CO-OPERATIVE HOUSING AND BASIC INFRASTRUCTURE PROVISION: A CONCEPTUAL FRAMEWORK FOR EFFECTIVE PUBLIC PRIVATE PARTNERSHIP

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Abstract

Aside finance, the dearth of infrastructure in developing countries including Nigeria has been a major challenge debilitating all round economic, physical and social development. The level and state of infrastructure development in Nigeria has not only increased the cost of undertaking businesses in the country but also the overall cost of real estate project development. Despite the fact that people organize co-operative movement to address some of their individual and societal needs such as housing, it has been observed that one of the critical challenges confronting co-operative societies' efforts in housing provision is the lack of or inadequate on-site infrastructure whilst the existing infrastructure in housing estates already developed by some of these co-operative societies suffer from poor maintenance. With a view to developing a conceptual framework for effective public private partnership for the provision and improvement of infrastructure in co-operative housing estates, this study undertook a comprehensive review of extant literatures on infrastructure provision and national development particularly as it relates to housing delivery in Nigeria. The study evaluates the current issues and challenges facing infrastructure provision in co-operative housing estates and proposed a framework that emphasize active collaboration of co-operative societies with institutional stakeholders such as insurance companies or pension funds, federal ministry of works and housing, thereby bolstering infrastructure development and housing provision efforts of co-operative societies in Nigeria.

Key words: Infrastructure, Co-operative housing, Partnership, Societies, Institution, Insurance

1.0 Introduction

Several studies have highlighted the problems of housing provision and lot of efforts poured into discussion of the challenges confronting public and private sector housing provision. One area that has equally attracted scholar's attention is urban housing and infrastructure provision. Tomori (2014) observed that the current finance for urban housing and infrastructure is inadequate both in terms of capital resources, lending policies and conditions compared with the types of income and borrowing capacity of majority of Africa's urban populations. The author further identified the myriads of problems confronting urban infrastructure provisions to include policy and political instability, lack of confidence, distorted economic policies as well as difficulties of governance. Infrastructure development is very vital to physical, social and economic growth and sustainability. Infrastructure is a broad concept and in order to properly situate urban housing infrastructure provision, it is imperative to look at the various definitions, classifications and policy perspective of what constitutes infrastructure.

The word 'infra' was derived from latin language and it means 'below' while structure according to British English Dictionary could be interpreted to mean "the overall form or organization of something" or "A cohesive whole built up of distinct parts" (Buhr, 2003). Infrastructure could therefore be interpreted as "the foundation required for functional formation". Better still, the British English Dictionary defined "infrastructure" as "the basic facilities, services and installations needed for the functioning of a community or society". Traditionally, "infrastructure" according to Drodowski, Scholze-Stubenrecht and Wermke (1997) has been applied to permanent installations required for military purposes. The authors further stated that modern general usage of the term concerns the necessary economic and organizational foundation of a highly developed economy (e.g. transport network, labour force etc.). In the field of economics, scholars have attempted to distinguish between infrastructure, superstructure and supra-structure all in an attempt to contextually situate the concept of infrastructure. For instance, Tinbergen (1962) introduced the distinction between infrastructure (for example, roads and education) and superstructure (comprising manufacturing, agricultural and mining activities). However, there was neither a precise definition nor any theoretic references of these terms to back up the perspective. Moreover, Nijkamp (2000) described infrastructure as material public capital (such as roads, railways, ports, pipelines etc.) and supra-structure as immaterial public capital (such as knowledge networks, communication, education, culture etc.). Although, a little overlap and not too clear boundary is observed in the various classifications, it however showed that attempts have been made to define and classify those foundational components that make for a functional economy.

Oyedele (2012) described infrastructure as the set of interconnected structural elements that provide framework supporting an entire structure of development. Fulmer (2009) described infrastructure as the technical structures that support a society, such as roads, water supply, sewers, electrical national grids, telecommunications, and so forth, and went further to defined it as the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions. Kumar (2005) categorized infrastructure into two: "hard and soft" infrastructure. While "hard" refers to the large physical networks necessary for the functioning of a modern industrial nation, "soft" infrastructure refers to all the institutions which are required to maintain the economic, health, and cultural and social standards of a country, such as the financial system, the education system, the health system, the governance system, and judiciary system, as well as security. According to Section 36 of the Infrastructure Concession Regulatory Commission (Establishment) Act, (2005) of Nigeria, infrastructure include development projects which, before the commencement of the Act, were financed, constructed, operated or maintained by the government and which, after the commencement of the Act may be wholly or partly implemented by the private sector under an agreement pursuant to the Act including but not limited to power plants, highways, seaports, airports, canals, dams, hydroelectric power projects, water supply, irrigation, telecommunications, railways, interstate transport systems land reclamation projects, environmental remediation and clean-up projects, industrial estates or township development, housing,

government buildings, tourism development projects, trade fair complexes, warehouses, solid wastes management, satellite and ground receiving stations, information technology networks and database infrastructure, education and health facilities, sewerage, drainage, dredging, and other infrastructure and development projects as may be approved, from to time, by the Federal Executive Council.

Infrastructure is therefore very critical and simply constitutes one of the most important factors for economic development of any nation. Infrastructure is the wheel that processes other economic inputs thereby providing the enabling environment for sustained economic growth and wealth creation (Ali, 2012). Every structure that aides and enhances human interaction with immediate natural environment and makes it more conducive for habitation could be regarded as infrastructure. Hence, as deduced from the "Establishment" Act, 2005, housing is classified as infrastructure. Housing goes beyond shelter to encompass the immediate environment, sanitation, drainage, recreation facilities and all other economic and social activities that make life worthwhile, hence the concept of urban housing infrastructure. Urban housing infrastructure is closely related to urban housing and infrastructure but could be distinguished by what each entails. While urban housing and infrastructure entail urban housing and urban infrastructure that make the entire urban system livable, urban housing infrastructure entails urban housing and complementary off-site and on-site infrastructure that makes the housing community livable. Therefore, this study focus is on urban housing infrastructure provision.

2.0 A Review of Public and Private Sector Housing Intervention

The crisis of insufficient and indecent housing condition that plaques the Nigeria housing sector began unnoticed in the colonial era and eventually snow-balled out of control in subsequent administration. The crisis has manifested in acute shortage of housing units, emergence and proliferation of the slums/squatter settlements, rising cost of housing rent and the increase in unaffordability among average citizen to procure decent accommodation in the housing market (Ademiluyi, 2010). Various studies have documented in quantitative terms the level of housing deficit in Nigeria over the years. Onibokun (1990) estimated that the nation's housing needs for 1990 to be 8,413,980; 7,770,005 and 7,624,230 units for the high, medium, and low income groups, respectively. The national rolling plan from 1990 to 1992 estimated the housing deficit to increase between 4.8 million to 5.9 million by 2000. The 1991 housing policy estimated that 700,000 housing units needed to be built each year if the housing deficit was to be cancelled. The document, in fact, indicated that no fewer than 60 percent of new housing units were to be built in the urban centers (Ogu & Ogbuozobe, 2001; Federal Republic Nigeria, 1991). Recent studies currently estimate the Nigerian housing shortage to be between 16 to 17 million housing units (Uroko and Akintola, 2008; Uroko, 2009). This figure has been corroborated by Federal Ministry of Lands, Housing and Urban Development (FMLHUD) which succinctly puts the shortfall at 17 million housing units (FMLHUD, 2012). This figure must have shot up astronomically going by UNIDO's (1980) assertion that "the level of production of housing in a developing country like Nigeria is only between 2 to 3 dwelling units per a thousand people compared with the required rate of 8-10 dwelling units per a thousand of the population" as recommended by the United Nations. In an attempt to bring the situation under control, successive governments have made conscious efforts at reducing the gap between housing demand and supply. According to Olokesusi and Okunfulure (2000), successive governments have made policy statements, sponsored housing programmes and projects via direct intervention or through their agencies, parastatals or partnerships to actually deliver new housing units. However, out of their targeted provision, a very minute percentage is always met. This could be attributed to the fact that most government housing programs have been frustrated by corruption, politicization, insufficiency of technical staff at building sites, and lack of infrastructure.

Consequent upon the lackluster performance of government housing programmes and the various criticisms that trailed government direct intervention, government began to encourage private sector involvement in housing provision by creating enabling environment to operate via favourable policy

pronouncements and lately, through Public-Private Partnership. Thus, in recent times, private sector dominates housing provision in Nigeria and as observed by Olatubara (2007), the sector contributes about 80 per cent of the total housing supply. However, Henshaw (2010) observed that the housing units produced by the private sector are usually out of the reach of the low and middle income families. The author further stated that access to housing units produced by the private sector has been left entirely to the pricing system buoyed by the interaction of demand and supply. A motivating factor for the private sector's intervention in housing delivery had been profit-making. This tendency props up housing prices and makes it extremely expensive to low income earners and this has further contributed to affordability issues. Consequently upon the inability of both public and private sector providers to meet the demand of the people, many have opted to explore various other methods that offer more convenient terms for procuring housing and one of such methods is the co-operative societies housing provision.

3.0 Co-operative Societies' Housing Intervention

Co-operative societies' housing provision has been lauded being a user based initiative. Agbola (1994) in Tomori (2014) identified co-operatives and five other channels by which informal sector provide housing. These other channels includes merchant builder; prefabricators; builder investors; on-site builders and land developers. Gbadeyan (2011) explained that Co-operative Societies have been playing significant role in the delivery and provision of housing services in urban centres in Nigeria. Co-operative societies provide credit in form of loan advancement for their members towards housing procurement. The International Cooperative Alliance (ICA) defined co-operative society as "an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Co-operative housing describes an approach or procedure fashioned after the principles and practices of co-operative societies to realize housing objectives/interest of its members. According to the National Confederation of Co-operative (2004), cooperative housing encompasses any or all of the following: (i) security of land ownership or making sure that the person's rights to live on a piece of land is not disturbed or threatened by eviction; (ii) provisions of infrastructure such as roads, transportation, water system and open spaces; (iii) construction of houses and (iv) management of the housing facilities which have been put up. Co-operative Societies offer a more flexible terms and conditions for assisting members to procure their housing than private and public sector in addition to the fact that the model is end user driven. Co-operative can also through their sheer financial strength tap into the wider market to acquire land and sell to members or procure building materials in buck and sell to members at reduced or subsidized rate. Several co-operative societies have assisted their members individually via loan advancement or collectively through land acquisition, documentation and allocation or complete housing development and allocation.

4.0 Housing Infrastructure Provision

Housing infrastructure encompasses all physical, social and economic structures that add extrinsic and intrinsic values to shelter and create habitable environment. Since housing is said to be more than mere shelter, housing infrastructure is also the sum of on-site infrastructure, off-site infrastructure and accommodation unit facilities. While off-site infrastructure provision is the responsibility of government, housing facilities, the responsibility of the owner, the duty to provide on-site infrastructure for housing estates naturally devolves on the sponsor of such project, whether an individual, a developer or an association. Off-site infrastructure as it relates to a housing estate encompasses neighbourhood related facilities such as motorable access road, drainage, paved walkway, electricity distribution system, public water mains, gas pipeline, street light, primary healthcare facilities, basic education facilities, security operative facilities, banks, post office, sport and recreational facilities, waste disposal system. These and many others in this category are provided by the government. The services within the housing area such as the electrical services, in-door and out-door lighting, common areas, car park, paved walkway, perimeter fencing, plumbing and sanitary services as well as physical features of housing units such as the size of rooms, quality

of finishes, proper ventilation are all responsibilities of the house owner. The housing estate facilities entail all the basic and complementary facilities that are located within a residential estate that makes it habitable for the residents. Such infrastructure facilities include estate link road, good estate road network, paved walk way, good drainage system, street lighting, independent power supply system, independent water supply system, closed circuit television (CCTV), transformer, healthcare facilities, crèche, estate recreational area, swimming pool, gymnasium, sewage disposal, perimeter fencing, postal and telecommunication facilities, domestic waste collection and disposal system. However, the cost of owning a home which includes cost of land acquisition and construction is enough investment for majority of Nigerians. Udoka (2013) stated that the capital intensive characteristic of urban infrastructure provisions makes it to be left in the hands of the government for its development.

The lack of adequate finance has not only affected urban infrastructure provision but also housing and had compelled people to look for alternative ways of financing these needs. According to Okoye (2014), public housing estates generally and specifically the case study, are experiencing various forms of infrastructure deterioration. The author observed that while some basic infrastructure are not provided in the estate from design inception, others are either lacking maintenance thereby not meeting the resident's need. In a recent study by Oloke (2015), it was found that lack of infrastructure; inadequate infrastructure as well as poor maintenance of existing ones constitutes critical challenges confronting co-operative housing provision.

5.0 Challenges of Co-operative Housing Infrastructure Provision

The challenges of infrastructure provision in Nigeria generally are enormous and can be seen in the shortage of it as well as lack of adequate maintenance of existing ones. Different studies have been carried out to x-ray the challenges facing infrastructure provision in Nigeria and by and large, the cause of the problem centered on lack of adequate finance and poor governance. Oyedele (2012) summarized the challenges thus; "the challenges of infrastructure development in third world countries are many. The demand surpasses the supply and finance that will stimulate rapid provision is not there. Due to wide gap between provision and needs, the leadership classes are in arrears in all sectors. The political situation is not encouraging to foreign investors. Governments do not set the priority right in infrastructure development. Projects are supposed to meet objectives, but in most cases, projects embarked upon are white elephant projects". Tomori (2014) also averred that lack of funds alone is not a root cause of poor infrastructure and services. It is a symptom of more fundamental problems and these include instability, lack of confidence, distorted economic policies, and difficulties of governance. These challenges have also resonated in the co-operative housing delivery system. Though self-help approach, lack of finance and inability to access assistance had been a major challenge militating against infrastructure provision in Nigeria. Another challenge is that many of these co-operative societies are committed to financial needs of members which are for different purposes of which housing is one. They only provides loan toward personal house building or engage in land acquisition, process of documents, and purchase of materials in bulk. Land acquired in such manner is provided with minimum level of infrastructure. Infrastructure provisions are grossly inadequate in many of these housing estates while lack of maintenance capacity aggravates deterioration.

6.0 A Conceptual Framework for Co-operative Housing Infrastructure Provision and Management

According to Jiboye (2011), a recent World Bank report notes that two of the most critical urban development issues facing Nigeria are the financing of urban infrastructure and the institutional arrangements for housing delivery in urban centers. Among the numerous challenges faced by urban dwellers, particularly in large urban centers like Lagos, housing and infrastructure ranked highest. The need to develop an effective and operational framework for housing and infrastructure delivery in Nigeria is

therefore central to the achievement of sustainable housing and urban development. Co-operative Societies' intervention in housing provision was in response to the inability of majority of Nigerians to procure their own homes themselves or acquire it through the private sector window. It is therefore evident that these societies are dominated by low and medium income Nigerians and the financial strength of the society would be a function of the mix of members. In order to assist the effort of these societies, a conceptual operational framework that involves the co-operative society, government and private sector is developed and presented in the Figure 1.

Private Unsatisfactory Sector Project Service delivery **Providers** Co-Project operative Federal and Implementation State Management Society and Supervisory Consultant Governmen Committee Long term financiers Satisfactory Project

Figure 1: Conceptual Framework for Co-operative Housing Infrastructure Provision and Management

Source: Author's 2016

Figure 1: Conceptual Framework for Co-operative Housing Infrastructure Provision and Management

The conceptual framework for the provision and management of co-operative housing infrastructure is as shown in Figure 1 above. The diagram shows how the partnership among the parties is convened as well as the flow of operation originating from the co-operative society and end up with the co-operative society. However, each of the parties has their respective responsibilities, term and conditions to be met. These are explained thus;

The Co-operative Society initiates the project which must be a unanimous demand of majority of members of the Society. However, for the co-operative society to package an acceptable project for government consideration and partnership, the co-operative societies must meet the following conditions. These are:

- The co-operative society must have a specified minimum number of co-operative members
- The co-operative society must have a specified minimum number members interested in housing procurement
- All members must have pension plan and subscribe to National Housing Fund
- The Co-operative Society must meet a specified minimum amount required as operating capital
- The Co-operative Society must have a specified minimum amount as capital base

- The co-operative society must have acquired land and must have carried out the survey of the land
- The Co-operative Society must have the architectural, structural and all other design of the proposed housing and infrastructural
- Must clearly identified the infrastructure requirements for the estate
- Must have prepared the cost implication for providing the infrastructure with the help of experts

After satisfying the conditions, the co-operative society then approach designated government agency, ministry or parastatal for collaboration and assistance. The government verify the application and other documents submitted, carry out necessary due diligence and be convinced of the authenticity of the applicant's co-operative society, the government go ahead to assist in the processing of title documents to the proposed housing estate, process the survey plan, approve all necessary designs and mobilize private sector service providers and long-term financial providers.

- The responsibility of government would include the processing of title document to the estate,
- Approval of all necessary designs
- Processing of survey plans
- Mobilization of private sector service providers
- Orchestrate contract signing among co-operative societies, private sector service providers and long term financiers

After this is the constitution of contract implementation and supervisory committee which shall consist of appointed executive and members of the Co-operative Society, representative of government, representative of private service providers and financiers, appointed project consultants and legal adviser of stakeholders. The committee oversees the implementation of the project and ensures that quality and quantity are not compromised as well as easy execution of the project. The Supervisory committee report to the partnership. If project was satisfactorily executed and delivered, then the project implementation supervisory committee acting on the instruction of the partnership award certificate of satisfactory completion and proceed to handover to management consultant. If not, the supervisory committee recommends that private sector service provider refund, forfeit payment or do it satisfactorily at no extra cost to the financier after which the Management Consultant takes over. The Management Consultant reports to the Co-operative Societies. Where the project is infrastructure provision, funding of the project is via long term financier e.g. insurance or pension funds guaranteed by Government. Where it is housing, financial assistance could also be sourced from long-term financier, guaranteed by the government while government in turn is backed-up (guaranteed) by the title of the development, Apex body of the Nigeria Co-operative Society and cash flow of the co-operative society. The conceptual framework ensures that assistance is secured from relevant quarters; capital is secured at affordable rate of interest and repayment spread over a long time where necessary.

7.0 Conclusion

Public Private Partnership describes a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. It involves a contract between a public sector authority and a private party, in which the private party provides public service or project and assumes substantial financial, technical and operational risk in the project. In order to achieve a sustainable, effective, productive, and result-oriented public private partnership, it is important that parties to the partnership must adopt a single framework of action that provides the basis for co-ordinating the work and responsibilities of all partners. Thus the concept suggested and the outlined conditions and responsibilities is expected, if religiously followed and implemented would go a long way to reduce infrastructure and housing provision challenge not only in the study area but also in Nigeria. It would

address effectively the inadequate infrastructure provide sustainable maintenance of existing infrastructure.

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