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ASSESSMENT OF THE ROLE OF PRIVATE PROPERTY DEVELOPERS IN THE PROVISION OF INFRASTRUCTURES IN KARU, KEFFI AND NASARAWA IN NASARAWA STATE, NIGERIA

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Abstract
Infrastructure crisis in Nigeria has left private sector with no other option than to provide alternative infrastructure to enhance the well-being and quality of life of the people. This current empirical study assesses the participation of private property developers in the provision of alternative infrastructures to their properties and residential environment in Karu, Keffi and Nasarawa council headquarters of Nasarawa State. A total number of 270 (two hundred and seventy) private property developers were selected using the simple random sampling technique and questionnaires were administered to the number out of which 216 (two hundred and sixteen) of the questionnaires were returned for analysis. Descriptive Statistical Method (Percentile and the Weighted Mean Score) were used in the analysis. Findings show that there are dearth of and non-functional public infrastructures in the study locations. The result also show that well and borehole ranked high among the alternative infrastructures provided by private developers in Karu, Keffi and Nasarawa respectively while very few of them provided generator sets and private security guard in their premises. On the other hand provision of major infrastructures such as roads, culverts among others is practically beyond the scope of private developers in the study areas due to cost implications and even when they strive to provide them through joint efforts, the result had being failures and frustration because of uncooperative attitude of other developers. It is therefore recommended that joint efforts should be fostered with little support from government to enable private developers provide alternative infrastructures that are capital intensive in the study areas in particular and Nigeria in general.
Key Words: Private developers, Infrastructures and Synergy

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INTRODUCTION

Real property investment offers the investor with regular flow of capital or income; it has tax advantage, and serves as a hedge against inflation (Olusegun, 2000; Asaju and Bello, 2002). Execution of this form of investment is capital intensive; hence, private property investors who do not have sufficient equity capital go into debt to finance it. To realize sufficient return from the investment is a subject of utmost concern to property investors and this is largely dependent on the rate of gearing introduced into the business and availability of market for the properties.

Prudent property developers in order to have certainty of returns and availability of market, ensures that necessary feasibility analysis is done before embarking on the contemplated development especially if it is not for owner occupation. A notable criterion in most feasibility analysis in Nigeria is availability of infrastructures in a property or residential neighbourhood which serves as magnet in wooing tenants and breeds market for the properties (Uroko, 2011). Provision of these infrastructures is within the confines of public authorities especially in the economies that guarantee such a practice. Unfortunately in Karu, Keffi and Nasarawa, the existing infrastructures are in a state of total neglect (occasioned by absence of rehabilitation and maintenance) or not available. No wonder in most part of Karu, Keffi and Nasarawa small and large scale industries including households strives to have their own electricity generators due to epileptic and unreliable supply of public electricity and private source of water supply. The danger of this is that the less privilege are not able to afford these basic infrastructures which ought to have been provided by the government. Hence Mabogunje (1993) opined that the non-availability of infrastructure such as water, electricity and sanitation are determinants of peoples' poor welfare. People are poor if they do not have access to these basic essentials in their residential vicinity. It is evidence from the Report of WHO and UNICEF (2010) that only 6% of the Nigerian populace have access to potable water supply on their premises. In addition, Ebiojuomore and Okoye (2006) reported that 500 industries in Kano folded up as a result of high cost of alternative power supply. The problem of infrastructure decay however, has led to closure of many manufacturing concerns in Nigeria and the study areas in particular within the last one decade.

Tyre and rubber manufacturing companies such as Dunlop and Michelin relocated to other African countries where the investment climate is good (Energy News, 2007; Onwuamaeze, 2009). Therefore, Sudeshna et al (2006) and Awodele et al (2010) noted that the need for infrastructure provision is urgent and enormous and the public sector does not have the resources to meet this growing infrastructure need. This according to Olujimi, et al (2009) calls for concern particularly on the part of the government at all levels. To avert the problem of inadequate infrastructure there is the need to involve the private sectors.

Private sectors in the developing regions have over the years been explored; particularly as it concern the enhancement of the well-being of the people (Thoenen, 2007). Private sector involvement could take several forms including the Public Private Partnership (PPP), a situation where government and private sector pull their resources together in order to finance infrastructure development (ECA, 2005 and Labuschagne, 1998). Thoenen (2007) noted that in construction support contractual arrangement, the private sector is involved in the design, construction and operation of a new investment. This usually takes the forms of Build Design Operate (BDO), Built Operate Transfer (BOT), Build Own Operate (BOO) and Build Own Operate and Transfer (BOOT). There is a gradual increase in the participation of private sector in the provision of infrastructures in the developing regions (Thomsen, 2005 and Thoenen, 2007). The involvement of the private sector (MTN, GLO, ETISALAT, AIRTEL and other CDMA providers) in the telecommunication sector in Nigeria is a typical example. To this end, Geopower (2010) opined that the development of municipal primary networks should remain the responsibility of a municipality since there may be instances when a private developer is confronted with the need to provide primary networks in order to facilitate specific development. However, this study is not concerned with private sector involvement through PPP or other contractual forms as opined by Thoenen (2007) but private property developers who because of the enormous decay in infrastructure, decided to provide them in limited scale for their comforts and to have tenants in their properties for regular flow of income (Mabogunje, 1993). In doing this the following questions are pertinent to this study. What are the types of infrastructure found in the study areas (Karu, Keffi and Nasarawa)? How functional are these infrastructures? To what extent has the private property developers' helped in the provision of alternative infrastructures in the study areas? Is there any synergy among the private property developers in providing major infrastructures?

THE STUDY AREAS

The study areas under review are local government area headquarters in Nasarawa State of Nigeria. These areas are reckoned with in the state as they harbour some of the major institutions, economic activities and have high concentration of population because of their proximity to Abuja, Nigeria's capital territory. The distance between Karu local government area to Abuja is approximately 12 kilometers, Keffi to Abuja is approximately 50 kilometers and Nasarawa to Abuja is approximately 100 kilometers.

The population of Karu according to 2006 census is approximately 205,477 persons. Actually the nearness of the city to the nation's capital propelled the growth in population as many people transit from Karu to work in Abuja. Consequently, the demand for housing accommodation is very high; hence, property developers from other parts of the country explore this by engaging in massive acquisition/building of properties. Hence, land and property values are very high because of persistent increase in the demand. Thus, the developers who could not acquire one because of high value and competition move to Keffi.

Keffi is another area under review, with a population of 92,664 according to 2006 census. This city housed the Federal Medical Centre, State University, School of Health Technology and the like. It is actually a growing city, largely, due to its proximity to Abuja and particularly the presence of the above institutions. There is high demand for land and property, which also inform the reason for increase in values of the properties. Activities of private property developers are felt in great measure in Keffi, though a good number of them are from Abuja in particular.

Nasarawa on the other hand is the home of solid minerals that housed the Federal Polytechnic and other secondary institutions. With a population of 189, 835 according to 2006 census, it is a growing city with land and property values on the increase, though not comparable with Keffi and Karu. The federal institution in Nasarawa is a major hub of its activities that drew people from various parts of the country. A good number of property developers in Nasarawa, apart from the local developers, are from other parts of the country but particularly from Abuja, the nation's capital. Infrastructures are sparsely provided by the public authorities in the three local government areas (Karu, Keffi and

Nasarawa). Not only are the infrastructures inadequate, they are poorly maintained. For instance, electricity can hardly be provided for an upward of 8 hours per day and in some cases it has virtually gone into extinction for several weeks and months. Despite the epileptic supply of electricity in these areas, the authorities of Power Holding Company of Nigeria (PHCN) charge bills that are not commensurate with what is consumed. Also, Roads, both tarred and untarred are generally in very poor state in all the council areas under study. In Nasarawa for instance, water supply from public mains is a hoarse; the situation is best described as disaster. This is because over the years there has been a total neglect of the treatment plant by successive administration. This has placed the equipment in terrible and dilapidated state. Few residents that adjourn the treatment plant go there to buy water by given a token of between N10 - N20 for a bucket and jerry - can respectively. It should be noted that in all the three councils under consideration, truck pushers (popularly called 'mai ruwa', i.e. water seller) go to public water board or borehole provided by private property developers to buy water in jerry - cans and sell to the public. Thus, selling of water in these local government areas in Nasarawa state, Nigeria is indeed a lucrative business, especially, during dry season of the year.

The deplorable state of infrastructures in the three local government councils have made private property developers over the years to provide infrastructures which are short in supply or repair them if they are in poor state. For instance, most property developers because of bureaucracy and delay on the part of the Power Holding Company of Nigeria (PHCN) provide electricity poles and cables when developing new properties. Developers also provide culverts and hire graders to open up access roads in the study areas (Karu, Keffi and Nasarawa) to enhance the quality of life of the people.

However, the situation of infrastructures in the three local government areas (Karu, Keffi and Nasarawa) is not different from that of other parts of the country even Abuja, Nigeria's capital territory. With increase in population the available infrastructures cannot meet the demand of the people. Even the ones put in place are poorly maintained.

METHODOLOGY

Data used in the study were collected using a structured questionnaire administered on the private property developers located in the selected areas (Nasarawa, Karu and Keffi councils) of Nasarawa state. A total number of 270 (two hundred and seventy) questionnaires were distributed proportionately on private property developers. This was done with the aid of trained field assistants, using the simple random sampling technique out which 216 (representing 70, 74 and 72 for Karu, Keffi and Nasarawa respectively) were returned for analysis. Questions relating to the types of public infrastructures in the study areas, alternative infrastructures provided to enhance the properties, functionality of these infrastructures and synergy if any between private property developers in the provision of infrastructures were among other things asked in this study. The analytical tool used in the study is the Descriptive Statistical Method (Percentile and the Weighted Mean Score Method). The Percentile method was used to analyse the socio-economic attributes of the respondents and the state of infrastructures in the study areas. The Weighted Mean Score rating was used to estimate alternative infrastructures provided by private property developers to their properties and neighbourhood and the problems faced in doing this. In analysing the state of infrastructures provided by the public authorities, a scale in percentages was used as follows; less than 40% depicting poor state, 40 – 59% depicting fair state and 60 – 100% depicting a good state. In real estate, state of repairs of a property or infrastructure is very important in developers decision to correct or otherwise a condition that exist. Weighted Mean Score is estimated using the formula:

$$\text{Weighted Mean Score} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{n_5 + n_4 + n_3 + n_2 + n_1} \quad (1)$$

Where n_5 = number of respondents who answered “strongly agree”

n_4 = number of respondents who answered “agree”

n_3 = number of respondents who answered “undecided”

n_2 = number of respondents who answered “disagree”

n_1 = number of respondents who answered “strongly disagree”

DATA ANALYSIS AND DISCUSSION OF RESULTS

Socio – economic characteristics of Respondents

The socio economic characteristics of the respondents in terms of property ownership, financial status, sources of funding and status of property owners are detailed in table 1.

Table 1: Socio – economic Characteristics of Property Developers in the study areas

	Socio-economic characteristics	Karu Frequency (%) n=70	Keffi Frequency (%) n=74	Nasarawa Frequency (%) n=72
1	**Purpose of Property Ownership:**			
	i. Owner occupation	41 (59)	21 (28)	22 (30)
	ii. Rented occupation	24 (34)	49 (66)	46 (64)
	iii. Owner and Rented occupation	05 (07)	04 (05)	04 (06)
2	**Financial Status:**			
	i. > N1,000,000.00	16 (23)	14 (19)	32 (44)
	ii. N1,000,001.00 – N2,000,000.00	22 (31)	11 (15)	12 (17)
	iii.N2,000,001.00 – N4,000,000.00	28 (40)	25 (34)	10 (14)
	iv. >N4,000,000.00	04 (06)	24 (32)	18 (25)
3	**Sources of Funding:**			
	i. Equity finance	22 (31)	35 (47)	60 (83)
	ii. Debt finance	26 (38)	16 (22)	08 (11)
	iii. Sales and leaseback	22 (31)	23 (31)	04 (06)
	iv. Others (please specify)……	-	-	-
4	**Status of Property Company:**			
	i. Sole proprietorship	51 (73)	61 (82)	48 (67)
	ii. Limited liability	19 (27)	13 (18)	24 (33)

Source: Field Survey, 2011

Table 1 show that 59%, 28% and 30% of the respondents develop properties for owner occupation in the three local government areas (Karu, Keffi and Nasarawa) while 34%, 66% and 64% develop properties strictly for rental occupation. The result however, shows a higher percentage of property developers building properties for rental occupation in Keffi and Nasarawa local government areas. This is not unexpected since there are tertiary institutions in the areas.

The result in the table also revealed the financial status of the respondents. From the table, respondents who earn above N2,000,000 in the three local government areas (Karu, Kefi and Nasarawa) are 46%, 66% and 39% respectively. The result shows that respondents in the three local government areas have a good financial standing as property development requires huge capital outlay for its execution. Hence most of the respondents' sources of finance for property development in the areas are from personal savings (31%, 47% and 83% for Karu, Keffi and Nasarawa) as shown in table 1. However, a developer with a good financial base would be able to provide alternative infrastructures for tenants

In addition, over 60% of respondents are operating on sole proprietorship basis in the study areas. Hence, their contribution in infrastructure provision is limited. This probably may be the reason why they cannot provide major infrastructures in their residential neighbourhoods. Table 1 also, revealed that 73%, 69% and 63% of the respondents in Karu, Keffi and Nasarawa own at least a property within her portfolio.

Infrastructures Provided in the three local government areas (Karu, Keffi and Nasarawa)

Table 2, 3 and 4 shows the state of infrastructures in the areas and the alternative infrastructures provided privately and jointly by the developers.

Table 2 shows the state of available public infrastructures provided by government in Karu, Keffi and Nasarawa local government headquarters of Nasarawa state. The table however, revealed that majority of the facilities (electricity, water, public schools, road network, telecommunication, bridges/culverts, drainages) are in poor state in all the local government areas. This situation is not different from that of other local government areas in other states of the country where infrastructures provided by government are in bad condition or are poorly managed. Hence developers crave for alternative ways of providing them.

Table 2: State of Infrastructures provided by the Government

S/No	Infrastructures	Karu LGA			Keffi LGA			Nasarawa LGA		
		State in %			State in %			State in %		
		Good 60-100	Fair 40–59	Poor < 40	Good 60-100	Fair 40-59	Poor < 40	Good 60-100	Fair 40-59	Poor < 40
1	Electricity	0	07	93	07	41	52	07	11	82
2	Tap water	11	30	59	27	34	39	15	14	71
3	Public School	14	14	72	12	23	65	09	17	74
4	Road network	10	26	64	11	58	31	08	32	60
5	Telecommunication	0	0	100	11	11	78	0	0	100
6	Bridges/culverts	36	57	07	03	16	81	27	13	60
7	Sewage Disposal	21	23	56	17	34	49	11	46	43
8	System	26	43	31	27	19	54	17	32	51
9	Drainage	71	11	18	41	28	31	63	19	18
	Recreational facilities									

Source: Field Survey, 2011

Table 3: Mean Score of Alternative Infrastructures Provided by the Private Property Developers in the study areas.

S/No	Alternative Infrastructures	Karu		Keffi		Nasarawa	
		Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
1	Electricity Generator	3.71	4	3.77	3	3.81	5
2	Borehole	4.13	2	4.12	2	4.10	4
3	Well Water	4.54	1	4.33	1	4.91	1
4	Culverts	2.34	8	2.86	6	3.20	7
5	Fence/Gate	3.89	3	3.03	5	4.87	2
6	Tarred Road	1.20	9	1.14	9	1.50	9
7	Untarred Road	2.44	7	2.43	8	3.20	8
8	Private Sewage disposal vehicle	3.71	4	3.42	4	3.45	6
9	Private Security Guard	3.52	6	3.77	3	4.87	2

Source: Authors' Field Survey, 2011

The mean score/ranking in table 3 shows that most private property developers provided water in their premises either through well or boreholes. In the table, well water ranked first with a mean score of 4.54, 4.33 and 4.91 in Karu, Keffi and Nasarawa local government areas. While the mean score for borehole water in Karu and Keffi are 4.13 and 4.12 respectively (ranking second) Nasarawa ranked fourth with a mean score of 4.10. Fence/gate ranked second and third in Nasarawa and Karu with a mean score of 4.87 and 3.89 respectively. While in Keffi, the mean score is 3.03 and ranked fifth.

The table also, revealed that in Nasarawa and Keffi private security guard ranked highly (second and third) with a mean score of 4.87 and 3.77 respectively in the two local government areas. This is not unexpected as most part of the northern and middle belt areas of the country are currently facing insecurity. In addition, electricity generator has a mean score of 3.71, 3.77 and 3.81 in Karu, Keffi and Nasarawa local government areas. The epileptic supply of electricity by the Power Holding Company of Nigeria (PHCN) has made both developers and tenants to provide alternative power through the use of electricity generators. Other alternative infrastructures provided by property developers in the study areas included sewage disposal system with a mean scores of 3.71 and 3.42 in Karu and Keffi which ranked fourth but Nasarawa has a mean score of 3.45 and ranked sixth. Infrastructures such as culverts and roads whether tarred or not are capital intensive and was rated low by property developers. However, joint efforts by developers in the study areas aided the provision of some of the infrastructures that are capital intensive.

Table 4: Major Infrastructures Provided through Synergy by Private Property Developers in the study areas.

S/NO	**Infrastructures Provided through Joint Effort**	**Karu**		**Keffi**		**Nasarawa**	
		Mean Score	**Rank**	**Mean Score**	**Rank**	**Mean Score**	**Rank**
1	Electricity Poles and Cables	4.83	1	4.71	1	4.54	1
2	Electricity Transformers	4.32	2	3.63	2	3.44	2
3	Vigilante group (security guards)	4.04	3	3.34	4	2.32	3
4	Culverts	1.82	5	3.38	3	1.31	4
5	Graded Untarred road	3.32	4	1.54	5	1.13	5

Table 4 above show the infrastructures that are capital intensive and are used by more than one household which private property developers' in the study areas provided through synergy. In the table, Electricity Poles and Cables as well as Electricity Transformers ranked first and second in the three local government areas (Karu, Keffi and Nasarawa). These infrastructures are supposed to be provided by government in Nigeria but because of undue delay in the provision, private property developers come together to provide them. The table also show Vigilante group ranking third in the three areas with a mean score of 4.04, 3.34 and 2.32 for Karu, Keffi and Nasarawa local government areas.

This is not contrary to expectation as most property developers through joint effort compliment the activities of the regular police to safe guard lives and properties in the study areas. Culvert also, has a mean score of 1.82, 3.38 and 1.31 in the study areas (Karu, Keffi and Nasarawa). Plate 1 below show one of the culverts, provided by developers through synergy in Tammah area of Nasarawa council headquarters.

Plate 1: Culvert Provided through Synergy by Private Property Developers.

Problems faced by the Private Property Developers

The problem faced by the Private Property Developers in the cause of carrying out infrastructural development in the study areas is detailed in table 5.

Table 5: Problem faced by Private Property Developers in the provision of alternative Infrastructures in the study areas.

S/No	**Problems**	**Karu**		**Keffi**		**Nasarawa**	
		Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
1.	Uncooperative attitude of other property developers	4.21	2	4.81	1	2.98	3
2.	Corruption and suspicious of who will gather the money for the project	3.20	3	3.82	2	3.08	2
3.	Inadequate finance for project execution	4.67	1	3.08	3	4.07	1

Table 5 show the result of the problems faced by private property developers in providing infrastructures in the study areas. In Karu and Nasarawa council areas, the problem is inadequate finance for its execution. This ranked the first with a mean rating of 4.67 and 4.07 respectively. This seems not to be the case in Keffi with a mean score of 3.08 (ranked third). Corruption and suspicious and uncooperative attitudes of the developers also is a problem in the areas of study

FINDINGS, RECOMMENDATIONS AND CONCLUSION

The study highlights efforts by private property developers in the provision of infrastructures in Karu, Keffi and Nasarawa local government headquarters of Nasarawa State, Nigeria. The study found out that well, borehole water, wall fence, gate and private security guard among other things top the list of alternative infrastructures provided by developers in the study areas. These are provided to enhance their well-being and that of their tenants, since public infrastructures are non-functional or in poor state. Infrastructures that are capital intensive and jointly used by other people are provided through synergy. Challenges faced by developers included insufficient capital, lack of cooperation and suspicion of who gathers the fund.

There is need for awareness campaign by both governmental and non-governmental bodies to get other private property developers involved in the provision of alternative infrastructures in their premises and neighbourhood as government alone cannot do it. Synergy of private developers should

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be sustained and strengthened by registering the body. Government on the other hand should give little financial support to private property developers to enable them provide major infrastructures in their neighbourhoods. With these, there will be constant addition to the existing infrastructure stock in Nigeria.

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