

Effects of Infrastructural Facilities on Residential Properties Rental Values in Abeokuta, Ogun State, Nigeria

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ABSTRACT

This paper aims at examining the influence of infrastructures on rental values of properties in Kemta Housing Estate, Abeokuta, Ogun State. Infrastructure is key in the assessment of the status of any urban area. Real Estate is the physical and appurtenances affixed to land while Real Property which denotes ownership includes all interest, benefits and rights inherent in the ownership of physical real estate., the value of Property is affected by factors such as environmental, accessibility, neighborhoods and property characteristics. Questionnaires were given to the Residents of Kemta Housing Estate, out of 155 questionnaires administered, only 105(67%) were retrieved and used for the analysis. Frequency tables alongside percentages were employed in analyzing the information retrieved while level of importance of the infrastructure facilities was analyzed with Relative Importance Index. It was revealed that majority of the Residents are tenants (61%) and infrastructural facilities (73%) was a major influence on the value of properties in the estate, others include water, good roads and provision of security. Major findings of this study are that availability of Medical Facilities (RII=2.72), well maintained roads with RII=3.12, improved Electricity supply and Drainage systems with RII of 2.75 where the most important facilities that the Residents of Kemta Housing Estate loves so much. Continuous maintenance of the available facilities had great influence on the rental values of the properties in the Estate and there has been an annual increase of rent in the Estate. To enhance the livability of residents within the estate, proper maintenance of the available facilities and construction/purchase of more facilities is hereby recommended.

Keywords: Residential Properties, Infrastructural Facilities, Development, Rental Values

INTRODUCTION

Food, shelter and clothing has been considered from time immemorial as the most essential needs that man cannot survive without. Shelter, which comes second among the needs can be regarded as having a place to rest one's head and hide from attacks and harsh weather. Housing is much more than shelter because it involves so many other factors. (Ajibola, Awodiran, Salu-Kosoko, 2013). Housing, according to Oyenuga (2006), consists of the immediate living space as well as amenities such as water, good roads, recreational facilities, electricity roads and a myriad of other amenities that improve occupants' quality of life. Property development demands a significant amount of capital, which is difficult to come by, especially in the majority of developing countries. Therefore, how to optimize returns on investment and recover their money in the shortest amount of time is what most investors in property development are worried about (Bello, 2009).

The socioeconomic environment that is produced by different organizations which may be public or private that act as investment hubs is known as the infrastructure network. Infrastructure plays transformative roles in the context of integration, assisting in the conversion of inputs into outputs or promoting trade via removing of obstacles. Hence, one of the major variables influencing a country's long-term growth is an improvement in its infrastructure. There are many different and intricate relationships between infrastructure

and economic growth. Infrastructure has several direct and indirect externalities in addition to having a direct impact on consumption and output. In addition to being a key indicator of environmental quality, infrastructure plays a crucial role in the socioeconomic growth of urban areas. According to Bello, Adeniji, and Arowosegbe (2015), it is crucial to development of urban areas.

Numerous services and facilities are included in urban infrastructure, including water, roads, trash collection, drainage, communication, primary health care, schools, and housing. Urban areas that have sufficient infrastructure usually commands land use that are very productive and also profitable. Through better rent offers, the utilization of the infrastructures contests with lesser applications. Land and housing values typically rise as a result of this rivalry for places with quality urban infrastructure, whether for sales or rents.

To better inform the general public and potential investors, this study emphasizes and assesses the quality of the infrastructure and its impact on the rental values of properties in Kemta Housing Estate, Abeokuta. In order to do this, the following goals were pursued. It is commonly accepted that providing infrastructure for residential properties will keep them attractive to potential tenants and raise their rental values. The following questions must therefore be addressed as part of this investigation: What are the different forms of residential property in Kemta Housing Estate? What kind of infrastructure does the residential property currently have? What kind of infrastructure facilities are these? How has the infrastructure that is currently in place affected the residential property's rental value? How will the quality of the infrastructure facilities in the Estate be raised and kept up over time in order to fetch higher rents? These are the inquiries that this study seeks to address.

CONCEPT OF INFRASTRUCTURE

Authors have given the word “infrastructure” a variety of definitions. The phrase has been used broadly to refer to a variety of activities, including the movement of people, the supply of public utilities, including water and electricity, the removal, reduction, and control of trash, as well as environmental rehabilitation. In order to improve private sector production and enable household consumption, Bello et al. (2015) define infrastructure as series of services provided either by public or private bodies. Nubi (2002), in his opinion said that infrastructure is the sum of all the amenities that make it possible for a city to operate efficiently, including institutional buildings like police stations, firefighter training facilities, banks, and post offices as well as pipe-borne water, drainage, roadways, sewage, health, and education. It serves just as the city's driving force. Physical structures are among the common elements, irrespective of the definitional formats presented. The establishment of facilities or utilities with private public funding and involvement with the goal of assisting the society's efficient operation.

According to Ominrin (2014), the following characteristics of infrastructure include:

- Because a sizable lump sum of money is needed, this may explain why people typically seek to their government to provide the amenities. It benefits from significant economies of scale, which leads to monopolies
- Both positive and negative externalities are highly prevalent
- Its input characteristic is moderate
- It has a significant network effect
- Cost recovery is challenging

While this aspect has typically remained true, the specific quality will vary on whether the infrastructure is in an urban, rural, or interurban area, or if the assets are operated by government agencies.

Infrastructures in Nigeria

Nigeria has its own collection of urban infrastructure, much like every other country in the globe. Electricity, roads, communications, drainage, waste disposal, educational and healthcare amenities, security facilities, recreational amenities and fire services in the major metropolitan areas were all included in this stock (Nubi, 2003). According to the constitution, some services are sole responsibilities of different levels of Government, examples include construction of major roads, installation of transformers etc. The Local Government may not have the financial muscle to provide all the infrastructures needed by the citizens, therefore the State Government usually step in to assist. Public agencies that are in charge of management and provision of some of the amenities are

1. State Water Corporations
2. Nigeria Telecommunications Limited
3. Electricity Generating and Distribution Companies
4. Nigeria Postal Services Limited
5. State Property Investment and Development Companies
6. State Health Management Boards.

Factors Determining of Rental Values

Property be it commercial or residential is worthless if it serves no use, is not in high demand, and is not scarce. Only until it serves man's needs and desires does real estate have any relevance. Value is a result of this man's collective desire for property (Olusegun, 2003). Man assigns value to things based on their capacity to satisfy his needs and desires as well as their relative rarity and usefulness to other things. Millington (2006), defined property value as the amount of money that can be obtained from a person (or people) who have the ability to buy the property as offered by a willing seller with full consent and enough time without being under pressure. Real estate is a heterogeneous good with a variety of distinctive qualities that reflect not only its location but are also influenced by other features like the infrastructure and neighborhood quality. According to Ge and Du (2007), determining the various elements that impact property value, which is an important aspect of real estate markets around the world, is a crucial portion of property valuation. According to Kamali, Hojjat, and Rajabi (2008) as shown in Fig 1, there are so many factors affecting the values of properties and it can be divided into environmental factors, neighborhood factors, accessibility factors, and property factors.

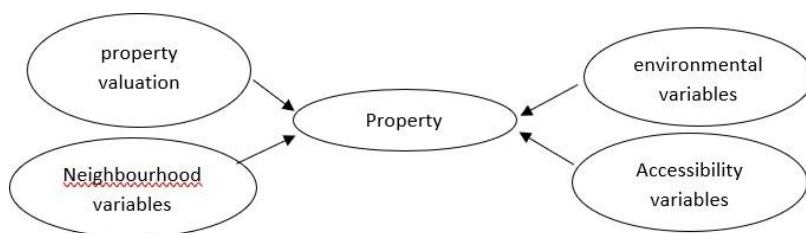


Fig 1: Factors Determining Rental Values Source: Kamali, Hojjat and Rajabi (2008)

Seven elements are listed by Oyebanji (2003) as having an impact on the values of properties. These variables include population fluctuations which can be declining or increasing, alterations in style or people's taste, institutional variables (which have to do with people's culture, religious beliefs, and governmental activity), technological variables, economic variables, geography variables, and complementary uses. These factors are also categorized by Olusegun (2003) into three main categories: external forces, internal factors, and economic considerations. Location and accessibility are considered external factors. Internal factors include the specific features of the property, such as the number of

bedrooms, plot size, garage, and bathrooms, among others. Economic factors include the purchasing power of the individual, the rate of interest, and the inflation rates in the nation. According to Kalu (2001), the potential of a property to generate revenue, its demand, and its location in relation to its usage are the three main factors that determine its value. Other elements he lists as influencing value include scarcity, the likelihood of increase in income, the economic status, the ownership cost, political and governmental issues, physical characteristics, and taxation. It can be concluded that the influence of infrastructure on values of properties received little to no attention, and the current study aims to change that.

Infrastructure and Residential Property Rental Values

According to Ajibola et al. (2013), infrastructure is one of the factors that determines a property’s worth and its presence causes a rise in property values. Properties in the neighborhood suffer when it is absent. Property values, according to Hammer, Booth, and Love (2000), are largely dependent on the availability of suitable infrastructure. Depending on his consideration for essential amenities like accessibility, water, and power, a residential user may be willing to pay a high value for property. High property values are attracted to areas with basic amenities including access roads, adequate drainage, electricity, public water supply, and telephone. A good road network’s direct contribution to accessibility results in high rental rates for areas with the best accessibility benefits. When all properties are reachable by a network of motorized roads, these properties will benefit from high rental prices brought about by accessibility. They added that water is essential to the home because it is required for drinking, cooking, bathing, and performing many other domestic tasks. As a result, rental values for residences in locations with good pipe-borne water delivery are undoubtedly higher than those in places without the service. The availability of a good communication network, electricity, and drainage are further crucial factors of property values.

MATERIALS AND METHODS

The purpose of this study’s research approach was to gather information on how the availability of infrastructure amenities in Kemta Housing Estate affected the rental values of residential property. Only 105 (67%) of the 155 questionnaires that were distributed to the households in the study area were recovered and used for the analysis, which allowed for the collection of primary data: Frequency tables and percentages were used for data presentation and analysis, and a relative relevance index was used to rank the infrastructure according to the respondents’ level of importance. For the study’s literature component, data from secondary sources, including journal articles and other published materials, were used. The analysis’s findings are shown in the tables below.

Table 1: Age Distribution of Respondents

Age	Respondents	Percentage (%)
21-39	50	47
40-55	45	43
56-70	10	10
Total	105	100

Source: Field survey, 2023

Table 1 shows that 47% of the respondents are in the age bracket of 21 – 39 years, while 43% are within the

age bracket of 40 – 55 years, 10% are within the age bracket of 56 – 70 years, This table clearly shows majority of the respondents (91%) are in their active age and conversant the trends in the rental values of residential properties in the area.

Table 2: Respondent’s Occupation

Occupation	Frequency	Percentage (%)
Business owner	15	14
Civil servant	40	38
Private Employees	27	26
Unemployed	13	12
Retirees	10	10
Total	105	100

Source: Field survey, 2023

Table 2 above shows that 12% of the respondents are unemployed, while 14% are business owners, 38% are civil servants, while 26% work with private companies and 10% of the respondents are retired. This explains that a large proportion of the respondents have good sources of income and will be able to afford the rent or own the properties within the estate.

Table 3: Ownership Status of Respondents

Status	Respondents	Percentage
Tenant	64	61
Owner	41	39
Total	105	100

Source: Field survey, 2023

Table 3 above shows the analysis of the ownership status of respondents. 39% are owners while 61% are tenants. This demonstrates that the majority of respondents (61%) are tenants, and one might rely on their opinions on rental data on the kind of residential property they inhabit.

Table 4: Type of Property Occupied by Respondents

Property	Frequency	Percentage (%)
One bedroom flat	21	20
2 bedroom flat	44	42
3 bedroom flat	25	24
4 bedroom detached duplex	8	8
5 bedroom semi detached duplex	7	6
Total	105	100

Source: Field survey, 2023

A larger proportion of respondents (42%, 24% and 20%) occupy 2 bedroom flat, Three bedroom flat and One bedroom flat while the remaining 8%, and 6% are living in 4 and 5 bedroom detached duplex. This implies that the properties with high rent are less occupied compared with the properties with lesser rents.

Table 5: Trends in Property Rental Values from 2019 to 2023

Property	2019	2020	2021	2022	2023
One bedroom flat	1800,000	180,000	2000,000	250,000	350,000
2 bedroom flat	350,000	400,000	500,000	550,000	550,000
3 bedroom flat	450,000	450,000	450,000	55,0000	600,000
4 bedroom detached duplex	600,000	650,000	800,000	1,200,000	1,300,000
5 bedroom semi detached duplex	700,000	750,000	800,000	1,200,000	1,400,000

Source: Field survey, 2023

The Table above reveals that a general increase in rental values of properties in Kemta Housing Estate. All the types of residential properties are affected by yearly increase in the rental values. This is due to the presence of infrastructural facilities and influx of people into the state capital.

Table 6: Ranking of the importance of Infrastructure facilities available in the Estate

Infrastructural facilities	Very Important (4)	Important (3)	Not too important (2)	Not important (1)	Total	RII	Ranking
Electricity	34	40	28	10	112	2.86	3 rd
	136	120	56	10	322		
Water system	30	40	27	15	112	2.76	4 th
	120	120	54	15	309		
Good roads	45	39	18	10	112	3.06	1 st
	180	117	36	10	343		
Drainage system	30	37	37	17	112	2.86	3 rd
	120	111	74	17	322		
Waste disposal system	30	30	40	12	112	2.67	5 th
	120	90	80	12	302		
Recreational facilities	31	23	40	16	112	2.63	6 th
	124	75	80	16	295		
Medical facilities	35	40	30	7	112	2.92	2 nd
	140	120	60	7	327		

Source: Field survey, 2023

Table 7 compares the importance of the infrastructures available by the respondents. It shows that good road with RII – 3.06 was ranked first and was closely followed by Medical Facilities (RII2.92) which was ranked second while Electricity and Drainage systems with RII of 2.86 was ranked third. Ranked fourth was water systems with RII -2.76 and coming fifth and sixth respectively are Waste Disposal System (RII-2.67) and recreational facilities (RII-2.63). This implies that good roads, medical facilities and electricity are the most important of the infrastructure within the estate.

Table 7. Factors Influencing Residential Properties Rental value by respondents

Determinant	Frequency	Percentage (%)
Aesthetics	15	14
Infrastructures available	70	67
Accessibility	20	19
Total	105	100

Source: Field survey, 2023

The table above explains that among the factors influencing rental values of residential properties, Infrastructures available (67%) is the most important factor that the respondents consider as a determinant of rental values, followed by Accessibility (19%) and Aesthetics (14%)

CONCLUSION AND RECOMMENDATIONS

The impact of infrastructure on the rental value of residential property in Kemta Housing Estate, Abeokuta, was investigated in this study. Infrastructure is a crucial component of a comfortable living environment, so this study looked at the infrastructures that are present in the Estate and how significant they are in determining the rental value of residential units in the studied area. The investigation found that the estate's property rents had been rising on an annual basis. According to the report, 42% of respondents live in two-bedroom apartments, 20% live in one-bedroom apartments, and 24% live in three-bedroom apartments. Furthermore, the study showed that the rental values of all the properties are been increased on a yearly basis, this is due to influx of people into the state capital and the availability of infrastructural facilities.

Among the available infrastructural facilities, the study showed that availability of Medical Facilities (RII=2.72), well maintained roads with RII=3.12, improved Electricity supply and Drainage systems with RII of 2.75 where the most important facilities that the Residents of Kemta Housing Estate loves so much. This study hereby conclude that improved quality of infrastructural facilities contributed to the increase in the rental values of residential property within the estate and hereby recommends that facilities within the estate should continue to be upgraded to further enhance the living conditions of the residents.

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