Critical Success Factors of Public Private Partnership for Affordable Housing in Nigeria

Yahaya Ahmed, Ibrahim Atan Bin Sipan

Abstract: Public private partnership was introduce by the Nigerian Government as an option to end the current crisis of housing shortage and affordable housing in the country. The aim of this paper is to identify the critical success factors of PPP for provision of affordable housing in Abuja. Based on the current studies PPP has not made any significant contribution to housing for low-income earners; rather it is suddenly change towards providing housing for high- and middle-income earners. The paper relies on interview with PPP expert to build up questionnaire survey on success factors of PPP for affordable housing in Nigeria. In total, 254 responses were obtain and analyzed using smart PLS to determine the success factors of PPP for affordable housing in Abuja. The results reveals that there are Six key component success factors of PPP for affordable housing provision in Abuja, this include: Strong Government support, access to alternative fund, favorable investment environment, available of competent personnel, transparency procurement process, and open communication among others. It therefore suggests that government should strongly provide a policies to support the success of PPP for affordable housing provision in Abuja, and also provide a means of subsidy to promote PPP toward provision of affordable housing. Therefore, it’s recommended that a good framework on affordable housing using PPP should put in place for a successful affordable housing provision.

Index Terms: Critical Success Factors, Public Private Partnership, Affordable housing, Abuja, Nigeria.

I. INTRODUCTION

Rural urban migration and the massive increase in population are the serious challenges affecting the capacity of most government in providing adequate and affordable housing in the developing countries. The United nation (2014), has projected that by the year 2050 urban population will increase to about 2.5 billion of people with about 90% increase in developing countries like Sub saharan Africa and Asia because there are poorest region in the world. Consequently, the challenges of housing provision in Nigeria today have become more complicated particularly among the low income group who have the largest urban population (Federal Republic of Nigeria, 1991). After several effort by the Nigerian government since after independence in 1960 to solved the challenges of housing provision, the government fail to meet up with the challenges to provide adequate and affordable housing in the country (Awotona 1990; Oruwari 2006).

Considering the fact that housing situation is worsening in Nigeria, several elements are consider as the main factors of an increase in housing declines in sub-Saharan Africa cities, this includes strict land use and use policies and discrimination; lack of coordination of public housing agencies; and high cost of construction materials and legislation (Ademiluyi and Raji, 2008). Rondinelli (1990) found that the failure of Nigeria and some sub Saharan cities to cope with the housing need in their perspectives area. As stated by African Ministerial Conference on Housing and Urban Development (AMCHUD, 2005, p. 5), African region is unable to meet up with the housing crisis for their inability to transform their organizations and values to the dynamic positive situation.

This suggests that both the public and private sectors in the African region have adopted incorrect organization framework and a non-functional housing delivery system in the past, and therefore, housing challenges in the continent have increased rapidly. Among the international development agencies that are involved in housing is, the United Nations Global Strategic Organization Shelter that advised that African countries including Nigeria to withdraw from housing as it is unable to meet the growing housing demand due to wrong approach adopted to address quantitative and qualitative shortages. The present housing situation in Nigeria and other developing nations brought in picture that the provision of housing and other infrastructural facility cannot be provided by the government along to the citizens, rather partnership with private developers as advice by the united nation as alternative solution to housing crisis.

However, on the UN recommended to African countries to put more responsibility for housing provision in the private sector through Public-Private-Partnerships (PPPs) (Ibem and Aduwo, 2012). Miraftab (2004) found that Public-Private Partnerships (PPPs) aware recognized as the arrangement of alternative institutions and approaches to civil service in cities in developing countries. In housing provision, PPP is promoted on the assumption that it will increase the interest of housing sector capabilities, and the expansion of housing capabilities and facilities (Shelter Afrique, 2008). Based on this recommendation the Nigerian government in 2004 adopted the PPP in the proposal to
increase housing supply in the country cities of Abuja and Lagos (Owei, 2007). The Government believes that PPP will improve efficiency in public administration and delivery of services through the editing of private and professional sector funds (Lagos State Government, 2008).

However, despite PPP's appeal, the success and failure of its applications in housing delivery has not been systematically reviewed (Jamali 2004b; Van Ham & Koppenjan 2010; Alinaitwe & Ayesiga 2013). The use of PPP in housing delivery is less than the infrastructure provision (Ong 2003; Abdul-Aziz & Kassim 2011; Trivedi & Ajit 2014). PPP programs, since the 1990s, have become the education, health, and transport infrastructure sectors (Li & Akintoye 2008). For this reason, PPPs in housing provision are poorly studied worldwide (Ong et al., 2002; Sengupta 2005; Abdul-Aziz 2012). The PPP in housing transfers has largely escaped academic research (Payne 2000) and has yet to have different spaces in both theory and application (Sengupta, 2005). Thus, the explanation factor for the successful delivery of PPP housing is still poorly understood especially in the context of developing countries such as Nigeria. The PPP initiative is in the early stages of most developing countries in the world, and its knowledge base has not yet been explored (Awodele et al. 2008). Supported by UN-HABITAT (2011), PPP housing programs in developing countries are rare, with little empirical data showing the trends of success. Moreover, PPP has become the major solution to housing challenges as stated in the literature that most countries in the world are now using PPP to tackle their housing problems (Ong and Lenard, 2002; Freut, 2005; UN-HABITAT, 2006b). Therefore, this studies tend to look at the success factors use by some countries like, Malaysia UK, India, Canada and Australia among others that successfully achieved in housing provision using success factor of PPP and apply to Nigeria.

II. LITERATURE REVIEW

Public housing provision in Nigeria as review by the literature, identifies three fundamental approached as used in the pass: government-assisted self-help housing, direct construction of housing units and slum clearance and upgrading initial to the inception of colonial rule in Nigeria. As observed by Mayaki (2003), government has not made any attempt to inshore the housing conditions. However, between 1973 and 1995 about 36 cases of slum clearance and upgrading were report in Nigeria (Agbola and Jinadu, 1997). The issue of slum clearance did not meet the aim of providing affordable housing in Nigeria as observed by UN-HABITAT (2006a), due to the insufficiency of funds to make available housing and services to displace people and unavailable of suitable land.

In 1970s government initiate self-help housing scheme through an arrangement with federal and state government and the World Bank. This arrangement is to help the low and middle income people to build their houses through the self-help efforts. Government had make available of about 24,397 plots through the institutional framework and counterpart funding. Due to the management limitation this programme was not extend to other state. The government made an attempt in 1986 to recue this programme through the national site and service scheme in Kano, Lagos, ondo, Kwara, Imo, Rivers state in conjunction with Abuja, the Federal capital of Nigeria (UN-HABITAT, 2006a). Land was provide and surveyed it into plots by the Federal Housing authority (FHA), the supervising agency. Also basic infrastructure (e.g. electricity, water and roads) was provide by the Federal Housing Authority (FHA), in some instances the government build core housing unit on the plot. Government spent almost N58 million (US 21.25 million) from 1986 – 1991 to provide 20,000 appropriate plots in 20 state of the country. However, the procedure of allocation this plot and high cost of the service plot give opportunity in favour of the government official and their partners, this assisted self-help scheme did not favor the low income group (Bana 1991; Mba 1992).

Consequently, the social provision of PPP depend on the concept that will take to reduce the government expenses (Brown et al., 2006) and the service provide at affordable price (Klijn & Koppenjan, 2000), with the reference above that stated were PPP used as social provision, its identify that government worked jointly with private organization providing adequate serviced to cut down the government spending.

However, no evidence recommending that the services provided were more affordable compared with other options, as proposing that PPP provision of affordable housing need more appraisal against this background, one can conclude that, PPP involve joint decision making, engagement of resources, sharing of duties, risk and benefit, division of labour and interdependence among stakeholders.

In housing provision, a study of PPP has been in different theoretical view (UN-HABITAT, 2006b). In view of this study, the significant of PPP is on rate of available housing provided together with affordable housing and accessibility in the PPP approach. PPP is proposing to boost the productivity and effectiveness of public housing sector through multi sectorial engagement within the framework of market strategies as it faithful in other social services provision (Mukhija, 2004; UN-HABITAT, 2006b). Apart from the volume of housing provided, one more issue concern of PPP beside the volume of housing provided, is how to improve on affordable housing.

Australian Housing and Research Institute (AHURI, 2004), stated that housing affordability refers to the scope of households to meet housing costs while maintaining the ability to meet other basic costs of living.

Therefore, it is generally accepted that affordable
housing is that which costs not more than between 25 per cent and 30 per cent of the household income (Aribigbola, 2008). Jimenez and Kieve (1993) and Oruwari (1993) noted that housing affordability is a observable idea that changes with time. This involve that it is an individual ability to see on how much households are set to pay for housing within the limit of their incomes. Evidence indicated that PPP had develop an affordable housing for the low income group in country like Malaysia, Australia Brazil and other developing countries (Ong&Lenard, 2002; Fruet, 2005; UN-HABITAT, 2006b). Affordable housing in the study observed as independent view on the ability to householder to pay for PPP providing affordable housing in Abuja.

Specifically, Nigeria and other developing countries brought about the fact that the government alone cannot solve the responsibility of providing adequate housing to the citizen’s couple with current situation. As confirm by (UNCHS 1992; World Bank 1993; Payne 1999; Ogu 2001; Mukhija 2004) that both the public and private sector not independently solve the problem of housing in the country.

Consequently, partnership between stakeholders in the housing sector have become certain (Obeng-Odoom 2009). As noted by African Ministerial Conference in Housing and Urban Development (2005), that most African countries should adopt PPP as a new perspectives to housing provision. As observed by Ikekpeazu (2004:30) and Owei (2007), Public–Private Partnership (PPP) has being searched in Nigeria as a solution to the current housing problem. Literature review discover the different PPP outcomes that are affected by the structure and attribute of the partnership. The study of Fruet (2005) and UN-HABITAT (2006b), indicate in spite of the fact that the result of PPP in housing provision different from one country to another, the responsibility of government organization, commercial private and non-beneficial private sector in the procedure were the key component with sufficient impact on the result of PPP for housing provision.

Consequently, the evaluation of PPP in housing provision in Abuja concentrate mostly on the structure and composition of the PPPs as well as the scope to which PPP housing schemes have solve the problems of inadequate housing supply, affordable housing and accessibility.

A. Public Private Partnership Housing Provision In Nigeria.

Public private partnership application for housing provision is not new in Nigeria, it was established at about seventeen years ago when the country officially adopted the method in public housing provision. Nigeria launched the New National Housing and Urban Development Policy (NNHUP) in 2002 under the leadership of olusegun Obasanjo and recognize the PPP as alternative to housing provision. The emphasis shift from the government provider approach is informed by the failure of the past efforts of the successive governments to address the growing urban housing crisis in the country. Therefore, the government sees the need to promote access to good, safe and clean housing accommodation at affordable price through a private sector-led initiative. It has been explained in this policy document that the adoption of the PPP approach to public housing is to ensure that the private sector plays a more active role in solving the problem of serious housing costs in the country. This is why most housing projects in the country are currently being implemented through the PPP approach. There are three main PPP drivers in Nigeria.

Nigeria has three key control of PPP for housing provision. High urbanization rate is the first driver, which contributes to the growing demand for housing beyond the public and private sectors that can meet freely. Second driver, the constrain of budgetary allocation and other competitive demands, the need to ease the government’s burden of financing the provision of public housing (Ibem and Aduwo, 2012). The third driver is the identification that the private sector has great potential in meeting the needs of housing because of its large human and financial resources. UN-HABITAT (2006a) stated that more that 80 percent of housing provision in Nigeria is provided by private sectors. On the basis of this, it is general believed that solution to low income housing by PPP is to create a surroundings that will permit privates and non-commercial private sectors organizations to fully profit to handle the actual production of UN-HABITAT housing units, 2006b).

This is in line with the approaches that enable housing and infrastructure to provide, which have obtained world acceptance and record important results in many developing countries such as Malaysia, Australia, India, Brazil and the Philippines among others to mention these. With the application of PPP in Nigeria in the recent time. Some of the PPP attribute in the country experience can be mention. The first attribute is that in spite the fact that the NNHUP has provide a legal framework for adoption of public private partnership in housing in Nigeria, current practice disclose that other laws have been designed to regulate the activities of PPP’s housing provision and infrastructure project operators in the country. Among them are the Infrastructure Concession Regulatory Commission (ICRC). Act 2005; The National Policy on Public-Private Partnership in Nigeria launched in 2009, the Public Procurement Act 2007; PPP Guidelines issued by the ICRC governing PPP ICRC, 2012), the Land Use Act 1978 as amended in 2004 and various “PPP Manuals and Guidelines. The deduction of this law is formulated to ensure PPP’s efforts in this country are implemented in the framework of the procedures set forth and adhere to global best practices in promoting equity, transparency and value for money. In fact, they are part of the government’s efforts to ensure there are promising policies and regulations for the implementation of PPP projects in Nigeria (Federal Republic of Nigeria (FRN), 2009).

In addition, Ibem (2010) has revealed that PPP housing projects are usually implemented based on the
Memorandum of Understanding (MOU) signed by all partners in the PPP housing project. The MOU is considered as an operational document and law that establishes PPP and helps to guide their operations on each project. Among other things, MOU reflects the nature and structure of housing projects, the role of partners and their contribution and equity benefits (Ibem, 2011a). There is also a development lease agreement (DLA), this is part of an operational document signed by a partner to PPP housing project in Nigeria. DLA represents the commitment of all parties to ensure that PPP housing projects are successfully executed according to the specifications outlined in the MOU.

There is need to state the important that apart from the generic laws in the PPP, MOU and DLA industries are the most common instruments used by PPP use operators in the implementation of PPP housing projects in Nigeria. It is important to note here. As a result, many operators and observers see these documents as a replacement for the PPP housing base in Nigeria. Unfortunately, this should not be repeatedly noted that these operating documents are full of difficulties in terms of enforcement by partners in PPP housing projects.

The second major feature that can illustrate Nigeria’s PPP experience in housing is the institutional framework for the implementation of PPP housing projects. The NNHUP has provide a legal framework for establishing an organization that can represent an established private sector in PPP housing projects in recognition of the importance of a strong institutional framework in the effective delivery of housing. Nigeria Property Developers Association (REDAN), the Nigeria Building Materials Manufacturers Association (BUMPAN) and the main mortgage institution (PMI) are the three major private sector organization set up under the policy instrument. The establishment was established primarily to work with ministries, departments and government agencies (MDAs) in the provision of public housing. However, careful study of PPP institutional framework in housing in Nigeria can be seen that there is an active involvement of federal and state government bodies (eg Ministries, ICRCs, Federal Housing Authorities, National Housing Companies); private housing developer (developer of commercial real estate); financiers (e.g., commercial banks, Nigeria Federal Mortgage Bank, major mortgage institution; physical development control unit) in the implementation of PPP housing projects. sadly, unlike other countries like Malaysia, Australia and Canada, where local government authorities, housing co-operatives and other non-governmental organizations (NGOs), community-based organizations (CBOs) represent the interests of low-income people to play an active role, had seen the involvement of this organization category in PPP housing projects in Nigeria (Ibem and Alagbe, 2015). Furthermore, despite the fact that BUMPAN is special established to become an active participant in the PPP housing project, its members are also not actively involved as partners in PPP housing projects in Nigeria. As a result, the government's intention to reduce the cost of building materials in the PPP housing project through BUMPAN's involvement has yet to be achieved. This means that PPPs in housing in Nigeria are largely a joint effort between government agencies, REDAN members and financial institutions.

Consequently, the agreement among authors is that PPPs in housing do not provide any significant contribution to solving the challenges of urban housing in Nigeria, especially among low-income households. This development has been linked to several factors. This includes a lack of uniform National Policy on PPP in housing in Nigeria, relying more on a joint venture model that encourages the government to hold equity holders and share profits from PPP housing projects; high interest rates on loans used to finance PPP housing projects and high cost building materials and construction equipment. Others are the lack of adequate incentives for private sector partners, the use of high standard buildings and non-involvement of local government authorities and private sector organizations not for profit in PPP housing projects (Ibem, 2011a, Ukoje and Kanu, 2014). These background explain why PPP's experience in the Nigerian housing sector is dominated by housing for high-income and middle-income earners. This experience varies to other developing country like Malaysia (Abdul-Aziz et al., 2011), the Philippines (UN-HABITAT, 2006b) and Brazil (Fruet, 2005), that made is contrary to experience in other developing countries such as which have made significant advancement in their housing low - income population through PPP choice.

Based on Malaysia, UK, Canada, India and Australia system of PPP for affordable housing to solve the problem of housing in their country, this study tends to develop a framework that uses the success factors of Malaysia, UK, Canada, India and Australia to determine, assess for completion and suggesting a solution to the problem of Nigerian housing i.e. the Abuja capital of Nigeria where there is rapid urban migration and rising population leading to high cost of living, high rental costs, and high housing costs (Morka, 2014). Therefore, the knowledge gap is an understanding of the situation that the investigation intends to achieve

B. Housing In Abuja

According to Isma'il et al. 2014 Abuja the Capital Federal Territory of Nigeria comprising most government headquarters and government parastatals, a number of private firms, foreign organizations and investors, offices and companies. It is an area of great development, with the majority of offices, headquarters and firms located in the federal capital. Due to the level of development, the high number of municipalities by people not only moved from rural areas, but also by people moving from other parts of the states to Abuja to find a better job. As the metropolitan economy continues to improve, the public gets and continues to become richer.
Connecting with the rush of people from various parts of the country, housing and land are seen by rich individuals as consecutive materials and therefore bought and built in the most central city. As identified by Logan and Molotch (1976), land entrepreneurs, including: Landlords, Entrepreneurs Developers, Transport and Utility Companies, Banks and Companies, and others, consider the home as a place of residence, but also as a product in the property market, which can be bought and exchanged, thereby providing exchange and use value for producers (entrepreneurs) and consumers (consumers), and therefore try, through collective action and in most cases in federation with other operators, to create conditions that will increase the future use of land in an area. Therefore, Abuja is now a city with buildings, scenarios, offices, organizations, parks, open spaces, and so forth, but also the city whose housing is very expensive even for people working in this city, except those in high class and some individuals in upper middle class society. There are several types of housing in the city, consisting of luxury homes, duplexes, bungalows and apartment blocks but all are very costly. Due to the continued influx of people to the city, the Government and some private investors have built and are still building plantations and housing developments in FCT to accommodate the growing population. The Master Plan contains proposals for housing programs that combined with subsidies to the housing sector, offer strategies to improve housing conditions in other urban areas of Nigeria. This program is based on the following principles:

1. Efficient layout of plots and appropriate infrastructure standards allow for increased standards when increasing economic capacity
2. A wide range of housing options for all income groups, from separate homes, flats, to a large number of traditional families, or home-dwelling accommodation and accommodation services Increasing dependence on local building materials, reducing the finishing level and careful management controls to ensure that construction costs are reduced and maintained at the lowest levels
3. Site and service approach, use of self-service and self-help services to reduce costs.

Today, the development of housing in Abuja has completely changed the direction of the proposed master plan proposals for housing programs that offer strategies to improve housing conditions in urban areas in Nigeria. The category of housing options in the city does not support all income groups. Although there are different home designs, which have been developed by individuals and private investors who have acquired land at very high levels of government and hence the cost of rent for these buildings is on the high side, coupled with the cost of construction and finishing population. Sometimes there is increased reliance on local building materials and the use of self-help and self-service services / modes. Currently, in the Abuja central area, the construction of many buildings and houses is done by various foreign and foreign construction companies, for example, Julius Berger, and with the use of foreign building materials, which are becoming more expensive and inexpensive housing by the low-income group and low. Hence, and the high population of other parts of the country seeking better sources of income, the government has participated in several large housing projects to accommodate the growing federal population.

C. Affordable Housing Units Constructed In Nigeria

The main component of the successful housing delivery program is the ability of the housing unit to target consumers. Housing is reasonable only when it does not cost more than 30% of the household income incurred (Andrew, 1998). Therefore, affordability of housing is a function of housing and household income. Therefore, this section attempts to determine the affordability of housing units built in the study area by linking household income to home prices. The question asked about housing prices is: what is the selling price of the housing unit? There was a voice response among the representatives of major actors (government agencies and the private sector), that the houses were sold at a higher price than originally agreed. The estate manager representing Terracquest Development Company Limited (ESM) said: "... house units will be built at N3.4 million for 2 bedrooms and N4.95 million for 3 bedrooms but because the government cannot provide funds for private sector infrastructure had to borrow a separate fund to finance the infrastructure, as a result, prices rose from N3.4 million to N4.2 million (2 semi semi-detached houses) and N4.95 million to N5.9 million (3 twin bedrooms) to accommodate the spent on providing infrastructure ". In a similar vein, ADH, said:

"The State Government cannot provide such a pre-agreed infrastructure; private companies do so. The government cannot pay the amount spent;
   companies are advised to factor infrastructure costs into housing costs which then raise prices from N3.4 million to N4.2 million (2 semi semi-detached houses) and N4.95 million to N5.9 million for 3 bedrooms. “Concluded from the fact that after completion of housing units, prices rose by about 23.5% and 19% for 2 semi-detached and 3 separate bedrooms. In addition, the government lost control of the project due to its inability to carry out its responsibilities as contained in the contractual arrangement, therefore, the initial arrangement that the payee will pay 10% and 20% of the advance payment (for 2 semi semi-detached and 3 bedrooms respectively) while FMBN will pay the balance to be repaid from the household's salary through the installment deduction cannot be held (ADH & MGO). The target group is unable to pay openly because of a low salary structure; As a result, Zahl-housing units are still vacant for some time and some homes have been demolished. As a result, the State Government advises private developers to search for buyers and dispose of housing units. Hence, private companies have
devised four ways to dispose of housing units that are open to the public. These include: 1) payment of 10% and 20% of the total cost of housing as a deposit for 2 3 bedroom bedrooms; 2) Rent (between N60,000 - N70,000 per annum for 2 semi-detached rooms and N80,000 - N100,000 per annum for 3 separate bedrooms); and 3) open sales for those who can afford it. The 2 bedroom semi-detached housing cost is N4,2 million which will be paid within 30 years which amounts to N140,000 a year; 30% of the annual income of beneficiaries earning the N420, 00 will amount to N126, 00 which is much lower than the amount required as an annual repayment for housing. During the interview, representatives of the beneficiaries have agreed unanimously, that the prices of housing units cannot be estimated as the level of income of civil servants in the study area. Thus, this indicates that housing units built under this rule fail in the ability test. Ibe and Adewo (2012) have reported in a similar study conducted in Ogun State, Nigeria, that the cost of housing units built through PPP is much higher than those constructed through non-PPP arrangements. In addition to the cost of home units, beneficiaries are often required to provide sureties and meet other conditions to qualify for mortgage loans which are always difficult for them to meet. One of the reasons for adopting PPPs for the provision of housing that is contrary to the direct approach is to make housing more affordable to the target group. However, studies show that the housing units provided are unavailable to most low-income people.

D. Critical Success Factors Of Public-Private Partnership Projects

Several researchers have investigated and developed different lists of CSFs for different PPP projects. For instance, Tam (1999) identified factors influencing the performance of BOT infrastructure development in Asia. Akintoye et al. (2003) identified success factors that contribute to the achievement of the best value in PFI projects in the UK. On the other hand, Qiao et al. (2001) identified CSFs for Build-Own-Transfer (BOT) projects in China. Jefferies et al. (2002) identified CSFs from the reflection of an Australian sports stadium project; Jamali (2004a) identified CSFs for PPP implementation in the telecommunications sector of Lebanon.

Looking at the factors contributing to PPP projects, Kwak et al. (2009) identified four CSFs from the extensive review of research studies from different administrative jurisdictions. Helmy (2011) identifies critical success factors for PPP projects in Kuwait. From an extensive review of literature and interview with experts, Zhang et al. (2001) also identified factors leading to the success of power projects. El-Sawalhi and Mansour (2014) also explored the critical success factors for PPP projects in Palestine. Gives a summary of critical success factors identified in the reviewed literature.

Given the complementarity among the lists of factors developed in the normative literature, many authors attempted to categorize CSFs into broad categories of principal success factors each with a list of success sub-factors. The categorization is to show the relationship between inter-related variables (Kleinbaum et al. 1998; Norusis 2008). For instance, Hardcastle et al. (2005) conducted a survey of managers and directors of organizations in the UK that were involved in PPP projects to investigate key success factors for public-private partnerships. The authors found that, using factor analysis method, the critical success factors can be grouped into five clusters. Other authors have also developed a similar categorization of CSFs although with some modification. For instance, Li et al. (2005) identified five groups of CSFs for PPP/PFI projects in UK construction industry, Zhang (2005) classified CSFs for PPP infrastructure development in general into five groups. Kwak et al. (2009) also identified four CSFs from the extensive literature review of research studies on PPP. In a related study, Chan et al. (2010) identified CSFs for PPP infrastructure projects in China which they grouped into seven categories of principal success factors See Tab. 2.2.

However, this study tend to use the concept of this success factors to see his significant in contribution to Nigerian PPP for affordable housing. Table: 2.2 Identification of success factors of PPP projects

<table>
<thead>
<tr>
<th>Success Factors</th>
<th>Meaning</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Right to develop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Right to determine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment/ responsibility of public/private sectors</td>
<td>a) Transparency in operation</td>
<td>Li et al., 2005; Jacobson and Choi, 2008; Ismail, 2013; Ameyan and Chan, 2015</td>
</tr>
<tr>
<td>b) Trained staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Technical Feasibility</td>
<td>In PPP procurement contracts, the feasibility study should review the technical requirements of the project and ensure any engineering uncertainties are resolved.</td>
<td>Tiong (1996); Zantke and Mangels (1999);</td>
</tr>
<tr>
<td>Technology transfer</td>
<td>Technology transfer is the transfer of knowledge and experience (Chung, 2001) that allows the company to provide</td>
<td>Chou &amp; Pramudawardhani (2015);</td>
</tr>
<tr>
<td>Good governance</td>
<td>It is the act of steering the policies and affairs of a nation, an organisation or project (Robinson et al., 2010). It relates to the quality and effectiveness of government institutions for transforming policy into successful implementation</td>
<td>Ismail, 2013</td>
</tr>
<tr>
<td>Competitive procurement process</td>
<td>Competition is very important when private sector enterprises are struggling to monopolise the provision of public infrastructure and services through a long-term public-private partnership (The World Bank 1997).</td>
<td>Gentry and Fernandez (1997); Kopp (1997); Arthur Andersen and Enterprise LSE (2000); Jefferies et al. (2002)</td>
</tr>
<tr>
<td>Transparency procurement process</td>
<td>This involves the use of market mechanisms for the delivery of public infrastructure and service (Greve &amp; Hodge, 2011).</td>
<td>Gentry and Fernandez (1997); Kopp (1997)</td>
</tr>
<tr>
<td>Financial capability</td>
<td>The public partner should exercise due diligence to review the financial viability and confirm the availability of the expected resources for a project.</td>
<td>Jefferies (2002), Zhang (2005)</td>
</tr>
<tr>
<td>Available financial market</td>
<td>Availability of mature financial market with a diversified range of financial services will lower financing costs thereby attracting private investors to PPP projects (Cheung, et al. 2012).</td>
<td>Li et al., 2005; Cheung, Chan and Kajewski, 2012; Ismail, 2013; Ameyan and Chan, 2015</td>
</tr>
<tr>
<td>Stable macro-economic conditions</td>
<td>The macroeconomic parameters that affect the economy of a nation include interest rate, exchange rate, inflation, and cost of labor and materials (Keong et al. 1997).</td>
<td>Jacobson and Choi, 2008</td>
</tr>
<tr>
<td>Involvement</td>
<td>a) Campaign activities</td>
<td>Zhang, 2005</td>
</tr>
</tbody>
</table>

| An efficient approval process | The public agency provides policy framework and development guidelines (Adusumilli, 1999); and streamline the approval process (Griffin 2004) in PPP. | Jefferies, Gameson and Rowlinson, 2002 |
| Sound economic policy | a) Real Gross Domestic Product (GDP) b) The Unemployment Rate c) The Stock Market d) The Interest Rate | Cheung, Chan and Kajewski, 2012; Ismail, 2013 |
| Stable Political Environment | The instability of political situation particularly in developing countries of the world endanger more frequent changes in government policies which affect the success of PPP (Wong, 2007). This stability relies on host government. | Cheung, Chan and Kajewski, 2012 |
| Strong political support | Successful partnership requires strong political leadership (NCPPP). Cultural patterns has heavily influence the acceptance of tolling by the public. In many countries free access to all public roads constitutes a traditional element of freedom, and as such, tolling | Wibowo and Alfen, 2014; Ameyan and Chan, 2015 |
### Critical Success Factors of Public Private Partnership for Affordable Housing in Nigeria

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government guarantee</td>
<td>The public sector agency is required to provide guarantee and exercise control especially where accountability is required; or where societal norms need to be protected.</td>
<td>Hemming (2006a), Jamali (2004b), Atmo &amp; Duffield (2014).</td>
</tr>
<tr>
<td>Strong Government support</td>
<td>Strong government support by providing additional source of financing the project and other means such as: Faster program approvals, lower land premiums, infrastructure cost subsidies, relaxation of housing standards and concessions for financial contributions to utilities, and tax breaks to encourage private sector participation in low-income housing.</td>
<td>Ibem, 2010</td>
</tr>
<tr>
<td>Consistent monitoring</td>
<td>As a continuous monitoring of control mechanisms, public agencies monitor the performance of their private partners to ensure they do not deviate from the agreement on agreed outputs and behaviors.</td>
<td>Abdul-Aziz and Kassim (2011)</td>
</tr>
<tr>
<td>True partnership</td>
<td>Trust among the partners</td>
<td>Cartlidge, 2006</td>
</tr>
<tr>
<td>Supportive community</td>
<td>The community supports the development of PPP in specific regions.</td>
<td>Cheung, Chan and Kajewski, 2012</td>
</tr>
</tbody>
</table>

### III. METHODOLOGY

This study is using exploratory sequential mixed methods, the purpose of the design of exploratory sequential mixed design methods involves the first qualitative data collection procedure to explore the phenomenon, and then collect quantitative data to clarify the relationships inherent in qualitative data.

The study used a focus group discussion with PPP experts and identified relevant success factors for the delivery of affordable PPP housing in Nigeria as determined from the literature. The professional background of the group interviews has been determined by their understanding of the PPP project. A pilot survey is under way to examine the effectiveness of the research instrument using Cronbach Alpha and Kaiser-Meyer-Olkin statistical methods. The instrument was considered reliable and effective when preparing the questionnaire.

As described by Kumar (2005), the questionnaire project should be produced through a literature review and validated through focus group interviews and tested before being used for comprehensive data collection. The questionnaire was distributed to stakeholders of public and private developers involved in PPP housing supply in Abuja, Nigeria. A total of 350 questionnaires was randomly assigned to the target of respondents (Stakeholders from both public and private sector officials) that participated in the PPP housing and real estate developers at FCT out of which 254 questionnaire were return. Data from questionnaire surveys were analyzed using the Statistical Package for Social Science (SPSS) software for factor analysis and smart PLS is used to analysis the data.

### IV. RESULTS AND FINDINGS
**Table 5.5** Composite Reliability and Convergent Validity of Public Private Partnership problems Model

<table>
<thead>
<tr>
<th>1st order Construct</th>
<th>2nd order Construct</th>
<th>Items</th>
<th>Measurement Model Type</th>
<th>Loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Legal Framework</td>
<td>ALF2</td>
<td>Reflective</td>
<td>0.695</td>
<td>0.881</td>
<td>0.514</td>
<td></td>
</tr>
<tr>
<td>ALF4</td>
<td>0.705</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALF5</td>
<td>0.738</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALF6</td>
<td>0.708</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALF7</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALF8</td>
<td>0.710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALF9</td>
<td>0.719</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective procurement process</td>
<td>EPP1</td>
<td>Reflective</td>
<td>0.844</td>
<td>0.880</td>
<td>0.710</td>
<td></td>
</tr>
<tr>
<td>EPP2</td>
<td>0.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPP3</td>
<td>0.855</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound Financial Package</td>
<td>SFP1</td>
<td>Reflective</td>
<td>0.753</td>
<td>0.901</td>
<td>0.503</td>
<td></td>
</tr>
<tr>
<td>SFP2</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFP3</td>
<td>0.805</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFP4</td>
<td>0.799</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFP5</td>
<td>0.697</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Economic Viability</td>
<td>PEV1</td>
<td>Reflective</td>
<td>0.775</td>
<td>0.874</td>
<td>0.634</td>
<td></td>
</tr>
<tr>
<td>PEV2</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEV3</td>
<td>0.830</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEV4</td>
<td>0.722</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 5.6** Convergent validity

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
<th>Average Variance (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALF</td>
<td>0.881</td>
<td>0.514</td>
</tr>
<tr>
<td>EPP_</td>
<td>0.880</td>
<td>0.710</td>
</tr>
<tr>
<td>JGC</td>
<td>0.901</td>
<td>0.503</td>
</tr>
<tr>
<td>PEV</td>
<td>0.874</td>
<td>0.634</td>
</tr>
<tr>
<td>SFP</td>
<td>0.874</td>
<td>0.581</td>
</tr>
<tr>
<td>SPS</td>
<td>0.878</td>
<td>0.592</td>
</tr>
</tbody>
</table>

**Fig 5.5** shows the critical success factors of public private partnership having a second order. Construct, Tables 5.5 and Table 5.6 Represents composite reliability, convergence validity and discriminant validity. Reflective measurement model of the appropriate legal framework, effective procurement process, sound financial package, project economic viability, judicial government control, & strong private sector when analyzing composite reliability adequate legal framework had nine indicators, effective procurement process had three indicators, sound financial package also had five indicators, project economic viability has four indicators, judicial government control has thirteen indicators and strong private sector has five indicators.

With all the indicators of the constructs included, the result indicate that reliability values fell below the accepted minimum value from two construct, adequate legal framework and judicial government control. therefore, two items were remove from adequate legal framework that include (ALF1 and ALF3), after removing this items the composite reliability values of Adequate legal framework has now increase to a strong acceptable value of (0.881). While in Judicial government control four items were remove that include (JGC1, JGC4, JGC6 and JGC13), the
Critical Success Factors of Public Private Partnership for Affordable Housing in Nigeria

The main reason PPP in housing is to provide adequate and affordable housing for all income groups. As a research findings, PPPs Is facing a tremendous problems of housing provision in the study area, this include the acquisition and access to land, poor implementation of housing policies, adequate housing finance, difficulty of accessibility to mortgage facilities and land titles, Massive rural urban migration and cost recovery among others. Just like the previous public housing delivery strategy, this approach is skewed towards providing housing for high- and middle-income earners in Abuja and other part of Nigerian. However, the provision of affordable housing has not yet been reached in the study area. The point that there is no consensus on the State Policy on PPP in housing in Nigeria is anxiety. Since PPP for affordable housing in Abuja Nigeria is unclear. Hence, it shows that PPP practices for affordable housing are then regarded as governance controls as the main component of affordable housing. It is therefore recommended that a good policy framework for the implementation of other variants of PPPs in meeting the affordable housing in Nigeria should be consider on the constituent parameter of affordable housing. First of all, it will wipe out all the underlying constraints that cannot define local government authorities and grassroots organizations in PPP for affordable housing, and then provide the needs of different socioeconomic groups in the country's sub sector of housing in Nigeria. Land allocation and government rights documents at premium cost add to the cost of housing provided by PPP.

To this end, the government may consider providing free land for affordable housing to ensure the ability and profitability of commercial private sector partners. We can also follow Malaysia's example of providing affordable housing for all income groups, so that cheaper and local materials can be used instead of expensive and imported in building affordable housing units. Likewise, self-help options and government-assisted housing options should be included in the PPP housing scheme to provide more affordable housing for all income group at a reasonable amount.

Public private partnership Contribution (PPP) although the current mortgage arrangement in the National Housing Fund (NHF) is commendable, there is still much to be done to facilitate easy access by Nigerians to mortgage facilities. This refers to the provision of fast facilities to qualified applicants. In addition, funds from the contribution pension scheme can be injected into affordable housing under PPP arrangements to enable low-income group and people interested in gaining access to affordable housing through their pension contributions. There is also an urgent need to empower the low income people financially by providing them with more job opportunities. This can be achieved through a multi-sectorial approach to agriculture, manufacturing, education, better acquisition of skills and wages and should be targeted towards providing this Nigerian economic group the necessary economic power to acquire a decent housing unit. Finally, since the PPP is a relatively new approach to public housing in Nigeria, some initial challenges are expected. Therefore, its implementation should incorporate the recommendations made in this paper to ensure better return on affordable housing for all income groups.

ACKNOWLEDGEMENTS

The author is grateful to Almighty Allah for giving me ability to write this paper. A special honour to my supervisor Ass. Prof Dr. Ibrahim Atan Bin Sipan of Department of Property Management, Faculty of Built Environment and surveying, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia for given me his time, full support in sharing his knowledge to make me understand the process of research. I want to thank organization for sending me to Malaysia to acquire new knowledge and lastly, I want to thank the UTM for admitting me as a research student of this great institution of learning, i
say thank you UTM.

REFERENCE

[8] outcomes for low-come group: A comparative analysis of housing sector between Malaysia and
[15] on ‘financing housing and urban development: with special reference to Africa’ issued at the end
[19] institute of information technology. neada India.
[34] in Public Private Partnerships in
[38] Australian Housing and Research Institute (AHURI) (2004) Measuring housing affordability, AHURI
[41] development in developing economies-the Nigerian experience. In the construction and building
[42] research conference of the royal institution of chartered surveyors. Dublin.
tidge/dp/B007Y2VSZK.
Critical Success Factors of Public Private Partnership for Affordable Housing in Nigeria

Hardcastle, C. et al., 2005. Critical Success Factors for PPP/PFI Projects in the UK Construction Industry:


Helmy, M.A., 2011 investigating the critical success factors for ppp projects in kuwau royal institute of technology, Stockholm.

Hemmung,R.,2006a., private-public partnership in realizing the potential for profitable investment in Africa. Tunis, Tunisia: organized by the IMF institute and the joint Africa institute, p.15.


Jimiez, E. & Kieve, H. (1983) Progressive development and affordability in the design of urban shelter


Lai, B. et al., 2005a. Critical success factor for PPP/PFI projects in the UK construction industry construction


Mayaki, S. S. (2003). Private sector involvement in mass housing: The way forward. Housing Today-

Journal of the Association of Housing Corporations of Nigeria, 1(7), 34.


Awka: Mekslink Publishers Nigeria.


[102]Ong, H.C. & lenard, D., 2002.can private finance be applied in the provision of housing


Access to Affordable Housing in Malaysia. Paper presented at FIG XXII.


[114]Ong, H.C. & lenard, D., 2002.can private finance be applied in the provision of housing


[119]Rondineilli, D.A (1990) Housing the urban poor in developing countries: other policy options for national


projects’. Journal of Construction Engineering and Management, 122: 3, 205-211.


AUTHORS PROFILE.

Yahaya Ahmed from Faculty of Built Environment and surveying, Department of Property Development, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia. My area of interest is governance issues.

I am Ibrahim Atan Bin Sipan from Faculty of Built Environment and surveying, Department of Property Development, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia. My area of interest is corporate sustainability.