

Housing Affordability Crisis in Port Harcourt Metropolis: A Comparative Analysis of Public and Private Housing Developers

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Abstract

This study assessed both public and private housing providers of Port Harcourt Metropolis. A pragmatist worldview, mixed methods approach, and descriptive survey design was employed. Out of a target population of 1800 households heads within the ten estates extracted from 42 estates, 362 valid questionnaires (94.3% retrieval rate) were analysed with descriptive statistics and cost of housing to income measures using 30% affordability benchmark supplemented with six key informant interviews. Four hypotheses were tested using Chi-Square test of independence at 0.05 level of significance. The study established that private (57.2%) housing providers accounted for majority of the housing provision, especially middle- and high-income housing, with less contribution from public housing (25.7%), which was the most affordable with flexible payment terms but limited by bureaucratic bottlenecks; that housing affordability has remained a major concern with 53.9% of the respondents reporting housing as either expensive or very expensive, 52.8% demitting spend over 40% of income on housing, only 37.0% believe affordability has improved over time, 71.5% acknowledged that more expensive housing have emerged over time, Chi-Square analysis proved significant association between the type of housing provider and their affordability offering ($\chi^2=73.35$, $p<0.001$), with the three most significant dimensions that differentiate the two sectors being identified as: perception of affordability (50.73% contribution), perception of value for money (48.15% contribution), and perception of affordability as a right (48.15%), significant association between the type of developer and their challenges to providing affordable housing ($\chi^2=127.14$, $p<0.001$), with underdevelopment (61.59%) and abandoned projects (19.80%) being most critical, and the two provision for types of housing units ($\chi^2=0.2006$, $p=0.999$) and housing affordability among income groups ($\chi^2=5.398$, $p=0.067$) being not significant between the two sectors. The study concludes that increasing the rate of housing production does not necessarily lead to affordability especially given multiple interacting factors, and proposes market-sensitive, integrated interventions addressing: land administration, housing finance, infrastructure, planning, governance, and public-private partnership to attain sustainable affordable housing. Proposes measures such as income-sensitive policies and interventions, targeted subsidies, flexible payment terms, affordable housing targets for large developments, and reform of housing finance system to improve affordability across income groups.

Keywords

Crisis, Housing Affordability, Nigeria, Port Harcourt Metropolis, Public and Private Housing Developers.

INTRODUCTION

Housing is universally recognized as one of the basic needs of man, and the availability and affordability of adequate housing considered as a primary factor in the development and well-being of people [22]. Aside from providing shelter, it enables access to vital services and resources, health, safety, education and work opportunities. It provides social stability and cohesion for its occupiers. To this extent, the presence of adequate housing and the degree of its affordability has been linked to sustainable urban development and improvements in quality of life. Coupled with its link to other domains of city management, infrastructure, environment, economy, governance and urbanism, housing has become the focus of global and national development efforts and strategies [29]. In recent decades, the availability and affordability of quality housing has been articulated as a target by many international agendas, helping to reduce global poverty and achieve sustainable global development. Recognising the vital role of housing to sustainable urban development, the Human

Settlement Agenda articulated in the UN SDG 11 has made inclusive and sustainable human settlements, cities and communities a priority, with particular focus on ensuring access for all to safe, affordable, adequate and sustainable housing, by 2030 [32]. However, housing affordability presents many countries around the world, particularly developing ones, with a formidable challenge to provide adequate housing at affordable prices, as the rate of urbanisation far exceeds the growth and deployment of construction resources and private capital [33]. Nigeria, the most populous country in Africa, exemplifies this challenge given its over 17million housing deficit, and the annual need for 700,000 housing units [12]. Port Harcourt, the capital of Rivers State and an important node within Nigeria's oil and gas economy, is among the urban agglomerations experiencing very severe inadequacies in housing. The city has experienced a sharp increase in population due to the large influx of migrant residents seeking employment and better quality of life in the city, in addition to natural increase, all of which have exerted enormous demand pressure on the availability and affordability of land and housing [17]. The

Port Harcourt metropolis is characterized by a paradoxical dilemma of unavailability of adequate housing to cater for the mushrooming population and the unavailability of affordable housing for its residents [9], [10].

This study was guided by three specific objectives, which are to:

- i. Assess the affordability of the types of housing units developed by public and private housing developers for different income groups in the study area.
- ii. Compare the affordability of housing provision between public and private housing providers.
- iii. Evaluate the overall impact of public and private housing development on housing affordability in the study area.

LITERATURE REVIEW

Theoretical Framework

Supply and Demand Theory

Supply and demand theory, provides the basis of the economic concepts behind the housing market and affordability elements in the Port Harcourt Metropolis. It is a popularly used definition in the studies concerning housing economics about the prices of housing and what constitutes the supply element in the housing market. It can be said that according to this theory, the prices of housing as well as the affordability status arises out of the interaction between the supply of housing and the demand for it ([20], [21]). In case of Port Harcourt, the metropolis, there has been a sudden increase in the population as well as a trend towards urbanisation owing to unprecedented demand factors, for the supply of affordable housing that has failed to respond to this demand, resulting in escalation in housing prices and reduced affordability. The theory helps cite the reason behind the housing crisis in Port Harcourt in the following way. Due to the crisis, where supply of housing has not coincided with the demand, there has been an increase in prices with affordability becoming the biggest concern of the urban dwellers, more so the low and middle income groups [14].

Market Failure and Government Intervention Theory

Market Failure and government intervention theory is used to explain why the government intervenes in the housing industry. Keynesian Economic Theory of market failure by John Maynard Keynes emphasizes the failure of free markets and focuses on the negative effects of such instability that make the society worse off in the provision of necessary goods and services [18]. He thus advocates government intervention in the market mechanism to demand for the correction of market failures. The theory is used in this research to theorize why there has been disequilibrium in the housing market in Port Harcourt region in spite of the rise in the number of private developers. The theory explains that private investment firms are only interested in most profitable housing projects and therefore prefer to underinvest in affordable housing developments.

The Residual Income Theory

The Residual Income Theory presents a more comprehensive perspective on housing affordability compared to the conventional measure of 30% rule. The proponents of this theory – [30] argue that a true measure of housing affordability can only be achieved when households, after deduction of money spent on housing, have enough income to meet their other basic needs (Food, transportation, housing cost, health care, education and utilities). Applying the theory to the Port Harcourt situation is relevant noting that most households would expend large proportion of their income on housing thus compromising their ability to meet their other fundamental needs.

Bid-Rent Theory

Bid-Rent Theory [5] clearly is a spatial-economic model for interpreting urban land use and its effects on housing affordability in Port Harcourt Metropolis. It describes land-use competition among various potential users in an urban setting along economic lines, i.e., land users compete by virtue of their pecuniary ability to pay for land rent, wherein rents decline with increasing distance from the city centre. In the Port Harcourt context, the application of bid-rent in respect of housing development enables one to understand the spatial dimensions of extent of housing development, the observed high spatial rental concentrations coupled with only high social class housing spatially located at the city centre and the vector-displacement of low-income housing development to the urban periphery while emerging at the altitude of irregular settlements in the city periphery. This theory assumes that urban households and business firms compete with each other in the land market. Therefore, the persons who have the highest rent possibilities will move to, control and occupy the locations that best satisfy their needs, preferences and business objectives.

Conceptual Review

Housing Affordability

Housing affordability can be defined as the extent to which a household can obtain satisfactory housing without endangering its other financial obligations [30]. The conventional approach to describe this is the comparison of housing cost to household income, where the standard is usually 30% of household income to meeting housing costs [1]. On the other hand, the new conception also takes into consideration the socio-economic, political and geographical context such as standards of living, mortgage access and distribution of affordable housing [13]. The approaches put forward by the government and stakeholders to improve the affordability include [24].

Affordable Housing for Different Income Groups

The affordable housing serves the various income classes, which can be distinguished as the middle-income, the low-income, and the high-income groups [8]. Considering the needs of low-income group, these households demand

deliberate discretion of the government in the social housing system and the needs for rental allowance; these groups have insufficient resources to demand for considerable support from these streams [35]. On the other hand, middle-income groups are often provided household planning integrative components, including the shared income housing scheme, retailer loan, and cooperative house; can be used to strengthen connection between social housing and market-limited housing [27]. The better qualification of high-income groups to the housing market is financial limitation, which implies the feasibility of investment housing and luxury house purposes [25].

Impact on Accessibility for Different Socio-economic Groups

Access to housing is also differentiated across income band. Low income groups are unlikely to afford formal housing services and overburdened by mortgage structures they have little choice but to live in informal settlement countries or self-build housing communities [4]. Middle income groups cannot afford the affordability for access to buy a house in the traditional way and therefore its rental housing is the only option. While high income group has the luxury of being able to relocate easily within the private and public housing market. Their access to a choice of location, size and quality is high, and in general the speed of access is also very high. Low income groups that don't have to In some countries, social housing assisted by the government and offered for free or at subsidized rental prices helps enhance access to housing for lower income groups. With regard to private developers of housing services, which are for profit, the middle and high income earners were targeted more successfully due to higher costs and marginal potential profit margins involved [31].

Empirical Review

[2] Explored the Minha Casa Minha Vida program in Brazil, which has delivered in excess of three million units since its establishment in 2009. Analysis of delinquency figures up to 2015 reveals the relatively high rates of twenty-eight percent with the role of proximity in location and income adequacy as a function of meeting ongoing costs of housing identified as key influences. Hence the comparative experience from Brazil places a premium on the location variable and adequacy of household income for ongoing costs in the success of housing provisions; this is a feature that must be explicitly considered in the development of housing schemes in Nigeria where access to peripheral location and ongoing household income affordability is a challenge. The adopted methodology was quantitative analysis of program data on delinquent households. The study illustrates how well-meaning government programs with good intentions can fail to provide affordable housing options even in large-scale schemes without emphasizing location and adequacy of household income for ongoing costs. [3] conducted research to explore the range of factors that impede affordable housing delivery for the low-income masses in a congested settlement

of Lagos from the perspective of their respondents by using survey methodology based on multi-sampling techniques and the Statistical Package for Social Sciences employed for both descriptive and inferential analysis. Several factors inhibiting the provision of affordable housing to the low-income earned had been determined. In addition, the study also set out factors inhibiting low-income masses gaining access to affordable housing. The study employed a multi-sampling survey research approach by sampling the population from low-income neighborhoods and used descriptive and inferential statistical techniques for analyzing the relationship between socio-economic characteristics and various affordability indicators.[22] analyzed the Millard Fuller Foundation's incremental housing methodology in Nigeria through a case study using qualitative approach based on indepth interview conducted with a senior MFF interviewee and sixteen beneficiaries of the program. The research found that the MFF incremental housing program, comprising shell-and-core homes, inclusive financing, flexible payment scheme, and a cooperative group-based approach, is a feasible and sustainable model of providing affordable homes for low- to middle-income people but that, it falls short of reaching the extreme poor due to the high affordability barriers involved. This finding corroborates global evidence of the limits of market-based solutions to housing needs for the urban poor.

[19] Undertook a synthesis of literature relating to real estate strategies, in which they identified public-private partnerships and community land trusts as fertile grounds for lowering housing costs and increasing accessibility to housing, while bringing to the fore the fact that modular construction and lightweight building materials could enhance the speed of construction without the undesirable effects of ecological degradation. Their research however draws attention to the fact that technological innovation could have meaningful institutional impacts which complement institutional reform. The study employed a systematic review of literature to draw together evidence from various circumstances for strategies that may be generalized to foster affordable housing. [26] provided an advanced quantitative analysis of the constraints to the realization of affordable housing in Pakistan with the use of Partial Least Squares Structural Equation Modeling using data from 200 respondents in Punjab. Their research established that market and financial constraints do not have statistically significant effects on the delivery of affordable housing, although policy and governance failures, institutional and regulatory constraints, and socio-cultural limitations did have remarkable effects in the statistical model which had 77.8 percent of the variance of the construction of affordable housing explained by the model, establishing that the relationship between institutional elements and the construction of affordable housing considerably exceeds purely financial variables.

METHODOLOGY

The study adopted a **pragmatic philosophical worldview**, mixed-research approach, and descriptive survey design to objectively assess housing affordability and the contributions

of public and private housing developers in Port Harcourt Metropolis. The study population comprised 42 housing estates, including 15 public and 27 private estates, with an estimated 1,800 households. Using multi-stage sampling, ten estates—five public and five private—were selected.

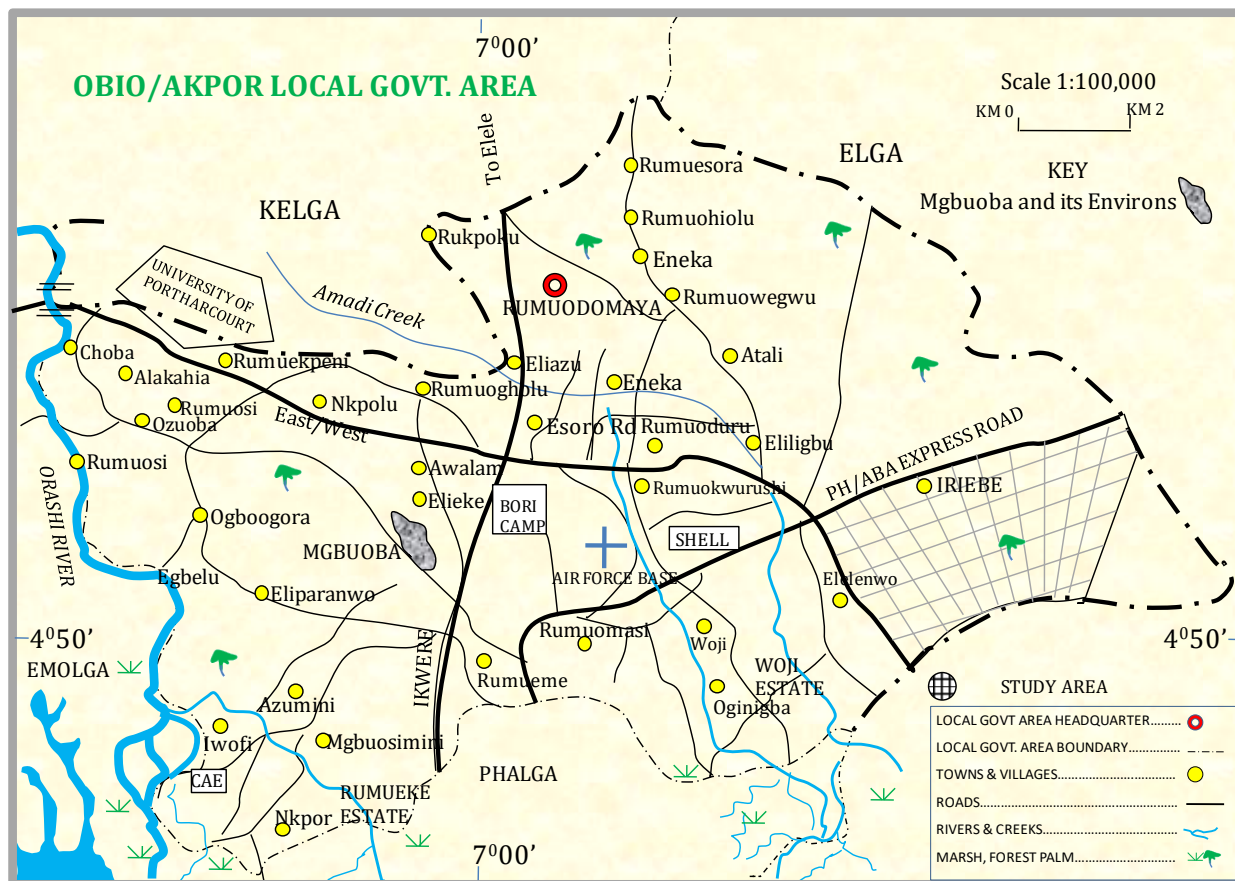


Figure 1. Map Showing Port Harcourt City and Obio/Akpor LGAs [23]

Using the Taro Yamane formula at 4.53% sampling error gives the total sample size of 384, however 362 valid questionnaires were collected and analyzed. The sample was allocated in proportion to the chosen estates, stratified by age and randomly selected systematically while 6 key informants selected purposively. The instrument's content and face validity was determined, content validity review a wide range of literature to match the objectives was done, whereas face validity was established through expert review by two renowned researchers who challenged the wording and structure of the instrument. Reliability was determined by doing a pilot study to 20 subjects by calculating Cronbach's Alpha, which yielded values of greater than 0.82 for all sections, the highest score being 0.984 for Comparison of Affordability and Impact sections, indicating an excellent internal consistency which is acceptable in social science research. Descriptive statistics and a Chi-squared at 0.05 significance was used in the results.

FINDINGS

The following observations were compiled from those 362 questionnaires distributed and correlates with oral interview

guide retrieved from the Key Informants being; (the Public housing agency comprising of - 2 representatives from public housing agency (General Housing Officer - Esq. (Mrs.) Ibaraye E. Uranta and the Board of Directors Chairman - Mr. Anthony N. Egwurugwu, RSHPSA) [28]; and those speaking for private housing development firms, to wit; 2 representatives from private housing development firms (Project Managers, Royal Palm Estate Developers, and Estates Managers, Paradise Estate Developers) and those speaking for Estate Surveyors and Valuer Firms, to wit; 2 Estate Surveyors and Valours respectively (Principal Partner, Femi Ayandipe & Co. Estate Surveyor and Valuer - Plot 185 Peter Odili Rd, beside The Hub Events Center, Trans. Amadi, Port Harcourt 500101, Rivers; and Senior Valuer, Audu Imonikhe & Co., 36 Okoroji St, D-line, PHALGA 500261, Rivers State).

Response Rate Analysis

The survey in the ten housing estates within the project area achieved a response rate of 94.3%, with a total of 362 questionnaires collected out of 384 distributed. Only 5.2% of these questionnaires were not returned. This response rate is

quite high and provides a solid basis for analysis. Distribution of questionnaires was relatively even, with most of the questionnaires collected from Elekahia Estate (14.6%) and Royal Havana Estate (14.6%). Court Estate had the lowest response rate with 4.7%. From the socio-economic composition of the respondents, it can be observed that the majority of the respondents, 78.7%, were between the ages of 25-54 years, which belongs to the active working class. Furthermore, the age groups, 35-44 years formed the dominant subgroup of the respondents with 27.6%. This implies that most housing decisions could be made by the 35-44 years of age bracket. Males formed the majority of the respondents with 62.7%, whereas females constituted 37.3%. This might be associated with existing sociocultural beliefs, traditions and norms. It also suggests that male-headed houses are the dominant landlord-ship category among the respondents. The ranking of the marital status of the respondents reflects that majority (63.8%) of the respondents were married, as well as most of the household heads. The

frequent household size category was 4-5 persons (41.2%), following closely by 2-3 persons (38.1%). This confirms the observation that, the majority of the housing units available in the study area are 2-bedroom units. With regard to other socio-economic features, the dominant educational category was secondary schools with 61.9%, whereas a small fraction of the respondents (9.9%) had higher education imparted by attending college and university, respectively. The dominant occupational category was entrepreneurs with 51.1%. Furthermore, a small proportion of the respondents (18.0%) were civil servants. The distribution of respondents according to their occupational categories suggests a well-diversified occupation and also features a major source of livelihood being self-employed. The socio-economic profile of the residents suggests that those living in the study area could be categorized as young working people who are married and operate medium-sized households with moderate educational attainments and diverse sources of livelihood.

Table 1. Distribution of Respondents by Estate and Monthly Income Level

Types	Estate	Below ₦70,000	₦70,000–₦120,000	₦121,000–₦190,000	₦191,000+	Not Applicable (NA)	Total
Public Estates	Aggrey Estate	0 (0%)	7 (16.3%)	11 (25.6%)	6 (14%)	19 (44.2%)	43 (100%)
	Elekahia Estate	1 (1.9%)	3 (5.7%)	16 (30.2%)	33 (62.3%)	0 (0%)	53 (100%)
	Marine Base	7 (21.9%)	1 (3.1%)	8 (25.0%)	0 (0%)	16 (50%)	32 (100%)
	Rumuibekwe	3 (7%)	4 (9.3%)	36 (83.7%)	0 (0%)	0 (0%)	43 (100%)
	Woji	0 (0%)	7 (16.3%)	11 (25.6%)	6 (14%)	19 (44.2%)	43 (100%)
Private Estates	Paradise	1 (3.8%)	0 (0%)	2 (7.7%)	10 (38.5%)	13 (50.0%)	26 (100%)
	Royal Havana	0 (0%)	5 (9.4%)	8 (15.1%)	18 (34.0%)	22 (41.5%)	53 (100%)
	Royal Palm	0 (0%)	7 (33.3%)	5 (23.8%)	9 (42.9%)	0 (0%)	21 (100%)
	Victory	0 (0%)	6 (19.4%)	0 (0%)	14 (45.2%)	11 (35.5%)	31 (100%)
	Court	4 (23.5%)	4 (23.5%)	0 (0%)	9 (52.9%)	0 (0%)	17 (100%)
	Total	16 (4.4%)	44 (12.2%)	97 (26.8%)	105 (29.0%)	100 (27.6%)	362 (100%)

Source: Researcher's Field Survey, 2025

At the aggregate level in Table 1, the largest proportion of respondents fall within the ₦191,000 and above income category (29.0%), followed by those earning ₦121,000–

₦190,000 (26.8%). A significant proportion of respondents (27.6%) did not disclose their income.

Table 2. Distribution of Monthly Income by Estate Category

Income Level	Public Estates	Private Estates	Total
Below ₦70,000	11 (5.1%)	5 (3.4%)	16 (4.4%)
₦70,000–₦120,000	22 (10.3%)	22 (14.9%)	44 (12.2%)
₦121,000–₦190,000	72 (33.6%)	25 (16.9%)	97 (26.8%)
₦191,000+	45 (21.0%)	60 (40.5%)	105 (29.0%)
Not Applicable (NA)	64 (29.9%)	36 (24.3%)	100 (27.6%)
Total	214 (100%)	148 (100%)	362 (100%)

Source: Researcher's Field Survey, 2025

In Table 2, private estates have nearly double the proportion of high-income earners (40.5%) compared to public estates

(21.0%), suggesting that private housing developments are more accessible to or targeted at higher-income groups. Public estates have a significantly higher proportion of middle-income earners (33.6%) compared to private estates (16.9%), indicating that public housing serves as a primary housing option for middle-income households.

Housing Affordability Analysis

Table 3. Distribution of Respondents by Cost of Housing Unit

Cost Range	Frequency	Percentage
Below ₦600,000	53	14.6
₦600,000 – ₦1,000,000	154	42.5
₦1,000,001 – ₦1,500,000	21	5.8
₦1,500,001 – ₦5,000,000	95	26.2
Above ₦5,000,000	39	10.8
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 3, the largest proportion of respondents (42.5%) fall within the ₦600,000–₦1,000,000 cost range, representing the most common housing price bracket in the study area. The second largest category ₦1,500,001–₦5,000,000 (26.2%) represents the upper-middle to high-end segment of the housing market.

Table 4. Distribution of Respondents by Perceived Affordability of Housing Unit

Level of Affordability	Frequency	Percentage
Very Affordable	62	17.1
Affordable	47	13.0
Moderate	58	16.0
Expensive	145	40.1
Very Expensive	50	13.8
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 4, a combined majority of 53.9% of respondents perceive housing as either "Expensive" (40.1%) or "Very Expensive" (13.8%), indicating that over half of the population in the study area considers housing costs to be beyond their financial means.

Table 5. Distribution of Respondents by Proportion of Income Spent on Housing

Proportion of Income	Frequency	Percentage
Less than 30%	72	19.9
30% – 40%	99	27.3
41% – 60%	152	42.0
61% and Above	39	10.8
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 5, The largest proportion of respondents (42.0%) allocate between 41% and 60% of their income to housing costs, representing a severe housing cost burden that significantly exceeds the 30% affordability threshold. An additional 10.8% spend more than 61% of their income on housing, representing the most severely burdened households.

Table 6. Distribution of Respondents by Receipt of Financial Aid or Housing Subsidy

Financial Aid/Housing Subsidy	Frequency	Percentage
Yes (Government Agency)	21	5.8
Yes (Private Firm)	37	10.2
No (Self-funding)	277	76.5

No (Donations/Assistance)	27	7.5
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 6, the vast majority of respondents (76.5%) reported that they did not receive any form of financial aid or housing subsidy, relying instead on self-funding. This indicates that housing acquisition in the study area is predominantly financed through personal savings and income.

Table 7. Distribution of Respondents by Perceived Target Income Groups of Developers

Target Income Group	Frequency	Percentage
High-Income Groups	237	65.5
Middle-Income Groups	92	25.4
Low-Income Groups	10	2.8
All Income Groups	23	6.4
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 7, the majority of respondents (65.5%) believe that housing developers primarily target high-income groups. Only a very small proportion of respondents (2.8%) believe that developers target low-income groups, reflecting the limited availability of affordable housing options for low-income earners.

Comparative Perception of Affordability, Value for Money, and Payment Flexibility

Table 8. Comparative Perception of Housing Affordability, Value for Money, and Payment Flexibility between Public and Private Providers

Perception Parameter	Public Housing	Private Housing	No Difference	Unsure	Total
More Affordable	175 (48.3%)	46 (12.7%)	116 (32.0%)	24 (6.6%)	362 (100%)
Better Value for Money	139 (38.4%)	186 (51.4%)	26 (7.2%)	11 (3.0%)	362 (100%)
More Flexible Payment Options	198 (54.7%)	124 (34.3%)	22 (6.1%)	18 (5.0%)	362 (100%)

Source: Researcher's Field Survey, 2025

In Table 8, a significant plurality of respondents perceived public housing as more affordable (48.3%), while only 12.7% believe private housing is more affordable. In terms of value for money, a majority of respondents (51.4%) stated that private housing offers better quality for the price paid,

compared to 38.4% who believe public housing provides better value. Public housing is perceived to offer more flexible payment or financing options, as indicated by 54.7% of respondents.

Table 9. Satisfaction with Public and Private Housing

Level of Satisfaction	Public Housing Frequency	Public Housing Percentage	Private Housing Frequency	Private Housing Percentage
Very Satisfied	13	3.6	52	14.4
Satisfied	99	27.4	59	16.3
Neutral	131	36.2	66	18.2
Dissatisfied	88	24.3	115	31.8
Very Dissatisfied	29	8.0	70	19.3
No Response	2	0.6	0	0.0
Total	362	100	362	100

Source: Researcher's Field Survey, 2025

In Table 9, for public housing, the majority of respondents expressed neutral (36.2%) opinions, while 27.4% reported being satisfied. However, a considerable proportion expressed dissatisfaction (24.3%) or very dissatisfaction (8.0%). For private housing, a significant proportion of respondents reported being dissatisfied (31.8%) or very dissatisfied (19.3%), indicating that despite perceived quality

advantages, private housing is associated with lower overall satisfaction, likely due to cost-related concerns.

Challenges in Accessing Public and Private Housing

Table 10. Distribution of Respondents by Challenges Faced in Accessing Affordable Housing Units from Public Developers

Challenges	Frequency	Percentage
Long Waiting List	7	1.9
Lack of Transparency	35	9.7
Corruption	34	9.4
Low Cost	11	3.0
Medium Cost	24	6.6
Over Bureaucracy	6	1.7
Total Valid Responses	117	32.3

Note: Only 117 respondents (32.3%) reported challenges; 245 respondents (67.7%) did not provide responses to this question.

Source: Researcher's Field Survey, 2025

In Table 10, among those who responded, the most prominent challenges identified are lack of transparency (9.7%) and corruption (9.4%), suggesting governance-related issues in the allocation and management of public housing.

Table 11. Distribution of Respondents by Challenges Faced in Accessing Affordable Housing Units from Private Developers

Challenges	Frequency	Percentage
Monopoly	125	34.5
Lack of Transparency	121	33.4
High Cost	25	6.9
Government Policy Constraints	21	5.8
Short Waiting List	16	4.4
Others	54	14.9
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 11, market dominance and lack of regulatory transparency are the key obstacles in accessing affordable private housing. Monopoly (34.5%) suggests that few developers control the housing market, limiting competition and enabling price manipulation. Lack of transparency (33.4%) indicates that information asymmetry between developers and prospective buyers or renters creates barriers to accessing affordable housing.

Impact on Housing Affordability

Table 12. Perception of Improvement in Housing Affordability

Perception	Frequency	Percentage
Yes, Improved	134	37.0
No, Not Improved	122	33.7
Unsure	106	29.3
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 12, the results show mixed perceptions, with

37.0% believing that the presence of both sectors has improved housing affordability, while 33.7% disagreed. The findings indicate no clear consensus among residents.

Table 13. Observed Changes in Housing Supply

Observed Change	Frequency	Percentage
Increase in Expensive Housing	259	71.5
Increase in Affordable Housing	45	12.4
Little or No Change	26	7.2
Unsure	32	8.8
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 13, the majority of respondents (71.5%) observed an increase in expensive housing, while only 12.4% reported an increase in affordable housing options. This suggests that recent housing development trends have largely favoured higher-cost housing rather than affordable options.

Table 14. Distribution of Respondents by Extent of Impact on Housing Provision

Extent of Impact	Frequency	Percentage
Very Extensively	108	29.8
Extensively	155	42.8
Moderate	50	13.8
Little	36	9.9
Very Little	13	3.6
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 14, a majority of respondents reported that the impact is extensive (42.8%) or very extensive (29.8%), together accounting for 72.6% of respondents, indicating that housing development activities significantly influence the housing landscape in the area.

Table 15. Distribution of Respondents by Perceived Impact on Quality of Living

Perceived Impact	Frequency	Percentage
No Impact	88	24.3
Very Negatively	130	35.9
Negatively	97	26.8
Positively	26	7.2
Very Positively	21	5.8
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 15, a combined 62.7% of respondents reported negative or very negative impacts on their quality of life. In contrast, only 13.0% indicated positive or very positive impacts, indicating that despite increased housing

development, improvements in living conditions have not been realized for the majority of residents.

Table 16. Role of Government in Improving Affordability

Role of Government	Frequency	Percentage
Improve Land Allocation System	134	37.0
Provide Subsidies	113	31.2
Regulate Private Housing Prices	88	24.3

Public-Private Partnerships	27	7.5
Total	362	100

Source: Researcher's Field Survey, 2025

In Table 16, improving the land allocation system (37.0%) is the most prominent suggestion, followed by providing subsidies (31.2%) and regulating private housing prices (24.3%).

Table 17 shows the results for the study's hypotheses:

Table 17. Summary of All Hypotheses

Hypothesis	χ^2 cal.	χ^2 cri.	df	p-value*	Decision	Interpretation
H ₀₁	0.2006	11.07	5	0.999	Not Rejected	No significant association between developer type and housing unit types
H ₀₂	5.398	5.99	2	0.067	Not Rejected	No significant association between developer type and affordability across income groups

HYPOTHESIS 1 - H₀₁: There is no significant relationship between the types of housing units developed by public and private housing developers in the study area.

χ^2 calculated = 0.0026 + 0.0011 + 0.0070 + 0.0477 + 0.0117 + 0.0117 + 0.0038 + 0.0016 + 0.0102 + 0.0692 + 0.0170 + 0.0170 = 0.2006

Degrees of Freedom = (r-1)(c-1) = (2-1)(6-1) = 5

Critical χ^2 ($\alpha=0.05$, df=5) = 11.07

Decision: χ^2 calculated (0.2006) < χ^2 critical (11.07). Therefore, **FAIL TO REJECT H₀₁**. Therefore, there is no significant relationship between public and private housing developers in the types of housing units developed. in the study area at the 95% confidence level.

HYPOTHESIS 2 - H₀₂: There is no significant relationship between developer type (public/private) and the affordability of housing units for different income groups in the study area.

χ^2 calculated = 1.372 + 0.644 + 0.192 + 1.981 + 0.932 + 0.277 = 5.398

Degrees of Freedom = (2-1)(3-1) = 2

Critical χ^2 ($\alpha=0.05$, df=2) = 5.99

Decision: χ^2 calculated (5.398) < χ^2 critical (5.99). Therefore, **FAIL TO REJECT H₀₂**. There is no significant relationship between developer type and the affordability of housing units for different income groups at the 95% confidence level.

DISCUSSION OF FINDINGS

The Affordability of the Types of Housing Units Developed by Public and Private Housing Developers for Different Income Groups in the Study Area

The high percentage (97.2%) of households spending, on average, above 40% of the monthly income on housing is an obvious indication of the extent of a serious housing affordability problem in Port Harcourt Metropolis. This is even more so when compared to international standards where generally accepted affordability benchmarks are

between 15% and 30% of gross household income [8], [34]. The 52.8% of the respondents who spend over 40% of their income on housing are suffering acute cost burdens while those spending less enjoy high levels of disposable income remaining to provide other household needs such as food, healthcare, education, transport and savings. Thus, the evidence available here suggests that a large proportion of respondents in the study area were suffering from serious housing cost burden hence reducing their standard of living. This result is consistent with the Residual Income Theory advanced by Stone, that instead of measuring affordability in terms of proportion of income spent on housing, it should be based on the presence or the lack of excess income remaining for other household needs after the cost of housing is paid [30].

The above findings also agree with the work of and [16] who found that rising housing prices have remained a dominating issue in Nigeria's urban areas as housing prices have continually increased faster than household income. Also agreeing is the work of [7] who established that the rising costs of construction and land prices, and the failure to provide adequate housing finance has been a major cause of house-price inflation and reduction in housing affordability in many cities in Nigeria. Saying that housing was either very expensive or expensive (53.9%) also agrees with the findings of the study that showed high housing costs burdens that limits household disposable income (see Table 13). The negative perception of affordable housing costs can be attributed to the high household expenditure spent on accommodation as Households spend a relatively high proportion of their income on housing. There is consequently, very little money left to spend on other household needs. only (30.1%) of respondents perceive the housing costs as either very affordable or affordable which shows that the housing market in the study area is affordable but only to a minority few. Those perceiving housing as affordable can be associated with households earning above the average income

of ₦191,000+ who can pay their rent comfortably. The distribution of housing costs also shows that the housing market is focused on the middle to high price ranges. The highest proportion of respondents (42.5%) have house costs between ₦600,000-₦1,000,000 which is typical of 1-bedroom and 2-bedroom flats and is the most common types of housing units as indicated by the housing units finding (16.0% and 39.0% respectively). This percentage group may typify middle-income earners as 26.8% of the respondents earning above the average income of ₦121,000-190,000 can be classified as middle-income earners. Concentration of households with higher incomes earning between ₦1,500,001-₦5,000,000 (26.2%) was high especially in private estate developments like Court (52.9% earning ₦191,000+) and Victory (45.2% earning ₦191,000+).

That 76.5% of respondents do not receive some form of government housing subsidy and rely primarily on their own resources to pay for housing, demonstrates the limited availability of formal housing finance mechanisms and the limited efficacy of government housing subsidy programs. It also demonstrated the huge burden placed on a household, especially those with limited income, to be responsible for the provision of accommodation, for which they are wholly financially responsible. It also indicates that the limited use of government support is in adherence to the limited role that public developers have played in the provision of housing (25.7%) to the respondents, and that public housing does not appear to be effectively reaching the target groups. The Chi-Square test confirmed that there was no significant relationship between developer type and affordability within each income group ($\chi^2=5.398$, $p=0.067$), indicating that the affordability issue was systemic, rather than sector specific and supporting the Residual Income Theory (Stone, 2006), which states that true housing affordability exists when households have enough income remaining after housing costs to meet other household needs.

Public vs. Private Housing Affordability in the Study Area

The results indicating that public housing is mostly regarded as cheaper than private housing (48.3% and 12.7% respectively) are consistent with what can be determined and not surprising. Public housing schemes are usually created on the basis of clearly described social welfare goals, with government subsidies, price controls and allocation policies supporting access to housing for the lower- or middle-income pensioners [11]. While the supply of public housing is still insufficient, lower costs of acquisition reported by the respondents suggest that government intervention is still significant in increasing housing accessibility.

This is consistent with [15] who showed that although the public housing schemes produce more affordable housing, the private estates did also offer relatively affordable housing for purchase or rent as private estates are predominantly aimed at creating social welfare objective and not to ensure profit maximisation. Also, the [11] pointed to the fact that the National Housing Policy sought to provide for all Nigerians

affordable shelter of good quality.

On the other hand, respondents also viewed private housing as offering more affordable accommodation (51.4%) though more expensive. It could be argued that this could be as a result of the better quality of construction, estate facilities, security arrangements, utility services and maintenance that generally characterizes privately developed estate housing. This agrees [17], that residents are generally more satisfied with the quality of former privately developed estate housing, probably due to good environmental quality and management even though it was less affordable.

The Chi-Square indicated an association exists between the Housing provider type category and the affordability provider category ($\chi^2=73.35$, $p<0.001$). The tests indicated that the private and public housing provider types are most different regarding how affordable the house is perceived to be, (public advantage) and **value for money** (private advantage). these two variables account for 98.88% of the total association and it reflects an important trade-off in housing provision. Flexible payment options between the sectors by contribution on the standardized residual indicates the terms do not differ significantly (1.11% contribution) and this could imply a common systemic problem (that require the development of broad policy responses). Coloured cells tests indicated private housing tend to be more unlikely to be perceived as affordable than expected by chance (standardized residual = 4.69) and more likely to be perceived as affordable (standardized residual = 3.91). compared with public housing and in contrast private housing tended to be more likely to be perceived as offering greater value for money (standardized residual = 4.56), and vice versa (public housing less than expected = standard residual = 3.81).

Further, the results also lend support to the Housing Market Theory, which postulates that housing supply and prices are generally determined by forces of supply and demand in the housing market [6]. Private developers tend to invest in those categories of housing associated with the greatest reward, thereby giving preference to middle and higher income housing where the returns are greater than for lower income housing. Affordable housing, therefore, can only be provided if governments provide incentives, subsidies or regulation to induce developers to build low-cost housing.

The comparative analysis also shows that public housing was more flexible in its payment arrangements (54.7%) making it more affordable for low-income and middle-income households. Flexible payment structure lowers the financial burden on households, and enhances access to home ownership. This finding supports the suggestions by [8] that in developing countries, solutions to housing affordability related to affordable mortgage systems, long-term financing arrangements and targeted housing subsidies.

The majorities of residents were neither satisfied nor dissatisfied with public housing, then 27.4% and 36.2% respectively. There were more dissatisfied residents (31.8%) and very dissatisfied residents (19.3%) in private housing. Even if the residents perceived the better quality of private

housing, they would be more dissatisfied with private housing; probably due to the affordability issue. This evidence shows the household's level of housing satisfaction can be caused by many factors, such as housing affordability, transportation accessibility, neighborhood condition, urban infrastructure, security of tenure, and family income level, which in turn, supports that housing satisfaction has multi-dimensional concepts and cannot be solely rooted on the physical housing condition. This finding is in accordance with the findings from [13], which stated housing satisfaction could from the extent to which the specific characteristics of the housing met the demands and expectations of the residents given the financial availability.

Overall Impact on Housing Affordability in the Study Area

The result that 71.5% of respondents have seen an increase in expensive housing stock over 5 years, compared to 12.4% who have seen an increase in affordable housing highlights that recent development initiatives have produced excess high-cost housing not affordable. This demonstrates that increasing housing numbers alone will not reduce the overall housing shortfall; to ensure affordability, new homes must be accessible to households of all income types, and that where expenditure investment is focused in high income market sectors, affordability continues to worsen.

This could also be explained by UN-Habitat, which argues that many fast-growing urban cities have seen an unprecedented increase in housing supply but have not seen rise in housing affordability as private investment has been focused in more expensive housing stock [34]. Furthermore, the authors [8] highlight that in developing countries housing shortages not only include inadequacy in housing supply but a mismatch between housing values and household income.

The results are also in agreement with [7], who concluded that the number of houses built should not be the criteria for determining housing affordability but the ability of households to attain decent shelter without experiencing financial distress. So, increasing the supply of housing does not necessarily increase housing affordability unless the housing policies are intentionally targeted at low and middle-income households.

Chi-Square test showed a significant association between housing development and perceiving affordability as improved ($\chi^2=10.35$, $p=0.035$). The greatest barriers that led individuals to perceiving affordability as improved were quality of life impacts negatively contributed 43.38% to the effect, quality of life impacts positively contributed 40.10% to the effect also. The mean negative impact score (46.25%) was higher than the positive impact score (30.38%) indicating that housing development has more negative effects than positive on affordability. Result of the Standardized Residual indicated that respondents who experienced positive impacts on quality of life were more likely to experience that housing development had improved affordability, and respondents who experienced negative impacts on quality of life were more likely to experience that housing development had not

improved affordability (standardized residual= + 1.61 and + 1.57 respectively). This is consistent with the expectation of Stone's Residual Income Theory and suggests that increasing the amount of housing makes it more or less unaffordable depending on whether those developing housing deliberately target low- and middle-income households [30].

The fact that 62.7% of the respondents viewed housing provisioning as affecting their quality of life negatively in similar vein supports the Residual Income Theory of Stone which contended that having to spend too much on housing leaves the satisfaction of other human needs compromised and hence diminishes quality of life. The study demonstrates that there cannot be sustainable settlement development through improvements on housing quality without concurrent efforts to make it affordable [30].

Findings also showed that, while a significant proportion of respondents believed that housing development had led to the growth of housing stock in the city area, most felt that recent development had not done much to improve affordability in the city area, with a lower proportion (37.0%) believing that both public and private sector developers' contributions had improved affordability (33.7% opposed). This again supports the view that merely increasing the production of housing cannot make it more affordable.

In terms of policy implications, the cross-comparison revealed that neither the public sector nor the private sector alone can adequately meet the housing demand of the Port Harcourt Metropolis. Though the public sector can provide relatively affordable housing opportunities, the public housing stock is substantially low in number and inadequate in quality and maintenance. On the other hand, private housing has made up a substantial proportion of the housing stock and generally provides better quality housing but is not accessible to the majority of households due to its high cost. Therefore, sustainable Housing delivery system in the Portharcourt Metropolis requires a complementary synergic partnership of government and private developers in which, the state creates an enabling environment for development through land reforms, infrastructure provision, planning incentives, and housing finance support while private developers sustain housing delivery under policies that promote housing affordability and access for all. The Chi-Square test for association revealed a statistically significant relationship between developer challenges affecting affordable housing provision with $\chi^2=127.14$, $p<0.001$. It was observed that underdevelopment (61.59%) and abandoned projects (19.80%) were the predominantly identified challenges to private developer participation. The standardized residual analysis indicated that underdevelopment was largely associated with private developer participation (standardized residual = +6.81) while abandoned projects majorly impacted on private developer participation (standardized residual = +3.86).

In addition, the hypotheses tests also demonstrated that there is no significant relationship between developer type and housing unit types ($\chi^2=0.2006$, $p=0.999$), which implies that

public sector and private sector developers both respond to similar market signals and constraints. Also, the relationship between developer type and affordability across income groups is not significant ($\chi^2 = 5.398$, $p = 0.067$), showing that the affordable housing development is a systemic problem across public and private sectors. However, several significant relationships were established, including between housing provider type and affordable housing development ($\chi^2 = 73.35$, $p < 0.001$), between developer obstacle and affordable housing development ($\chi^2 = 127.14$, $p < 0.001$) and between housing development and affordable housing development ($\chi^2 = 10.35$, $p = 0.035$), this indicated that although there are significant difference between housing production patterns, challenges, and impacts, the differences do not necessarily imply significant differences in affordability outcome, and therein lies the problem of the persistence of the affordability crisis and the need for broad and comprehensive policy solutions that improves access to land, finance, and institutional strengths.

CONCLUSION

This study examined the housing affordability of public and private housing developers in Port Harcourt Metropolis, Rivers State, Nigeria. The result indicates that while the public and private sector influences the delivery of affordable residential environment, housing affordability is still one of the serious urban development challenges facing modern Port Harcourt City. The demographic transition towards urban civilization, the high urbanization rate and accelerated population growth rate, erosion of land values, influx of high rising costs of construction materials, inadequate housing finance, institutional inefficiencies and the poor policy implementations, has significantly widened the housing gap of affordability in the metropolis.

It was concluded that Private developers remain the major providers of housing in PH. The private sector housing provision has both supplemented the overall housing stock and delivered better quality residential development, but because of higher market-oriented pricing, it is used predominantly by middle and high-income households leaving many low- and moderate-income households unable to afford decently. Public housing has been found to be more affordable than private sector housing thanks to government intervention and subsidized pricing, but it has failed to meet rising demand due to limited supply, bureaucracy and poor maintenance of units.

A second most important conclusion from this research is that the degree of affordability of housing results from a complex set of socio-economic, institutional, financial and planning factors and not merely due to housing prices. Household income, employment, household size, land-related costs, housing-finance, utilities and services, provision of infrastructure, planning regime, good institutional governance, and the characteristics of housing finance have a combined effect on the ability of households to access affordable housing. The findings further strengthen

the dynamic characteristic of housing affordability and suggest that a sustainable solution will emerge from integrated rather than targeted interventions.

Housing production only is not adequate to address high housing costs; the production of additional house units is not going to solve the issue of high housing costs. The findings reveal that, despite the benefits of recent housing developments in improving social, sanitation, environmental and security condition of some of the residential areas, however, new houses were still very expensive and therefore not accessible by a lot of households. Based on the findings, housing policies should focus on issues of affordability and equitable access and inclusiveness.

The study further suggests that the Nigeria housing finance system cannot sufficiently tackle the challenge of universal homeownership. The dominance of personal savings and the marginal sources of mortgage finance point to the fundamental structural failures within the housing finance landscape. In the absence of mortgage facilities, affordable interest rates and effective subsidy schemes, most households will continue to depend on rental accommodation or incremental self-built housing.

In summation, this work asserts that the best way in tackling the problems of housing affordability in Port Harcourt Metropolis with a view to establishing sustainable housing policy is an integrated urban planning that requires an effective land administration, good infrastructure services, effective housing finance, sound physical planning, good governance, institutional capacity building with partnership approach to government and the private sector, among others. Sustainable housing policies do not seek to just produce more habitable living units, but seek to make accessible decent, safe, healthy and affordable housing services for households of all income groups.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:

- 1. Make Housing Affordable for Different Income Groups:** Both government and private sector housing developers should plan and set prices on the basis of income sensitivity to ensure affordability for various income groups. Incentive to private sector to develop housing for middle- and low income households should also be encouraged.
- 2. Improve Public-Private Housing Provision and Affordability:** Government should focus on strengthening partnership between the public and private housing providers by combining affordable public housing with the quality, investment capacity and flexibility of private development. Furthermore, encouragement should be given to public-private partnership through making serviced land, infrastructure, additional tax benefits, better approval procedures and affordable housing mandatory. There should also be specific targets for affordable housing in such partnerships so that benefits extend beyond high

income earners.

3. **Increase Overall Contribution of Housing Supply to Affordable Housing Provision:** At a time of rising housing demand and rising prices, the government should aim to ensure that rising levels of housing development benefit the supply of affordable housing rather than mainly expanding the market in high value housing. Affordable-housing targets should be set in general development control planning policies. local planning authorities should specify in planning conditions an affordable housing share for large-scale development projects, requiring affordable housing to be incorporated; promoting higher density development where appropriate to minimize land costs and infrastructure; prioritise infrastructure provision and keep development costs low to increase affordability.

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