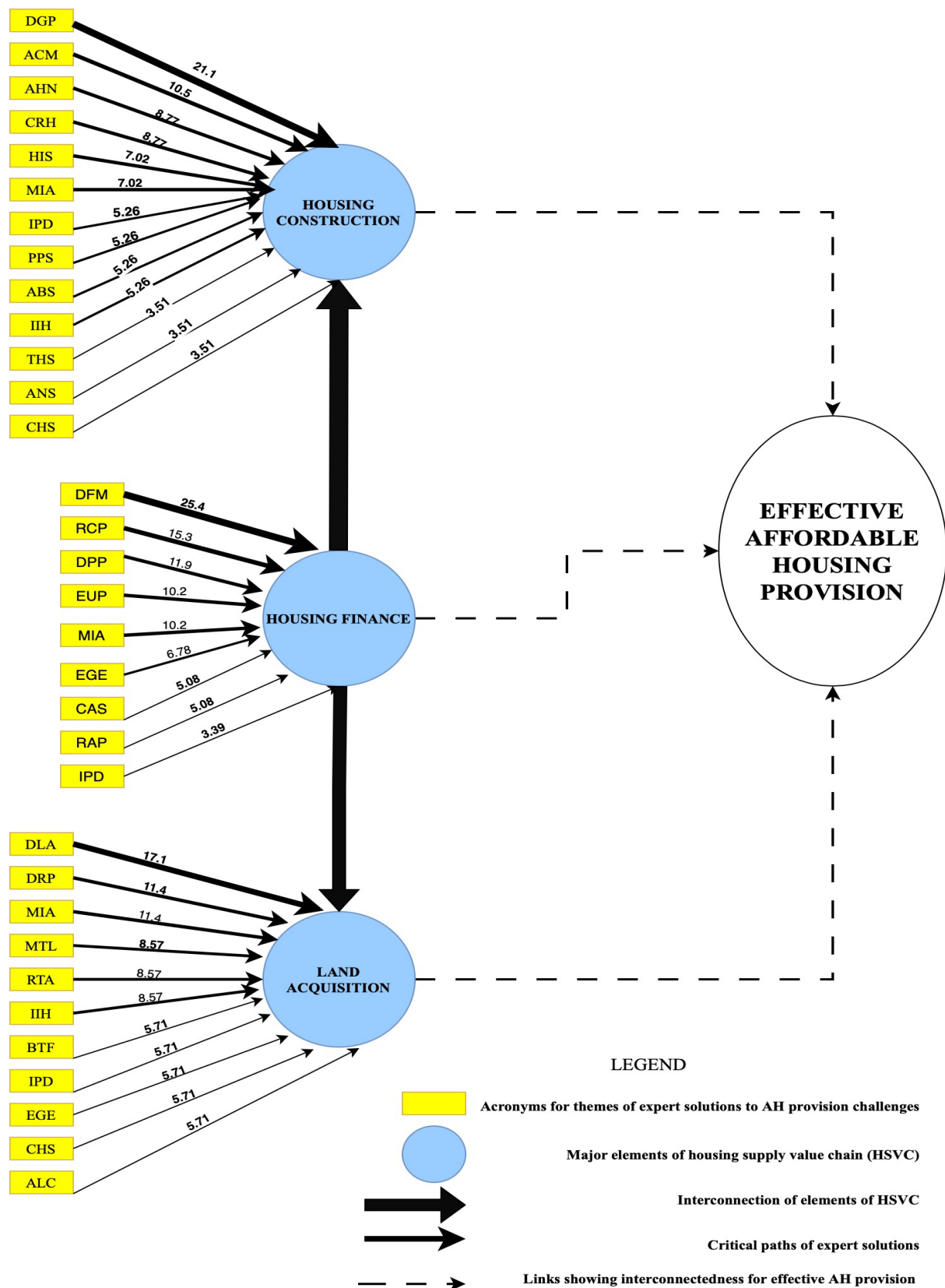
*“Build a coalition of all stakeholders: Government, developers, financiers etc. For instance, land is provided at subsidized rate, there are waivers given to developers purchasing building materials for affordable housing construction, there is a special funding dedicated and so on, all driven by policy executed by strong political will.”*

It is worthy of note that findings show that deliberate government policies inclusive of the urban poor, ascertaining the actual housing need of the urban poor, mainstreaming informal agencies and strategies, adequately incentivizing the private sector, communal housing strategies, enhancing the general economy and the act of government giving regard to and titling the assets of the urban poor are important solutions to affordable housing provision challenges consistent across the entire HSVC by expert opinions as showcased in Table 6.1, Table 6.2 and Table 6.3. These buttress the multidisciplinary nature of sustainable housing solution. As government plays roles in availing land, deliberate policy formulation and implementation, government intensifies efforts to enhance the macroeconomy, the research community explores the realities of the urban poor, all NGOs and private institutions must be

available to support affordable housing provision while the informal communities must be ready to take responsibility for better housing, aligning with (Anierobi & Obasi, 2021; Boamah, 2010; Grubbauer, 2019; Karley, 2002; Sandhu, 2013). Patel (2013) advocated that all stakeholders need to have a proper dialogue and agreement if the collaboration will be successful. Stakeholders must be willing to adapt, modify and improve until the most suitable and sustainable housing solution for the urban poor is eventually achieved (Patel & Bartlett, 2016).

Fig. 6.1 is an equation model formulated from research findings on expert solutions to AH provision constraints across the entire HSVC. It is an agglomeration of all themes of critical solutions (acronyms in yellow legend) that enable one to easily identify the significant solutions at a glance. These themes are presented in Tables 6.1, 6.2, 6.3 and in Table 7.1 in the next chapter. The weight of the arrows signifying the critical paths of these solutions evidence the priority the experts place on each theme of housing solutions and their level of significance in impacting success in AH construction, finance, and land acquisition. Success in each independent element and in all the interdependent elements of HSVC should enable EAH provision from experts' (supply) point of view. AH provision is a popular discussion in literature (Adabre & Chan, 2019; Adabre et al., 2020; Chan & Adabre, 2019; Ihuah & Eaton, 2014; Lee, 2020; Oyeboji et al., 2017; Said et al., 2016). However, this study extends housing theory by investigating expert housing solutions concurrently across the entire HSVC. The FGD methodology deployed in this analysis enabled insightful arguments among experienced experts with representation across fields related to the major components of HSVC (see chapters 3), making study results multidimensional and holistic. The equation model of critical expert solutions to AH provision challenges across the entire HSVC in developing economies generated in this study is a fundamental extension of housing literature.





**Figure 6.1:** Equation model of critical solutions to affordable housing supply challenges

Source: Researcher, 2023

#### **6.4 Chapter summary**

This chapter examined experts' solutions to prevailing affordable housing provision challenges across the entire HSVC. Three major perspectives of land acquisition, housing construction and housing finance were explored in detail, being the major elements of HSVC. The chapter provides a comprehensive expert-oriented analysis to affordable housing provision challenges in developing economies. Findings from this chapter reveal that deliberate government policies that are considerate of the urban poor's peculiarities and inclusive of their needs are the most significant solutions to affordable provision challenges across the entire housing supply value chain. To successfully tackle affordable housing construction challenges, it is crucial to desist from the popular dependence on 'brick and mortar' and use alternative construction materials like bamboo, clay and others that are cheaper. Regarding affordable housing finance, a deliberate finance model designed to target the urban poor is the most critical success factor to achieve affordable housing finance in Nigeria while government needs to deliberately reserve some urban land for housing the urban poor to overcome land acquisition issues in Nigeria. This chapter further developed an equation model formulated from all themes of critical solutions to affordable housing provision challenges in developing economies. This chapter provides expert-oriented solutions to complement the users-oriented solutions presented in previous chapters. The next chapter attempts to integrate solutions from both perspectives for more effective solutions to affordable housing provision challenges.

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## CHAPTER 7: INTEGRATION OF AH SOLUTIONS ACROSS THE ENTIRE HSVC TO DEVELOP A FRAMEWORK FOR EAH PROVISION <sup>6</sup>

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### 7.1 Introduction

This chapter addresses (objectives 4 and 5) of this study to integrate experts' solutions and users-oriented solutions to affordable housing provision challenges across the entire HSVC, and to develop a pragmatic framework for effective affordable housing provision from a consolidation of users and experts' solutions to affordable housing provision constraints. To achieve these objectives, this chapter juxtaposes affordable housing solutions deduced from informal strategies of the urban poor with experts' opinion on significant solutions to affordable housing constraints. This chapter proceeds to integrate the highlighted solutions from the bilateral viewpoints into syntheses of frameworks for affordable housing provision across the main components of HSVC. It further synchronized and consolidated these frameworks into one pragmatic framework for effective affordable housing provision (EAH); encapsulating all the independent frameworks into one consolidated interdependent entity. Lastly, this chapter tests hypotheses developed around the construct of this study and validates the pragmatic framework for effective affordable housing provision in developing economies.

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<sup>6</sup> This chapter is largely based on the following publication:

- Akinwande, T. (2023). Effective affordable housing finance in developing economies: A comparative analysis of demand and supply solutions. *Paper presented at the International Conference on Sustainable and Inclusive Urban Development in Global South: International Experiences and Future Strategies, 10<sup>th</sup> – 12<sup>th</sup>, August 2023. New Delhi, India.*
- Akinwande, T., & Hui, E. C. M. Effective affordable housing provision in developing economies: A comparative analysis of users and experts' solutions. Manuscript Number: PIP-D-23-00054 (Under review at Planning journal).

## 7.2 Integration of expert and demand-oriented affordable housing solutions

Table 7.1 presents a combination of the systematic thematic analysis of findings presented in Tables 6.1, 6.2 and 6.3 in the previous chapter, where frequency of occurrence of a theme of solution is tagged ‘d’ for discussants and ‘r’ for interview respondents. These analyses are elucidated in detail in the chapter three of this dissertation. Table 7.2 presents affordable housing solutions deduced from investigating the urban poor side by side with experts’ significant solutions to constraints in affordable housing provision.

**Table 7.1:** Expert solutions to affordable housing provision challenges across HSVC

Themes	d	r	Total (d+r)	y(%)
<b>Housing Construction</b>				
Deliberate government policies and laws inclusive of the urban poor	2	10	12	21.053
Use of alternative construction materials and strategies	1	5	6	10.526
Ascertaining the actual housing need	3	2	5	8.7719
Controlled rental housing strategies	1	4	5	8.7719
Inclusionary housing strategies	3	1	4	7.0175
Mainstreaming informal agencies and strategies into the formal sector		4	4	7.0175
Incentivizing private developers adequately		3	3	5.2632
PPP strategies	1	2	3	5.2632
Adequate budgetary allocation of subsidies		3	3	5.2632
Improving informal housing to increase housing stock		3	3	5.2632
Treating housing as a system with multidimensions	1	1	2	3.5088
Adopting non-market solutions	1	1	2	3.5088
Communal housing strategies	1	1	2	3.5088
Commodify housing	1		1	1.7544
Enhancing the general economy		1	1	1.7544
Partnership with research community for workable solutions		1	1	1.7544
Grand total			(Σf)57	100
<b>Housing Finance</b>				
Deliberate finance models and policies inclusive of the urban poor	8	7	15	25.424
Rent control policies accompanied with proper implementation	3	6	9	15.254
Deliberate Public-private partnership approaches	5	2	7	11.864
Empowerment of the urban poor to earn more and spend wisely	2	4	6	10.169
Mainstreaming informal agencies and strategies into the formal sector		6	6	10.169
Enhancing the general economy and improving infrastructure		4	4	6.7797
Coalition of all housing stakeholders	3		3	5.0847
Recognising the assets of the urban poor and titling same		3	3	5.0847

Themes	d	r	Total (d +r)	y(%)
Incentivizing private developers adequately		2	2	3.3898
Adapting transfer subsidies to the Nigerian reality	1		1	1.6949
Mass housing production and delivery	1		1	1.6949
Ascertaining the actual housing need		1	1	1.6949
Employers to provide housing and not only housing allowances		1	1	1.6949
Grand total			(Σf)59	100
Land Acquisition				
Deliberate land allocation policies inclusive of the urban poor	2	4	6	17.143
Deliberate rental policies inclusive of the urban poor	2	2	4	11.429
Mainstreaming informal agencies and strategies into the formal sector	3	1	4	11.429
More transparent land allocation and titling processes	2	1	3	8.5714
Recognising the assets of the urban poor and titling same	1	2	3	8.5714
Improving informal housing to avoid new land allocation	2	1	3	8.5714
Better transport infrastructure to access outer cities	2		2	5.7143
Incentivizing private developers adequately to encourage them	1	1	2	5.7143
Enhancing the general economy and improving infrastructure	2		2	5.7143
Communal housing strategies	2		2	5.7143
Alternative accommodation		2	2	5.7143
Ascertaining the actual housing need	1		1	2.8571
Adopting holistic approaches for the housing ecosystem		1	1	2.8571
Grand total			(Σf)35	100

**Table 7.2:** Major affordable housing solutions from supply and demand viewpoints

Supply (experts) perspective	Demand (users) perspective
Housing Finance	
1. Deliberate finance models and policies inclusive of the urban poor	▪ Group savings
2. Rent control policies accompanied with proper implementation	▪ Trade unions
3. Deliberate Public-private partnership approaches	▪ Cooperative societies
4. Empowerment of the urban poor to earn more and spend wisely	▪ Microfinance institutions
5. Mainstreaming informal agencies and strategies into the formal sector	▪ Rental finance models
6. Enhancing the general economy and improving infrastructure	▪ Daily/weekly rent payment plans
7. Coalition of all housing stakeholders	
8. Recognising the assets of the urban poor and titling same	
9. Incentivizing private developers adequately	
Housing Construction	

Supply (experts) perspective	Demand (users) perspective
<ol style="list-style-type: none"> <li>1. Deliberate government policies and laws inclusive of the urban poor</li> <li>2. Use of alternative construction materials and strategies</li> <li>3. Ascertaining the actual housing need</li> <li>4. Controlled rental housing strategies</li> <li>5. Inclusionary housing strategies</li> <li>6. Mainstreaming informal agencies and strategies into the formal sector</li> <li>7. Incentivizing private developers adequately</li> <li>8. Public-Private Partnership strategies</li> <li>9. Adequate budgetary allocation of subsidies</li> <li>10. Improving informal housing to increase housing stock</li> <li>11. Treating housing as a system with multidimensions</li> <li>12. Adopting non-market solutions</li> <li>13. Communal housing strategies</li> </ol>	<ul style="list-style-type: none"> <li>▪ Cheap housing</li> <li>▪ Rental housing</li> <li>▪ Shared apartment</li> <li>▪ Use of alternative building materials (improvised housing)</li> <li>▪ Incremental housing</li> <li>▪ Mixed-use housing</li> </ul>
Land Acquisition	
<ol style="list-style-type: none"> <li>1. Deliberate land allocation policies inclusive of the urban poor</li> <li>2. Deliberate rental policies inclusive of the urban poor</li> <li>3. Mainstreaming informal agencies and strategies into the formal sector</li> <li>4. More transparent land allocation and titling processes</li> <li>5. Recognising the assets of the urban poor and titling same</li> <li>6. Improving informal housing to avoid new land allocation</li> <li>7. Better transport infrastructure to access outer cities</li> <li>8. Incentivizing private developers adequately to encourage them</li> <li>9. Enhancing the general economy and improving infrastructure</li> <li>10. Communal housing strategies</li> <li>11. Alternative accommodation</li> </ol>	<ul style="list-style-type: none"> <li>▪ Proximity to work places</li> <li>▪ Mixed-use housing</li> <li>▪ Cheap rental housing</li> <li>▪ Deliberate government policies on land allocation inclusive of the urban poor</li> </ul>

### 7.2.1 Housing construction

As evidenced in Table 7.2, housing construction solutions of the urban poor include low-budget housing as they mostly earn no income. The few that are lucky to earn an income usually earn

very low and cannot afford market rent, this leaves them with options like shared apartment with friends and relatives, improvised housing like wooden houses, containers and the likes. Some very few urban poor are able to gather some capital usually from savings groups and contributions to own a home employing strategies like self-help incremental housing and use of alternative building materials (improvised housing). These approaches can be modified towards effectively housing the urban poor in agreement with housing experts who advocated for mainstreaming of informal strategies, improving available informal housing stock, the use of alternative materials in building construction, and deliberately inclusive policies; as presented in Table 7.1. These identified informal housing solutions can be incorporated into affordable housing policies, creating deliberate policies that are inclusive of the urban poor for more effective affordable housing provision (Amoako & Boamah, 2017).

Deliberate government policies will be considerate and inclusive of the urban poor towards sustainable, effective and suitable affordable housing when it adopts non-market solutions to provide cheap housing and free hostel accommodation for the urban poor that have no income, while empowering them to start earning an income. Shared apartment is a strategy of the urban poor that can also be explored along with the free hostel accommodations to house more than one family in one unit with shared facilities. Many of the sampled urban poor trade in the same place they live, suggesting a form of mixed-use housing strategy. This strategy can be explored to increase affordable housing stock, where a property is designed to serve commercial purposes during the day but serve as shelter at night. This will innovatively house the urban poor while preserving their sources of income and livelihood.

In self-help incremental housing, the urban poor build gradually by themselves which suggests that some of them can be engaged for construction activities. This is another strategy of the urban poor that can be explored to engage the youths in the community for cheaper labour

during housing intervention programmes. In addition to the cheap labour that this offers, engaging the community in housing programmes will give them a sense of responsibility, a sense of belonging and improve their economic status (Sanga & Lucian, 2016; Wainer et al., 2016). The few urban poor who own their homes achieved this through incremental housing strategy in alignment with Bangura and Lee (2021); Sanga and Lucian (2016); Wainer et al. (2016); agreeing with expert opinion, these available housing stock should be improved and titled instead of demolition and relocation of the slum dwellers. This is a radical approach that will increase the available housing stock without having to build new housing, avoiding the cost of construction and all the associated expenses; while enhancing the economic power of the urban poor. Mainstreaming and formalizing strategies of the urban poor will strengthen them and speed up affordable housing construction for the urban poor (Fieuw & Mitlin, 2018; Patel, 2013; Patel & Bartlett, 2016). This way the urban poor are enabled to help themselves out of their own housing predicament.

Improvised housing is a common housing construction solution of the sampled urban poor where they use other building materials cheaper than ‘brick and mortar’ as shown in Table 7.2 in agreement with (Acheampong & Anokye, 2015; Service, 2012). For improvised housing strategy to thrive in any economy, legal frameworks and deliberate policies must be put in place to support and encourage the practice. Government can collaborate with research community in identifying useful alternative materials while deliberately reserving some parts of urban land for affordable housing construction purposes. Private developers and all other interested stakeholders can be incentivized through a properly structured public-private partnership arrangements to adopt alternative materials that are durable, sustainable, and affordable in building for the urban poor who are less concerned about aesthetics but are in urgent need of housing. Expert opinion was that abandoned houses across the cities can be converted into hostel accommodation for the urban poor. This is one of the ways the urban



poor improvise for their housing constraints in the cities and can be explored, properly packaged, and modified towards affordable housing provision. Sustainable and effective affordable housing construction solution will be an innovative fusion of users (demand) and experts' (supply) solutions as summarised in Fig. 7.1, showing the process flow from points [1 – 4].

### **7.2.2 Housing finance**

As evinced in Table 7.1, significant expert solutions for affordable housing finance constraints include deliberate finance models that are inclusive of the urban poor and modification of existing finance models of the urban poor. These expert solutions adequately align with the realities of the urban poor which demonstrates that there are existing informal finance approaches like the group savings, trade unions, cooperative societies and microfinance institutions that can be explored and indeed modified towards effectively financing housing for the urban poor. It is a significant expert opinion that government needs to create deliberate finance models that are considerate of the low-income and poor credit record characteristics of the urban poor, such policies will be suitable and effective if informed by the existing finance approaches of the urban poor in agreement with (Sandhu, 2013; United Nations Human Settlements Programme, 2005). However, modification, repackaging and institutionalization of existing informal finance models which is also a significant expert finance solution may be a cheaper and more sustainable means to affordable housing financing in developing economies. Study findings align with literature that informal approaches are often accompanied by managerial challenges as opined in Patel (2013); Patel and Bartlett (2016); Sripanich et al. (2015) but with deliberate policies in place as posited by experts, such challenges can be controlled (Sripanich et al., 2015).

Rental housing is a prominent strategy of the urban poor to enhance housing affordability for themselves as 90% of respondents live in cheap rented housing. This is an information that should dictate the tune of policies, if such policies will be deliberately inclusive of the urban poor's housing and income realities. Deliberate finance policies as a supply-side solution should prioritise rental housing over homeownership, providing rental housing loans with considerate down payment requirements and flexible loan repayment plans specifically designed for the urban poor (Sandhu, 2013; UN-Habitat, 2011, 2013a). Rental package is a solution mutual to both users and experts that must be explored for effective affordable housing financing. Findings reveal that the urban poor are mostly casually employed and earn daily/weekly incomes, it is difficult for the urban poor to accumulate funds from daily/weekly earnings for annual rent payment arrangements. Experts on the supply-side averred for deliberate and properly implemented rental policies that are inclusive of the urban poor. As far as the urban poor is concerned, an inclusive rental policy will be such that encourages daily/weekly rent payment. Deliberate policies can be designed to explore the existing thrift collection, savings groups, microfinance institutions and trade union strategies to establish a controlled system where daily/weekly rents are collected and accumulated towards monthly or annual rent payment.

The creditworthiness of the urban poor is hampered by their level and regularity of income (Acheampong & Anokye, 2015; Klink & Denaldi, 2014; Tariq, 2012; Un-Habitat, 2012, 2013a), to overcome this prevailing challenge, it is crucial that deliberate finance models device other means of verifying and establishing creditworthiness of the urban poor. Study findings show that financial assistance is a popular anticipation among the urban poor, especially with regards to their income-generating vocations. Along this line of thought, experts opined that the urban poor require trainings on how to earn more, save more towards their better housing and spend less. Housing experts also put forward that it is essential to enhance national economy, improve

the state of infrastructure and increase the minimum wage. These expert solutions are truly aware and considerate of the realities of the urban poor. For effective affordable housing finance to be achieved, finance solutions need to be integrated from supply-side and demand-side and carefully packaged to address the urban poor. Sustainable and effective affordable housing finance solution will be an ingenious synthesis of users (demand) and experts' (supply) solutions as summed up in Fig. 7.2.

### **7.2.3 Land acquisition**

As exhibited in Table 4.2 and discussed in chapter four of this dissertation, the investigated urban poor rarely have income and lack financial capacity to acquire land in the cities at market rate except land is deliberately allocated to service them, this is an opinion also avowed by experts as critical solution to affordable land acquisition constraints in developing economies in agreement with (Nzau & Trillo, 2020). Government needs to deliberately reserve some portions of urban land for housing the urban poor as the urban poor are intricate parts of the city's ecosystem. Cities will be dysfunctional without the urban poor who cannot afford urban land and housing, it is imperative to make provisions for their shelter through deliberate policies. Government needs to partner with other stakeholders to accommodate the urban poor in consonance with Karuaihe and Wandschneider (2018); Nzau and Trillo (2020) who advocated for government allocating lands to private developers for inclusionary housing strategies where affordable housing for the urban poor is mixed into market housing.

Other innovative supply-side solutions include government collaborating with interested stakeholders to adopt abandoned buildings within the city, modify and convert them into affordable housing instead of new land allocations. All non-market solutions require deliberate policies to set social housing provision strategies in motion through harmonious partnership with NGOs and other stakeholders as established in (Anierobi & Obasi, 2021; Coskun, 2011;

Mutman & Turgut, 2011). Communal land acquisition strategy is another solution that can be explored to solve land acquisition challenges. Experts averred that the complexities of land acquisition, allocation and documentation become easier when faced as a group in alignment with (Amoako & Boamah, 2017; Boamah, 2010; Habitat, 2007; Karley, 2002; Landman & Napier, 2010; Sripanich et al., 2015). Empirical evidence established the presence of savings groups and trade unions in the sampled informal settlements, these can be mainstreamed, institutionalized, and supported with policies that will enable them acquire land as a community for members, thereby alleviating the challenges of land acquisition for the urban poor. As policies encourage communal land acquisition, policies should also encourage more transparency in land documentation processes, discourage bureaucracy and diminish cost of land registration in favour of the urban poor (Klink & Denaldi, 2014; Patel & Bartlett, 2016; Sandhu, 2013; Un-Habitat, 2013a; Ward et al., 2015).

Study findings are that the urban mostly live and earn income within their settlement, suggesting an economic tie to these locations in consonance with Kusrini et al. (2018); Wainer and Vale (2021); Young (2018), making relocation, displacement, and forceful eviction unfavourable to the urban poor. As demonstrated in Table 7.1 and discussed in chapter 6 of this thesis, housing experts advocated for improvement or an upgrade of existing informal housing stock to increase the national housing stock without the need for new land allocations, this alleviates the challenges of seeking land in the already congested cities or displacing the urban poor to outer cities away from their sources of income. Titling existing informal housing as assets is another radical expert solution that will retain the urban poor in present locations, sustainably upgrade their financial status, enhance their creditworthiness whilst increasing national housing stock without the task of new land allocations. These are inventive supply-side solutions similar to Amoako and Boamah (2017); Average (2019) and Yap (2016) who asserted that housing strategies of the urban poor can be informative for ways to eliminate

slums. Informal housing strategies, if modified and institutionalized through deliberate policies can be explored to sustainably empower the urban poor while effectively providing affordable housing.

Findings from this study demonstrate that rental housing is a popular strategy of the urban poor that helps them avoid the high cost and hardship of land acquisition (Datta & Jones, 2001; Kamruzzaman, 2009). Findings also show that the urban poor deploy mixed-use housing strategy where they live and trade within the same space they live. This strategy enhances affordability for the urban poor while managing available space. These innovative approaches of the urban poor can be explored with adequate legal framework to increase housing affordability and enhance land management in already congested cities. The urban poor can be housed in deliberate mixed-use rental houses that are designed to shelter the urban poor at night while offering a space for commercial uses during the day. Along this line of thought, experts avow for deliberate rental housing policies and alternative accommodation to house the urban poor in cities. Deliberate government land policies that will be inclusive of the urban poor will strengthen cheap rental housing provision, control rent to prevent market forces from influencing rent against the urban poor and lastly explore alternative accommodation options like mixed-use housing, hostel accommodation, engaging abandoned properties across the cities to provide affordable housing with minimal need for new land allocations. For affordable land provision in an effective and sustainable manner, it is essential to integrate expert solutions and users-oriented solutions into an innovative vehicle as summarised in Fig. 7.3.

The independent elements of housing supply value chain function interdependently in reality. Housing finance is the fulcrum that drives land acquisition and housing construction as housing development cannot be embarked upon without adequate financing (Doling et al., 2013). Housing construction is only achievable when housing finance and acquired land are available,

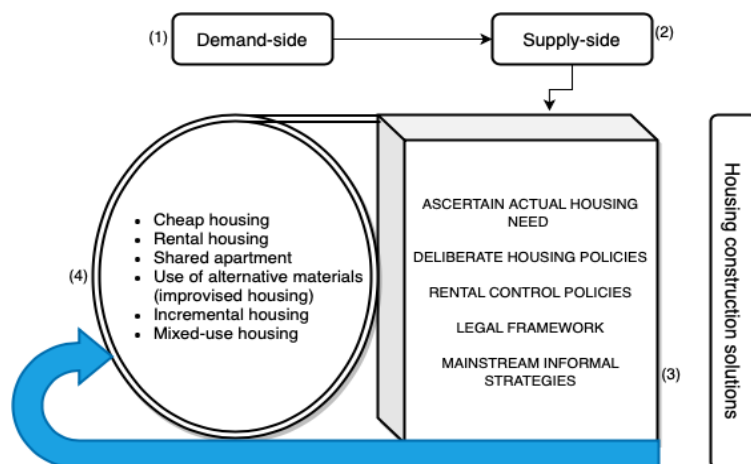
it is therefore pragmatic to investigate the components of housing supply value chain (HSVC) as an interdependent entity. This study investigated the urban poor and examined housing experts to gather users (demand) and experts' (supply) solutions respectively. These solutions were explored across the major components of HSVC which are fundamental to successful housing supply in any economies. To achieve adequate supply which is in harmony with demand, supply should be informed by what is in demand. This way, discrepancy between housing demand and supply can be diminished and eliminated. This study is a thorough investigation of AH solutions from two-sided perspectives across the entire HSVC to achieve sustainable, suitable and effective approaches to affordable housing provision for the urban poor in developing economies.

Integrated solutions are presented in a pragmatic framework for effective affordable housing (EAH) provision for the urban poor in Fig. 7.4. This framework clusters the identified affordable housing solutions based on informal housing solutions deduced from strategies of the urban poor and housing experts' critical affordable housing solutions. Unbroken arrows in this framework represent connections between elements while dotted lines represent the mutual interrelationship of all components within the framework, showing the flow of processes from points [1 – 5]. As conceived in Akinwande & Hui (2022), the framework seeks to encapsulate and synchronize all three major components of the HSVC into one whole package, highlighting the solutions for every element whilst demonstrating the interconnectedness, links, and interdependence of these elements toward the pragmatic achievement of sustainable, suitable, and effective affordable housing provision approaches from a consolidated users/experts' standpoint.

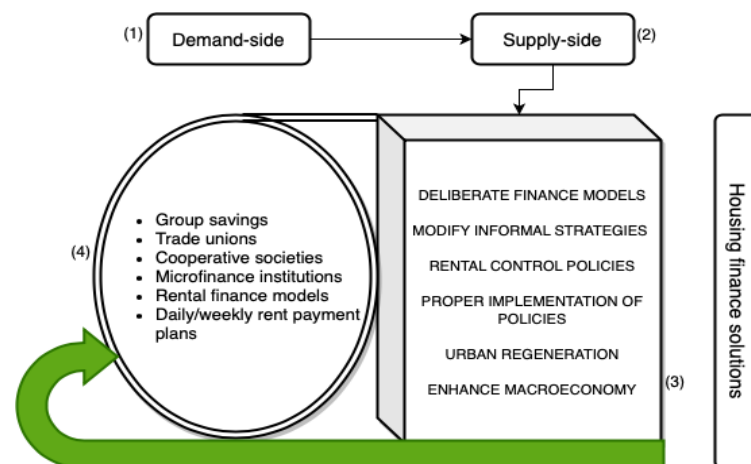
Though several studies have investigated AH provision, to the best of researcher's knowledge, there is yet to be a study that concurrently explores AH solutions from demand and supply

perspectives (Adabre & Chan, 2019; Adabre et al., 2020; Chan & Adabre, 2019; Ihuah & Eaton, 2014; Lee, 2020; Oyebanji et al., 2017; Said et al., 2016). This study attempts to create a balance between AH demand and supply, eliminating the apparent discrepancy between AH demand and supply by examining AH provision solutions from the bilateral viewpoints of users (demand) and experts (supply) towards effectively housing the urban poor. Further, this study adopts a multidimensional approach by investigating these two-sided AH solutions across the entire HSVC to amplify advocacies for multidisciplinary approaches in housing studies and interventions such as Fieuw and Mitlin (2018); Grubbauer (2019); Marutlulle (2021); Patel and Bartlett (2016), introducing a new theory that has capacities to enhance effective affordable housing (EAH) provision for the urban poor in developing economies.

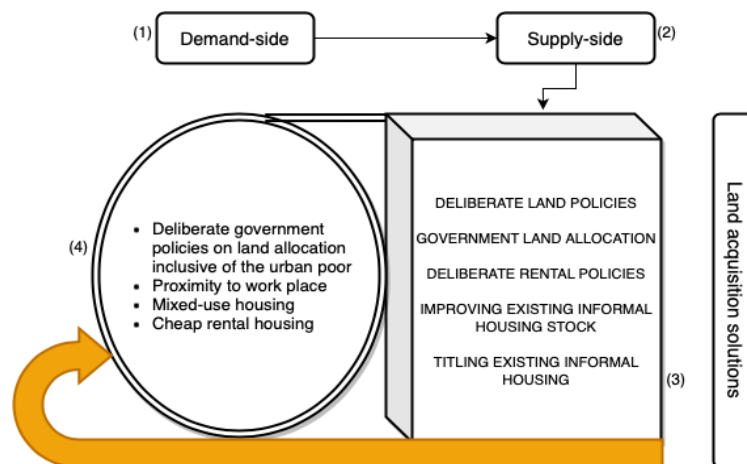
The framework for EAH provision generated in this study culminates the theory, providing that AH supply-oriented solutions will be suitable and more effective when informed by AH demand-oriented solutions across the entire HSVC. Supply-side solutions should incorporate and strengthen identified demand-oriented solutions in a manner that recognizes the interdependence of the components of HSVC. The framework advocates that policies made to enhance AH finance should be accompanied with policies that encourage affordable land allocation as well as policies to enable AH construction approaches. The prevalent challenge of AH provision in developing countries require deliberate solutions that concurrently target the constraints encountered at each level of HSVC. This multidisciplinary and holistic approach across the entire HSVC has capacities to enhance the effects of AH interventions towards the achievement of EAH provision in developing economies. This is a pivotal and essential extension of housing studies in the area of multidisciplinary and multidimensional approaches to housing interventions, especially in response to the complicated nature of prevailing AH provision challenges in developing economies.



**Figure 7.1:** Effective affordable housing construction



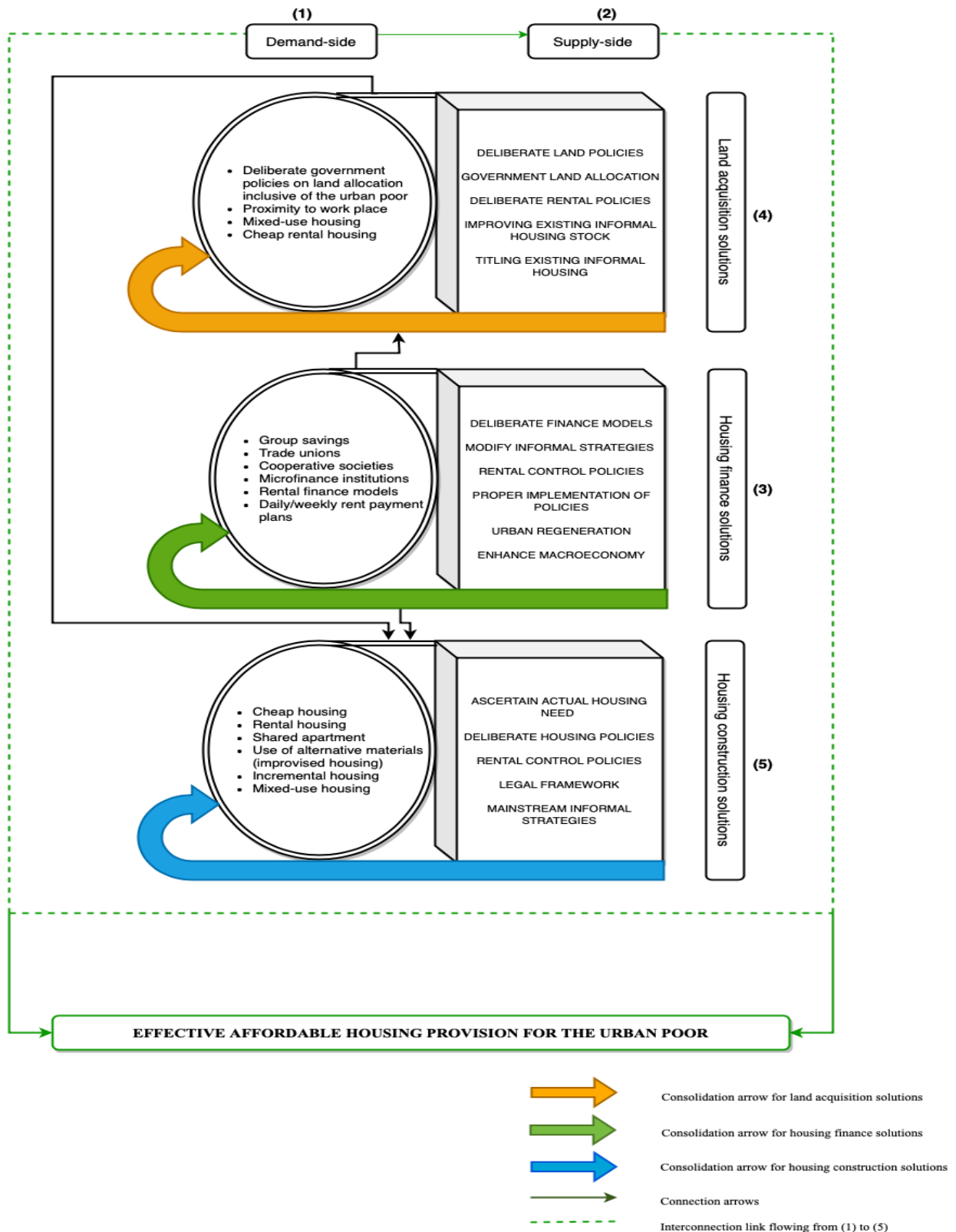
**Figure 7.2:** Effective affordable housing finance



**Figure 7.3:** Effective affordable land acquisition

Sources: Researcher, 2023





**Figure 7.4:** A pragmatic framework for effective affordable housing provision in Nigeria, a consolidation of demand and supply viewpoints

Source: Researcher, 2023.

#### **7.4 Validation of the pragmatic framework**

Validation is not only the final stage of a research process but an essential process to test the credibility, objectivity, feasibility, quality, suitability, applicability, relevance and acceptability of research outputs which can either be frameworks, models or theories (Adabre, 2021; Darko, 2019; De Wilde, 2018; Hu et al., 2016; Osei-Kyei et al., 2017; Wuni, 2022). The level to which the developed framework provides the target function and captures realistic requirements is measured through the process of validation (Osei-Kyei et al., 2017). Validation can be any of the following; empirical, analytical and comparative validation processes (De Wilde, 2018). This study employed the empirical validation process using expert opinion for the benefits of exploring the external constructs as well as content validities of the framework (Adabre, 2021). The expert opinion was utilised in this study to save reasonable research time in alignment with (Adabre, 2021; Adegioriola, 2023; Osei-Kyei et al., 2017), because it will take substantial period of time to validate with real life projects.

For the validation procedure of this study, six validation questions were developed and utilised to examine the external, internal, construct and content validities. The generalizability and adaptability of the pragmatic framework for effective affordable housing provision to other groups of urban poor is measured in external validity (Hu et al., 2016), while internal validity measures causality and the degree to which the frameworks can provide the outcome anticipated and enhance effectiveness in affordable housing provision (Osei-Kyei et al., 2017). The alignment of the frameworks with real world requirements for affordable housing provision is measured in construct validity, measuring appropriateness and comprehensiveness of the frameworks (Wuni, 2022). Lastly, for the proposed framework for effective affordable housing provision, content validity was measured by an assessment of the framework, its constructs and the implementation strategies; if these could cause effectiveness in affordable housing provision, if implemented properly (Adabre, 2021; Darko, 2019).

The various aspects of validation can be evaluated using quantitative or qualitative approaches (Yang et al., 2011). The qualitative approach was adopted to corroborate and validate this research's outcome because the external validity, internal validity, construct validity and content validity required for this study are all qualitative in nature (Adabre, 2021; Lucko & Rojas, 2010).

#### **7.4.1 Validation questionnaire and expert survey**

A questionnaire containing relevant questions were developed in this study to validate the proposed framework for effective affordable housing provision in Nigeria. Similar to past studies, the questionnaires was dispensed via email (Adabre, 2021; Adegoriola, 2023; Ameyaw & Chan, 2016). This was followed by online meetings to discuss the assessment responses of the experts. The questionnaire had four sections. Section 1 gathered background information of the consulted experts. In Section 2, the experts were provided with a brief summary of study findings and the processes that led to the development of the framework. Section 3 presented the proposed framework and lastly in section 4, the experts were requested to answer 6 enquiries that measure external validity, internal validity, construct validity, and content validity of the proposed framework. As applied in (Adabre, 2021; Adegoriola, 2023; Wuni, 2022), the experts were presented with six validation statements with which they were requested to assess their level of agreement or disagreement, using a 5-point Likert scale: (1= strongly disagree, 2= disagree, 3= moderate, 4= agree, and 5 = strongly agree). Eight experienced experts with minimum of 10 years working experience in the fields directly related to major components of HSVC were purposively recruited to partake in the validation exercise. The relevant information of the experts is presented in Table 7.3

**Table 7.3:** Background information of the panel of experts

	Expert 1 (E1)	Expert 2 (E2)	Expert 3 (E3)	Expert 4 (E4)	Expert 5 (E5)	Expert 6 (E6)	Expert 7 (E7)	Expert 8 (E8)
Section of Operation	Affordable Housing Financier	Lands Bureau	Ministry of Lands	Secondary/ Wholesale Mortgage Lender	Urban Planner	Public Housing Developer	Affordable Housing Financier	Private Property Developer
Position	AGM Risk Management Department	Senior Valuation Officer	Deputy Director	Group head, Strategy & Performance Management	Head of Projects	Head, Town Planning Unit	Group Head, Direct Marketing Unit	Head of Operations
Years of Experience	22 years	20 years	23 years	27 years	12 years	10 years	16 years	15 years

**Table 7.4:** Validation result for integrated framework

S/N	Validation statements	E1	E2	E3	E4	E5	E6	E7	E8	Mean
1.	The expert solution to affordable housing provision constraints determined as significant in this study are reasonable and are applicable to the current situation in Nigeria.	5	5	4	5	5	4	4	5	4.63
2.	The framework for effective affordable housing provision is easily intelligible and could be used for affordable housing provision in Nigeria.	5	4	5	4	5	3	4	5	4.38
3.	The systematic connection and interconnection of elements of HSVC in the framework are appropriate.	4	5	4	5	5	3	4	5	4.38
4.	The framework for effective affordable housing provision is inclusive and comprehensive for the application.	4	4	4	5	5	3	4	5	4.25
5.	The appropriate application of the pragmatic framework of consolidated solutions will enhance suitable and effective affordable housing provision in Nigeria.	4	5	4	4	4	4	4	4	4.13
6.	Overall, the framework is suitable for achieving effective affordable housing provision in Nigeria.	4	5	4	5	5	5	4	5	4.63

#### 7.4.2 Validation results

Table 7.4 evinces the validation results. As demonstrated in Table 7.4, mean scores for all the validation statement are above 4.00. The typical implication of this is that experts agree and confirm that the framework for effective affordable housing provision is adequate in terms of

external validity, internal validity, construct validity and content validity. To appraise the external validity of the framework, statements 1 and 6 are appropriate. As displayed in Table 7.4, statement 1 obtained a high mean score of 4.63 which is an indication that critical affordable housing solutions and consolidated solutions from bilateral perspectives as established in this study are vital and reasonable within the Nigerian context. The high mean score of 4.63 was also obtained for statement 6, implying that the framework for EAH provision is highly suitable for the achievement of its target function of ensuring effectiveness in affordable housing provision in Nigeria.

Statement 2 appraised the internal validity of the framework for EAH provision. As displayed in Table 7.4, the mean score of 4.38 was obtained for this statement and this implies that the framework is articulate, lucid and easily applicable in the Nigerian housing market. Statements 3 and 4 appraised the construct validity of the framework for EAH provision and obtained means scores of 4.38 and 4.25 respectively. The mean score for statement 3 confirms the systematic connection within the construct of this study, implying that the framework for EAH is appropriate for the Nigerian affordable housing provision sector. On the other hand, the result for statement 4 is an indication that the framework for EAH provision is highly inclusive and comprehensive.

Statement 5 appraised the content validity of the framework for EAH provision and obtained a mean score of 4.13. This implies that the framework has high tendencies of enhancing effectiveness and sustainability of affordable housing provision in Nigeria, provided the policy makers and all stakeholders involved in AH provision apply the framework appropriately (Adabre, 2021). This validation procedure is considered reliable in past studies in the built environment (Adabre, 2021; Adegoriola, 2023; Wuni, 2022).

Obtaining high mean scores ( $> 4.00$ ) across the four validation aspects in this study on EAH provision demonstrates that study results are credible, reliable, comprehensive, inclusive and appropriate for the Nigerian situation (Adabre, 2021; Darko, 2019). The framework can therefore enhance the achievement of EAH provision in Nigeria. To ensure that this framework is adopted in Nigeria and other developing countries, some steps have been taken as strategies for implementation towards achieving SDGs. These steps include, making some of the study results publicly available through publications and some under second-stage review in various reputable publication outlets. Also, some of the research findings have been presented at conferences in Hong Kong, (New York) United States of America, (London) United Kingdom and (Delhi) India. Presenting study results in workshops, conferences and seminars of professional organisations and institutions in Nigeria [i.e. Nigerian Institution of Estate Surveyors and Valuers (NIESV), Estate Surveyors and Valuers' Registration Board of Nigeria (ESVARBON), Nigerian Institute of Town Planners (NITP), Ministry of Housing, Federal Mortgage Bank of Nigeria (FMBN) among many others] and in other developing countries will make study results more available.

#### 7.4.2.1 Additional feedbacks from the experts on the proposed framework

The consulted experts provided qualitative feedbacks and suggestions with which the applicability of the framework can be improved, in addition to their quantitated assessments. The professionals largely attested to the significance and applicability of the framework for the achievement of effective affordable housing provision as demonstrated in some of their responses;

*“Generally, I concur that the framework for effective housing provision as captured adequately covers salient issues and pragmatic solutions to address the challenge of affordable housing for the urban poor in Nigeria.”*

*“I have studied the framework and I think it is comprehensive, looking at the issues from the supply and demand sides and equally proffering an integrated solution from both sides.”*

*“The framework, I would say, is market-focused by recognising the interplay of supply and demand in driving affordable housing solution in Nigeria. The three elemental components are essential in defining affordable housing solutions.”*

*“Great job! I agree with the elements for the housing supply value chain (HSVC).”*

*“The framework if carefully adopted will attract wide stakeholders’ interest to support affordable housing delivery in Nigeria. Overall, the researcher did a good job based on the approach adopted to arrive at the framework.”*

In as much as the experts multilaterally validated the framework, an expert opined that the framework will be challenged by the inadequacies in the regulatory framework for housing development in Nigeria. This is quoted below;

*“The regulatory framework around housing development in Nigeria is not adequate at the moment. The framework may be challenged by the lack of legislative frameworks for housing development.”*

Nevertheless, this concern has been addressed in the recommendations of this study. Finally, an outstanding expert recommendation was that housing development should be identified as a key performance index (KPI) for good governance in the country, so that housing development becomes of high priority to increase housing stock and attract all the accompanying economic benefits. In the words of the expert;

*“Housing development should be a KPI for good governance. Also because of the potential for housing development to have a multiplier effect in the society/economy; government must take housing development seriously and not leave it to the private developers. State Housing Corporations should also be incentivised, and budgetary allocations made to government sponsored housing finance institutions.”*

## **7.5 Chapter summary**

This chapter juxtaposes and integrates affordable housing solutions from experts and users’ perspective to develop frameworks for effective affordable housing provision across the entire housing supply value chain. This chapter further developed and validated the consolidated

framework for effective affordable housing provision. The frameworks contain specific strategies and processes that will enhance affordable housing finance, affordable land acquisition and affordable housing construction in developing economies. The three independent frameworks can enable different stakeholders to identify solutions and processes in the areas involving their expertise, while the consolidated framework that synthesises the three components demonstrates the interconnectedness of housing challenges and amplifies the need for multidisciplinary approaches in tackling housing challenges. The chapter provides the first consolidated framework for effective affordable housing provision that can enable the achievement of sustainable development goal (11) for inclusive and resilient cities in developing economies. Relevant conclusions are drawn in the next chapter, stating the contributions and limitations of this study.



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## **CHAPTER 8: CONCLUSIONS, CONTRIBUTIONS AND FUTURE RESEARCH**

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### **8.1 Introduction**

This chapter is a summary of the accomplishments of study objectives. Relevant conclusions based on study objectives are established in this chapter. The chapter begins with a review of the objectives of this study, associating each with the findings from the research study. The novelty and contributions of this study to theory, policy and practice are outlined in this chapter. The recommendations, limitations and future research direction are subsequently presented in this chapter.

### **8.2 Review of research objectives**

This study aimed at integrating affordable housing solutions from both users (demand) and experts' (supply) perspectives across the entire HSVC, with a view to investigate whether a pragmatic framework to effectively house the urban poor in Nigeria can be developed.

To achieve this aim, the objectives are as follows:

1. To investigate strategies utilized by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations.
2. To examine how informal housing strategies of the urban poor can inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria.
3. To ascertain experts' solutions to constraints in affordable land acquisition, affordable housing finance and affordable housing construction in Nigeria.
4. To examine the nexus between demand-oriented solutions from the urban poor's strategies and experts' housing solutions towards EAH provision in Nigeria.

5. To consolidate findings to develop and propose a pragmatic framework (that envelopes both users and experts' solutions) for EAH provision for the urban poor in Nigeria.

The five objectives of this study were successfully accomplished using various qualitative methodologies for in-depth analyses as presented in chapter 3 of this thesis. The major findings and conclusions of each objective are presented below:

**Objective 1:** *Investigate strategies utilized by the urban poor in Nigeria to provide suitable AH for themselves and their families, considering their socio-economic limitations.*

A thorough thematic content analysis of the livelihood, housing characteristics, housing situation and housing activities of the urban poor in Lagos slums ascertained their strategies for housing themselves and families, clustering these strategies in Fig. 2 (see chapter 4) to clearly demonstrate potentials for effective affordable housing provision that can be unlocked. Study findings establishes that the urban poor barely have any incomes and when they are able to earn, it is below \$7.5 weekly. This limits their ability to pay rent, thus suitable affordable housing for the urban poor is near free housing. For those who are able to earn some income, the suitable rent should be less than \$9 per month, going by their income. It is noteworthy that, other individual/family commitments are not factored into this analysis of rent as it is strictly based on income, of which other important commitments may diminish the amount the urban poor are able to dispose on rent per month.

Also, study confirms that daily/weekly rent payment is more realistic for the urban poor. Regarding housing tenure and types, findings are that cheap rental housing is the suitable housing for the urban poor as they cannot afford homeownership. Affordable housing interventions should not relocate or displace the urban poor as findings show that the urban poor have economic ties to their locations. Instead of relocation and displacement of the urban poor, innovative means should be explored to provide affordable housing for the urban poor at

least around their original settlements, so that their sources of income are protected. The urban poor deploy incremental housing, shared housing and alternative housing (use of alternative building materials - wood) as a means suitable for affordable housing construction. Further, study reveals untapped resources in the activities of groups' savings and microfinance institutions within informal settlements towards effective affordable housing financing.

These findings (discussed in detail in chapter 4) extend housing literature by providing a circumstantial demand-oriented analysis to AH provision challenges in developing economies, which has capacity to eliminate discrepancy between AH demand and suppl. Findings from this study augment and extend past housing studies (see chapter 4) that have examined the characteristics of the urban poor in other parts of the world by documenting the characteristics and more importantly, the informal housing strategies of the urban poor in Lagos slums. Study findings extend literature (see chapter 2 and 4) that housing strategies of informal settlers can be informative of ways to eradicate slum formation in cities of developing economies, by exploring the informal housing strategies of Lagos slum dwellers. Lastly, literature advanced that AH policies can be utilised to upgrade informal settlements in developing economies (see chapter 4), study findings provide informal strategies of the urban poor that can be carefully incorporated into AH policy decisions in favour of the urban poor; thereby extending housing studies.

**Objective 2:** *To examine how informal housing strategies of the urban poor can inform affordable land acquisition, affordable housing finance and affordable housing construction towards EAH provision in Nigeria.*

Extensive literature review revealed housing finance, land acquisition and housing construction as the three main components of housing supply value chain. Thorough thematic content analysis and deductive analysis were conducted on the findings of (objective 1) to examine

how each component can be structured based on the informal strategies of the urban poor, to extend housing literature from a demand-oriented viewpoint towards developing a pragmatic, demand-oriented framework for effective AH supply in Nigeria. The identified informal strategies were analysed vis-à-vis the three major components of HSVC to inform realistic ways to solving the prevailing AH provision challenges in Nigeria. The analysis in this study is premised upon the concept that being attentive to the interconnectivity of HSVC components in affordable housing research and affordable housing policies will lead to realistic affordable housing solution; resulting in effective affordable housing provision for the urban poor across the world in agreement with literature (see chapter 5).

This study investigated each component of HSVC as individual elements in relation to informal housing strategies of the urban poor whilst acknowledging the interdependence and interconnectedness of these components, this enabled the formulation of a comprehensive framework that can tackle the complicated challenge of AH provision for the urban poor in developing economies. As presented in detail in chapter 5 of this thesis, findings are that the urban poor depend on casual employments to earn a living probably as result of their minimal level of education, making them earn low and irregular incomes. These limit their access to credits from formal finance institutions as they have a poor credit score and are unworthy of credits being given. In response to these inadequacies of the urban poor, study found that the urban poor are actively involved in unionism, savings' groups and with microfinance institutions through their various vocations as an alternative means of affordable housing finance, agreeing with past housing studies (see chapter 2)

These findings agree with housing literature (see chapter 2) that savings' groups and microfinance are informal finance strategies usually adopted by the urban poor. Though finance strategies have been devised by the urban poor, findings confirm that assistance in areas of

housing finance is still the most anticipated intervention by the urban poor. This implies that realistic AH intervention for this urban poor category will prioritise housing finance. The existing unions and associations already face management difficulties in alignment with literature (see chapter 2), suggesting that modification and repackaging of these trade unions is crucial so that these resources can be maximised towards effective AH provision. In the area of housing finance, daily/weekly rent payment is more suitable for the sampled urban poor. This calls for deliberate rent policies that will be considerate of the financial state of the urban poor.

Regarding housing construction, study findings are that the urban poor resolve their desperate housing needs by employing self-help incremental housing, living in cheap rental housing, improvised housing and shared/family housing. Major implications and lessons from these findings are that: (1) Housing finance interventions may need to be modified to fund rent payment as homeownership may not be realistic for this category of people. (2) Incremental housing can be a means for the urban poor to solve their housing problems themselves with the help of deliberate policies to support them, while limiting the shortfalls of incremental housing (3) Existing incremental housing of the urban poor can be enhanced to increase the available housing stock (4) Practicing construction workers among the urban poor can be employed into housing development projects to enhance their economic conditions while enjoying their cheap labour to reduce construction cost. (5) Housing construction interventions should be targeted at cheap rental housing with inventions that can support shared housing and the use of alternative cheaper materials for housing construction. The urban poor engage in building improvised housing for themselves. Coupled with the unionism already present in these settlements, this can be a source of cheaper labour for future AH interventions. Government is encouraged to involve the community in housing programmes as this will not only the reduce

cost of construction, but it will also enhance the economic state of the urban poor, giving the slum dwellers a sense of belonging and a sense of responsibility.

Land acquisition appears as the least concern of the urban poor among the three components of HSVC, since homeownership is unaffordable and thus unsuitable for them. The more suitable AH solution for the urban poor is rental housing, thus government and all interested stakeholders should focus on making affordable rental housing available to the urban poor. Government is encouraged to make deliberate efforts to lessen the challenges of land acquisition and implement policies that will attract private investors, NGOs, and all other stakeholders to acquire land for AH development. Other land acquisition solutions in literature (see chapter 2) such as finance allocation for collective land acquisition, harmonious relationship between government, NGOs, private developers and all other stakeholders, public-private partnership among many others are amplified in this study. Findings from this study buttress literature (see chapter 2) that informal settlers usually have socioeconomic ties to their locations and should not be carelessly relocated. This research finding suggests that the suitable location for AH provision will be the original settlements where the urban poor are. In other words, this makes sense to discourage relocation, displacement, and forceful eviction of informal settlers.

Study findings are fundamental extension to housing literature as this study is the first to investigate the informal housing strategies of the urban poor across the entire HSVC. Past studies have investigated the urban poor and their housing characteristics (see chapters 2 and 5), but none had investigated these characteristics vis a vis the major components of HSVC – housing finance, housing construction and land acquisition. Examining the housing challenges of the urban poor across the three components of HSVC provides a broad view of housing challenge to encourage multidisciplinary and multidimensional approaches in AH

interventions. This also extends housing studies that have advocated for multidisciplinary approaches in housing interventions (see chapter 5) as well as extends the advocacy for housing to be treated as a multidimensional system. Interventions that are conceived to address AH provision concurrently across the entire HSVC have capacities to enhance the possibility of effectively housing the urban poor in developing economies.

**Objective 3:** *To ascertain experts' solutions to constraints in land acquisition, affordable housing finance and affordable housing construction in Nigeria.*

Expert solutions to AH challenges in Nigeria have been solicited from three major perspectives of land acquisition, housing construction and housing finance. These three major components of HSVC were rigorously examined in this study, using content and systematic thematic analyses. As discussed in detail in chapter 6 of this thesis, study findings revealed that deliberate government policies that are considerate of the urban poor's peculiarities and inclusive of their needs are the most significant solutions to AH provision challenges across the entire housing supply value chain. To successfully tackle the AH construction challenges, it is crucial to desist from the popular dependence on 'brick and mortar' and use alternative construction materials like bamboo, clay and others that are cheaper. Alternative housing strategies such as shared housing, conversion of abandoned houses for AH provision purposes and incremental housing approaches will reduce the cost of housing construction. Housing experts argue that adequately incentivizing private developers towards PPP arrangements, adequate budgetary allocation of subsidies, improving existing informal housing to increase the housing stock, addressing housing as a multidimensional system, use of non-market solutions to address housing problems and communal housing strategies to reduce housing cost are all important solutions to AH construction challenges.

Deliberate finance models designed to target the urban poor is the most critical success factor to AH finance in Nigeria. Rental housing supported with adequately implemented rent control policies will reduce the cost of housing finance for the urban poor while deliberate PPP approaches like inclusionary housing and land-value capture (LVC) will enable the private sector to invest in AH provision. The economic status of the urban poor can be enhanced through urban renewal programmes to educate them on how to earn more, spend wisely and invest in their own better housing. If informal finance agencies and their strategies are mainstreamed and institutionalized, the urban poor will be empowered to be able to solve housing problems through their existing means. Experts further posited that enhancing the general economy and state of national infrastructure will increase the income of the urban poor – a pathway that they are no longer poor and can afford better housing. Coalition of all housing stakeholders in a form of ‘platform banking’ is an innovative solution submitted by the finance professionals that can encourage a cooperative discussion among all stakeholders towards more deliberate and sustainable means of housing the urban poor. Experts argue that radical approaches like giving titles to assets of the urban poor will enhance their creditworthiness, thereby enhancing their access to debt financing. The private sector should also be adequately incentivized as a strategy to increase their involvement with AH provision.

Findings are that government deliberately reserving urban land for housing the urban poor is the most significant solution to land shortage issues in Lagos. It is significant for government to formulate inclusive rental policies that help the urban poor. They have their existing informal strategies for acquiring land like through communal land. This should be mainstreamed and institutionalized, so as to achieve more effective ways of housing provision and deliveries. Land allocation and titling processes should be more transparent and less bureaucratic to reduce the cost of land documentation. Radical approaches like titling the assets of informal settlers and improving the existing informal housing stock will eliminate the need for new land



allocation troubles. In experts' opinions, land acquisition challenges will be alleviated if transport infrastructure to outer cities are improved. This will obviously decongest the cities whilst, access to the city opportunities can be guaranteed. Alternative accommodation strategies like hostels, mobile homes, conversion of abandoned properties into AH supply and the use of convertible homes are innovative solutions that can eliminate the need for land acquisition for housing the urban poor. These innovative expert solutions are discussed in detail in chapter 6.

Findings from this study amplify housing literature by thoroughly investigating experts in the Nigerian housing sector. Studies that investigate housing experts are popular in literature (see chapters 2 and 6), however, this study is a pivotal extension to housing discussions as it is first to investigate expert housing solutions concurrently across the entire HSVC. The study clustered experienced housing professionals in areas relating to the major components of HSVC in a focus group discussion, enabling insightful debates that are incorporative of the entire HSVC (see chapters 3 and 6). This makes study results multidimensional. This study further extends literature by meticulously analysing housing expert solutions to generate an equation model of critical expert solutions to AH provision challenges across the entire HSVC (see chapter 6). The equation model of critical housing solutions generated in this study showcases the significant AH solutions across the entire HSVC in developing economies, which has policy and practical implications.

**Objective 4:** *To examine the nexus between demand-oriented solutions from the urban poor's strategies and experts' housing solutions towards EAH provision in Nigeria.*

Integrative analyses of findings from (objectives 2 and 3) juxtaposed and synthesized supply-side and demand-side affordable housing solutions in developing economies across the entire HSVC. As demonstrated in the responses of the urban poor (see chapters 4 and 7), they deploy

informal strategies such as incremental housing, use alternative materials like wood for housing construction, use of alternative housing such as shared housing, communal housing and many use the same space they practice their vocations as homes; suggesting a mixed-use housing which serves commercial purposes during the day but serves residential purposes at night time. These user-oriented findings can be supported with experts' solutions (see chapters 6 and 7) like institutionalising informal approaches and agencies and deliberate government policies to include the urban poor. Additional findings from the urban poor are that they belong to trade unions and savings groups as well as engage microfinance institutions within the informal settlements.

These are prospects that can be modified and enhanced with supply-side solutions like deliberate finance models designed for the urban poor, institutionalising informal associations and finance agencies among other expert solutions discussed in detail in chapters 6 and 7 of this study. It can be deduced from investigating the urban poor that they have economic ties to their present location and relocating them to outer cities is not economically favourable. This finding is mutual with expert solutions that government policies need to be deliberate in reserving some portions of urban land to house the urban poor. Solutions deduced from informal strategies of the urban poor and housing expert solutions were consolidated into units of effective solutions to challenges across the entire HSVC. Findings from this study establishes that deliberate government policies that are considerate of the peculiarities of the urban poor and inclusive of their housing needs are the most significant solutions to affordable housing provision challenges across the entire HSVC.

Findings from this study constitute a timely extension to housing literature as a paucity of study that investigates AH provision from the bilateral viewpoints of users (demand) and experts (supply) exists (see chapter 7), while there is an apparent misalliance between AH demand and

supply. This study fills this literature gap and in an attempt to create a balance between AH demand and supply. This study adopts a multidimensional approach by investigating these two-sided AH solutions across the entire HSVC (see chapter 7), thereby making a fundamental contribution to knowledge. This study amplifies advocacies like the need to investigate the urban poor in AH studies, the need to investigate AH provision from multidimensional perspectives among others in previous literature (see chapters 2 and 7). This study introduced a new theory of examining AH solutions from bilateral viewpoints across the entire HSVC in developing economies; a crucial extension of housing studies considering the prevalent and complicated nature of AH challenges.

**Objective 5:** *To consolidate findings to develop and propose a pragmatic framework (that envelopes both users and experts' solutions) for EAH provision for the urban poor in Nigeria.*

To accomplish this research objective, findings from (objective 4) are carefully integrated and synchronised into one all-encompassing framework of effective affordable housing provision in developing economies (see chapter 7). The interdependence of the elements of HSVC is considered and incorporated to ingeniously develop a pragmatic framework for effective approaches to AH provision in developing economies, integrating solutions deduced from strategies of the urban poor and solutions from housing experts' points of view. This study evinces AH solutions in developing economies from bilateral standpoints, juxtaposes them and finally consolidates these two-pronged solutions into one interconnected and reinforced system of solutions.

To successfully address the constraints of AH provision from a realistic point of view, it is crucial that government makes deliberate efforts to formulate and implement inclusive policies. Such policies should include deliberate land allocation for AH provision, deliberate finance models that accommodate the financial realities of the urban poor, deliberate policies to

incentivize, encourage and partner with all interested stakeholders to invest in AH provision, deliberate rental policies that protect the urban poor from market rent pressures, harmonious coalition of all stakeholders of AH provision, deliberate government decision to enhance the economy and state of infrastructure, legal frameworks to support alternative housing provision strategies like mixed-use homes, communal housing, inclusionary housing, mixed housing, shared housing, incremental housing, hostel accommodation, mobile homes, adopting abandoned houses for AH provision purposes, use of alternative materials (wood, containers, bamboo among others), institutionalising informal strategies, improving existing informal housing stock, documenting and titling available informal housing among many other measures explicitly discussed in this study and intelligibly summarised in Fig. 7.4 (see chapter 7).

The framework for EAH provision generated in objective 5 of this study culminates the theory introduced in of this research (see chapter 7), advocating that EAH provision will be achieved if AH supply solutions are informed by AH demand solutions across the entire HSVC. The framework incorporates and strengthens demand-oriented housing solutions with experts' housing solutions (supply-side), while acknowledging the interdependence of the components of HSVC. The advocacy is that policies made to enhance AH finance should be accompanied with policies that encourage affordable land allocation as well as policies to enable AH construction approaches in developing economies. These three major components of HSVC – housing finance, land acquisition and housing construction should be addressed concurrently, as they operate interdependently in reality. The prevalent and complex nature of AH provision challenges require innovative interventions (see chapter 7) that concurrently target the constraints encountered at each level of HSVC towards EAH provision for the urban poor in Nigeria.

### **8.3 Novelty and contributions of the study**

#### **8.3.1 Originality of the study**

- This study is first of its kind to investigate the informal housing strategies of the urban poor in relation to major components of HSVC towards the achievement of EAH provision.
- This study is first to examine experts' opinions across the entire HSVC, revealing expert solutions to constraints encountered in affordable housing financing, affordable housing construction and affordable land acquisition. A novel contribution from this qualitative study is the clustering of housing experts' solutions to develop an equation model of critical AH solutions across the entire HSVC in Nigeria.
- In addition, the critical AH experts' solutions ascertained in this study addresses each level of HSVC independently (housing finance, land acquisition and housing construction), and also addresses the components as one interconnected entity.
- This is the first study to concurrently explore users and experts' perspectives to AH solutions across the entire HSVC, unveiling informal housing solutions of the urban poor and housing experts' solutions to AH provision constraints in developing economies. This research makes a novel contribution to knowledge by rigorously investigating these bilateral views of AH solutions, and integrating these two-sided solutions to formulate frameworks for effective affordable housing finance, effective affordable land acquisition and effective affordable housing construction in Nigeria.
- The study is an innovative amalgamation of expert and users-oriented AH solutions across the entire HSVC to formulate a pragmatic framework for EAH provision in Nigeria. It provides a comprehensive analysis of solutions to AH provision challenges in Nigeria and adaptable in other developing economies.

### **8.3.2 Theoretical contributions**

- The study is a pivotal extension of housing studies by thorough examinations of the urban poor in some of the largest slums in Sub-Saharan Africa. Data from this study can be useful resources for future housing studies in developing economies. Also, findings amplify the voice of the urban poor and has capacities to initiate further scholarly debates.
- This study augments housing studies that have investigated informal settlers in the past by investigating the urban poor in some of the largest slums in Sub-Saharan Africa. Further, this study extends literature by ascertaining untapped useful resources and potentials for suitable AH provision within the informal housing strategies of the urban poor.
- This study amplifies the popular advocacy for multidisciplinary approaches in housing interventions by past housing studies. The study achieved this by investigating AH solutions of the urban poor across the entire HSVC. Housing strategies of the urban poor in relation to housing finance, housing construction and land acquisition were thus ascertained in this study, extending housing literature by providing a comprehensive demand-oriented analysis to AH provision challenges in developing economies.
- This study augments past housing studies that have investigated housing professionals by identifying and aggregating experts' solutions to AH provision constraints. It extends housing literature by investigating experts' housing solutions across the entire HSVC. Thus, it ascertained housing experts' solutions in relation to housing finance, housing construction and land acquisition, generating an equation model of critical experts' solutions to AH provision constraints across the entire HSVC. Thereby, this study provides a comprehensive supply-side analysis to AH provision challenges in developing economies. The investigation across the entire HSVC aligns with the

argument for creative and multidimensional approaches to housing analysis and interventions.

- This study is a crucial extension to housing literature as it compares AH solutions from users (demand) and experts' (supply) viewpoints in order to integrate these bilateral solutions towards EAH provision in developing economies. Thus, study fills a literature gap to proffer AH solutions that realistically synchronise demand and supply. This supports the debate for innovative and multidisciplinary approaches to housing studies.
- This study compares these two-sided AH solutions across the entire HSVC to formulate frameworks that are intelligibly consolidated into a pragmatic framework for EAH provision in Nigeria. This is a fundamental extension of housing literature especially in response to prevailing and intricate challenges of AH provision in developing economies.

### **8.3.3 Practical contributions**

- Study findings draw attention to the pitiable housing situations of the urban poor and findings from this study have capacity to guide AH interventions to meet the target housing needs of the urban poor in Nigeria and other developing economies.
- Findings from this study provide useful information for suitable housing provision for the urban poor in Nigeria. Data clustered in this study provide indispensable information for suitable and EAH provision across the entire HSVC in developing economies. It is recommended that AH interventions should be informed by study findings, to address AH provision challenges in a suitable, sustainable and effective manner.
- The consolidated AH solutions will enhance AH supply being informed by AH demand. This has capacities to eliminate mismatch between housing supply and demand towards

the achievement of sustainable development goals (SDGs); especially goal 11 for inclusive, resilient, safe and sustainable cities in developing economies.

- Findings may be beneficial to governments, NGOs and other stakeholders involved in AH provision. We recommend that housing intervention approaches should be multidisciplinary and multidimensional but strongly anchored on deliberate government policies that are research informed. We recommend that housing interventions prioritise solutions based on the significant experts' solutions established in this study for effectiveness, particularly in Nigeria and can be adapted in other developing economies of the world.

#### **8.3.4 Policy implications**

- Policymakers may find the contributions provided in this study useful to enrich their understanding of the informal housing strategies of the urban poor. Data from this study are informative for housing policy decisions. It is recommended that deliberate efforts should be made to improve, modify, institutionalize and incorporate the informal housing strategies of the urban poor ascertained in this study, into housing policies towards effectively housing the urban poor in Nigeria.
- Contributions of this study may be useful for enriching the knowledge and comprehension of policymakers on critical experts' solutions to AH provision challenges across the entire HSVC. Also, study findings may be essential for enriching the understanding of policymakers about consolidated AH solutions from both users and experts' viewpoints. It is possible to eradicate the misalliance between AH demand and supply, if study findings are incorporated into housing policy decisions in Nigeria and other developing economies. It is therefore recommended that AH interventions and policies should adopt the framework for EAH developed in this study and reinforce it with adequate legal framework to effectively house the urban poor in Nigeria.



- The framework for EAH provision developed in this study provides a sustainable process of AH provision where constraints across all levels of HSVC are concurrently addressed with deliberate efforts. The framework advocates that AH provision interventions should begin by establishing actual housing demand to inform supply, then efforts to improve affordable housing finance should be accompanied with efforts to ensure that affordable land is available as well as efforts to actualize affordable housing construction. This framework has capacity to enhance the achievement of EAH in Nigeria and other developing economies, if appropriately included and implemented in policies.

#### **8.4 Limitations of the study**

- Considering the nature of research sample, findings in this research are not generalisable to all urban poor people. Nevertheless, qualitative findings are in-depth, transferable to other groups of urban poor (Brink, 1993), and confirmable as responses from field investigation are quoted in the data analyses sections (see chapters 4 – 7) to inform data interpretation.
- Despite the contributions of this study, findings were based on semi-structured interviews with 40 randomly sampled slum dwellers in 5 strata of Lagos slums, semi-structured interviews and a focus group discussion with housing experts; it is necessary to consider this limitation while interpreting study results. Nonetheless, the 40 respondents were randomly sampled in carefully stratified Lagos homogenous slums to ensure that samples are representative of the urban poor in Lagos slums. Also, due to the homogeneity in the characteristics of the respondents, their housing conditions are similar and representative of the situation in Lagos slums. The experts investigated in this study were carefully sought to be housing professionals with wide enough spectrum of experience within fields relating to the major components of HSVC (housing finance,

housing construction and land acquisition), making sure that no component is left out despite the small sample size.

- This study gathered useful data for housing finance and housing construction analyses from the informal settlements but data may appear not robust enough for land acquisition analysis due to the probabilistic sampling technique utilized. Nevertheless, the stratified random sampling method adopted eliminated bias and increased accuracy of study findings, giving the slumdweller onsite equal chances of being sampled. This ensured that data were illustrative of the true conditions of Lagos slums (Nguyen et al., 2021; Wang & Cheng, 2020).

## **8.5 Opportunities for future research**

Based on this study's limitations, there are opportunities for further research as follows;

- This study might initiate similar studies in other developing economies and developed economies towards the achievement of sustainable development goals (SDGs) across the world. It is necessary to carry out similar assessments in other parts of Nigeria and other parts of the world to enhance generalization of study findings.
- Future studies may extend this study by gathering data over a longer period of time. This will enable projection into the future needs of the urban poor.
- A similar investigation can be embarked upon where multiple focus group discussions will be conducted and quantitative methodologies will be utilized for more generalisable results. It may also be necessary to engage international housing experts in future studies.
- It may be necessary for future studies to purposively sample homeowners within the slums of Lagos to ascertain their informal strategies to homeownership especially as regards affordable land acquisition in urban centres.

## 8.6 APPENDICES

### 8.6.1 Appendix A: Pilot survey questionnaire template



#### QUESTIONNAIRE FOR PILOT STUDY

#### TOPIC: EFFECTIVE AFFORDABLE HOUSING PROVISION FIT FOR THE URBAN POOR IN DEVELOPING ECONOMIES

**Objective:** To ascertain the prevalent means of livelihood in the sampled informal settlements in Nigeria; identifying the prospects within these.

1. What do you do for a living?		
Questions	Yes	No
2. Do you have a union or association in your vocation?		
3. If you do, does your union/association assist members with housing needs e.g., rent payment, purchase of landed property, construction finance? If yes, please explain.		

## 8.6.2 Appendix B: Interview questions for informal settlements



### RESEARCH INSTRUMENT

#### Introduction

Dear Respondent,

I humbly solicit your cooperation to participate in an ongoing research aimed at investigating the peculiar challenges of land acquisition, housing finance and housing construction for the urban poor as well as suggested solutions to the identified challenges to these three key elements of affordable housing supply value chain. The survey is part of a Ph.D. research work and all responses to the survey will be treated with the utmost confidentiality and used solely for academic purposes.

This survey would be very brief, we intend not to waste your valuable time. We are convinced that your contribution would be instrumental in highlighting the challenges of affordable housing provision and also assist us in proffering pragmatic solutions to achieve effective affordable housing provision for the urban poor in developing economies.

Thank you.

Yours Sincerely,

Timothy Olugbenga AKINWANDE (PhD Candidate)

Prof. Eddie C.M. HUI (Chief-supervisor, Department of Building and Real Estate, Hong Kong Polytechnic University).

**Objective:** To ascertain what strategies the urban poor utilize to provide suitable affordable housing for themselves and their families, considering their socioeconomic limitations.

S/N	Questions	Responses	
1	Name of respondent		
2	Gender of respondent		
3	Age range of respondent		
4	Educational qualification of respondent		
5	What do you do for a living?		
6	How long have you lived in this locality?		
	<b>Questions</b>	<b>Yes</b>	<b>No</b>
7	Do you have a union or association in your vocation?		
8	If you answered YES to Q6 above, does your union/association assist members with housing needs e.g., rent payment, purchase of landed property, construction finance?		
9	If you answered YES to Q7 above, kindly briefly explain the nature of the assistance they offer.		
10	How much would you charge per service in your vocation?		
11	How many daily clients do you have on the average?		
12	Do you live within the neighbourhood (Trekable distance)?		
13	Do you own the housing you live in?		
14	If YES to Q8 above, how did you finance the housing?		
15	If NO to Q8 above, is it a rented apartment, what kind?		
16	What is range of your monthly rent?		
17	Do you hope for a better housing for yourself?		
18	What do you think can be done to help your hopes fulfilled?		

### **8.6.3 Appendix C: Guide questions for interrogating experts**

#### **Guide Questions for Focus Group Discussion**

Focus Group 1: Academia

Focus Group 2: Property Developers

Focus Group 3: Finance Institutions

Focus Group 4: Ministry of Housing, Lands bureau

Focus Group 5: Representatives from the four (4) groups above.

#### **Guide Questions**

- 1) How can socioeconomic activities in informal settlements be considered and enabled to ease land acquisition for the informal settlers?
- 2) How can socioeconomic activities in informal settlements be harnessed as a housing finance source?
- 3) How can socioeconomic activities in informal settlements be harnessed to support their own housing construction activities?
- 4) What are the success factors of sustainable affordable housing (SAH) provision for the urban poor?
- 5) What are the challenges of sustainable affordable housing (SAH) provision for the urban poor?
- 6) What are the suggested ways around the challenges of SAH provision for the urban poor?
- 7) What ways can the housing construction burden be made lighter for the urban poor?
- 8) What ways can the land acquisition, registration and titling burden be made lighter for the urban poor.
- 9) Where can the urban poor find the lowliest priced lands within the urban community where they dwell?
- 10) Is ownership the only way forward? Are there answers for the urban poor in leasing or renting?
- 11) What are the challenges to expect with this and what is the way forward?
- 12) How can the housing needs of the urban poor be incorporated to the housing supply value chain?
- 13) Are there existing economic models that this housing intention can be fitted to?
- 14) If not, how can a suitable homegrown economic model be crafted in order to solve the housing problems of the urban poor?

- 15) If there are existing economic models, how can they be (modified and) applied to the problem being studied?
- 16) Is there going to be any element of subsidy in the quest for housing the urban poor? Are subsidies the way to go or transfer payments?
- 17) What housing finance approaches will be most suitable for the urban poor?
- 18) How can the poorest urban poor be lifted up the ladder of sufficient disposable income in order to be able to afford decent housing facilities?
- 19) Can financial technology (FinTech) companies play any role in this in view of their innovative finance models?
- 20) If policies incorporate land acquisition, housing finance and housing construction in an all-encompassing manner, what effects do you think this will have on housing provision in general?
- 21) What is the possibility of such all-encompassing policies?
- 22) What will be the challenges of such all-encompassing policies, and can these be overcome?
- 23) If policies are designed to consider and alleviate the challenges of the urban poor in land acquisition, housing finance and housing construction in a holistic manner; what effects do you think this will have on housing provision in general?

#### 8.6.4 Appendix D: Validation questionnaire



### Questionnaire for validating the pragmatic framework for effective affordable housing provision in Nigeria: Integrating demand and supply solutions

#### Purpose

The purpose of this survey is to seek responses from experts for validating a developed framework for effective affordable housing provision. The validation aims to appraise the adequacy of the framework in terms of the following: suitability, practicability, credibility, reliability and comprehensiveness.

#### Background

The pragmatic framework for effective affordable housing provision for the urban poor in Nigeria was developed based on a consolidation of affordable housing demand solutions as deduced from informal housing strategies of the urban poor in Lagos, Nigeria and significant supply solutions to affordable housing provision constraints as deduced from housing expert responses. This framework is developed as part of a PhD research study on effective affordable housing provision for the urban poor in Nigeria. This study was conducted by the PhD candidate Timothy Olugbenga Akinwande under the supervision of Prof. Eddie C.M. Hui. The surveys were conducted from June to September, 2022.

#### Instructions

Please, this document is presented in three sections. Section 1 presents the study findings that informed the constructs of the developed framework. Section 2 presents the developed framework. Lastly, section 3 contains the validation questions for assessing the framework. Please, you are required to rate each statement based on your level of agreement on a 5-point Likert scale (1= strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree).

We greatly appreciate your immense contribution to this validation procedure. Please, we would appreciate if you could kindly return the completed questionnaire via email to Akinwande Timothy within a week from 18th May to 26th May 2023. ([timothy-olugbenga.akinwande@polyu.edu.hk](mailto:timothy-olugbenga.akinwande@polyu.edu.hk))

Please accept my profound gratitude in advance for your kind contribution to this research.

Yours Sincerely,

Timothy Olugbenga AKINWANDE (PhD Candidate)

Prof. Eddie C.M. HUI (Chief-supervisor, Department of Building and Real Estate, Hong Kong Polytechnic University).



## **Section 1: A brief description of the study findings**

The study aimed to develop a pragmatic framework for effective affordable housing provision in Nigeria that integrates solutions from both demand and supply perspectives. To achieve this, first, the study through a systematic literature review disintegrated affordable housing provision into three key elements of housing supply value chain (HSVC) for a detailed analysis of each independent element and then a thorough analysis of the interdependence of these elements and the accompanying solutions. Secondly, semi-structured interviews were conducted in the five largest slums of Makoko in Yaba local government (LG), Majidun in Ikorodu LG, Ojota in Ikeja LG, Alaba-rago/Alaba-international in Ojo LG and Abule-osun in Amuwo/Oriade LG areas of Lagos state to ascertain informal housing strategies of the urban poor as demand-oriented affordable housing provision solutions. This is summarized in Fig. 1, a framework for effective affordable housing provision strategy from a demand-oriented perspective.

Thirdly, focus group discussion and in-depth interviews were conducted with housing experts in Nigeria to determine supply-side solutions to affordable housing provision challenges. These are briefly summarized in Table 1. The expert solutions were analyzed for significance following thorough thematic and content analyses. The level of significance of these expert solutions are presented in Fig. 2. The critical paths of these solutions evidence their level of significance in impacting success in each element of HSVC. Finally, the solutions from both demand and supply viewpoints were carefully consolidated into a pragmatic framework for effective affordable housing provision in Nigeria, presented in Fig.3.

### **Highlights:**

1. Demand-oriented solutions to affordable housing provision constraints along the entire housing supply value chain, summarised in Fig. 1.
2. Supply-oriented solutions to affordable housing provision constraints along the entire housing supply value chain, summarised in Table 1.
3. Level of significance of expert solutions to affordable housing provision constraints along the entire housing supply value chain, presented in Fig. 2.
4. An integrated framework of supply and demand solutions across the entire housing supply value chain, presented in Fig. 3.

## Demand-oriented solutions

The framework clusters the identified affordable housing solutions all based on informal housing strategies of the lower-income cadre of the urban poor. The framework attempts to address all three components of the HSVC as one whole package, identifying the solutions for each component whilst presenting the interrelatedness and interdependence of these components towards the achievement of a demand-oriented, pragmatic, and effective affordable housing supply/provision approach.

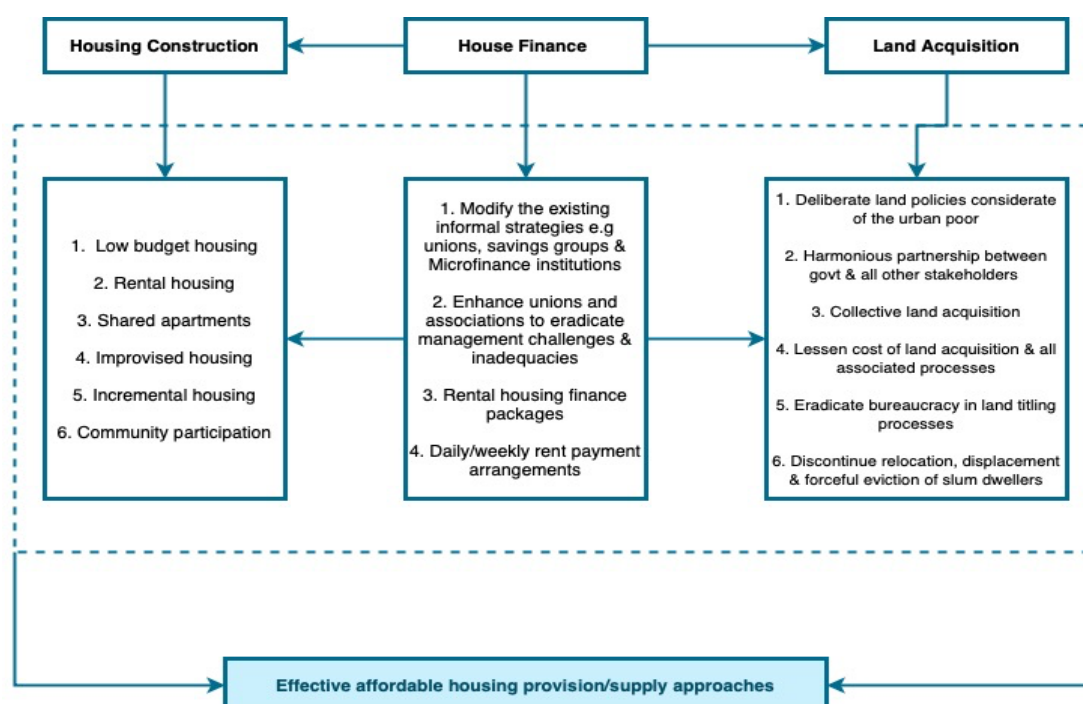


Fig. 1: A framework for effective affordable housing supply/provision approach from demand-oriented standpoint.

## Supply-oriented solutions

**Table 1:** Expert solutions to affordable housing provision challenges along the HSVC

Code	Themes	Sig (%)
Housing Construction		
DGP	Deliberate government policies and laws inclusive of the urban poor	21.053
ACM	Use of alternative construction materials and strategies	10.526
AHN	Ascertaining the actual housing need	8.7719
CRH	Controlled rental housing strategies	8.7719
HIS	Inclusionary housing strategies	7.0175

MIA	Mainstreaming informal agencies and strategies into the formal sector	7.0175
IPD	Incentivizing private developers adequately	5.2632
PPS	PPP strategies	5.2632
ABS	Adequate budgetary allocation of subsidies	5.2632
IIH	Improving informal housing to increase housing stock	5.2632
THS	Treating housing as a system with multidimensions	3.5088
ANS	Adopting non-market solutions	3.5088
CHS	Communal housing strategies	3.5088
Housing Finance		
DFM	Deliberate finance models and policies inclusive of the urban poor	25.424
RCP	Rent control policies accompanied with proper implementation	15.254
DPP	Deliberate Public-private partnership approaches	11.864
EUP	Empowerment of the urban poor to earn more and spend wisely	10.169
MIA	Mainstreaming informal agencies and strategies into the formal sector	10.169
EGE	Enhancing the general economy and improving infrastructure	6.7797
CHS	Coalition of all housing stakeholders	5.0847
RAP	Recognising the assets of the urban poor and titling same	5.0847
IPD	Incentivizing private developers adequately	3.3898
Land Acquisition		
DLA	Deliberate land allocation policies inclusive of the urban poor	17.143
DRP	Deliberate rental policies inclusive of the urban poor	11.429
MIA	Mainstreaming informal agencies and strategies into the formal sector	11.429
MTL	More transparent land allocation and titling processes	8.5714
RTA	Recognising the assets of the urban poor and titling same	8.5714
IIH	Improving informal housing to avoid new land allocation	8.5714
BTF	Better transport infrastructure to access outer cities	5.7143
IPD	Incentivizing private developers adequately to encourage them	5.7143
EGE	Enhancing the general economy and improving infrastructure	5.7143
CHS	Communal housing strategies	5.7143
ALC	Alternative accommodation	5.7143

Fig. 2 below is an equation model formulated from research findings on expert solutions to affordable housing provision constraints in relation to key elements of HSVC. It is an agglomeration of all critical solutions, clearly showing their critical paths based on expert opinion. The critical paths of these solutions evidence their level of significance in impacting success in each element of HSVC. Success in each independent element and interdependent elements of HSVC will result into efficient affordable housing provision from supply-side point of view.

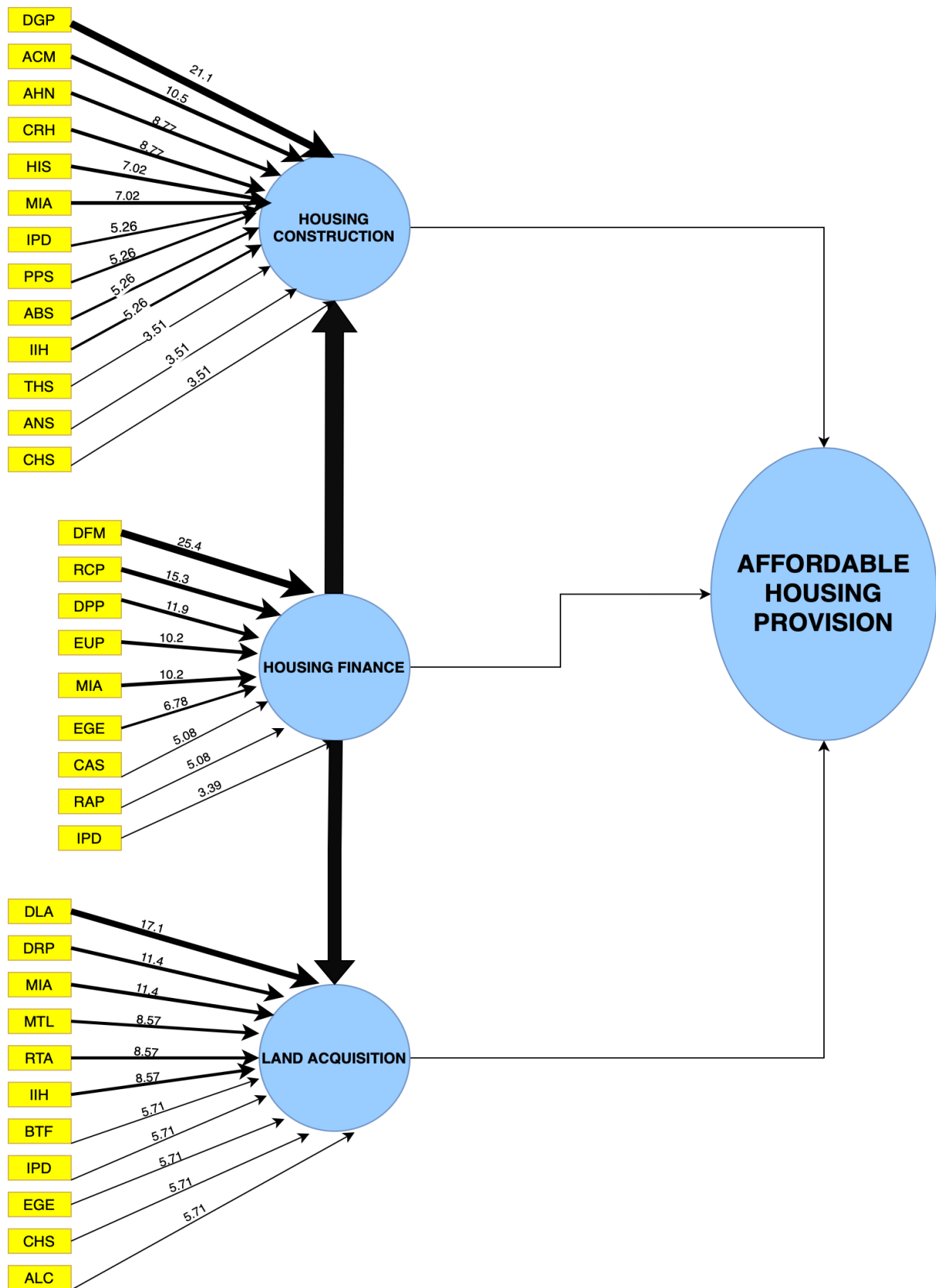


Fig. 2: Equation model of critical solutions to affordable housing supply challenges

## **Section 2: The developed framework**

The framework clusters the identified affordable housing solutions based on informal housing solutions of the urban poor and housing experts' critical solutions to affordable housing provision challenges. The framework provides that affordable housing supply solutions are more effective when informed by affordable housing demand solutions across the entire housing supply value chain. The supply solutions should incorporate and strengthen demand solutions in a manner that recognizes the interdependence of all elements of housing supply value chain. Unbroken arrows in this framework represent connections between elements while dotted lines represent the mutual interrelationship of all components within the framework. The framework seeks to encapsulate all three components of the HSVC into one whole package, highlighting the solutions for each component whilst demonstrating the interconnectedness, links, and interdependence of these components towards the pragmatic achievement of sustainable, suitable, and effective affordable housing provision approach from a consolidated demand and supply standpoints.

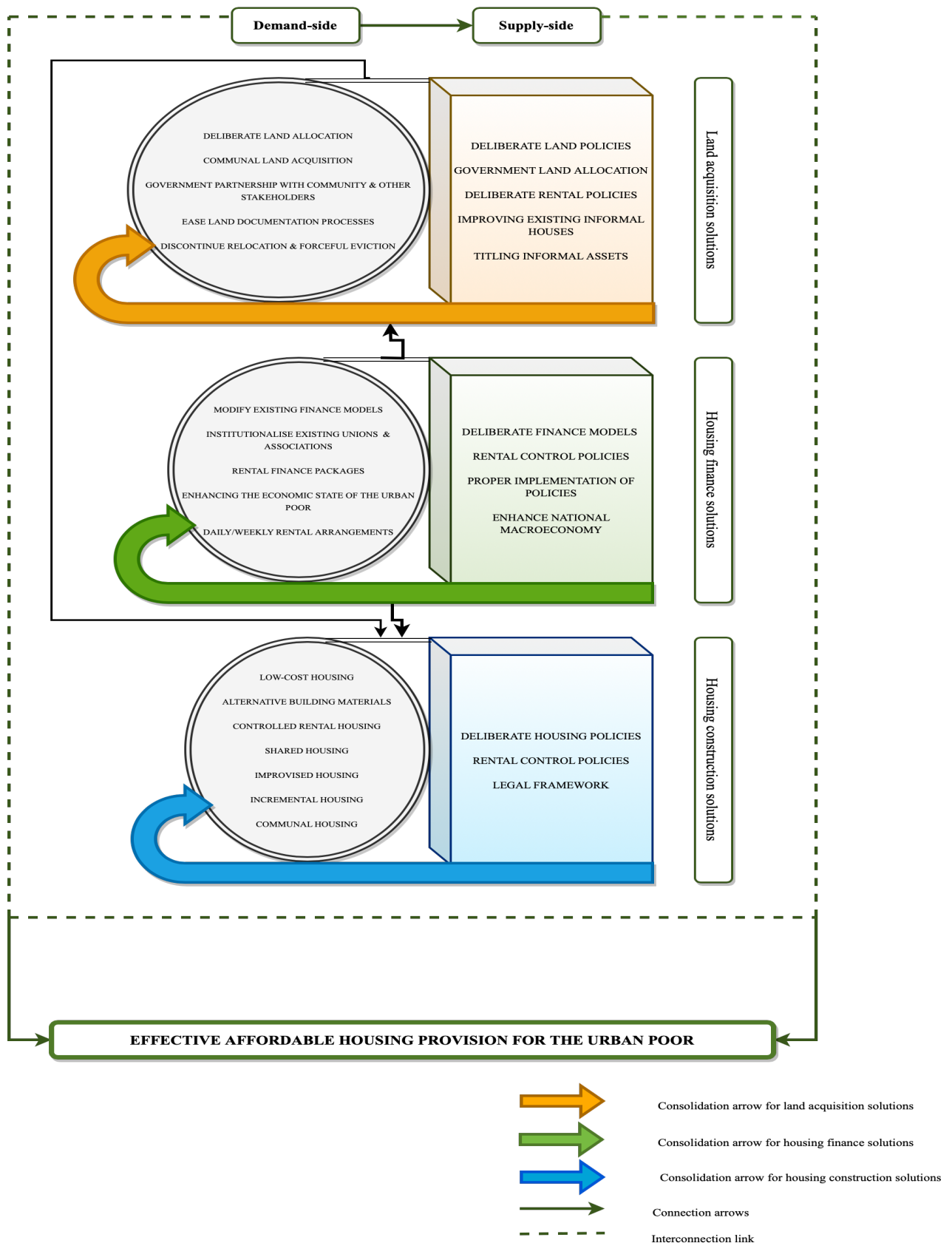


Fig. 3: A pragmatic framework for effective affordable housing provision in Nigeria, a consolidation of demand and supply viewpoints.

### Section 3: Questionnaire for validating the pragmatic framework for effective affordable housing provision in Nigeria: A consolidation of demand and supply viewpoints

#### Expert's background information

1. Sector of operation

Private housing developer ☐ Public housing developer. ☐ Affordable housing financier ☐

Ministry of housing ☐ Lands bureau ☐ Others, please specify .....

2. Years of experience .....

3. Office address .....

4. Designation .....

5. Email address .....

Please, to what extent do you agree with the following statements regarding the framework for effective affordable housing provision in Nigeria: A consolidation of demand and supply-oriented solutions.

Please, use the following scale:

1=strong disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree.

No	Validation statements	Level of agreement
1	The expert solution to affordable housing provision constraints determined as significant in this study are reasonable and are applicable to the current situation in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
2	The framework for effective affordable housing provision is easily intelligible and could be used for affordable housing provision in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
3	The systematic connection and interconnection of elements of HSVC in the framework are appropriate.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
4	The framework for effective affordable housing provision is inclusive and comprehensive for the application.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
5	The appropriate application of the pragmatic framework of consolidated solutions will enhance suitable and effective affordable housing provision in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
6	Overall, the framework is suitable for achieving effective affordable housing provision in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5

No	Hypothetical statements	Level of agreement
1	Investigating AH solutions across the entire HSVC has significant positive impact on AH provision in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5
2	Integrating AH solutions from bilateral viewpoints has significant positive impact on AH provision in Nigeria.	<input type="checkbox"/> 1; <input type="checkbox"/> 2; <input type="checkbox"/> 3; <input type="checkbox"/> 4; <input type="checkbox"/> 5

Please give comments on your observations or make suggestions in the space provided below that could help improve the framework.

**Comments:**

.....

.....

.....

End of Survey

Thank you for your valuable time, participation and support.



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