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ANALYSIS OF HOUSING DELIVERY IN RELATION TO LAND USE ALLOCATION IN DELTA STATE (2012-2022).

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Abstract

Housing provision is a basic need of man which cannot be overemphasized nor substituted, allocation of land use to accommodate this essential need of man is expected to be among the top priorities of any government. Therefore, when land use allocation is made to the detriment of housing, the poor suffers because the available houses will be unaffordable. The aim of this study is to analyse housing delivery in Delta State in relation to land use allocation in the State between 2012 to 2022. Using Taro Yamane's Formula, a sample size of 885 was obtained from a total population of 4,744. The study adopted qualitative and quantitative research methods to analyse the opinion of the respondents. Questionnaires were distributed to the respondents to obtain their opinion. Data collected were presented using table and analysed using mean score analysis, while the Two-way ANOVA was used to test the formulated hypothesis using SPSS (statistical package for social sciences) and regression analysis was conducted test the relationship between housing delivery and land use allocation in Delta State between 2012 and 2022. The study found that Delta State has experienced a significant increase in the percentage rate of housing delivery between 2012 and 2022. Also, the regression analysis carried out shows that an increase in land use allocation brings about increase in housing delivery in Delta State. The study concluded that land use allocation has a significant impact on housing delivery in Delta State. It promotes controlled housing development, improves housing delivery, and generates revenue for the government.

Keywords: Housing Delivery, Land Use Allocation, Relation, Delta State

Introduction

There are numerous demand and use of land resources ranging from agriculture, pasture, forestry, housing, urban regeneration, infrastructure amongst others. Obviously, most countries and societies have not been able to meet nor balance this ever increasing but conflicting demands and uses. These demands and uses has often created social upheaval and several efforts have been devoted to developing a system to administer land rights which can be refer to as Land Administration System– a process of determining, recording and disseminating information about ownership, value and uses of land. The creation of a balanced land use system (urban equilibrium), that is, the provision of adequate land for the various land uses, consistent with the creation of functionally efficient physical environment, is the objective of the land use allocation. Land use allocation is to ensure the best utilization of land in the national interest, and to prevent individual land owners from using that land to the detriment of body politic (Lawal, 2000). This is in spite of the common law right to develop their land, as they like, provided they do not cause any nuisance or interfere with the rights of others. Land is expected to be allocated across various type of uses such as residential, commercial, industrial and agricultural etc. to give room for balanced development in the state. Shelter being the third most basic need of man is taken care of by the residential land use which is expected to translate to adequate housing delivery in the State. Most often than not, it is discovered that land allocated for residential use are being converted to either commercial or industrial uses in order to

maximize profit for investment in land, this unwholesome practice often reduces the supply of houses thereby making the available ones very unaffordable. It is from this backdrop that this work shall analyse housing delivery in Delta State in relation to land use allocation from 2012 to 2022.

The Succession Theory of Urban Land Uses
This is a contemporary model on urban land use change which assumes that over time, the growth pattern of an urban area will result to succession in use of different land uses as the best and highest use changes (John, 1977). The theory emphasized that the central district that is already congested to further accommodates economic activities will eventually expand by the redevelopment of proximate land use zone otherwise known as the CBD Fringe or Transition Zone and slightly into the Medium Value Residential Zone, hence changing the character of the neighbourhoods to that of the commercial premises. This theory explains very well the current state of our urban centers, whereby in most cases it is difficult to clearly differentiate Residential neighbourhood from commercial or industrial neighbourhood. This is as a result of encroachment of commercial and industrial properties into residential neighbourhood.

Type of Land Allocation to Various Uses
The typical land allocation to various uses could be assigned to the following:

a. **Residential Layout:-** A neighbouhood is the minimum planning unit desirable for the development of residential areas. It is the area within which residents may all share the common services, social activities and facilities required in the vicinity of the dwellings. The population of neighborhoods according to Farmer and Gibb (1979) vary from 2,000 to 8,000 requiring land areas of 20 – 100 hectares. The density of the development being the primary determining factor.

b. **Commercial Layouts:-** In commercial layout plans, at least 45-50% of the land to be developed should be allocated to road and vehicular parking and at least 10% to recreation and public utilities. This means that the land areas (building plots) put to actual commercial use should not exceed 40-45% of the land area. A small commercial layout for a neighborhood shopping centre or market requires at least 1.5 hectares (Farmer and Gibb, 1979).

c. **Industrial Layouts:-** The minimum land area required for modern industrial estate is about 20 hectares (Farmer and Gibb, 1979). Of these, 30-40% should be allocated to roads and vehicular parking. This implies that not more than 50-60% of the entire layout land should be committed to actual industrial uses.

General Overview of Housing Delivery in Nigeria
The various delivery systems in Nigeria from pre - independence to date have shown nonperformance of the building industry. According to Amao and Ilesanmi (2013), pre-1928 before the advent of colonial rule, Nigerians built houses through communal efforts. The community appoints a day for the project and the owner prepares meal for the people. This continued to 1928 though some communities still maintain the practice despite westernization. However, government started intervening in housing delivery 1928 during the bubonic plague of 1928-1929 (FGN, 2004). Government of the defunct Lagos colony paddling into housing delivery through Lagos Executive Development Board (LEDB) charged with responsibility of planning and development of the city (Amao and Ilesanmi, 2013). However, only public servants benefitted. Besides, during the independence preparation, slums were cleared and additional houses were built through direct labour. Nigerian Building Society (NBS) was established after the World War II by the colonial government to provide housing opportunities to both public and private sectors. Nevertheless, not much benefitted from the scheme especially outside Lagos.

Colonial approaches to African urban housing in fifties were redeployment of decaying areas combined with the renewal of slums areas, as well, the construction of housing estates. This attempt was made in 1951. From 1952-1960, Nigeria carved up to three regions, viz; Eastern, Western and Northern regions respectively. These regions established housing corporations in 1964 to provide mortgages to people to build houses and pay back over a span period of time. This program could not be sustained, so it failed. However, within the two national developments plan (19621968 and 1970-1975), housing was considered non-consumption oriented, less preferred and non- income generating sector. In spite of this, insignificant sums of money were pumped into the sector. With wrong perception by the public, investors were misled that they cannot recoup their investment on housing (especially for low income earners) as fast as possible with any appreciable margin (Amao and Ilesanmi, 2013). However, the loans to prospective house builders were few, poorly organized and ineffective.

In 1976-1985, the government was compelled to act due to shortage of housing, rising house rent and overcrowding. The government reorganized Nigerian Building Society (NBS) to Federal Mortgage Bank of Nigeria (FMBN) in order to serve as lending institution for house loans. From this, employees' Housing Scheme (Special Provision) Decree No. 54 of 1979 was promulgated. The decree stated that every employer should provide and maintain a housing scheme for its employees. The government through the Central Bank of Nigeria directed commercial banks to devote 5-6% of their total income to real estate. Despite steps taken, the housing delivery was getting worse.

The National Housing Policy was established in 1991 with the aim of providing decent and affordable housing to all Nigerians. It was evident at the inception but the implementation was poor and ineffective. However, a Presidential Technical Committee housing and urban development was set up by the government to address the new reforms. The reforms promulgated the restructuring of FMBN and the creation of Real Estate Developers Association of Nigeria (REDAN) as well as the Building Materials Producers Association of Nigeria (BUMPAN). Ebie (2004) opined that the new reforms were mechanisms to finance private developers for mass production of houses and allow buyers to have easy access to borrow money through the mortgage institutions. However, the performance of the FMBN was nothing to write home about. For instance, FMBN gave out loan to 8,874 out of 1,000,000 applications between 1977 -1990 and nothing came out of it (Amao and Ilesanmi, 2013).

The FGN proposed a housing reform by establishing Federal Ministry of Housing and Urban Development in 2003, though there was artifice those houses were made available, but very costly and unaffordable by average Nigerians (Mabogunje, 2004). He added that a number of legislation have to be amended for housing to be affordable by average Nigerian. It is good to note that for housing delivery has been greatly improved in Nigeria through the activities of private developers over the years. However, it is the duty of government to create enabling environment and basic infrastructural facilities to encourage the activities of private developers.

Methodology

For this study, qualitative and quantitative research methods were adopted. The population for this study are Professional members of Nigerian Institution of Estate Surveyors and Valuers Delta State, Real Estate Developers Association of Nigeria delta State, Nigerian Institute of Town Planner Delta State, Occupiers of the housing Estates in Asaba, Agbor and Warri designed and developed by Delta Development and Property Authority, Asaba (DDPA), Allottees of Delta State Government in Asaba, Ughelli and Warri and Delta State Land Use Allocation Committee. The choice of Asaba, Warri, Agbor and Ughelli as the area of study is because these cities has in them housing estates developed by DDPA and they are equally the major urban centers in Delta State. The total population for the study is 4,744. From this population a sample size of 885 was drawn with the use of Taro Yamane formula. Questionnaire was distributed to the

respondents to obtain their opinion. The data obtained from the respondents were presented with the use of tables and charts and analysed with Two Way ANOVA.

Data Present and Analysis

Table 1: Housing Delivery in Delta State in relation to Land Use Allocation in Delta State (2012-2022)

QUESTIONS	SA	A	UD	DA	SD	Total	Mean
Housing delivery in Delta State from 2012-2022 has been satisfactory in supply in relation to Land Use and Allocation	662	127	58	30	8	885	4.59

From table 1, the mean score is greater than 3.0 therefore, the housing delivery in Delta State from 2012-2022 has been satisfactory in supply.There is a high rate of housing delivery in relation to land use allocation in Delta state between 2012 – 2022.

Table 2:   The percentage rate of Housing delivery in Delta State between 2012 – 2022.

Year	Percentage (%)
2012	28
2013	33
2014	35
2015	38
2016	43
2017	49
2018	56
2019	63
2020	70
2021	75
2022	82

Sources: Delta State Journal (Smart Agenda) 2022

From table 2, there is constant increase in the rate of housing delivery in Delta State, this confirms that the supply of housing in Delta State from 2012 to 2022 is satisfactory.

From figure 1, there is a constant increase in housing delivery from 2012 to 2022. This confirms that the housing delivery in Delta state is satisfactory for the period under review.
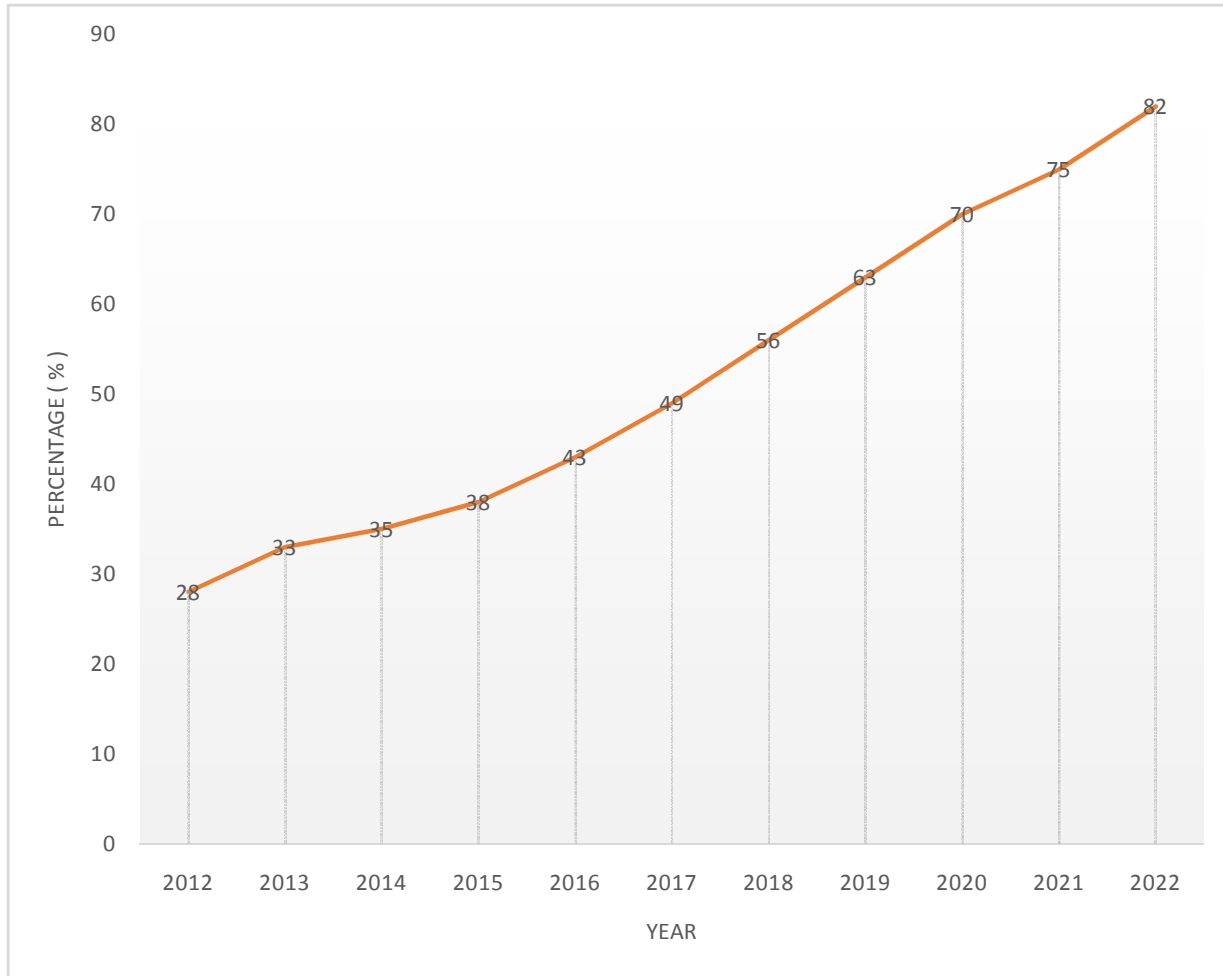
Figure 2: Graphical Representation of the Percentage rate of Housing Delivery in Line Graph (2012 – 2022)

Delta State has experienced a significant increase in the percentage rate of housing delivery between 2012 and 2022. The state government has implemented various policies and initiatives to address the housing deficit, accommodation challenge and improve the standard of living for its citizens.

Test of Hypothesis

The hypothesis tested is given below;

Two ways Analysis of Variance for Research Hypothesis Three

H_0: The land use allocation do not have significant impact on housing delivery in Delta State.

H_1: The land use allocation has significant impact on housing delivery Delta State.

Table 3: **Test of Hypothesis**

Sources of variances	SS	DF	MS	Cal-F	Crit-P Level
Between group	4523.66	1	4523.66		0.002
Within group	541	7	77.29	3.20	0.001

The table above shows that P-value of 0.07 was greater than 0.05 level of significant
H_o: is rejected, while H_1: is accepted indicating that the land use allocation has significant impact on housing delivery in Delta State.

Table 4: Regression analysis of Housing Delivery and Land Use Allocation

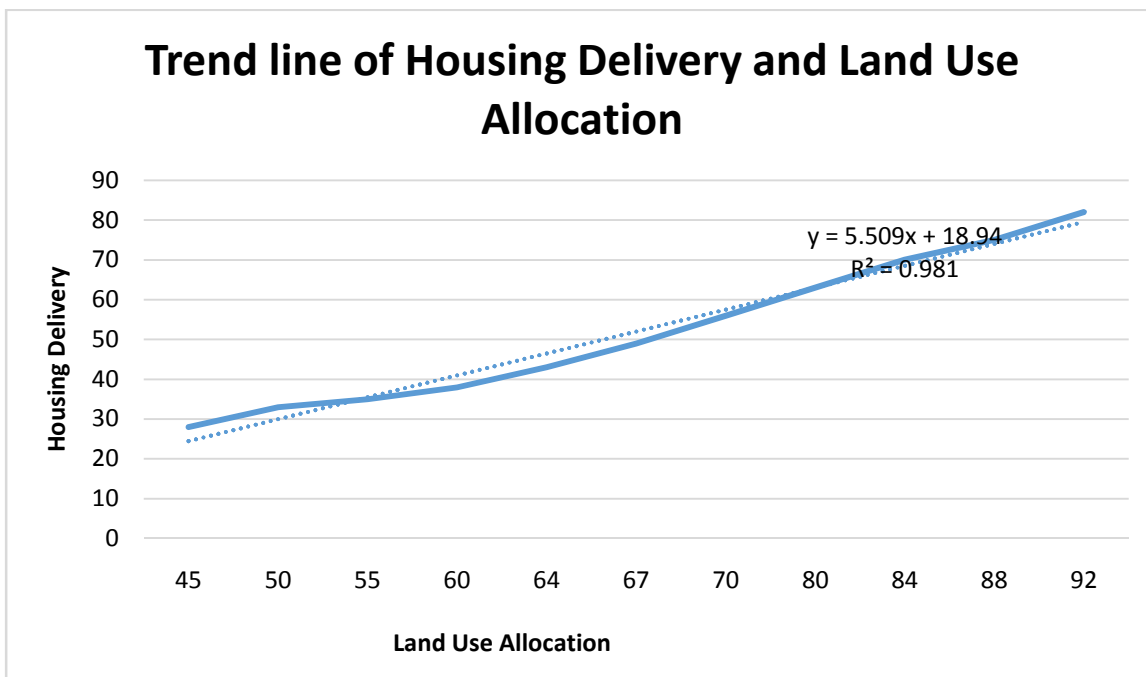| Housing Delivery	Land Use Allocation
28	45
33	50
35	55
38	60
43	64
49	67
56	70
63	80
70	84
75	88
82	92

Figure 2: Trend Line of Housing Delivery and Land Use Allocation

The regression equation between housing delivery and Land Use Allocation is *housing_delivery = 18.945 + 5.5091Land_use_allocation.*The coefficient of land use allocation is 5.5091, this value means that a unit increase in land use allocation will increase housing delivery by 18.945.

Table 5: Coefficients of Regression Analysis.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	18.945	3.920		-7.037	.000
	Land Use Allocation	5.5091	.056	.990	20.781	.000

a. Dependent Variable: Housing Delivery

The R square measures the amount of variation of in housing delivery that is explained by Land use allocation, an R square of 0.9813 means that 98.13% of the variation in housing delivery is explained by Land use allocation.

Table 6: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.9918[a]	.9813	.977	2.77789

a. Predictors: (Constant), Land Use Allocation

Based on the available data, the regression analysis shows a significant relationship between the dependent variable of housing delivery and the independent variable of land use allocation in Delta State. This suggests that the way land is used allocated in Delta state has a direct impact on the delivery of housing in the area.

The results of the analysis showed that there was a strong positive correlation between land use and allocation procedures and housing delivery in Delta State. This means that as land use allocation improve, there is a corresponding increase in housing delivery in the area. It can be inferred that there is a significant relationship between land use allocation and housing delivery in Delta state. Therefore, improving land use allocation could potentially lead to an increase in housing delivery in the area.

Summary of Findings

Delta State has experienced a significant increase in the percentage rate of housing delivery between 2012 and 2022. Also, the regression analysis carried out shows that an increase in land use allocation brings about increase in housing delivery in Delta State. This could be attributed to proper land use allocation adopted by Delta State government which has helped to reduce housing deficit in Delta State. This shows that land use allocationhas significant impact on housing delivery in Delta state as ascertained in the tested hypothesis.The result of the regression analysis showed that there was a strong positive relationship between land use allocation and housing delivery in Delta state

Conclusion

In conclusion, land use allocation has a significant impact on housing delivery in Delta State. It promote controlled housing development, improves housing delivery, and generates revenue for the government. It is important for property developers to comply with the Land Use and Allocation of the State to ensure sustainable development in the state.

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