



APPRAISING THE IMPACT OF INDIVIDUAL DEVELOPED HOUSING (IDH) ON THE REAL ESTATE OUTLOOK OF ABUJA METROPOLIS

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Abstract: - This study assesses variables that drive the success of “individual-developed” housing geared towards better Real Estate outlook in Abuja metropolis. Different views as perceived by various private developers were obtained through their construction/development firms in selected areas of the metropolis. A Critical evaluation of encouraging factors for individual-developed housing was carried out. A purposive sampling method was used to obtain data derived via questionnaire from a survey involving clients of 19 Construction firms who have/had been involved in individual-housing development in different areas. These were further analysed with Chi-square and correlation methods of analysis. Some of the findings indicated that although individual-developers are hitherto faced with a number of constraints in pursuing individual-developed Housing Projects, success in house building can be influenced by land availability, available service facilities, house owner’s level of income, building materials, building process, neighbourhood and environment factors, quality of houses and location as applicable to various income earners.

Keywords: Individual-developed, Real Estate, Housing Projects, Housing provision

Introduction: Housing is recognized world-wide as one of the basic necessities of life and a pre-requisite to survival of man (Aminu & Ruhizal, 2007). In this light, Arku (2009) established a mutually influential relationship between housing conditions and availability and

the living standards, social harmony, safety and security of individuals in the society. The enormous importance of housing notwithstanding its provision and availability in Nigeria over the years has been in an acutely increasing deficit owing to the swiftly increasing human population amongst many other reasons (Peterside, 2005). Consequently, Nigerians across all income groups have over the years resolved to engaging in the provision of residential housing projects through the individual-development approach in a quest to

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meet their housing needs (Antony, Eghan & Afram, 2014).

However, from literature it has been established that individual-developers are hitherto faced with a number of constraints in pursuing individual-development Housing Projects which according to Tunas & Peresthu (2010) have been identified to include; lack of viable and accessible housing finance systems, high cost of mortgages, prolonged land acquisition and tenure procedures, land litigation, inadequate house design & development, poor house acquisition procedures, weak implementation of planning regulatory systems, increasing cost of building materials, unskilled labour, poor site supervision, inadequate know-how among self-builders and unavailable personal resources. Also recognized as constraints by UN Habitat (2011) include; marginalization of non-land holding families, bureaucracies with land title registration, obsolete building regulations and codes, poor resource management, inadequate duration of contract periods, poor communication between parties, improper planning, inaccurate project cost estimates and high cost of resources for building the house, a combination of these constraints affects timely completion of most projects. Further identified were post-construction related challenges such as; poor access road networks, lack of electricity, lack of water, and lack of adequate security in and around development areas during occupation.

On the contrary, Ntema (2011) anchored the concept of individual-development housing on the freedom-to-build, where dweller's control is paramount to the success of any housing programme in order to overcome bureaucratic and technological barriers (Anthony *et. al.*, 2014). It has also been advocated that housing provision through the individual-development approach is cheaper because of removal of paid labour (sweat equity) of the dweller (Anthony *et. al.*, 2014).

Subsequently, this approach has been the housing realization culture in developing nations

and currently accounts for about 90% of the housing stocks, and could be contributing reasonably to the economy annually (Litman, 2014).

Literature review:-

Housing Provision: The process of making houses available to prospective users/occupiers is known as housing provision. Andrew (2013) advanced that "Housing is the process of providing functional shelter in a proper setting in a neighbourhood supported by sustainable maintenance of the built environment for the day to day living and activities of individual and families within the communities". Arku (2009) established a mutually influential relationship between housing conditions and availability and the living standards, social harmony, safety and security of individuals in the society. Hence, decent housing is a basic living requirement and essential for man's existence and for the development of human potential and its adequacy enhances the individual's health, welfare and productivity and consequently a stimulus to national economy (Aminu & Ruhizal, 2013).

Sustainable housing provision as it affects Real Estate outlook is therefore the gradual, continual and replicable process of meeting the housing needs of the populace, to include the vast majority of who are poor. It ensures that housing strategies are stable and are not subject to vagaries in the political circumstances of the country and requires proper definition of housing needs, and the participation of the end users to ensure their satisfaction. Achieving enhanced Real Estate outlook by housing provision requires the appropriate political will based on the conviction of the responsibility of government to its citizens and the need to create humane and decent environment for dignified living. In order to realize sustainable housing provision, the housing needs of the Nigerian population have to be put into proper focus, and a coordinated programme.

However, the government as part of its social services has a responsibility therefore to ensure

the provision of infrastructural amenities like good road networks, proper drainage services, extensive electrification of upcoming areas, waste disposal alternatives and security. These amenities go a long way in determining the interest of individuals to develop.

Ukoha and Beamish (1997) indicated that in spite of the direct correlation between affordable housing and better living standard as shown by previous studies, successive efforts to meet every set target have failed, therefore, increasing housing deficit in Nigeria remains almost directly proportional to increasing human population which has been responsible for rapid urbanization.

Consequently, one of the continuing challenges posed by unprecedented urbanization in developing countries including Nigeria is the provision of adequate and affordable housing (Agbo, 2012).

Housing Availability: This expresses the condition of readiness or handiness of houses. Given an estimated Nigerian population at over One hundred and sixty million (NPC, 2014) and still rising, it is practically difficult if not impossible for the Nigerian government to make available affordable housing for every middle and low income Nigerian who constitute the bulk of the population.

Estimated figure has shown that Nigeria needs an average of One million (1,000,000) housing units per year not only to replenish decaying housing stock but also to meet rising demand (Peterside, 2005). This housing need according to Eziyi & Amole (2010), shows Seventeen million (17,000,000) units housing deficit and this figure implies a serious shortage of housing and it equals insufficient availability of housing in Nigeria.

Housing Suitability and Environmental Fitness: Housing suitability refers to the fit between the abilities of users and the physical features of their homes. Underlying the concept of suitability is the theory of "environmental fit" which compares a person's level of competence with the demands of their environment (Litman,

2008). Competence, according to Adedeji (2012) refers to such factors as health, sensory and cognitive abilities, capacity for self-care and ability to perform various activities of living. If the environment is too demanding for a person's competence or if the environment puts too few demands on a person's competence, there is a poor fit. Housing suitability has received increasing attention in the last decade as the number of aged persons has increased. These chronic conditions can translate into limitations in ability to carry out major functional activities such as climbing stairs, amongst others (Agbo, 2012).

Methodology: - In order to collect relevant information necessary for this research, literature survey in the related works such as books, conference papers, research works, journals, newspapers, and magazines were carried out. Interviews were in the forms of discussions with practicing construction professionals which enabled them to speak generally on individually-developed projects currently or previously handled by their firms.

The study employs a survey research method with the questionnaire as the primary source of data. It consisted of a composition of questions bothering on the driving force behind individually developed houses as well as challenges encountered towards these housing developments. A purposive sampling technique was used to select the construction firms (All operating within Abuja metropolis) for the questionnaires administration. A sample size of 19 construction firms was targeted in different parts of the city with a total of 30 questionnaires handed to Principals of each of these practicing firms to be administered to individual housing developers (their clients). Total distributed questionnaires numbered 570. A total of 502 questionnaires were retrieved (88% retrieval) and found suitable for analysis. An initial observation revealed that 90-95% of respondents of each construction company had exactly similar answers.

Correlation Analysis: Correlation (Bivariate) was employed to determine the level of significance in the relationship between individual-development encouraging factors (IDEF) and housing provision towards enhancing Real Estate outlook in Abuja metropolis. Below is the mathematical determination of person rank coefficient “r”.

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where; y = Individual-development encouraging factors (IDEF)

x = Housing provision

n = Number of Questionnaires retrieved from clients of firms

r = person rank coefficient.

“r” above ranges between -1 and 1 i.e. $-1 \leq r \leq 1$. The nearer and positive the value of r, the stronger the influence the independent variable (frequency index) have on the dependent variable (important index) positively. On the

Analysis of data:-

Table 1: Frequency Table for Correlation of Individual-Development Encouraging Factors (IDEF) and Housing Provision

CORRELATION TABLE					
S/N	Y(IDEF)	X(HOU.PR)	XY	X^2	Y^2
1	15	3	45	225	9
2	20	4	80	400	16
3	20	5	100	400	25
4	19	5	95	361	25
5	18	6	108	324	36
6	19	7	133	361	49
7	20	7	140	400	49
8	18	7	126	324	49
9	20	7	140	400	49
10	21	8	168	441	64
11	22	8	176	484	64
12	22	8	176	484	64
13	22	9	198	484	81
14	22	9	198	484	81
15	22	9	198	484	81
16	24	11	264	576	121
17	25	11	275	625	121
18	20	7	140	400	49
19	22	9	198	484	81
S.TOTAL	391	140	2958	8141	1114

other hand, the opposite of the above explanation occurs when “r” is negative. A scatter diagram with a line of the best fit was used to illustrate this relation appropriately.

Chi- Square Method of Analysis: The Chi-square of independent statistics was used as a data analysis tool for this study. This data analysis tool was actually used to determine if there actually exists a relationship between individual-development encouraging factors (IDEF) and housing provision in Abuja metropolis using questions directly relating to IDEF and housing provision in the questionnaires. The followings applied where;

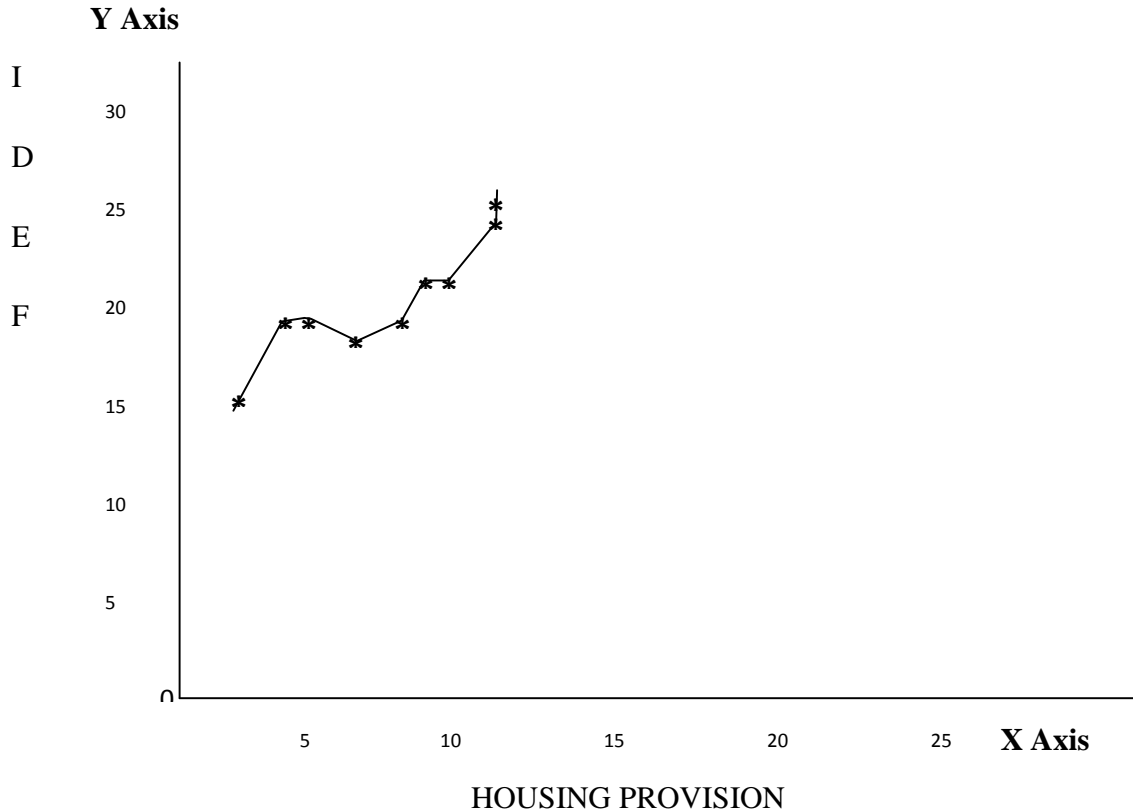
N = Total number of questionnaires

χ^2 = Chi-Square value

df = Degree of freedom calculated with formula:- (C-1)x(R-1) where C = Columns and R = Rows

P-value = Probability Value (Required for decision making).

Figure 1: Graphical representation indicating line of best fit on relationship between IDEF and housing provision. A scale of 2cm representing 5units (on paper) was used in both the “x” and “y” axis.



Explanation

Figure 1 indicates the line of best fit in the relationship between IDEF and housing provision. The “x” axis represents Housing Provision while the “y” axis represents IDEF.

Table 2: Result of Correlation Test on Relationship between IDEF and Housing Provision

		IDEF	Housing Provision
IDEF	Pearson Correlation	1	0.994(**)
	Sig. (2-tailed)		.000
	n =	19	19
Housing Provision	Pearson Correlation	0.994(**)	1
	Sig. (2-tailed)	.000	
	n =	19	19

The Pearson correlation formula “r” was used to determine the significant relationship between IDEF and housing provision from the data above and its result represented in the Table below

**** Correlation is significant at the 0.01 level (2-tailed).**

The Chi-square of independent statistics was used to determine if there actually exists a relationship (significance) between Individual-Development Encouraging Factors (IDEF) and housing provision in Abuja metropolis.

Where;

N = Total number of retrieved questionnaires

χ^2 = Chi-Square value

df = Degree of freedom calculated with formula:- (C-1)x(R-1) where C = Columns and R = Rows

P-value = Probability Value (Required for decision making).

A. Results of Chi-square method of analysis**Table 3: Item 10 (Housing Provision) Against Items 11-18 (Individual-Development Encouraging Factors (IDEF))**

Variables	N	χ^2	df	P-value	Decision
Item 11	19	0.907	4	0.924	NS
Item 12	19	1.558	6	0.956	NS
Item 13	19	2.210	6	0.899	NS
Item 14	19	1.587	2	0.452	NS
Item 15	19	2.833	4	0.586	NS
Item 16	19	0.623	2	0.732	NS
Item 17	19	9.138	4	0.058	S
Item 18	19	3.188	4	0.527	NS

In Table 3, items 11, 12, 13, 14, 15, 16, 17 and 18 indicated no significance in the opinions of respondents as against item 17 which indicated significance (Ratio 7:1). This implies

significance in the relationship between Individual-Development Encouraging Factors (IDEF) and housing provision.

Table 4: Item 5 (Housing provision) against Items 11 -18 (IDEF)

Variables	N	χ^2	df	P-value	Decision
Item 11	19	1.87	4	0.758	NS
Item 12	19	2.906	6	0.821	NS
Item 13	19	5.405	6	0.493	NS
Item 14	19	0.697	2	0.706	NS
Item 15	19	8.137	4	0.087	NS
Item 16	19	0.697	2	0.706	NS
Item 17	19	4.904	4	0.297	NS
Item 18	19	1.744	4	0.783	NS

From Table 4, items 11 – 18 indicated no significance in the opinions of respondents. This implies a significant relationship between IDEF and housing provision.

Table 5: Item 6 (Housing Provision) Against Items 11-18 (IDEF)

Variables	N	χ^2	df	P-value	Decision
Item 11	19	0.069	2	0.968	NS
Item 12	19	0.593	3	0.204	NS
Item 13	19	2.988	3	0.393	NS
Item 14	19	1.236	1	0.266	NS
Item 15	19	1.309	2	0.520	NS
Item 16	19	1.236	1	0.266	NS
Item 17	19	2.222	2	0.392	NS
Item 18	19	1.674	2	0.433	NS

From Table 5, items 11 – 18 also indicated no significance in the opinions of respondents. This

equally implies significance in the relationship between IDEF and housing provision.

Table 6: Item 7 (Housing Provision) Against Items 11-18 (IDEF)

Variables	N	χ^2	df	P-value	Decision
Item 11	19	7.933	6	0.243	NS
Item 12	19	13.003	9	0.162	NS
Item 13	19	12.629	9	0.180	NS
Item 14	19	2.550	3	0.466	NS
Item 15	19	11.873	6	0.065	NS
Item 16	19	2.321	3	0.509	NS
Item 17	19	6.375	6	0.383	NS
Item 18	19	7.589	6	0.270	NS

From Table 6, items 11 – 18 indicated no significance in the opinions of respondents. This implies significance in the relationship between IDEF and housing provision.

Findings and Conclusion: - The effect of high population upsurge and urbanization with a declining economy has thrown Nigeria into serious housing problems and Abuja metropolis is not free from this. Most individuals have resorted to developing outside the main city due to cost of development materials, inadequate cash flow, inflation with wage level remaining the same, cost of land values e.t.c. Conceivably, a major trait of housing crisis notable in many Nigerian cities to include Abuja is that of inadequate supply relative to demand. The shortage which is in both quantitative and qualitative terms is more acute in the urban center. In Abuja metropolis, findings equally indicate that people that occupy sub-standard houses in the outskirts are more than people who occupy quality houses and is attributed to low income as well as economic decline. Thus, it is assertive that there is inadequacy in housing to cope with the ever-increasing population of Abuja.

Hence, Abuja residents across all income groups have over the years resolved to engage in the provision of residential housing projects through the individual-develop approach in a quest to meet their housing needs. This work also established that individual-developers are

hitherto faced with a number of constraints in pursuing individual-developed Housing Projects. Within the context of this research findings also indicate that in Abuja metropolis, success in individual-developed buildings has been influenced by certain factors, which include but are not limited to materials, project management, available service facilities, income level and building materials.

Recommendations:-Some recommendations are as stated;

1. The government (within its capacity) should subsidize the price of building materials particularly for middle-income and low-income earning citizens in Abuja to enable them afford housing of their own.
2. Building professionals should be more engaged in individual-financed projects (at negotiated costs) so as to maintain quality and standards.
3. Distribution and transportation of building materials should be done evenly so that people who live in low-income areas would have easier access to such materials and at a reduced cost of transportation.
4. The government (within its capacity) should also provide infrastructural amenities in upcoming areas to encourage individual housing development
5. Relevant government agencies like the Federal Capital Development Agency (FCDA) should make it easier for individual-

developers to get development permits and land acquisitions for a smooth project processes.

References

- Adedeji D. (2012), Sustainable Housing Provision: Preference for the Use of Interlocking Masonry in Housing Delivery in Nigeria *Architecture Research*, 2:5, 6-12.
- Agbo N. (2012), Strategies for Achieving Sustainable Housing in Nigeria by Private Initiative, A Paper Presented at Association of Architectural Educators in Nigeria (Aarches) Annual General Meeting at Department Of Architecture University Of Jos, Nigeria, 3-8.
- Ahadzie D.K and Badu E. (2011), Success Indicators for Self-build Houses In Two Ghanaian Cities, *Journal of Science and Technology*, 31:3.
- Alink H. (2003), Lack of training and poor building skills lead to Cape Housing Debacle. *Housing in Southern Africa*, 24-28.
- Aminu G.W. and Ruhizal R. (2007), The Concept and Implementation Housing Policies and Programmes in Nigeria, *Business Management Dynamics*, 3:2, 13-19.
- Andrew G. T. (2013), Improvement towards Providing Affordable Housing in Nigeria, 22-28, LXI Press, Ilorin.
- Anthony B. *et.al* (2014), Policies and Challenges of Self-Help Housing Provision, *Developing Country Studies ISSN 2224-607*, 4:6, 2225-2565. Arku, G. (2009) The economics of housing programmes in Ghana: *Planning Perspectives*, 24:3, 8-15.
- Eziyi O. I. and Amole O. (2010), Evaluation of Public Housing Programmes in Nigeria: A Theoretical and Conceptual Approach, *the Built and Human Environment Review*, 3, 1-7.
- Gough K. V. and Yankson P. A. (2010), Neglected Aspect of the Housing Market: The Caretakers of Peri-urban Accra, Ghana. *Urban Studies*, 48:4.
- Litman T. (2008), Evaluating Accessibility for Transportation Planning, Victoria Transport Policy Institute.
- Litman T. (2014), Affordable-Accessible Housing In A Dynamic City; Why and How To Increase Affordable Housing Development in Accessible Location.
- NPC (2014), National Population Commission, Official Gazette. Abuja, Nigeria.
- Ntema L. J. (2011), Self-Help Housing in South Africa: Paradigms, Policy and Practice. Unpublished PhD Thesis, University of the Free State, South Africa.
- Peterside C. S. (2005), Ameliorating housing deficit in Nigeria: the role of primary and secondary mortgage institutions and the capital market.
- United Nations Habitat. (2011), Promotion of non-conventional approaches to housing Finance for low-income groups: United Nation Centre for Human Settlements.
- Tunas D. and Peresthu A. (2010), The Self-help housing in Indonesia: The only option for the poor? *Habitat International*, 34.
- Ukoha O. M. and Beamish J. O. (1997), Assessments of Residents Satisfaction with Public Housing in Abuja, Nigeria, *Habitat International*, 21:4.
- Zhang L. *et.al* (2003), Self-help in housing and Chengzhongcun in China's Urbanization, *International Journal of Urban and Regional Research*, 27:4.