Site Attributes and Capital Value of Recreational Real Estate Investment in Akwa Ibom State, Nigeria¹

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Abstract

This research aimed at examining the site attributes and capital values of recreational real estate in Akwa Ibom State, Nigeria. In order to achieve the stated aim, the objectives were to examine the site attributes of recreational real estate in the study area, to determine the mean capital value of recreational real estate investments in the study area and to establish the relationship between site attributes and recreational real estate investment in the study area. The research work adopted the cross-sectional survey type of design. The research population comprised Estate Surveyors and Valuers who have rendered professional services in the study area. Stratified random sampling method was used. Both descriptive and inferential statistics were employed in the analysis of the data using the Microsoft Excel software. Data obtained was analysed using regression analysis and analysis of variance. Site attributes formed the independent variable and mean capital value constituted the dependent variable. The study found out that the site attributes comprised considered by investors in the study area comprised plot size, plot shape, utilities and open space. The study also found out varying capital values across the 31 Local Government Areas of the State, with the maximum capital value of \$\frac{\text{N}}{164,100,000.00}\$ observed in Uyo Local Government, and the minimum capital value of \$\frac{1}{8}58,280,500.00\$ observed in Ika Local Government Area of the study area. Regression result showed a p-value of 0.000, which is less than 0.05, F-ratio value of 46.58 and an R² value of 88.17%. This indicated a strong relationship and implied that site attribute has a significant relationship with the capital value of recreational real estate. The research concluded there was a statistically significant relationship between site attributes and capital value of recreational real estate in Akwa Ibom State. The findings in this research can aid policy makers in reintegrating and rebuilding sub-Saharan African nations for a sustainable development.

Keywords: Site Attributes, Capital Value, Recreational Real Estate, Akwa Ibom State.

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Introduction

Recreational real estate investment is very vital in the development of the economy of any nation. Recreational real estate is purchased for recreational purposes; whether it is for hiking, playing games, swimming, cycling, sitting out at open space as well as indoor games (James *et al.*, 2020) and it yields regular income to the investor. However, since the middle of the 20th century, real estate owners, real estate investors and real estate occupiers have struggled to identify the basic factors that influence recreational property prices in the global real estate market (Fernandez *et al.*, 2011). This problem has attracted a lot of interest from researchers, real estate surveyors and other relevant stakeholders concerned with housing development, investment and management. For instance, capital values of recreational properties in a particular neighborhood in most cases differ significantly with the capital values of similar recreational properties in another location within the same metropolis.

Man, nations, region and the world would be severely limited in development without good performance of investments in real estate, which is a key factor for physical and economic growth (Ekpo, 2021). Site attributes and capital values of recreational real estate are interdependent. That is to say that site attributes have implications on recreational real estate investment (Ogunba, 2012) and authors have attested to the existence of undeniable link between them (Ekpo, 2023; Kemiki *et al.*, 2014; Egbenta 2001; Sule 2009). Therefore, there is a recent advocacy for investors to recognize the role of site attributes on recreational real estate investment. Site attributes are observed in terms of its components of open space, utilities, topography, plot shape and plot size.

Urbanization in Nigeria has a long history in its growth and development (Oyesiku, 2002). Extensive development has been a distinguishing feature of the 19th and 20th centuries with the concentration of economic and administrative decision-making in towns in Akwa Ibom State. The present position concerning property investment in the South-South geopolitical zone of Nigeria is that site attributes of real estate investments have remained key issues that practicing Estate Surveyors and Valuers are yet to fully exploit. As a result of this, the researchers were challenged to carry out this research work to determine the full impact of site attributes on recreational real estate investment in Akwa Ibom State of Nigeria. On this note, the aim of this research is to examine the site attributes and capital values of recreational real estate in the study area with a view to establishing the relationship between site attributes and capital values of residential real estate in the study area.

Objectives of the study

In order to achieve the stated aim, the following objectives were set:

- i. To examine the different site attributes of recreational real estate in the study area
- ii. To determine the mean capital value of recreational real estate investments in the study area
- iii. To establish the relationship between site attributes and recreational real estate investment in the study area.

The increasing rate of variations on capital values of recreational properties among varying neighborhoods in many towns and cities in Nigeria recently has brought about discussions within the spheres of practicing estate surveyors and valuers, property investors as well as policy makers on housing investment and management in Nigeria. Therefore, examining the impact of site attributes such as size of the real estate, shape of the real estate, utilities and open parking space on capital values of recreational properties in Akwa Ibom State, will not only benefit prospective recreational real estate investors in the study area, but would also benefit the real estate surveyors and valuers as well as the policy makers. Since the influence of the site attributes on real estate capital value will be established, all the relevant stakeholders can better understand the causal factors for the variation in capital values of recreational real estate in the study area. With this understanding, the estate surveyors and valuers can isolate variables and develop models about capital values of recreational properties in the study area. In the same vein, policy makers can adequately plan recreational environments, enforce strict adherence of planning regulations and provide effective site facilities that will attract higher capital value and stimulate economic growth in Akwa Ibom State and its environs.

Review of Related Literature

Housing related attributes of recreational real estate form influential factors of house consumer's preferences. The theory adopted in this research is the theory of value. A theory of value is any economic theory that attempts to explain the exchange value or price of goods and services. Key questions in economic theory include why goods and services are priced as they are, how the value of goods and services comes about, and—for normative value theories—how to calculate the correct price of goods and services. Adam Smith agreed with certain aspects of labor theory of value but believed it did not fully explain price and profit. Instead, he proposed a cost-of-production theory of value (to later develop into exchange value theory) that explained value was determined by several different factors, including wages and rents (Hunt, 2015). However, Udechukwu (2009) posited that real property has significance only when it satisfies

man's needs and desires. One of the desires and needs of human is no invest in recreational real estate for security and regularity of income. Investment has been viewed by Udoudoh (2016) as the commitment of a given sum of money at the present time in expectation of recovering a large sum in the future. Ajayi (2000) defined investment as an act of laying out money now in return for future financial rewards. Both of them look at returns on investment to accrue in financial form. However, there are site characteristics that investors consider before embarking on recreational real estate investment. These include, among others, size of the plot, shape of the plot, utility as well as the availability of open space.

Various studies (MacDonald and MacMillan, 2007; Kiel and Zabel, 2008; Anthony, 2012) on housing prices determination show that locational and neighborhood attributes are the leading factors affecting capital values of real estate investments. However, most of these studies are carried out in foreign countries with only a handful of them conducted in some part of Nigeria. This implies that the impact of site attributes on capital values of real estate in many Nigerian states including Akwa Ibom, the study area, is yet to be investigated and thus, account for the negligible attention being given to site attributes of recreational real estates.

Regrettably, the few studies from the Nigerian context that have examined the impact of the housing attributes on housing prices, aside from been conducted outside the study area being currently examined, most of the studies examined the impact of only one individual attribute of housing on house prices. While some researchers (Kemiki *et al.*, 2014; Egbenta 2001; Sule 2009; Mbachu and Lenon 2005) use few explanatory variables of the housing attributes on housing prices in drawing a general conclusion. As stated by Sirmans *et al.*, (2005), the impact of housing attributes on house value at different geographical regions may be different. Therefore, making generalization to relate to a particular geographical region may be unrealistic. Similarly, Fumilayo (2012) asserted that housing encompasses many characteristics which include site characteristics, attributes of location and neighborhood characteristics. Thus, the study of the impact of other components or attributes to draw a general conclusion on the entire capital value of a property without regards to site attributes may not be sufficient to justify a convincing result

Aluko (2011) examined The Effects of Location and Neighbourhood Attributes on Housing Values in Metropolitan Lagos. The aim of the paper was to analyse and determine the relative roles of location and neighbourhood characteristics in the determination of housing values/prices. In order to achieve this, attempts were made to evaluate the role of location and neighbourhood factors in the determination of house prices; study how house prices/values vary by area; show how spatial variation of the housing attributes leads to the determination of income sub-groups in cities; and determine the extent to which these findings help in the understanding of the structure of the housing market in Nigerian cities. Hypothesis was tested and analysis of variance and

multiple regression models were used in the analysis. It was concluded that neighbourhood and locational attributes show more importance on house values when smaller geographical housing units are examined.

Impact of Site Attributes on Real Estate Investment

(i) Utility and Real Estate Investment: Several authors have attested to the fact that the presence of electricity, potable water, sewage as well as the availability of internet services can boost the value of a property. Udechukwu (2009) asserted that a landed property located where the necessary facilities needed to make life comfortable are present, will command a higher value that the one which does not have utilities like electricity, water, sewage as well as the presence of internet services. Johnson *et al.*, (2005) opined that the determinants of property value include the utilities, the presence of which leads to appreciation in property values. Its absence affects neigbourhood properties adversely. Hammer *et al.*, (2000) state that provision of good and adequate infrastructure is central to property values. Harvey, in Ekpo (2021) was of the opinion that a user of real estate may be prepared to pay a high value for a property depending on his consideration for basic facilities such as accessibility, water and electricity. Litchfield (1974) observes that areas with basic facilities such as access roads, good drainage, electricity, public water supply and telephone attract high property values.

(ii) Plot Shapes and Real Estate Investment

Most authors have given the benefits of a rectangular lot. The merits include ease of measurement, thus making it easier to maintain property lines. They provide more usable space for house owners and are easier to maintain. Fencing is easier and less costly and is easier to distribute space between the frontage and backyard during the construction of the recreational real estate. Additionally, rectangular plots maintain overall value better than irregularly shaped plots. The rectangular shaped plot shares the same benefit with square-shaped plots but only differ in the sense that the square-shaped plots tend to be smaller. On the other hand, plots that are trapezoidal and triangular in shape share common features which include property lines are being relatively easier to maintain, relatively easier to erect a fence and the odd angles in the lot providing opportunities for pools, barbeque areas, recreational areas, tool shade, etc. The problem is that they normally have smaller frontage with little to no parking or open space and is relatively difficult to develop due to the uneven distribution in space.

(iii) Open space and Real Estate Investment

Kiel and Zabel (2018) found out in their research that open space seems to have had a positive effect on house prices. The study concluded that prices are 3.9% higher in paid parking areas while properties with garage parking space are 6% more expensive as well as a price increase of 2.9% if one has a private parking space. Macdonald (2017) found out in his research that real estate with open parking spaces fetch up to 18% more than equivalent homes without private places to park.

(iv) Plot Size and Real Estate Investment

There has been very little analysis of the effects of relative size on value. As noted earlier, Turnbull and Sirmans (2018) find that properties on smaller plots sell for less while houses developed on larger plots sell at high capital values. A study by Asabere and Huffman (2014) on the relative size of vacant lots finds that the value of larger lots relative to average lot size is reduced and the value of smaller lots is increased. Both studies thus support the hypothesis that larger properties sell at discounts and smaller properties sell for premiums relative to the typical size in the neighborhood. This article expands upon this limited research on relative size effects by developing new measures to estimate the effects of relative house size on value. The working hypothesis is that relative size differences will result in larger house sizes selling for discounts. Correspondingly, relatively smaller houses will generate premiums relative to the typical house size in the neighborhood. The analysis is extended with a hypothesis that the effects of relative size will increase with distance from average size. That is, as houses get smaller relative to the average size property in a neighborhood, premiums will increase, and as houses get larger, discounts will be greater. The size of a property relative to the average sized property in its neighborhood may affect its sale price, according to Asabare and Huffman (2014)

Research Methods

This research adopted the survey design method. This study utilized both secondary and primary sources of data. Primary data required for this study was obtained through a questionnaire survey. The questionnaire was designed in such a way as to elicit information on the average capital values of selected recreational properties in the metropolitan units of the study area between 2019 and 2022. Stratified sampling technique was then employed to divide the study area into 31 units based on the Local Government Areas in the state. Data on capital values of the recreational properties were collected from registered Estate Surveyors and Valuers that have rendered professional services in the stratified units of the study area (this is because the Estate Surveyors and Valuers are the only professionals in Nigeria that are empowered by the law i.e.

Decree No 24 of 1975 to determine the value of properties and their interest). Simple random sampling technique was used to obtain 31 properties from the management portfolio of the Estate Surveyors and Valuers who have rendered professional services to their clients across the study area. Descriptive and inferential statistics were employed to resolve the objectives and the formulated hypothesis. Parametric data was used for analysis in this research. Independent variables were open space, utilities, plot shape and plot size, while the dependent variable was the mean capital value. To test for the variations in capital values, the analysis of variance and multiple regression models were used.

Data Presentation and Analysis

In this section, an attempt was made to analyse the data collected in order to achieve the objectives of the research. In doing so, the linear regression model was used. Capital Value was the dependent variable, while size, shape, utilities and open space made up the independent variable. In the models, the variables were represented by the following codes: Capital Value = Y; Size = Size; Shape = Shape; Utilities = Utilies; Open Space = O Space. The respondents' profile is presented in Table 1.

Table 1: Estate Surveyors and Valuers' profile

Profile	Item	Frequency	Percentage	
Position Held in the	Principal Partner	13	41.94	
Firm	Associate Partner	18	58.06	
	Total	31	100	
Educational	Doctor of Philosophy (PhD)	3	9.68	
Qualification	Masters of Science (MSc)	5	16.13	
	Bachelor of Science (BSc.)	14	45.16	
	Higher National Diploma (HND)	9	29.03	
	Total	31	100	
Professional	Fellow (FNIVS)	6	19.36	
Qualification	Associate (ANIVS)	23	74.19	
	Probationer	2	6.45	
	Total	31	100	
Years of professional	Above 15 years	7	22.58	
practice	10 – 14 years	13	41.94	
	5 – 9 years	6	19.36	
	1-4 years	5	16.13	
	Total	31	100	

Source: Researchers' analysis, 2023.

Table 1 presented the profile of the respondents who responded by supplying the data on site attributes and rental values of recreational real estate investments in Akwa Ibom State, in terms of their position in the Estate Firm, professional qualification, educational qualification and years of professional practice as Estate Surveyors and Valuers. It was found out that 45.16% of the respondents had Bachelor of Science degree, 16.13% had their Masters of Science degree in Estate Management and Valuation, while about 9.68% and 29.03% had their Doctor of Philosophy and Higher National Diploma respectively. Having many Estate Surveyors under the Bachelor of Science category may be related to the fact that Estate Management and Valuation is a lucrative profession, thus graduates are expected to commence practice after their Bachelor degree. With respect to the position of the respondents, the Associate Partners formed the major part of the respondents with 58.06%, while the Principal Partnersconstituted41.94% of the respondents. It was observed that all the respondents held high positions in their firms which provide more credibility to the validity and reliability of the data obtained. Moreover, the respondents for this study were in different cadre of professional membership of the Nigerian Institution of Estate Surveyors and Valuers (NIESV). Their distribution showed that Fellows (FNIVS) and Probationers formed only 19.36% and 6.45% of the respondents, while Associates (ANIVS) formed 74.19% of the respondents. This implies that all the respondents are professionally qualified to respond adequately to the questionnaire. Table 1 also showed that 41.94% of the respondents have been in practice between 10-14 years, 22.58% of the respondents were in practice above 15 years while 19.36% and 16.13% constituted 5-9 years and 1-4 years respectively. Most of the respondents have professional experience for more than 10 years. This suggests that they have enough practical experience and exposure to supply the necessary data needed for the study. On this note, it can be said that respondents were found professionally and academically fit to supply valid, credible and reliable data for this study

Analysis of site attributes of recreational real estate in the study area

In order to answer objective 1, an attempt was made in this section to examine the site attributes of recreational real estate in the study area and results presented in Table 2

Table 2: Details of the Independent Variables

Town	Plot Size (m ²)	Plot Shape	Utilities	Open Space	
Uyo	1820	4	4	546	
Abak	1700	4	4	534	
Nsit Ibom	850	3	3	270	
Ikot Ekpene	1700	3	4	538	
MkpatĒnin	1050	3	3	460	
Ukanafun	980	3	3	395	

UrueOffong/Oruko	670	3	2	250
Itu	500	2	2	210
Oron	950	3	3	320
Onna	900	3	3	284
Ibiono	1000	3	2	430
Ikono	1100	4	4	459
NsitUbium	800	1	2	245
Nsit Atai	870	2	3	288
Mbo	960	3	2	364
Ibeno	880	2	3	295
Ikot Abasi	1340	4	4	502
ObotAkara	740	3	2	208
Uruan	660	2	2	184
UdungUko	590	2	2	162
Okobo	480	1	1	150
Etim Ekpo	950	2	1	325
Eket	1550	4	4	526
Eastern Obolo	1000	3	2	428
EsitEket	1240	3	2	486
Ika	940	3	1	318
Etinan	1150	3	3	470
IbesikpoAsutan	1250	4	2	498
Ini	780	2	1	226
Essien Udim	1,500	3	3	512
Oruk Anam	480	1	1	148

Source: Field survey, 2023

Table 2 presented the details of the independent variables and their different constitutions in the 31 Local Government Areas of Akwa Ibom State. In terms of plot shapes, the metropolitan units that had a trapezoidal shaped site (denoted by 4) include: Ibesikpo, Eket, Ikot Abasi, Ikono, Uyo and Abak, while the areas that had a triangular shaped (denoted by 1) recreational sites include NsitUbium, Okobo, Oruk Anam. The rest of the Local Government Areas had recreational sites that are either rectangular or square-shaped, which were denoted by 2 and 3 respectively. In terms of utilities, the recreational sites that enjoyed the four basic amenities (denoted by 4) include those in Uyo, Abak, Ikot Ekpene, Ikono and Eket, while the recreational sites that enjoyed at least 1 of the basic amenities were found in Oruk Anam, Ini, Okobo, Ika and Etim Ekpo. The recreational sites found in other stratified units had at least two or three of the basic amenities in the study area. The basic amenities used in the research included presence of free internet services, sewage, electricity and potable water.

Analysis of the capital values of recreational real estates in the study area

In this section, the analysis of the capital value of recreational real estate in the study area was done, in order to answer objective 2. Capital value of recreational properties from 2019 to 2022 in the study area was obtained from the firms of Estate Surveyors and Valuers. The average capital values of the recreational properties were then determined and presented in Table 3.

Table 3: Analysis of the Capital Value of Recreational real estate in the Study Area

Town	Capital Values				Average Capital
	2019	2020	2021	2022	Value
Uyo	163,500,000	163,900,000	164,000,000	165,000,000	164,100,000
Abak	140,200,000	140,800,000	142,700,000	143,500,000	141,800,000
Nsit Ibom	87,300,000	88,400,000	89,000,000	89,800,000	88,625,000
Ikot Ekpene	141,400,000	141,000,000	142,700,000	143,550,000	142,162,500
MkpatEnin	109,770,000	110,480,000	112,065,000	112,500,000	111,203,750
Ukanafun	95,400,000	95,900,000	96,300,000	97,620,000	96,305,000
UrueOffong/Oruko	84,330,000	85,000,000	85,750,000	86,900,000	85,495,000
Itu	82,000,000	82,960,000	83,064,000	83,580,000	82,901,000
Oron	93,250,000	93,000,000	94,820,000	95,010,000	94,020,000
Onna	90,480,000	91,675,000	91,850,000	92,905,000	91,727,500
Ibiono	98,940,000	99,600,000	100,500,000	102,035,000	100,268,750
Ikono	117,290,000	118,000,000	118,370,000	119,030,000	118,172,500
Ika	57,000,000	57,400,000	58,920,000	59,802,000	58,280,500
Nsit Atai	89,060,000	90,550,000	91,000,000	91,710,000	90,580,000
Mbo	94,770,000	95,000,000	95,600,000	96,550,000	95,480,000
Ibeno	89,450,000	90,130,000	90,560,000	91,800,000	90,485,000
Ikot Abasi	127,400,000	128,900,000	129,000,000	129,850,000	128,787,500
ObotAkara	88,000,000	88,500,000	89,020,000	90,000,000	88,880,000
Uruan	84,500,000	85,300,000	85,940,000	86,200,000	85,485,000
UdungUko	80,000,000	80,900,000	81,600,000	82,400,000	81,225,000
Okobo	78,800,000	79,600,000	80,700,000	81,300,000	80,100,000
Etim Ekpo	93,000,000	92,940,000	93,660,000	94,840,000	93,610,000
Eket	134,600,000	135,040,000	135,400,000	136,950,000	135,497,500
Eastern Obolo	98,800,000	99,600,000	100,120,000	102,040,000	100,140,000
EsitEket	123,400,000	124,900,000	125,000,000	125,400,000	124,675,000
Oruk Anam	91,640,000	92,000,000	92,900,000	93,900,000	92,610,000
Etinan	116,750,000	117,000,000	117,200,000	118,000,000	117,237,500
IbesikpoAsutan	127,020,800	127,940,000	128,000,000	128,640,000	127,900,200
Ini	88,000,000	88,400,000	89,800,000	90,550,000	89,187,500
Essien Udim	131,350,000	132,040,000	133,055,400	133,950,000	132,598,850

NsitUbium	78,550,000	79,000,000	79,700,000	80,300,000	79,387,500
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Source: Researchers' Analysis, 2023

Table 3 shows the analysis of the mean capital value of recreational real estate in the study area. It can be found out that the highest average capital value of the recreational real estate investment during the study period was in Uyo with an overall capital value of \$\frac{\text{\text{N}}}{164,100,000.00}\$ and the least was observed in Ika with a capital value of \$\frac{\text{\text{\text{\text{N}}}}{58,280,500.00}\$. However, the general performance of recreational real estate in the study area may be described also to be very good. Table 3 also showed a consistent rise in the capital values of recreational properties from year to year.

Analysis of the relationship between site attributes and capital value of recreational real estate investment in the study area

In this section, an establishment of a relationship between independent variables and capital value of recreational real estate in the study area was made. Multiple linear regression analysis was carried out between the independent and dependent variables and the summary statistic of the independent variable presented in Table 4.

Table 4: Summary Statistic of the Independent Variables

	Standard				Lower	Upper
	Coefficients	Error	t Stat	P-value	95%	95%
Intercept	39991057.7	5198183.339	7.693276	4.76E-08	29285199	50696917
P_Size	38583.55389	12942.83394	2.981075	0.006319	11927.29	65239.82
P_Shape	4385825.613	2843822.365	1.542229	0.135582	-1471136	10242787
Utlies	-625529.5231	2189966.025	-0.28563	0.777511	-5135849	3884790
O_Space	37312.1555	34932.65645	1.068117	0.295674	-34633	109257.3

Source: Researchers' Analysis, 2023

The output in Table 4 shows the result of fitting a multiple linear regression model to describe the relationship between the Capital Value and the independent variables. The model to express the result of the fitting is shown in Eqn. 1

From Equation 1 it can be deduced that there are positive relationships between all the independent variables (except utilities, which indicates negative relationships) and Capital Value.

Also, from Table 4, the p value for plot size and plot shape are less than 0.05, indicating that there is a statistically significant relationship between Capital Value and the independent variables at 95% confidence level.

The analysis of variance of the relationship between site attributes and capital value of recreational real estate in the study area was analysed and presented in Table 5.

Table 5: ANOVA of relationship between site attributes and capital value of recreational real estate in Akwa Ibom state

				G1 10
				Significance
Df	SS	MS	F	F
4	1.16E+16	2.9E+15	46.57866	3.11E-11
25	1.56E+15	6.23E+13		
29	1.32E+16			
0.938985092				
0.881693003				
0.862763883				
7891559.434				
2.024				
	4 25 29 0.938985092 0.881693003 0.862763883 7891559.434	4 1.16E+16 25 1.56E+15 29 1.32E+16 0.938985092 0.881693003 0.862763883 7891559.434	4 1.16E+16 2.9E+15 25 1.56E+15 6.23E+13 29 1.32E+16 0.938985092 0.881693003 0.862763883 7891559.434	4 1.16E+16 2.9E+15 46.57866 25 1.56E+15 6.23E+13 29 1.32E+16 0.938985092 0.881693003 0.862763883 7891559.434

Source: Researcher's analysis, 2023

From Table 5, the R-squared statistic indicates that the model as fitted explains 88.17% of variability in capital value of recreational real estate. The adjusted R² statistic, which is more suitable for comparing models with different number of independent variables, is 86.27%. The Durbin Watson statistic, which is 2.024, tests the residuals and determines if there is any significant correlation based on the order in which the data occur. In addition, the analysis of variance of the relationship between independent variables and Capital Value shows that the Fratio is 46.58 and a p-value of 0.000, which is less than 0.05. This implies that the null hypothesis is rejected meaning that there is statistically significant relationship between capital value of recreational real estate and the site attribute variables.

Discussion of Findings

This study examined the impact of site attributes on capital values of recreational real estate in Akwa Ibom State, Nigeria. The study revealed the details of the site attributes (plot size, plot shape, utilities and Open space). The study revealed that 6 out of the sampled 31 (19.35%) recreational facilities, while 3 out of 31 (9.7%) recreational real estate were on a triangular-shaped plots. This implies that about 71% of the recreational real properties under study were

constructed on rectangular and square-shaped plots. The study further revealed a consistent rise in the trend of capital values observed between 2019 and 2022. Furthermore, the study found out the maximum average capital values of recreational real estate in the study area was \$\frac{\text{N1}64,100,000}{\text{N5}8,280,500}\$ was observed in Uyo Local Government while the minimum capital value of \$\frac{\text{N5}8,280,500}{\text{N5}00}\$ was observed in Ika Local Government Area of the study area. Finally, in the establishment of the relationship between site attributes and capital values of recreational real estate in the study area, it was found out that as the plot size becomes smaller, the capital value becomes lower and vice versa. It was also observed that the presence of the four basic utilities brought about high capital values and vice versa. The study also revealed that there was a significant relationship and the model to express the result of the fitting as shown in Equation 1, can be used in forecasting the capital value of recreational property in the study area, given the elements and components of the site attributes of the area. This research is in congruent with the works of Aluko (2011), Turnbull and Sirmans (2018) and Hammer *et al.*, (2000) which found out that capital values were affected by some factors considered in this study.

Conclusion

This research was conducted to evaluate the site attribute and capital value of recreational real estates in Akwa Ibom state. The study showed the details of the site attributes (plot size, plot shape, utilities and Open space) and their formation in the different Local Governments of the study area. The study further showed that there were varying capital values of recreational real estate in the study area between 2019 and 2022. This result is consistent with results of other studies in different parts of Nigeria where site attributes influence the capital value of residential real estate values. The study concluded that there is a significant relationship between site attributes and capital values of residential real estate values in Akwa Ibom State.

Recommendation

This study recommends, based on the researcher's findings, to point the way forward on the part of the Estate Surveyors and Valuers, the policy makers as well as recreational real estate investors. Before embarking on recreational real estate investment, it is recommended that prospective investors take into account the size and shape of the lot. A lot with a desirable shape and position should guarantee a degree of privacy and quietness. If it is an empty plot, irregularly shaped plots may cost more to develop. However, the value of the property can be boosted by constructing unique properties that take advantage of the space. Knowing the size and shape of the plot will enable you to effectively get a plan that fits perfectly. The size of the site should be able to give room for future extension and the shape should be even and devoid of any sharp corners.

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