

The Impact of Developer Infrastructure Charges on Housing Affordability in Zoo Estate Enugu.

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ABSTRACT

This paper examines the impact of developer infrastructure charges on housing affordability in Zoo Estate Enugu. Data were collected through the administration of a questionnaire. A total of 92 questionnaires were distributed to the respondents, out of which 88 were retrieved and used for the analysis. Relative Importance Index (RII) was used to analyze the respondents' scores of the basic impact factors. From the result, high rents, increase in housing prices, lack of adequate and affordable housing and developer infrastructure charges increases accessibility etc., were ranked first, second, third and fourth respectively. The results of the analysis indicate that developer infrastructure charges cause high rents and increase in housing prices which significantly affect housing affordability. The study recommended that funding and maintenance of infrastructure by the State Government should be made from revenues collected as property rates or ground rent and not necessarily creating another nomenclature called Infrastructure Development Fund (IDF) or Infrastructure Development Charge (IDC).

Keywords: Impact, Developer, Infrastructure Charges and Housing Affordability.

I. INTRODUCTION

1.1 Background of the Study

Housing affordability is more than just house prices. In a broad context, housing affordability includes ready access to public transport, schools and good road networks and of course access to all the basic utilities. Housing affordability is one of the key factors that can describe the socioeconomic stability and development of a country. Housing affordability is

aimed to ensure that housing is affordable by every income earner group whether low-income, middle income and high-income group. Housing is one of the important basic human needs and components in an urban economy.

Nigeria's population at the era of independence (1960) was 45,211,614 with an urbanization of 6, 967,110. It has an urban population of 15.4%. In the year 2016, the population had increased to 189,139,124 with an urban population of 49% (Nigeria Population, 2016). The total land area of 910, 802km² could not take care of the increase in population. The United Nations estimates that Nigeria's population in 2005 stands at 141 million, and predicted that it would reach 289 million by 2050 (Campbell, 2012). Over 40% of Nigerians lived in urban areas, thus rapid growth in population creates demand pressure towards shelter and efficient supply and distribution of basic utilities such as transportation, water supply, health facilities, electricity and other services for the city dwellers which are provided by the Government (Enisan and Ogundiran, 2013). With the recession period Nigeria is experiencing, the Government is faced with challenges to provide housing for the masses especially for those in the urban areas. The effort had been made by the Government in the past (Mabogunje, 2002) but they are not adequate especially for the middle income earners. However, the purpose had not been successful because those that need housing could not afford it. Thus, they tend to live in semi – urban areas, slums, and substandard accommodation. The private sector had contributed about 90% of urban housing (Omole, 2001) to assist the government as a result of rapid growth in the urban areas. Despite this, the private sector is faced with the constraints

of meeting up the supply of housing (Nubi, 2008). Okpala and Onyejiaka, (2020) Deficit of urban infrastructure make residential properties inaccessible and as well, unavailable, a property which is inaccessible is untenable and as a result performs below expectation.

This is due to the cost of building materials, deficiency of housing finance arrangement, inflexible loan conditions from mortgage banks and government policies (Raji, 2008; Enisan and Ogundiran, 2013). According to Nubi (2008), land value and rents had increased ahead of inflation especially with this recessed economy of Nigeria where diversification is into infrastructure, mining and agriculture. Therefore, there is a need to manage macroeconomic stability and pro – cyclical government expenditure patterns by improving non – oil growth performance and saving Nigeria’s oil revenues for future use (Ayodele, 2013). As a result of inadequate housing, the sale of land and rentage is very high (Nubi, 2008). Housing plays an important role in the development of any nation. It has been ascertained as the basic need of a man (Makinde, 2013; Akinyode and Tareef, 2014). The challenges faced by Nigeria government in providing for housing is not peculiar to Nigeria alone, many developing countries are also faced with these challenges. Thus, various strategies had been developed to help in providing housing at a cheaper rate. Previous studies on strategies are on the cooperative housing model (Fasakin, 1998), land allocation system (Oduwaye, 1998) and financial model (Omole, 2001).

Developer infrastructure charges have been introduced as a “user pays” method of funding residents by shifting the responsibility of funding new growth-related infrastructure from the government to the development industry (Burge, 2005); however, the passing-on of these costs to new homeowners is said to have negative impact on housing affordability (Been, 2005). However, in fast growing areas, the government doesn’t provide funds to build all the new urban infrastructure needed in housing estates. Sourcing the funding for the provision of new urban infrastructure has been a policy dilemma for the government.

This paper was designed to examine the impact of infrastructure charges on housing affordability using Zoo Estate Enugu as a case study with the view to proffer solutions on how to remedy the situation.

1.2 Statement of the Problem

Nigerian cities are experiencing an unprecedented growth in over the past three

decades. Statistics show that about 60% of the Nigerian population are without adequate shelter. It was estimated that the nation’s housing demand for 1990 was 8,413,980, 7,770,005 and 7,624,230 units for the high, medium and low-income groups respectively (Onibokon, 1990). For the 2020 housing demand would stand at 39,989,286; 35,570,900 and 28,548,633 housing units for the respective income groups. (Agbola, 1998). Again, the National Rolling Plan (1990 – 1992) estimated the housing deficit to increase between 4.8 million to 5.9 million by the year 2000.

The deficits in housing demand have resulted in numerous problems. The problems include overcrowding, reduction in the vacancy rate, high room occupancy rates, proliferation of informal settlements, pressure on the existing housing stock, pressure on existing infrastructure, deterioration of the infrastructural facilities, inadequate basic amenities, poor spatial arrangement, and deteriorated environment. Others are high rents, increase in housing prices, lack of adequate and affordable housing and decrease in Marginal propensity to save (MPS) of the household as greater part of the income is spent on rent.

Infrastructure Development Charge (IDC) or Infrastructure Development Fund (IDF) charged by the Housing Authority on developers is one of the major problems facing housing affordability. Various funding mechanisms are available, however ratepayers and voters in general resist the introduction of new rates and taxes to fund infrastructure for which they perceive no benefit (Evans-Cowley and Lawhon, 2003) and debt adverse governments refuse to consider infrastructure bond issues (Chan et al., 2009). This is particularly relevant in high growth areas where new road, water, sewerage and waste water and other public services are required to support rapidly growing populations with limited public-purse budgets and equally limited debt appetites. When these funds were first introduced, the need was to bring development in estates by way of providing good road networks, electricity etc. but little or no attention was paid to what impact IDC will have on housing affordability.

1.3 Aim and Objectives

The aim of this work is to critically analyze the impact of developer infrastructure charges on housing affordability in Zoo Estate Enugu.

The Objectives Includes:

- i. To identify the infrastructure provided through developer infrastructure charge.
- ii. To determine factors responsible for inadequate infrastructure provision

iii. To assess the likely impact of developer infrastructure charges on housing affordability.

1.4 The Scope of the study

The study is focused on the impact of developer infrastructure charge on housing affordability in Zoo estate Enugu.

1.5 Significance of the study

This study will be of great benefit to students of Estate Management, Lecturers (Academia), Researchers, the Institution (NIESV), the Board (ESVARBON); practitioners in the South-east, the government of Enugu State and all classes of people involved in Residential Real Estate.

1.6 The Area of Study

The study area is centered on Ekulu East Housing Estate Enugu popularly known as Zoo Estate. It is a high- and medium-income residential neighborhood which is located in the State Capital and covers a land area of about 500 hectares. Accessibility into the estate is through a number of gates, most of which fronts the 82-division road. Major developments within the area are schools, shops, churches and residential properties. The estate is inhabited by people of diverse cultural and religious groups, majority of whom are Igbos. A large proportion of the residents are politicians and high placed individuals working with Enugu State Government. The housing units consist of bungalows, semi detached houses and detached houses.

The estate is managed by Enugu State Housing Development Corporation (ESHDC), one of the fully commercialized agencies of the Enugu State Government with the responsibility of implementing housing policies for all classes of people in the State. It is important to note that, the Enugu State Housing Development Corporation (ESHDC) is a parastatal of the Enugu State Government, owned 100% by it and is established by Enugu State Housing Development Corporation Law Cap 58 Laws of Enugu State Government 2004.

II. LITERATURE REVIEW

2.1 General Meaning of Infrastructure

Infrastructure is widely defined as the system of services and facilities which provides for the basic well-being and quality of life (Ziara and Ayyub, 1996). Infrastructure can be described generally as the set of interconnected structural elements that provide a framework supporting an entire structure of development. The major features in the above definition of infrastructure consist of

facilities and utilities which are provided for the public to enhance living standards of the people.

2.2 The Public Infrastructure

Public infrastructure refers to infrastructure facilities, systems and structures that are owned and operated by the public i.e., the government. It includes all infrastructure facilities that are open to the general public to use.

Infrastructure includes all essential systems and facilities that facilitate the smooth flow of an economy's day-to-day activities and enhance the living standard of people. It includes basic facilities such as roads, water supply, electricity, telecommunications and many more. Examples of public infrastructure includes the following:

- i. Transport Infrastructure: Bridges, roads, airports, rail transport etc.
- ii. Water Infrastructure: Water supply, water resource management, flood management, proper sewage and drainage systems.
- iii. Power and energy infrastructure: power grid, power stations, wind turbines, windmills, solar panels.
- iv. Telecommunications infrastructure: Telephone, network, broadband network, wifi services
- v. Educational infrastructure: public schools and universities, public training institutes.
- vi. Health infrastructure: public hospitals subsidized health check-ups etc.
- vii. Recreational infrastructure: public parks and gardens, historical sites, national reserves etc.

2.2 Categories and Components of Infrastructure

Zakout (2006), stated that infrastructure is important to attain adequate housing and good quality of life for individuals especially in the construction of low-cost housing and therefore urban infrastructure should be classified into two main categories namely:

- i. Basic infrastructure components
- ii. Supportive infrastructure components

2.2.1. Basic Infrastructure Components

The basic infrastructure components are defined as the key infrastructure components which are considered as a basic requirement for the basic life, health, safety and security of people. The provision of infrastructure which falls under this category should be provided simultaneously with

the construction of houses and their costs added to the cost of housing.

The provision of this infrastructure is the responsibility of the housing institution in cooperation and coordination with the relevant authorities.

The basic infrastructure components are as follows: water supply, wastewater collection (sewage system), wastewater treatment and reuse or disposal, power supply and security lighting, access and paving, storm water drainage and telephone lines.

2.2.2. Supportive Infrastructure Components

This category of infrastructure includes all services which are considered to be supportive to the lives of the residents, but not necessarily essential for their basic well-being. The provision of supportive infrastructure services within an estate or community is to provide proximity to services and facilitate the social life of residents. Thus, they are considered additional public facilities. Supportive infrastructure components include one or more of the following service facilities: parks and green areas, schools, health center, worship area, public market and public service buildings.

2.3 The Development Lease Agreement

The development lease agreement is between the developer and the Enugu State Housing Development Corporation (ESHDC). Both parties commit to a number of responsibilities.

The developer commits to the following:

- i. Not assigning or subletting any part of the allocated land.
- ii. Submitting within 3 months of signing the development lease, building plans for approval and commencing effective mobilization to site.
- iii. Providing secondary and tertiary infrastructure to the buildings.

The Enugu State Housing Development Corporation's responsibilities include:

- i. Deferring building approval fees until the developer processes title deeds for the built-up properties in the Estate.
- ii. Guaranteeing approval of properly documented building plans by development control within one month of submission.
- iii. Providing primary and arterial infrastructure to the property but in situations where they fail to do as stipulated, the developer is at liberty to provide such infrastructure to make the building habitable.

- iv. Granting a sublease directly to any person designated by the developer as a purchaser upon payment of all fees and deferred charges. It is essential to note that after development of land with all necessary secondary infrastructures, the developers may sell to the public and submit names of subscribers to the Corporation.

2.4 Infrastructure Development Charge (IDC)

The term infrastructure development charge is a term that is used to encompass the estimated proportionate cost of providing urban infrastructure such as roads, electricity, water etc to new development. It is a one-off charge levied on the developer, generally at the time of rezoning/planning approval (Been, 2005). These costs historically were borne by the public purse, however in high growth areas, governments have been increasingly reluctant to fund such infrastructure through general revenue. Existing home owners resist paying higher rates and taxes to fund new development. Hence infrastructure charges were introduced to shift these costs to the private sector (Burge, 2006). Infrastructure charges were originally intended to transfer the burden of infrastructure provision in high growth areas from the public purse on to developers (Evans-Cowley and Lawhon, 2003). However, in a competitive market, and subject to the various prevailing market elasticities, the literature is consistent in its conclusions that despite market conditions (i.e. relative market elasticities) infrastructure charges are passed onto home buyers in the long run and will thus lead to increased housing prices (Been, 2005, Evans-Cowley and Lawhon, 2003, Ihlanfeldt and Shaughnessy, 2004, Burge and Ihlanfeldt, 2006).

2.5 Effects of Infrastructure on Property Value

The state of infrastructure is an important parameter for assessment and indicator of status of any urban system (Ajibola et al., 2013). Olujimi (2010), asserted that the problems of deteriorated infrastructure are particularly peculiar in the old indigenous core areas of the cities while the non-availability of infrastructure is peculiar to the outer spontaneous settlements that accommodate the low-income population. Public infrastructure when adequately provided offers multi-dimensional benefits within its operative network (Famuyiwa and Otegbulu, 2012). Real Estate has no value if it has no utility, if it is not scarce and if it is not effectively demanded (Ajibola et al., 2013).

Odudu (2003), observed that housing values tended to peak in those locations that enjoyed one form of

infrastructure or the other. (Johnson et al., 2005) stated that one of the determinants of property value is infrastructure, the presence of which leads to appreciation in property values.

2.6 Impact of developer infrastructure charges on housing affordability.

- i. **High Standard Designs:** Contemporary residential housing designs in Nigeria result in bogus and high standard and expensive housing units with unnecessarily expensive materials and components which are affordable to only few Nigerians.
 - ii. **Taste and Acceptability:** The low-income housing facilities such as roomy houses, one-bedroom low-cost houses are declining in the major urban centers in preference to Block of Flats, duplexes and luxury apartments. (Lagos, Abuja, P.H and State Capitals). The reason is that most housing developments in recent times are in the hands of private speculative developers who prefer to have rich tenants considering the money they spend on land and high cost of building materials and high interest rates of loan facility needed in raising a structure. They therefore cannot afford to go for cheap accommodation.
 - iii. **High Cost of Building Materials:** Nigerians have developed high taste for very expensive building materials such, marble, granite, for wall cladding, stainless steel, exotic ceiling and roofing materials, massive columns with ornaments and cornices that serve no structural purposes, bullet proof steel doors, reflective glass windows, glasses with powder coated aluminum frames just to say the list all for residential buildings. Most of these materials are either imported or manufactured locally with imported machinery and technology. According to Mbah, (2002) about 91% of the roofs of residential houses in Lagos are made of corrugated iron sheets, while over 8% constitute of asbestos sheets, about 93 percent have concrete floors while 6% have tiled floors. Also, in Onitsha 80% of the walls of residential buildings are made of cement while buildings with mud walls are about 5% only. Also, buildings with corrugated metal roofs constitute over 90 percent of the total, while asbestos roofs constitute only 3%.
 - iv. **High Technological Input:** Many contemporary residential buildings that adorn our urban centers require high level of technological input which requires high level equipment to function, operate and maintain. Some residential buildings rise up to six floors without elevators. Some are without adequate electricity to power them including air-condition gadgets. Some are without adequate natural lighting and ventilation due to their complexity. Sometimes more floors are added to existing ones for commercial gains without consideration of the consequences of additional load to existing foundations. These present structural problems which are one of reasons for frequent incidences of building collapse.
 - v. **Durability and Safety:** Durability is another problem that hinders the use of local materials for low-cost mass housing provision. Some of the local materials are not durable therefore maintenance, in the form of renovation, and replacement will be much more often compared to those with more permanent structures. Mud and wooden houses are often attacked by termites thereby reducing the strength of their structures. They are liable to vandalism and attacks by robbers. They are also liable to attacks by fire and local fire bridges are ill-equipped. Also, incidences of harsh weather such as wind rain and excessive dryness due to loss of moisture for unseasoned wood have been recorded. The consequences of all the problems enumerated in this study are housing shortages in Nigerian Urban Centers which have remained unresolved both in quantity and in quality.
 - vi. The low-income and middle-income groups of the urban population are the most affected. Inconsistency in government policies and programmes, including frequent changes of policies with changes of government and without proper assessment of the existing ones.
 - vii. Lack of efficient and sustainable credit delivery to the housing sector.
 - viii. People's incomes are relatively low in comparison with house market prices, resulting in an affordability problem.
 - ix. High cost of building materials.
 - x. Lack of effective coordination among Housing Agencies. While all tiers of the government are involved in one way or the other in housing matters, their activities are hardly coordinated.
- Politicization of housing issues. Adeleye (2008) opined that some the impediments to housing growth in Nigeria are as follows:
- i. Macro-economic environment and absence of financing systems
 - ii. Moderate inflation and high interest rate.
 - iii. High unemployment and moderate GDP growth at about 7%-9% pa

- iv. Standard of living: GDP per capita income in 2006 was \$1200.
- v. Land Use Act, the land use act restricts access to land that have no titles on them and limits development of housing units.
- vi. High cost of building materials, building materials are very expensive and not necessarily of the appropriate type.
- vii. High construction costs, the cost of constructing developments are high and often unaffordable
- viii. Dearth of good quality construction companies.
- ix. Poor quality of construction.
- x. High cost of land in urban areas.
- xi. Values placed on land especially in the urban areas are high and their owners seek to make high gains on sale.
- xii. Lack of Physical infrastructure and social amenities, infrastructure and social amenities are not readily available in the rural areas and also some parts of the urban areas. About 40-60% of housing construction cost is related to infrastructure provision.

2.7 The Property Developer's Role in Providing Infrastructure

The property developer is considered the first original intended payer of infrastructure charges. Infrastructure charges are levied on the property developer as a cost of production in the property development process. Basic economic theory tells us that if the cost of production of a good goes up, so too must the cost of the good to the consumer. Same scenario applies to the developer. Developers are the least likely party to carry this cost burden despite the fact they are the ones the charge is levied upon.

The premise for any price impact argument is based on the concept of who ends up bearing the cost of infrastructure charge. Infrastructure charges were originally intended to transfer the burden of infrastructure provision in high growth areas from the public purse and existing owners on to developers. However, there are a number of parties that may be potentially liable for the ultimate payment of these fees. Apart from the developer, these include: the original land owner and the new homeowner (Huffman, et al., 1988).

2.8 Types of Infrastructure

- a. **Soft Infrastructure:** Refers to all the institutions that help maintain a healthy

economy. It usually requires extensive human capital and is service-oriented towards its population. It includes all educational, health, financial, law and order, governmental systems and social security systems and institutions that are crucial to the wellbeing of an economy.

- b. **Hard Infrastructure:** This is made up of all the physical systems that are crucial to running a modern/ industrialized economy. It includes transport systems such as roads and highways and telecommunication services such as telephone lines and broadband systems.
- c. **Critical Infrastructure:** Made up of all the assets that are defined by the government as being crucial to the functioning of an economy. It includes facilities such as the assets used for shelter and heating, telecommunication, public health, agricultural facilities etc.

2.9 Financing of Public Infrastructure

Public infrastructure is financed in a number of ways, including publicly (through taxes), privately (through private investments), and public private partnerships.

i. Taxation

Public infrastructure may be financed through taxes, tolls, or metered user fees. Since public infrastructure is open for use by the general public, the general public pays for the infrastructure facilities through taxes.

ii. Investments

Public infrastructure tends to be high-cost investment projects; the returns on which are extremely high and prosperous. Hence, such projects attract several investment opportunities. Sometimes, private companies choose to invest in a country's infrastructure projects as part of their expansion initiatives. For example, a power and energy company opts to build railways and pipelines in a country where it wants to refine petroleum. The investment benefits are to both the company and the domestic economy.

iii. Public-Private Partnership (PPP)

Public-Private Partnership (PPP) is best described as a partnership or an arrangement between two or more private organizations and the public sector. A public-private partnership is the most popular means of financing large public sector projects. It helps share risks and makes the economy prosperous by bringing in investment opportunities and increasing the living standard of the people.

2.10 Factors Responsible for Inadequate Infrastructure Provision

Many factors are responsible for the inadequate infrastructure provision in Nigeria such as but not limited to; poor funding; lack of interest by government, corruption; poor maintenance culture; and lack of planning (Olaseni and Alade, 2012).

- i. **Poor Funding:** Funding as one of the most significant factors to inadequate infrastructure provision has become a major challenge to infrastructure and other projects development in Nigeria for decades (Ihuah and Benebo, 2014). This may be related to the incessant population increases in the country, associating with the increasing need or demand for infrastructure provisions in all sectors. Unfortunately, the government resources and their allocation have hardly met the increasing demand for infrastructure project adequacy in the Nigerian economic context.
- ii. **Lack of Interest by Government:** A particular government in power may not have interest in the estate simply because the governor does not have properties located there. This makes such estate not to have projects awarded and if possibly awarded, execution and completion of the project becomes a doubt. Subscriber/users of such estates end up funding projects upon projects.
- iii. **Corruption in the System:** Corruption has become a major socio-economic problem in Nigeria with negative effects on infrastructure development (Olaseni and Alade, 2012). Olaseni and Alade (2012) while emphasizing went further to affirm that embezzlement of funds allocated for infrastructure development is a common feature in public offices. Also many projects for which funds have been allocated and released were never completed while inflation of project costs is a common experience (Yunusa, 2011).

iv. **Poor Maintenance Culture:** The Housing cooperation in-charge of estates often ignores the maintenance of these infrastructures even when residents/users continuously pay maintenance levies yearly. For instance, a breakdown of the supply channel of water may be left unattended for over a period of time which may leave the estate without water provision. Subscribers/users of the estate without water supply may be forced to provide alternative sources of water for themselves by sinking boreholes and digging wells. This additional cost incurred will directly or indirectly affect affordability.

v. **Lack of Planning:** Lack of planning is one major factor responsible for inadequate infrastructure. The master plan of some estates was never designed to accommodate all the modern facilities in the world today. Residents of these estates go the extra mile to make alternative plans to have such infrastructure provided. Provision of these modern facilities thus incurs additional cost to housing. e.g In an estate where a major sewer line was meant to be provided but was not provided, developers will incur additional cost to provide soak away in every housing unit. By doing so, that extra cost will affect housing affordability.

III. METHODOLOGY

The data for this study was obtained through the use of structured questionnaires from Investors/Developers and residents in Zoo Estate Enugu. A total of 92 questionnaires were distributed to the respondents, out of which 88 were properly completed, retrieved and used for the analysis. Relative Importance Index (RII) was used to analyze the respondents' scores of the basic factors. With the use of Likert scale, respondent's opinion on the impact of developer infrastructure charges on housing affordability was obtained.

IV. DATA PRESENTATION

Table 1: Responses and Ranking on Infrastructure Provided through Developer Infrastructure Charge.

S/N	Infrastructure	Scales and Number of Respondents					RII	Ranking
		5	4	3	2	1		
1.	Transport Infrastructure	51	24	9	3	1	4.32	1
2.	Water Infrastructure	49	25	8	5	1	4.32	1
3.	Power and energy Infrastructure	46	21	12	7	2	4.18	3
4.	Education Infrastructure	42	21	14	8	3	4.03	4

5	Health Infrastructure	36	24	15	10	3	3.91	5
6	Telecommunications Infrastructure	29	26	17	11	5	3.72	6
7	Recreational Infrastructure	25	26	19	12	6	3.59	7

Rank: (Strongly agree -5, Agree -4, indifferent-3, Disagree -2, strongly disagree -1)
From the analysis, transport infrastructure and water infrastructure ranked first, power and energy

infrastructure ranked third and education infrastructure ranked fourth etc. This implies that they are the most infrastructure provided through developer infrastructure charge.

Table 2: Responses and Ranking on Factors Responsible for Inadequate Infrastructure Provision

S/N	Infrastructure	Scales and Number of Respondents					RII	Ranking
		5	4	3	2	1		
1.	Poor funding	50	25	10	3	-	4.39	1
2.	Lack of interest by government	48	25	9	6	-	4.31	2
3.	Corruption	47	23	11	7	-	4.25	3
4.	Poor maintenance culture	42	21	14	9	2	4.05	4
5	Lack of planning	36	23	15	10	4	3.88	5

Rank: (Strongly agree -5, Agree -4, indifferent-3, Disagree -2, strongly disagree -1)
From the analysis, poor funding ranked first, Lack of interest by the government ranked second and

corruption ranked third etc. This implies that they are the most significant factors responsible for inadequate infrastructure provision.

Table 3: Responses and Ranking on Impact of Developer Infrastructure Charges on Housing Affordability.

S/N	Impacts	Scales and Number of Respondents					RII	Ranking
		5	4	3	2	1		
1.	High rents	49	26	8	5	-	4.35	1
2.	Increase in housing prices	47	24	10	7	-	4.26	2
3.	Lack of adequate and affordable housing	44	25	11	8	-	4.19	3
4.	Developer infrastructure charges increases accessibility	43	23	13	8	1	4.13	4
5	Taste and acceptability	35	25	13	10	5	3.85	5
6	Durability and safety	32	24	15	11	6	3.74	6
7	High technological input	27	23	17	13	8	3.55	7

Rank: (Strongly agree -5, Agree -4, indifferent-3, Disagree -2, strongly disagree -1)

From the analysis, high rents ranked first, increase in housing prices ranked second, lack of adequate and affordable housing ranked third and developer infrastructure charges increased accessibility ranked fourth etc. and they are the most significant impact factors.

V. SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.1 Summary

Housing is becoming increasingly unaffordable in Nigeria, with developer levies in the form of infrastructure charges as a contributing factor. Infrastructure charges have rapidly increased in many jurisdictions with nobody asking the question who really should pay for this urban infrastructure; the developer, user/residents, new home buyers or the government at large.

One should bear in mind that developer levied infrastructure charges are passed-on to new home buyers and this end up affecting housing affordability.

The following recommendations are made to address the impact of developer infrastructure charges on housing affordability.

5.2 Recommendations

Based on our findings, the following recommendations were made:

- i. There is a dire need for every State government to go back and encourage the Public Private Partnership (PPP) agreement where responsibilities will be shared as to who handles provision of certain infrastructures especially in our housing estates.
- ii. Governments on its part should try as much as possible to keep its part of the partnership agreement towards providing primary infrastructures to districts allocated for PPP housing estates.
- iii. Funding and maintenance of infrastructure by the State Government should be made from monies collected as property rates or ground rent and not necessarily creating another nomenclature called Infrastructure Development Fund (IDF) or Infrastructure Development Charge (IDC) as used in various States.
- iv. There should be organized workshops/seminars for all parties involved in housing delivery, especially the State Government, developers, land owners and

residents/users to enlighten them on the impact caused by infrastructure charge on housing affordability

and the need for all parties to work together through (PPP) in order to achieve the desired goal.

- v. There is also a need for stakeholders to participate in supervision and monitoring of infrastructure project development in estates in order to check embezzlement of funds, project diversion and substandard projects.
- vi. Housing authorities must ensure that housing estates are properly planned and designed in the master plan to accommodate every modern infrastructure and as well provide the same in order to avoid some additional cost to be incurred in the future by residents or new home buyers.
- vii. The issue of ground rent being paid only when the allottee of land is giving consent or assignment to a purchaser should be revisited. This is because ground rents are meant to be used for development and maintenance of existing infrastructures in estates.
- viii. The state government together with the housing development corporation should set up a task force team to enforce the collection of ground rent on each property payable annually to fund provision of these infrastructures in the estates.
- ix. The governments should try as much as possible to make houses affordable to people, especially low-income earners.

5.3 Conclusion

The impact of infrastructure development charge on housing affordability cannot be overemphasized. Housing is gradually becoming unaffordable in our estates. This problem needs to be attended to within the possible shortest time. The recommendations made should be implemented in order to address the problem faced.

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