

# Assessment of Infrastructure Provision in Housing Delivery in A Public-Public Partnership in Abuja, FCT

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## Abstract

There exist in the provision of adequate housing with the requisite infrastructure to make for better living condition. Over the years, government through a National Housing policy, has continue to come up with some strategies in housing provision and encouraged privately developed housing investment to thrive and minimize deficit. Abuja was conceptualized as an integrated and sustainable city and planned to avoid the numerous problems plaguing other Nigerian megacities, while emphasizing the inter-relationship of infrastructure, housing, economic, social services, open space, and recreation. The population in this study is drawn from the participants of the Public-Private Partnership housing delivery, personnel staff of Mass Housing Department, FCDA and Mass Housing Unit in Department of Development Control, FCTA in charge of supervision and monitoring, the developers and occupants of the developed housing. Data was made through questionnaire administration and interview to the sampled population. Summary of findings reveals the impact of infrastructure on housing provision through public-private partnership in the study area in the study area.

**Keywords:** infrastructure, partnership, housing, development.

## Introduction

Housing is the construction of a permanent affordable residential building in a well-planned, functional, safe, decent, sanitary, and comfortable environment well provided with adequate social amenities and infrastructures (Alao, 2009; Owoicho, 2015). It is an important requirement for human existence in terms of shelter, economic activities, livelihood, protection, and safety and is recognised as one of the oldest developments of mankind since civilization began (Olayiwola, Adeleye & Ogunshakin, 2005; Ajayi & Omole, 2012). Housing is globally ranked as the second basic necessity of life, next to food, and a prerequisite to the survival of man (United Nations, 1992; Eyakenyi, 2014). Affirmatively, in recognition of the need for adequate and suitable housing for all citizens, Governments at all levels are directed to focus all their policies and programmes on the provision of affordable, quality housing in a sustainable environment as enshrined in the 1999 Nigerian Constitution, section 16 (2) (d) under the fundamental objectives and directive principles of State policy. Thus, the importance of providing adequate housing in any nation cannot be overemphasized (Waziri & Roosli, 2013). However, in sub-Saharan Africa and most developing nations of the world, the provision of adequate and quality housing remains a major challenge.

It is not news that all successive governments in Nigeria since independence, in order to boost their image and gain acceptance, have prioritized housing in their housing delivery intervention policies and programmes either as a provider, facilitator, or enabler. (Akeju, 2007; Waziri et al, 2013).

Thus, it is upon this background that Federal Government, through a National Housing policy, came up with some strategies in which the government significantly disengaged in housing provision and encouraged privately developed housing investment to thrive (Mabogunje, 1999) cited in (Mabogunje, 2001) and buttressed same in the New National Housing Policy published in the year 2006 which emphasized on private sector participation in housing finance and investment. And within the same period, the Federal Capital Development Administration, precisely year 2000 initiated a public-private partnership mass housing scheme in order to provide affordable housing for Abuja urban low and medium-income citizens housing especially federal government employees who migrated from Lagos in compliance with government directives (Jibril & Garba, 2012).

### **Statement of Research Problem**

Abuja was conceptualized as an integrated and sustainable city and planned to avoid the numerous problems plaguing other Nigerian megacities, while emphasizing the inter-relationship of infrastructure, housing, economic, social services, open space, and recreation (Abubakar, 2014). According to statistics, the city's population has doubled beyond the projected designed capacity of approximately 3.2 million people on full completion, even when less than 50% of the planned development has been achieved (Imam, Mohammed, Wilson & Cheeseman, 2008).

Therefore, the Organized Private Sector through a public-private-partnership arrangement was mandated to produce quality housing for sale at affordable prices to low and medium-income groups in the city. To actualize this initiative, the government, through Federal Capital Development Administration, entered into a development lease agreement with private investors known as developers. The agreement terms and conditions mandated The Federal Capital Territory Administration to create enabling conditions by providing land for mass housing estate land; defer approval and development charges and levies, and provide primary infrastructures. Developers, among other conditions, are to have access to land without payment of premium, jointly identify economic trees and developments belonging to indigenes with FCDA staffers and pay compensation subject to FCDA reimbursement, have accelerated development approval at no initial cost, arrange for funding and mobilization to site within six months to enable them mass produce housing units.

Thus, all these abnormalities prompted the inquiry as to what is or constitutes mass housing as defined in the agreement? What are the specific responsibilities of the parties as stipulated in the terms and conditions of the development lease agreement? How far have both parties complied in the discharge of their responsibilities? What are the factors affecting mass housing delivery? Where are these mass housing sites in the third development plan located within the Federal Capital City? What is infrastructure? What are

the impacts of quality housing on the economy and well-being of the citizenry? The effects of infrastructure on mass housing delivery? In the process of answering these questions, the study will attempt to review all the areas stated to gain insight into the subject field, though not chronologically as stated above.

## **Aim and Objectives**

This study aims to assess the effects of urban infrastructure provision on public-private partnership arrangements for mass housing delivery in Federal Capital City, Abuja. This will be done through the following set objectives:

- identify mass housing sites in Federal Capital City Abuja;
- examine various Infrastructure Provisions Arrangements agreed upon for Mass Housing Estate development;

## **Review of Literature**

### **The Role of Housing in National Development**

Ibem (2010) observed that the massive influx of people to urban cities coupled with natural population growth in the last few years in the face of chaotic and inadequate response by the government had worsened the housing situation in Nigeria to the extent that both economic development and citizens' welfare are adversely affected. The concept of provision of shelter is among the old development of humans (Olayiwola et al, 2005; Ajayi et al, 2012). However, modernization has come to redefine housing; thus, National Housing Policy (2012) sees housing to encompass a system of having safe, comfortable, functional, identifiable and affordable shelter properly set-out in a layout within a neighbourhood, provided with continuously maintained infrastructures that allow for the well-being of individual/families' daily living be it social, economic and cultural activities, aspiration or preferences in the community.

### **Housing as a Driver of Economic Development:**

Housing and related activities have been identified to contribute an enormous impact on macroeconomic stability in both developed and developing economies. According to statistics Ferguson & Haider, (2002) and Eyakenyi, (2014) housing construction industry in developing economies contributes around 15 % of gross domestic product and provides jobs for unskilled and semi-skilled workers.

They also asserted that this sector could jump-start economies in recession while giving other sectors time to develop. The housing and construction industry generates economic growth, creates wealth, employment, and income, redistributes income as well as acting a macroeconomic stabilizer in recession. In economic recovery in Japan during a recession, (Hirayama, 2003) cited in (Arku, 2006), housing was the primary source of job creation, saving inducement, and investment in other productive activities.

**Housing Provides Foundation for Security**

According to the report, the inability of rural-urban migrants to secure accommodation in cities and the resultant formation of slums, shanty towns, and urban sprawls constitute the highest ever available political trait and fervent ground for a crisis, political violence, conflict, and insurgence that promotes insecurity. Also, home ownership brings economic security to families, mitigates investment risk, and enhances confidence and stability in entire neighbourhoods (Jackson, 2005).

**Poor Land Management, High Cost of Building Materials and Construction:**

Challenges of housing in developing economies will not be complete without mentioning poor land management in urban cities, such as incomplete property registers, bureaucratic land titling processes, etc. Not only that property registering and titling takes a long time of, about three to five years, but the cost of documentation is also high compared to other nations. It took Okonjo-Iweala three years and many days of frustrations and uncertainty to secure a property title in Lagos at a legal cost of \$12,000.00 as against the World Bank standard of a maximum of six months and 21 percent of the property value.

In fact, in South Africa, the similar property is 6 percent of the current value at a shorter time. Furthermore, the high cost of construction has been identified as another challenging factor confronting housing in developing economies. For instance, in Nigeria, it takes between N8 million and N12 million to construct a three-bedroom bungalow, but it is much cheaper in developed countries because of the affordable cost of building materials and labour as well as infrastructures. Most developers provide the infrastructure such as roads, sewerage, water, electricity, etc at an exorbitant cost of up to 30 - 40 percent of the cost of the housing as against the government providing them. The high cost of documentation added to the high cost of the building takes the building beyond the reach of low-income populace.

**Research Methodology****Study Population**

The population in this study is the relevant persons in both parties involved in Public – Private Partnership housing delivery which includes personnel of Mass Housing Department, FCDA and Mass Housing Unit in Department of Development Control, FCTA in charge of supervision and monitoring, the developers and occupants developed housing. REDAN registered estate developers' companies in Abuja, which as of 2016 stands at 703 members but most of them are not involved in mass housing development, and some mass housing developers are not members of REDAN. Therefore, a survey of actual existing mass housing estates in Phase 3 was carried out and collaborated with data obtained from development control, and a sample frame of 123 estates was established in six districts having mass housing estates and thus a sample frame of 123 estates.

### Sampling Size and Technique

The number of households varies per estate. However, the survey shows that they range from 28 to 1700 households per estate. In the Eleven selected estates for the developers, the sample size for households will be calculated based on Krejcie & Morgan's (1970) formula having a confidence level of 95%

$$\text{thus: } S = \frac{X^2 NP(1-P)}{d^2 (N-1) + X^2 P(1-P)}$$

Where:

S = Required sample size from a finite population

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population size

P = Population proportion (expressed as decimal assumed to be 0.5 (50%))

d = Degree of accuracy (5%) expressed as a proportion (0.05) margin of error

### Method of Data Collection

In addition to the literature reviewed, staffers of the mass housing department of the Federal Capital Development Authority were interviewed, especially on the terms of the development lease agreement, to generate firsthand information on the bases of the mass housing programme and the binding terms and conditions; the locations of the mass housing estate and approval status as well as compliance from both the government and the developers. Also, separate questionnaires designed to suit the required information were administered to both the developers and household occupants (the consumers). Some of the variables were ranked using a likert scale.

### Summary of Findings and Results

**Table 4.1 Mass Housing Policy Specification**

S/N	POLICY SPECIFICATION IN HECTARES	ACTUAL ALLOCATION No. OF DEVELOPERS	TOTAL HECTARES
1.	Small Scale Development 1-2	1	1.65
2.	Medium Scale Development 3-5	20	90.436
3.	Large Scale Development 6-10	21	187.727
4.	Total	42	279.813

SOURCE: UKOJE, 2012.

**Table 4.2 Total Allocation for Mass Housing For Phases 3 And 4 Districts In Federal Capital City Development Plan**

S/N	DISTRICTS	LAND ALLOCATION (H.A.)
1.	Bunkoro	856.78
2.	Dakwo	568.50

3.	Duboyi	336.29
4.	Dutse	540.94
5.	Gaduwa	481.66
6.	Galadimawa	661.05
7.	Gwarinpa 11	433.52
8.	Ido Gwari	627.41
9.	Idu Sabo	428.85
10.	Kado	489.51
11.	Kafe	598.63
12.	Karsana East	765.81
13.	Karsana North	915.47
14.	Karsana South	605.23
15.	Karsana West	509.72
16.	Kodo	376.75
17.	Lokogoma	800.40
18.	Mbora	537.13
19.	Sabo Gida	741.02
20.	Saraji	561.07
21.	Wumba	113.94
22.	Wupa	284.02
	<b>Total</b>	<b>12,691.69</b>

*SOURCE: Department of Mass Housing 2011.*

### **Infrastructure Provisions Arrangements for Mass Housing Estate Development in the FCC**

Various classes of infrastructure are provided for the multiple estates sampled, ranging from road, sewer lines, drainage, and other housing infrastructure. The research findings, therefore analysed as shown in the table below. These infrastructures are presented as a checklist as it concerns their availability and the level of efficiency of services delivered by the infrastructure to the residents of the Estates sampled for the paper.

<b>Keys</b>	
<b>1</b>	Very Poor
<b>2</b>	Poor
<b>3</b>	Indifferent
<b>4</b>	Good
<b>5</b>	Very Good

Question Input	Location of Respondents	1	2	3	4	5
Access to liquid Sewage Disposal Facility	Kafe		✓	✓		
	Galadimawa					
	Lokogoma				✓	
	Wumba				✓	
	Nbora				✓	
Access to Solid Waste Collection	Kafe				✓	
	Galadimawa				✓	
	Lokogoma				✓	
	Wumba					
	Nbora			✓		
Access to AEDC Electrification and Other Power	Kafe				✓	
	Galadimawa			✓		
	Lokogoma				✓	
	Wumba				✓	
	Nbora		✓			
Kafe Galadimawa Lokogoma Wumba Nbora	Kafe	✓				
	Galadimawa	✓				
	Lokogoma				✓	
	Wumba				✓	
	Nbora	✓				
Access to Hospital or Clinics	Kafe		✓			
	Galadimawa		✓			
	Lokogoma			✓		
	Wumba			✓		
	Nbora				✓	

Access to Shopping Mall	Kafe	✓				✓
	Galadimawa				✓	
	Lokogoma				✓	
	Wumba					
	Nbora				✓	
Access to Parks and Gardens	Kafe		✓			
	Galadimawa				✓	✓
	Lokogoma				✓	
	Wumba					
	Nbora			✓		
Access to Schools	Kafe		✓			
	Galadimawa				✓	✓
	Lokogoma					
	Wumba				✓	
	Nbora				✓	
Access to Place of Worship	Kafe				✓	✓
	Galadimawa				✓	
	Lokogoma					
	Wumba	✓				
	Nbora		✓			
Access to Fire Service Station	Kafe	✓				
	Galadimawa	✓				
	Lokogoma	✓				
	Wumba			✓		
	Nbora					✓
Access to Internet/Communication facility	Kafe					
	Galadimawa		✓			
	Lokogoma					

	Wumba				✓	
	Nbora	✓				

### Summary of Findings

The respondents are randomly taken from five neighborhoods, namely Galadimawa, Lokogoma, Kafe, Wumba, and Nbora in which 29.2% of the respondent are taken from Nbora, 22.9% are taken from Wumba, 17.4% are taken from Lokogoma, 5.6% are taken from Galadimawa, and 25% are taken from Kafe. The age distribution of respondents was considered in the research in order to obtain the socio-demographic profile of the residents in the study area. The age distribution shows youthfulness in the demographic profile of the respondents sampled and activeness in the ability to generate income, reproduce and occupy more space in the study area. The various respondents sampled in the selected estate were observed to have different levels of employment as observed in the survey ranging from the self-employed, civil/public servants, and others. The analysis shows that a fair percentage of the respondents sampled have secured jobs while only a few are unemployed or without a defined means of livelihood. Just as the employment status of respondents differed, so also is the marital status of respondents sampled. Findings showed that an overwhelming majority of sampled respondents were married with family (60.4%) and 31.9% were singles.

Various classes of infrastructure are provided for the multiple estates sampled, ranging from road, sewer lines, drainage, and other housing infrastructure. These infrastructures are presented as a checklist as it concerns their availability and the level of efficiency of services delivered by the infrastructure to the residents of the Estates sampled for the research. Public utilities are inadequately provided, the little provided is overstretched, and other areas are not well serviced or not serviced at all. Access to a liquid sewage disposal facility in Nbora, wumba and Lokogoma is relatively good compared to that in Galadimawa, which is poor. At the same time, Kafe access to the liquid sewage disposal facility is fairly adequate, according to the table. On the other hand, access of Kafe to solid waste collection points is relatively good, much like Lokogoma, and Wumba. But, Nbora access to solid waste collection is fairly adequate see table. Access to AEDC Electrification and other power in Kafe, Lokogoma, and Wumba is Good, which is way above average, according to the likert scale. But Galadimawa access to AEDC electrification and other power source is indifferent. Kafe access to pipe-borne water is very poor, as well as Galadimawa, and Nbora. Only Lokogoma and Efab that has access to good pipe-borne water. Kafe and Galadimawa have good access to a hospital in their locality.

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