ABSTRACT

The perspective review of this study is the issue of public private partnership with regard to the approached of which it has become more important in upgrading an affordable housing provision in Nigeria. Furthermore, this study aims to identify the challenges of public private partnership for affordable housing provision and proffer an alternative means of providing an affordable housing in Nigeria. Based on previous studies public private partnership has not made any important contribution to affordable housing; rather it is unexpectedly change approached by providing housing for high-income earners. Data were achieved using an expert opinion to identify the PPP problems and critical success factors to build up questionnaire survey. In total, 256 responses were obtained and analyzed using statistical tools to identify the challenges of public private partnership for housing provision in Abuja. This study found that lack of sound legal framework, a paucity of funds, lack of experience in PPP, funding constraints, and lack of proper monitoring are the major challenges of public private partnership housing provision. Furthermore, this study also found that adequate legal framework, sound financial package and judicious government control are the success factors of affordable housing in Nigeria. Therefore, this article indicate that self-help options and government assisted housing options, accessibility by Nigerians to mortgage facilities, funds from the contribution pension scheme, provision of land at no cost should be considered in the PPP housing scheme. However, it’s recommended that a good framework is required on the constituent factors of PPP for affordable housing using the adequate legal framework, sound financial package and judicious government control.

Keywords: Affordable housing, Public Private Partnership, Abuja, Nigeria
Introduction

Just like most places in the world, Nigeria faces many difficulties in providing adequate housing development. The government has made several trials in the past few decades to address the current housing problem for all income groups that are the majority of urban residents in Nigeria (Federal Republic of Nigeria, 1991). However, Awotona (1990) and Oruwari (2006) observed government failures over the years to address the rapid increase in housing problems, especially among the lower income groups. Aluko and Amidu (2006) illustrate that low-income groups represent all wage earners and self-employed people whose annual income is 20% or below the maximum annual income level of the highest wage level in the Specific Public Service Structure in Nigeria. The group comprises people earning an average annual income of approximately N 1414,912 (the US $ 2,861.5) or less and is now estimated to be 80% of the Nigerian population of 60 million). However, the UN Centre for Human Settlements report shows that housing failure is becoming more critical especially as cities such as Abuja and Lagos (UN-HABITAT, 2006; World Bank, 1993), contributing to 100 slums with poor housing and living conditions with most low-income groups between 1985 and 2006 (Ibem, 2011). According to Ibem (2011), several factors that contribute to the increase in housing difficulties, including skills & acquisition issues, institutional problems, financial problems, legal frameworks and political problems are a major element of the housing crisis in sub-Saharan Africa.

African countries cannot cope with the crisis of protection because of our inefficiency or even refuse to accept change and transform our organization closer and our values to the ever-changing positive situation. Wibowo & Aifen (2015) and Kavishe, 2018, suggests that both the public and private sectors in the African region have occupied an incorrect organizational framework and a non-functional housing delivery system in the past, and hence, the housing challenges in the continent have increased rapidly. Among the international developments, the United Nations Global Strategic Organization Shelter has called on the government to withdraw from housing as it cannot meet the growing demand for housing, as the government's failure to provide an approach to addressing quantitative and qualitative deficiencies and housing challenges affordable in many less developed countries (Ahmed and Sipan, 2019ª; Ameyaw, & Chan, 2015).

One of the recommended UN solutions is that the Nigerian government has to put more responsibility for housing provision in the private sector through Public-Private-Partnerships (PPPs) (Ibem1 and Aduwo, 2012). Miraftab (2004) finds that public-Private Partnerships (PPPs) are recognized as an arrangement and an approach of alternative institutions that can be seen to make public services to cities in developing countries. In the provision of housing, PPP is promoted on the assumption that it will increase the interest of sectors, housing sector capabilities, and the expansion of housing capabilities and facilities (Shelter Afrique, 2008). Satisfied with this visible benefit, the Nigerian government in 2004 adopted the PPP to propose an increase in housing supply in the country (Owei, 2007). In the cities of Abuja and Lagos, for example, there is a change in service through the PPP approach, particularly in the areas of housing development, solid waste management and transportation. The government believes that the PPP involved will improve efficiency in public administration and service delivery through injection of private and professional funds (Lagos State Government, 2008). However, to date, there is little evidence to prove how PPP has addressed housing problems in the cities as there is very little research that can be proven on the matter. Thus, the success of PPP projects is determined by the critical success factors of PPP.
This background study is to identify the PPP problem and determine the CSF PPP for affordable housing in Nigeria. This study aims to review the problems and success of PPP in the provision of affordable housing in Abuja Nigeria. Based on the findings, this paper provides recommendations for better PPP outcomes for affordable housing in Abuja and other cities in Nigeria.

Nature of Nigeria’s Housing problems.

Housing problems have been generally accepted as an increase and complex. In the spectrum of these problems, one can identify quantitative and qualitative shortcomings. (Abiodun, 1985) quoted by Olayiwola et al. (2005). Identify major housing problems in Nigeria due to the instability of human needs for housing. This problem is worldwide and its recurrence. Actually, it is doubtful if any country in the world can satisfy its housing needs satisfactorily. In Nigeria, most people live in low quality housing and in a clean environment. This inadequate housing problem has been compounded by rapid urbanization and economic growth. Housing problems are more serious for low-income groups where the problem has been complicated by rapid growth, rising property value, speculative activity, poor immigrant entry and lack of planning (Ibem 2011). One can also be a growing place in the form and design of housing from home forms to single-family homes and forms as factors responsible for poor housing shortages for the low income group (Okpala, 1985; Waziri and Roosli, 2013). Inadequate housing problems are experienced in the urban and rural areas of Nigeria. For example, NISER in rural housing studies in nine countries in southern Nigeria found that "the predicted demand for housing units on average six for one residential unit for nine states was 5.2 million in 1990, 7.0 million in 2000, 9.5 million in 2010 and 12.7m in 2020." Other manifestations of housing problems are high rent in the housing market, inadequate mortgage finance, and mortgage loan facilities. This problem has caused congestion, inadequate socio-social facilities, unsustainable social and economic conditions and urban poverty, an absence of open space, land area development resulting in congestion, facilities in residential areas, and inadequate Building materials (Onibokun, 1985) quoted by Olayiwola, O Adeleye (1985).

Affordable Housing Need and Productive Demand

With increased population and inland urban migration in Nigeria, affordable housing issues are a basic necessity for individuals to enjoy. Affordable housing is described as housing for rent or purchase that is affordable for all income groups. Household constraints with the proportionate financial capacity to secure private housing constrained (Milligan, 2009). The gap between housing demand and the ability to acquire. There is a gap between affordable housing requirements and the ability to effectively acquire housing needs with the challenge of affordable housing demand in the country (Woetzel et al, 2014; Yap and Hua, 2017).

Housing Demand

There is no limit to claiming regardless of those who have housing and those who do not have a home still need more, those who still need more rooms or improve the current situation. However, there is a demanding challenge that affects the needs and wants of the people, with related financial problems. An Inconsistency of housing demand and provision of housing supply in Nigeria that faces rapid population growth, the rapidly developing township of the non-built financing system (Walley, 2014). There are some economic factors that cause demand, such as rural urban migration and increased
economic activity which leads to increased demand for labour (Finmarktrust, 2010). The violation of the government’s efforts to provide housing and realize achievements during the period was uncontrolled and worsened by population growth of around 42 million in 1960 and around 200 million in 2016. Temporary housing expenditure is about 100,000 units per year, as well as the need for around 700,000 units each year and that has increased the total housing deficit to about 23 million units (ACEC, 2015). In addition, in some major urban areas (such as Abuja, Kano, Logos, and Kaduna), the increase in housing demand is about 20% per annum (Okonjo-Iweala, 2014). Vision development strategy aimed at building 10,398,650 housing between 2012 and 2020 (Odia, 2010). However, the number of Nigerians living in urban areas between the 1930s was 7% and 10% in the 1950s while 20%, 27%, and 35% between the 1970s and 1990s (Ajibola & Sanmi, 2015). The number of Nigerians living in urban areas has now risen to 50% causing some problems that resulted in housing shortages, the congestion of nearly 60% of Niger’s unmarried people (FGN, 2013).

Housing supply

Views of housing supplies in Nigeria can be based on formal and informal sectors. Formally refers to supply from the private sector and various elements of the public sector. Common problems stop the world city boom from losing this opportunity. Although there is a divergence scale, the limitation of providing more affordable housing is very similar worldwide and regionally. This can be categorized as a barrier that leads to a lack of demand and restricts the ability of developers to produce sufficient numbers and prices for the mass market (Walley, 2014).

There are many challenges in the supply side, especially access to land rights and property rights lacking the housing industry to produce in large quantities of affordable housing. Regulatory obstacles, such as challenges in the registration of obsolete building codes or building codes, and the time and cost of constructing the limit of home-limited advertising limitations (Olotuah and Aiyeta, 2015). Developers find it difficult to access suitable and long-term financing and may be required by the lender to provide the document as a potential feasibility study based on the financial status in the field. Effectively, the housing industry is hindered as borrowers are unwilling to take risks associated with new developments that target social demand. The lack of public finances can also prevent state or local authorities from providing appropriate infrastructure or equipment to housing projects (Walley, 2014).

The scattered housing units built in Nigeria The main component of the successful housing delivery program is the ability of the housing units to target consumers. Housing is reasonable only when it does not spend more than 30% of household income (Muhammad & Johar, 2018). Thus, housing capability 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. Questions asked about housing prices are: what is the selling price of a home unit? There is a voice response among key actors (government agencies and the private sector), that houses are sold at a higher price than originally agreed. Farm managers representing Terraquest 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 can not provide funds for infrastructure the private sector forced separately funds to finance infrastructure, resulting in an increase from N3.4 million to N4.2 million (semi-detach semi-part houses) and N4.95 million to N5.9 million (3 semi-detached houses) to cover the cost of infrastructure provision ". In the same tone, ADH said: "The State Government can not provide the infrastructure as agreed, private companies do so. The
government can not pay the amount spent;

The company is advised to provide infrastructure cost factor to the cost of housing which then increases the price from N3.4 million to N4.2 million (2 semi-half houses) and N4.95 million to N5.9 million for 3 bedrooms. "In conclusion, after the completion of the housing unit, prices rose by 23.5% and 19% for 2 semi-bedrooms and 3 separate bedrooms. In addition, the government could not control the project due to the inability to carry out its responsibilities as contained in the contract agreement, hence the arrangement early on that the payee will pay 10% and 20% of the prepayment (for 2 semi detach and 3 bedrooms respectively) while the FMBN will pay the balance to be repaid from wages through an unsecured installment deduction (ADH & MGO) Target group unable to pay openly because of the low pay structure; As a result, the housing units were vacant for some time and some houses were demolished, as the State Government buyers and dispose of home units. Thus, private companies have devised four ways to remove open house units for ram ai: 1) payment of 10% and 20% of the total cost of housing as per i deposit for 2 bedrooms 3 bedrooms; 2) Rent (between N60, 000 - N70, 000 per annum for 2 twin 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 the recipient who earned N420, 000 will amount to N126, 000 which is much lower than the amount required as an annual repayment for housing. During the interview, the representative of the consignee agreed unanimously, that the price of the home unit cannot be estimated as the level of income of civil servants in the study area. Therefore, this indicates that housing units built under this rule fail in capacity testing. Ibe and Aduwo (2012) report in similar studies conducted in Ogun State, Nigeria, that the cost of home 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 requirements to qualify for mortgage loans which are always hard-to-find (PSAF, 2018).

One of the reasons for adopting PPPs for housing provision 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 not available to most low-income people.

**Government owned housing**

These houses are allocated to civil servants or certain levels and federal and state-level staff categories with a small amount of money to be deducted from their monthly salary. The government for that business almost provides 25% of the public slave accommodation through this type of housing (Talba, 2004). The government has two types of housing, government reserve (GRA) and low-income housing for workers (NDUBEUEZE, 2009). This government reserve is almost found in major cities in Nigeria. They are derived from British colonial administration culture building European quarters that provide protection to the increased number of colonial administrators in the 1920s. The GRA houses consist of a single family center based in the west with a wide plot size and open space. It has the least density of urban housing with almost one unit of every two hectares with little variation between cities (Mba, 1993). Senior officials take advantage of GRA as a luxury housing subsidy with British exit after independence. Low and medium income provides with self-government who hates in the effort to provide affordable housing to employees closer to their workplace. This type of housing is far less attractive than their GRA counterparts. This housing is the only one or two bedroom apartment in a separate, semi-detached or consecutive house in smaller plot sizes. These houses provide ample basic amenities and utilities and often provide better accommodation than some in
high-income neighborhoods/ neighborhoods with reasonable subsidized rates for employees who benefit from such housing (Osei-Kyei and Chan, 2015).

Mass Public Housing

The creation of the Federal Housing Authority (FHA) shortly after independence under Decree no. 40 of 1973 with the responsibility of making proposals for housing programs and government approvals from project implantation. Some housing estates were built by FHA under the National Housing Program. The Implementation of this program is in line with the country's National Development Plan (NDP). For example, the National housing program built the town festival and Ipaja City in Lagos between 1975 and 1980. Likewise, from 1981-1985 the National Housing program also plans to build 350 medium and high-rise housing units in each federal state (Itsmeizic, 2011). On the other hand, the NHP suffered many abandoned housing projects from 1986-1993 which resulted in the failure of the program. This period marks the period of consolidation for this reason. Therefore, the government places emphasis on completing a suspended housing program instead of a new program. The National Housing Program 1994-1995 is designed to build 121,000 homes across the country for all income groups. The first low-cost housing estate was built by FHA in the capital. That's the first affordable housing to provide in this country with a mortgage repayment time log system (Jiboye, 2011).

Private Sector Housing

Despite the emphasis on public mass housing policy earlier, the government remains a key sector in the development of Nigeria housing. Despite the level of implementation, the amount and type of public housing are too limited to influence the size and structure of urban housing demand, affecting rent or transfer of any filtration process in the country (Ozo, 1990; Megginson, & Netter, 2001). The National Housing Policy Verily recognizes that the private sector contributes more than 90% of housing stocks in the country (Federal Government of Nigeria, 2002). The private sector is usually referred to as a combination of individuals, small builders, developers / commercial housing agencies, banking and non-banking financial intermediaries, and industrial and commercial organizations that invest in housing with the aim of making profits. Hence its use here basically covers most other forms of housing that are not served by government agencies.

Individuals and Households

Individuals and households are the most dominant sub-sectors in the private sector in the provision of urban housing in the country. In fact, more than 70 percent of the total stock of urban housing (including housing owners and rental housing) in Nigeria is provided by individuals (UNCHS, 1993). Although this sub-sector contributes most of the rented housing in urban areas, self-interest is a very strong motive. In doing so, the type of housing provided cuts across different income groups from luxury dwellers to lower housing including unofficial standards. Given that the vast majority of households in the city are made up of most low-income and middle-income households, they are in the housing sub-market for these groups that they are most visible. Most homeowners rent an apartment and extra room in their home to revive their housing investment and increase the role of housing for major private sector actors discussed below. Household income (Roumboutsos et al. 2013).
Housing in Abuja

According to Isma’il et al. 2014 Abuja the Capital Federal Territory of Nigeria consists of most government headquarters and government headquarters parastatals of several private firms, foreign organizations and investors, offices and companies. It is a great development area, 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 the public 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. In connection with the rush of people from various parts of the country, housing and land are seen by wealthy individuals as consecutive materials and therefore bought and built in the most central city (Amba and Ekanem, 2012).

As identified by Muhammad and Johar (2018), land entrepreneurs, including Landlords, Entrepreneur Developers, Transport and Utility Companies, Banks and Companies, and others, regard the home as a dwelling place, but also as a product the real estate market, which can be bought and exchanged, thereby providing exchange and use value to producers (entrepreneurs) and consumers (consumers), and therefore try, through collective action and in most cases in federation with other operators, improve the future of land use in the area. Therefore, Abuja is now a city with buildings, scenarios, offices, organizations, parks, open spaces, and so on, but also a very expensive city for housing people working in the city, except in high class and some individuals in the upper middle class society (Giddings, 2007). There are several types of housing in the city, consisting of luxury homes, duplexes, bungalows and apartment blocks but all are very expensive. 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 combined with subsidies to the housing sector, offering strategies to improve housing conditions in other urban areas of Nigeria. The program is based on the following principles:

i. Sufficient layout of plots and appropriate infrastructure standards allow for increased standards when increasing economic capacity

ii. A broad scope of housing alternative for all income groups, from separate homes, flats, to a large number of traditional families, or accommodation and accommodation services Increase 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 level.

iii. Site and service approach, use of self service and self help to reduce costs. Center for Ownership and Expulsion Center & Center for Social and Economic Rights (Bredenoord, 2017).

Methodology

This study uses a sequential mixed approach. The purpose of the sequential design approach involves the first qualitative data collection process to explore phenomena and then assemble quantitative data to clarify current relationships in qualitative data. This study used a focus group discussion with public private partnership experts and acknowledged relevant success factors for the provision of public private partnership affordable housing in Nigeria as determined from the literature. The
professional background respondents to the group interviews have identified their understanding of the public private partnership project. A pioneer surveys were conducted to test the efficiency of research tools using Cronbach Alpha and Kaiser-Meyer-Olkin statistical approaches. The mechanism was found to be reliable and effective in preparing the questionnaire.

As described by Sykes et al. 2016 and Kumar, 2005, the questionnaire project should be from a literature review and validated through focus group interviews and tested before being used for comprehensive data collection. The questionnaire was circulated to stakeholders involved in public and private developers who provide public private partnership in Abuja, Nigeria. A total of 350 questionnaires were randomly given to FCT's target audience (stakeholders of public and private sector officials) to participate in public private partnership housing and real estate developers, which returned 254 questionnaires. Factor analysis using SPSS software and intelligent partial least test analysis of the data used to analyze the data from the questionnaire.

**Results and Discussion**

1. **Results and discussion**
   a. **Demographic of the respondent**

![Figure 1](image1.png)

**Figure 1** Age group and types of PPP project Participated

![Figure 2](image2.png)

**Figure 2** Profession and Work experience

Most of the participants have work for several years with public private partnership housing project. As shows from Figure 1(a), respondents have the necessary experience to conduct this research survey because 78.9% of respondents have at least 1-20 years of work experience, while those over 20 have with 25.8% of experience, only 10.9% of PPP projects are inexperienced. Figure 1(b) shows the type of public private partnership project in Nigeria, with the highest participation in public private partnership housing projects at 72.3% and 13.3% for infrastructure development, while those engaged in public private partnership projects did not participate in any projects. Project, but there is a 14.5% knowledge of public private partnership.

The role of different professionals in the public private partnership housing project in Nigeria is shown in Figure 2(a). Respondents in financial institutions accounted for 13%, and real estate developers accounted for 54%, of which 32% came from government civil servants. These indicate
that the respondents are from the field of research being investigated. This indicates that the data used in the study is reliable.

Figure 2(b) shows the familiarity of respondents in the Nigerian public private partnership housing project. The response showed that 78.9% of respondents were closely related to the public private partnership housing project, while persons with more than 20 years of practice were 9.8%, while those who worked for public private partnership and had inexperienced knowledge were 10.9%. It is worth noting that about 88.7% of the respondents are completely familiar with, familiar or familiar with the public private partnership housing project in Nigeria.

Figure 3. Focus Group Agreement Index

Figure 3. Indicate that the experts reached a 73.5% agreement with the public private partnership critical success factors to deliver affordable housing. According to expert opinion, thirty-nine critical success factors are very important for affordable housing provision in Nigeria. However, these 39 critical success factors were used for pilot studies and find out their reliability and effectiveness. After finding the reliability, validity, and sampling appropriateness of the study tools, the study conducted a broad questionnaire in consequent chapters.
Figure 1 PPP Problem Model

Figure 6.1 shows the Model Public Private Partnership Issues by constructing the second order and the Tables 6.1 and 6.2 reveal the reliability of composites, the validity of convergence and the validity of discrimination. The reflective measurement model for the Private Public Partnership Problem under the five construction described above, Skills & Procurement Problems comprises four indicators: PPP10, PPPP9, PPPP18 & PPPP12). Institutional problem as the second construction also consists of three indicators (PPPP7 (PPPP6, PPPP4), the third construction is a Financial Problem with three indicators (PPPP3, PPPP2, PPPP11), while the fourth Legislative Framework is constructed with four indicators namely PPPP23, PPPP20, PPPP22, PPPP13) is a Political problem, indicator (PPPP19, PPPP17, PPPP16).

Table 1.1 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 CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC PARTNERSHIP</td>
<td>Skill &amp; Acquisition Problems</td>
<td>PPP10 PPPP9 PPPP18 PPPP12</td>
<td>Reflective</td>
<td>0.725 0.761 0.671 0.708</td>
<td>0.809 0.514</td>
</tr>
<tr>
<td></td>
<td>Institutional problems</td>
<td>PPPP7 PPPP6 PPPP4</td>
<td>Reflective</td>
<td>0.777 0.768 0.788</td>
<td>0.821 0.605</td>
</tr>
<tr>
<td></td>
<td>Financial Problems</td>
<td>PPPP3 PPPP2 PPPP11</td>
<td>Reflective</td>
<td>0.778 0.733 0.733</td>
<td>0.793 0.56</td>
</tr>
<tr>
<td>Legal Framework</td>
<td>PPPP23</td>
<td>PPPP20</td>
<td>PPPP22</td>
<td>PPPP13</td>
<td>Reflective</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>Political problems</td>
<td>PPPP19</td>
<td>PPPP17</td>
<td>PPPP16</td>
<td></td>
<td>Reflective</td>
</tr>
</tbody>
</table>

Table 1.3 Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>PPPPF1</th>
<th>PPPPF2</th>
<th>PPPPF3</th>
<th>PPPPF4</th>
<th>PPPPF5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP</td>
<td>0.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>0.544</td>
<td>0.556</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>0.689</td>
<td>0.529</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LFP</td>
<td>0.532</td>
<td>0.673</td>
<td>0.772</td>
<td>0.693</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Skill & Acquisition Problems (PPPP) Construct**

Skill and acquisition problems include four variables, skilled manpower (PPPP10) with loading points (0.725), technical knowledge (PPPP9) with loading points (0.761), Less experience in PPP (PPPP18) and Growth in building materials (PPPP12) charge (0.708).

As shown in Table 6.3 the reliability value of Skills & Earnings Problems is (0.809) satisfying higher than the acceptable minimum of 0.6. This shows that the value of composite reliability is steady (Civelek, 2018; Hair et al., 2014). Nevertheless, the AVE is a Skills & acquisitional Problem (0.514) also indicates that convergence validity has been accepted, as the value received by AVE <0.5. The problem of the institution is to have the AVE (0.605), while Financial Problems have AVE (0.56), Legislative Framework (0.55) and Political Problems (0.548), which indicates convergence validity has been establish. This shows that Skills and procurement problems have a significant impact on PPP for affordable housing provision in Nigeria.

Therefore, there is need to share abilities, knowledge and concepts. For example, we are establishing training and meetings to share concepts and knowledge. Share expertise; use technical support from various private organizations. However, one of the greatest significant ideas and features of partnership is sharing.

**Institutional problems Construct**

Institutional problems as shown in Table 6.4 contain three variables, the lack of overall view of the national development goals (PPPP7) with loading points (0.777), Institutional Framework (PPPP6) with the loading point (0.768) PPPP4) (0.788). However, the value of composite reliability for institutional problems has a combined reliability value (0.821) and AVE (0.605). Therefore, the results show that the reliability of composites and AVE has significant and steady value because the value is slightly higher than the minimum value.

Therefore, we have an obligation to ensure that the process is clear, competitive and transparent. These essential be reflected and consolidated in the procedure we adopt. Therefore, compared with other countries in the world, the government Nigerian needs to implement a new framework to support public private partnership to meet these challenges. Malaysia, the United Kingdom and Australia as example.

**Financial Problems (PPPP) Construct**

Financial problems as shown in Table 6.5 have three latent constructs, including Paucity Fund (PPPP3) with loading point (0.778), base instability and turning point (PPPP2) with the discharge point (0.733) and unstable building material prices PPPP11) also with loading point (0.733). Therefore, Financial Problems have composite reliability values (0.793) and AVE (0.56). CR and AVE financial issues show significant and credible value because of the higher value of the
acceptable minimum. However, due to insufficient funding sources, high interest rates and lack of government policies, financial problems are mainly affecting Nigeria's public private partnership. Therefore, the Nigerian government needs to support public private partnership through alternative funding, through the establishment of more financial institutions like the federal mortgage lending institutions, and the need to ease or control high interest rates.

**Legal Framework (PPPP) Construct**

As shown in Table 6.6 the Legal Framework has four variables, the lack of proper monitoring (PPPP23) with the discharge point (0.748), lack of awareness among stakeholders (PPPP20) with discharge point (0.709), Poverty Challenge (PPPP22) point (0.748) and inefficient equipment (PPPP13) with charge point (0.742). The Legal Framework also has a composite reliability value (0.83) and AVE (0.55). Therefore, the Legal framework has important and credible CR and AVE.

Therefore, the government needs to support public private partnership by providing relevant policies and is responsible for controlling public private partnership affairs to provide affordable housing.

**Political problems (PPPP) Construct**

Political problems have three variables, high cost social facilities (PPPP19) with loading points (0.727), Lack of political will (PPPP17) with discharge point (0.734), and Financing constraints (PPPP16) with discharge point (0.760). CR issues are (0.785) and AVE (0.548). Therefore, the results show that the reliability of composites and AVE has significant and steady value because the value is slightly higher than the minimum value. The force of the electoral phase and the lack of political environment caused by inadequate services may create problems for starting or retaining public-private partnerships. Governments must, as much as possible, to ensure that these political factors do not undermine contractual partnerships with private sector partners. Thus, all the formation under the public private partnership model as shown in Table 6.1 proved a significant impact on PPP in which all variables are in acceptable value. This shows that the PPP problem has a significant impact on affordable housing in Nigeria. Therefore, critical success factors of public private partnership will be the effective means of solving the problema of public private partnership for affordable housing provision in Nigeria.

Therefore, public private partnership can profer a solution to affordable housing in Nigeria using the adequate legal framewrok, sound financial package and judicious government the key success factors to affordable housing in Nigeria as found in this study.
Adequate Legal Framework (ALF) Construct.

Table 6.12 Composite Reliability and Convergent Validity of Adequate Legal Framework (ALF) Construct.

<table>
<thead>
<tr>
<th>1st order Construct</th>
<th>2nd order Construct</th>
<th>Items</th>
<th>Measurement Model Type</th>
<th>Loading (&gt; 0.7)</th>
<th>CR (&gt;0.6)</th>
<th>AVE (&gt;0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Success Factors Of Public-Private Partnership Model (ALF)</td>
<td>Adequate Legal Framework</td>
<td>ALF2</td>
<td>Reflective</td>
<td>0.695</td>
<td>0.881</td>
<td>0.514</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF4</td>
<td></td>
<td>0.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF5</td>
<td></td>
<td>0.738</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF6</td>
<td></td>
<td>0.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF7</td>
<td></td>
<td>0.742</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF8</td>
<td></td>
<td>0.710</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALF9</td>
<td></td>
<td>0.719</td>
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</table>

Table 6.12 shows adequate legal framework as one of the first construct which consist of the commitment/responsibility of public/private sectors (ALF2) with loading point (0.695), identification and understanding of client/owner requirement (ALF4) and a loading point of (0.705), project technical feasibility (ALF5) also has a loading point of (0.738), technology transfer (ALF6) with loading point (0.708), available of competent personnel (ALF7) and a loading point of (0.742), sound legal basis (ALF8) with a loading point of (0.710), and robust and clear agreement (ALF9) also with a loading point of (0.719) respectively. Meanwhile, an adequate legal framework has a composite reliability value of (0.881) and AVE of (0.514); this shows that adequate legal framework construct is very significant with a perfect model fit.

However, from the above Table 6.12, Nigeria cannot provide affordable housing without adopting the use of an adequate legal framework. Adequate legal framework serves as one of the important success factors with sub factors of the commitment/responsibility of public/private sectors, identification and understanding of client/owner requirement, project technical feasibility, technology transfer, available of competent personnel, sound legal, and robust and clear agreement. This factors will help to ensure the program stability and the recognition of beneficiaries as rights holders in Nigeria, this is because some countries like Malaysia, UK, and Australia among other countries in the world have succeeded in improving affordable housing condition for all income group.
Sound Financial Package (SFP) Construct.

Table 6.14 Composite Reliability and Convergent Validity of Sound Financial Package (SFP) Construct.

<table>
<thead>
<tr>
<th>1st order Construct</th>
<th>2nd order Construct</th>
<th>Items</th>
<th>Measurement Model Type</th>
<th>Loading (&gt; 0.7)</th>
<th>CR (&gt;0.6)</th>
<th>AVE (&gt;0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Success Factors Of Public-Private Partnership Model</td>
<td>Sound Financial Package (SFP)</td>
<td>SFP1</td>
<td>Reflective</td>
<td>0.753</td>
<td>0.901</td>
<td>0.581</td>
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<td></td>
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<td>SFP2</td>
<td></td>
<td>0.752</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>SFP3</td>
<td></td>
<td>0.805</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SFP4</td>
<td></td>
<td>0.799</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SFP5</td>
<td></td>
<td>0.697</td>
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</tbody>
</table>

Sound financial package (SFP) consists of five variable, Stable currencies of debts & equity finance (SFP1) with loading point of (0.733), repayment of the debt (SFP2) and a loading point of (0.752), access to alternative fund (SFP3) has a loading point of (0.805), financial capability (SFP4) with a loading point of (0.799), and assessment of cost-benefit (SFP5) with loading point of (0.697). However, the CR and AVE of the sound financial package (SFP) are (0.901) and (0.581), respectively. This indicates a significant fit model that all variable fall within the accepted value.

From the above table, the result proves that PPP can provide adequate and affordable housing without the financial package. The ability to finance a project is one of the most important aspects. Therefore, the government of Nigeria needs to support the PPP through an alternative mean of funding, by creating more financial institution like the federal mortgage institutions, also the need to reduce or control the high-interest rate, provision of subsidy will help reducing the cost of housing to the middle and low income earners (Ahmed and Sipan, 2019b).

Judicial Government Control (JGC) Construct.

Table 6.16 Composite Reliability and Convergent Validity of Judicial Government control (JGC) Construct.

<table>
<thead>
<tr>
<th>1st order Construct</th>
<th>2nd order Construct</th>
<th>Items</th>
<th>Measurement Model Type</th>
<th>Loading (&gt; 0.7)</th>
<th>CR (&gt;0.6)</th>
<th>AVE (&gt;0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Success Factors Of Public-Private Partnership Model</td>
<td>Judicial Government control (JGC)</td>
<td>JGC10</td>
<td>Reflective</td>
<td>0.690</td>
<td>0.874</td>
<td>0.573</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JGC11</td>
<td></td>
<td>0.738</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>JGC12</td>
<td></td>
<td>0.660</td>
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<td></td>
<td></td>
<td>JGC2</td>
<td></td>
<td>0.723</td>
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<tr>
<td></td>
<td></td>
<td>JGC3</td>
<td></td>
<td>0.703</td>
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<tr>
<td></td>
<td></td>
<td>JGC5</td>
<td></td>
<td>0.674</td>
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</table>
As indicated in Table 6.16, judicial government control (JGC) construct consists of six variables, such as: action against errant developers (JGC10) with a loading point of (0.690), access to land (JGC11) with a loading point (0.738), appropriate risk allocation (JGC12) with a loading point of (0.660), sound economic policy (JGC2) with a loading point (0.723), stable political environment (JGC3) with a loading point (0.703), strong political support (JGC5) with a loading point of (0.674), share authority between the public & private sector (JGC7) with a loading point (0.726), strong government support (JGC8) also has a loading point of (0.744), and consistent monitoring (JGC9) with a loading point (0.715). The judicial government control (JGC) construct has a CR of (0.874) and AVE of (0.573). Therefore, the judicial government control (JGC) model indicates a significant and accepted point.

Judicial government control (JGC) involves government control exercises to ensure that all parties comply with established rules and regulations and discharge their responsibilities wisely. The variables under construction are based on the success factors identified from the literature studied (Chan et al. 2005).

The government is the brain behind the success of PPP in the world. Therefore, the success of PPP depends on strong government support. The result in the above Table 6.16 proves significant for judicial government control as one of the key success factors of PPP to provide affordable housing in Nigeria. The continued improvement in the rule of law will help build investor confidence and promote greater growth. Ensure that the government exercises certain rights granted by the project agreement or certain rights derived from national laws, such as foreign exchange levy guarantees, to ensure that the company will not be requisitioned without proper compensation and will not stop the project company (Ahmed and Sipan, 2019b).

**Conclusion**

The main reason for PPP in housing is to provide adequate and affordable housing for all income groups. As a research find, PPP in the study area faces serious challenges in providing affordable housing. These challenges include acquisition and access to land, implementation of poor housing policies, adequate housing finance, access difficulties to mortgage facilities and land titles, large rural urban migration and cost recovery among others. Just like the previous public housing delivery strategy, this approach cannot be a home for high-income and middle-income earners in Abuja Nigeria. However, provision of affordable housing has not yet been reached in the study area. The point that there is no consensus on the National 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 considered as governance controls as the main component of affordable housing.

However, findings of this study accept the initiatives of government and the private developers to create an opportunity of providing affordable housing, although affordability relies on income and expenditure with the theories of securing affordability, refund affordability and income affordability as component of affordability as said by Gana and Hill, 2008.

It is therefore recommended that a good policy framework for the implementation of other PPP variants in fulfilling affordable housing in Nigeria should be a consonant on the parameters of affordable housing constituencies. First of all, it will wipe out all the undetermined constraints of 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 capabilities and benefits of commercial sector partners. We can also go behind the example of Malaysia to provide affordable housing for all income groups, so that cheaper and local materials can be used instead of expensive and imported building materials in building affordable housing units. Similarly, self-help options and government-assisted housing options should be incorporated into the PPP housing scheme to provide affordable housing for all income groups at a reasonable rate.

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