

CRITICAL SUCCESS FACTORS OF PUBLIC-PRIVATE PARTNERSHIP
MODEL FOR AFFORDABLE HOUSING PROVISION IN NIGERIA

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DEDICATION

This thesis is dedicated to my late father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my late mother, who taught me that even the largest task can be accomplished if it is done one step at a time. Lastly, this thesis is dedicated to the development of
Humanity.

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ABSTRACT

The success of any public-private partnership (PPP) project in a country depends on the maturity of the country's critical success factors (CSF) in making PPP projects successful. Therefore, it is necessary to measure the model for identification of public-private partnership problem of provision of affordable housing; and determine the measurement model for the determination of critical success factors for public-private partnership of affordable housing. Although, several researches have been conducted on PPP housing provision, however, they do not yield any positive results as they ended-up providing housing for the high income people leaving the majority of about 80% of the low income people living in slums and unhealthy environment. Consequently, past studies have not dwelled on the use of critical success factor of PPP for affordable housing in Nigeria. As such, the aim of this study firstly, to determine the problem of PPP and the critical success factor of PPP for affordable housing provision in Abuja, Nigeria. Secondly, this study also evaluated the relationship between the CSFs of PPP, the problem of PPP in providing affordable housing in Nigeria and finally, develop a model of CSF for the success of PPP in providing affordable housing in Abuja, Nigeria. The methodology used in this study was through discussions with six experts in the field to bring to the fore the critical success factors of public-private partnership PPP. A questionnaire was prepared based on literature review and the outcome of the experts' views. A total of 350 questionnaires were distributed to the participants of PPP in Abuja, out of which 256 were returned. Consequently, the data gathered were analyzed using partial least square analysis (PLS). The findings revealed the major problems of PPP, which included skill and acquisition, institutional, financial, legal framework, as well as politics. It was further determined that adequate legal framework, effective procurement process, sound financial package, project economic viability, judicial government control, and strong private sector were the critical success factors of PPP for affordable housing provision in Abuja, Nigeria. It was also found that critical success factors (CSF) has a significant relationship with the problems of public-private partnership (PPP) and therefore, CSF of PPP has provided the solution to PPP problems of affordable housing provision. However, the partial least square (PLS) analysis established the CSF of PPP model for affordable housing to low income group in Abuja, Nigeria. The findings has provided answers to PPP to focus on the provision of affordable housing for low-income people in Abuja, Nigeria and recommends that this model should have total support from the government to address this long-time problem.

ABSTRAK

Kejayaan projek kerjasama awam-swasta (PPP) di sesebuah negara bergantung kepada faktor kejayaan kritikal negara (CSF) dalam menjayakan projek PPP. Oleh itu, adalah perlu untuk mengukur model bagi mengenal pasti masalah kerjasama awam-swasta bagi perumahan mampu milik dan menentukan model pengukuran untuk penentuan faktor kejayaan kritikal bagi kerjasama perumahan mampu milik awam-swasta. Walaupun beberapa penyelidik telah melakukan mengenai penyediaan perumahan PPP ini, namun mereka tidak memberikan hasil positif kerana ia akhirnya hanya menyediakan perumahan untuk golongan berpendapatan tinggi menyebabkan majoriti kira-kira 80% golongan berpendapatan rendah tinggal di kawasan setinggan dan persekitaran yang tidak sihat. Kajian terdahulu juga tidak membincangkan penggunaan faktor kritikal kejayaan penting PPP untuk perumahan mampu milik di Nigeria. Oleh itu, tujuan kajian ini adalah pertama, untuk mengenal pasti masalah PPP dan faktor kejayaan kritikal PPP untuk penyediaan perumahan mampu milik di Abuja, Nigeria. Kedua, kajian ini juga menilai hubungan antara CSF PPP, masalah PPP dalam menyediakan perumahan mampu milik di Nigeria dan seterusnya membangunkan model CSF untuk kejayaan PPP dalam memperuntukkan perumahan mampu milik di Abuja, Nigeria. Kaedah yang digunakan dalam kajian ini adalah perbincangan kumpulan fokus bersama enam pakar dalam bidang ini bagi mengenal pasti faktor kejayaan kritikal PPP-kerjasama awam-swasta. Soal selidik dibuat berasaskan kajian literatur dan hasil pandangan pakar. Sebanyak 350 borang soal selidik diedarkan kepada peserta PPP di Abuja dan sebanyak 256 borang telah dikembalikan. Data yang dikumpul dianalisis menggunakan teknik Kuasa Dua Terkecil Separa (PLS). Hasil kajian menunjukkan masalah PPP yang merangkumi kemahiran dan pemerolehan, kerangka institusi, undang-undang, dan juga politik. Dengan lebih jelas lagi dapat ditentukan bahawa kerangka undang-undang yang mencukupi, proses perolehan yang efektif, pakej kewangan yang kukuh, daya maju ekonomi projek, kawalan pemerintah kehakiman, dan sektor swasta yang kuat adalah faktor kejayaan penting PPP untuk peruntukkan perumahan mampu milik di Abuja, Nigeria. Juga didapati bahawa faktor kejayaan kritikal (CSF) mempunyai hubungan yang signifikan dengan masalah kerjasama awam-swasta (PPP) dan oleh itu, CSF PPP telah memberikan jalan penyelesaian untuk masalah penyediaan perumahan mampu milik PPP. Walau bagaimanapun, analisis PLS menetapkan model CSF PPP untuk perumahan mampu milik kepada golongan pendapatan rendah di Abuja, Nigeria. Hasil kajian ini mampu menyediakan resolusi kepada PPP untuk menumpukan pada peruntukan perumahan mampu milik bagi golongan pendapatan rendah di Abuja, Nigeria dan mencadangkan bahawa model ini perlu mendapat sokongan penuh dari pihak kerajaan untuk menyelesaikan masalah yang berpanjangan ini.

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LIST OF ABBREVIATIONS

ALF	-	Adequate legal framework
AHP	-	Affordable Housing Provision
AHP	-	Analytic Hierachy process
AMCHUD	-	African Ministerial Conference on Housing and Urban Development
AVE	-	Average Variance Extraction
BBO	-	Buy Build Operate
BLPRW	-	Better Life Programme for Rural Women
BOO	-	Build Own Operate
BOT	-	Build Operate Transfer.
BSc	-	Bachelors of Science
BTech	-	Bachelors of Technology
CBD	-	Central Business District
CD	-	Covariance Based
CHKL	-	Kuala Lumpur City Hall
COHRE	-	Center for Housing Rights and Evictions
CR	-	Construct Reliability
CSFs	-	Critical Success Factors
CSOM	-	Construct Sevice and Maitenance
CV	-	Converginе Validity
DB	-	Design Build
DBFOM	-	Design Build Finance Operate Maintain
DBM	-	Design Build Maintain

DBO	-	Design Build Operate
DBOM	-	Design Build Operate Maintain
DF	-	Development Finance
EPP	-	Effective Procurement Process
EFA	-	Explotory Factor Analysis
FP	-	Financial Problem
FCT	-	Federal Capial Territory
FCTA	-	Federal Capital Territory Abuja
FHA	-	Federal Housing Authority
FMBN	-	Federal Mortgage Bank of Nigeria
FMWH	-	Federal Ministry of Work And Housing
GRA	-	Government Reserve Area
HND	-	Higher National Diploma
HTMT	-	Heterotrail-Monotrait Ratio of Correlation
IAD	-	Institution of Affordable Housing Development
IAHCN	-	Institution of Affordable Housing Commission of Nigeria
ICRC	-	Infrastrutural Concession Regulation Commission
IP	-	Institutional Problem
IR	-	Internal Reliability
JGC	-	Judicious Government Control
JPMC	-	Joint Project Management Committee
LFP	-	Legal Framework Problem
LIH	-	Low Income Housing
LV	-	Laten Variable
MDGs	-	Mellinion Development Goals

MHLG	-	Ministry of Housing and Logal Government
MI1	-	Most Important
ML	-	Maximun Likelihood
MP	-	More Problem
MP1	-	Most Problem
MP2	-	Moderate Problem
MRSS	-	Minimum Require Sample Size
MSc	-	Master of Science
ND	-	National Diploma
NDB	-	National Development Bank
NEP	-	New Economic Policy
NGOs	-	Non Governmental Organisation
NHF	-	National Housing Fund
NHP	-	National Housing Program
NPPPR	-	Nigeria Public Private Partnership Review
OEM	-	Original Equipment Manufacturer
OM	-	Operate Maitain
OMM	-	Operate Maintain Management
OV	-	Observe Variables
PEV	-	Project Economic Viability
PFA	-	Philiphine Fact Authority
PFI	-	Private Finance Initiative
PhD	-	Doctor of Philosophy
PLS	-	Partial Least Test Primary Mortgage Institutes (PMI),
PMI	-	Primary Mortgage Institutes

PP	-	Political Problem
PPP	-	Public Private Partnership
PPPP	-	Public Private Partnership Problems
PREP	-	Public Request for Eligibility Process
PSC	-	Public Sector Control
SAP	-	Skill Acqusational Problems
SD	-	Standard Diviation
SEM	-	Structural Equation Medelling
SERAC	-	Social Economic Right Action Center
SF	-	Success Factors
SFP	-	Sound Financial Package
SMC	-	Square Multiple Correlation
SPS	-	Strong Private Sector
SPV	-	Special Purpose Vehicle
TCC	-	Toranto City Council
TCHC	-	Toronto City Housing Cooperatives
UK	-	United Kingdom
UN	-	United Nation
US	-	United State
VFM	-	Value for Money
VIF	-	Variance Inflation Factor

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Housing provides the most basic human needs, such as health, well-being, social attitudes, and economic productivity (UN-HABITAT, 2006). It has been pointed out that affordable housing is an essential condition for human well-being, social and economic well-being (Taiwo, 2014). The branch of housing also extends to the macroeconomic conditions of the wider urban economy (e.g., cities) (UN-HABITAT, 2003a). Although housing plays an important role as a basic need, almost all societies in history have lacked sufficient supplies of such goods. Despite repeated attempts by the government to provide shelter in the past decade, housing supply in most developing nations is seriously inadequate today. Nigeria is one of the developing nations, the housing situation is deteriorating, population growth and urbanization are growing at a higher rate, and the gap between housing demand and supply is greatest. As a result, conditions still exist because housing is often seen as an unwelcome stepchild and is frustrating in project families that constitute development or economic plans (UN-HABITAT, 2006).

In view of the deteriorating states of housing in Nigeria, several factors are considered to be major factors in the decline of housing in sub-Saharan Africa, including severe land use and the use of policies and bias; deficiency of coordination in public housing institutions; construction materials and fabulous legislation cost (Ademiluyi and Raji, 2008). According to Rondinelli (1990) Nigeria and selected sub-Saharan cities did not respond to housing needs in their perceptions.

The AMC for Housing and the Urban Development (A.M.C.H.U.D, 2005) stated that the African nations fail to cope with the housing challenges due to the

incapability to transform their organization and values into a changing and positive state of affairs.

This proves that the public and the private sectors in African nations have used the wrong organizational structure and ineffective housing provision systems in the last decade by providing housing only for the high income elite, so the housing problem in the African region have increased hurriedly. One of the global development organization involved in the housing are the United Nations International Policy Society of Housing, which recommends the African nations, as well as Nigeria, to pull out from the housing project because of the wrong method to addressing quantitative and quality problems and meet the growing housing demand shortage.

Affordable housing can be defined as cost-effective housing, which means that households can pay without financial difficulties” (Robinson et al., 2006). The term “economically affordable housing refers to the ability of financial housing in terms of household income, comparing particular categories of housing, such as social housing, public housing and low-cost housing, which are often used (United Nations, 2014) According to a study by Khazanah (2014), there is a difference between household income and expenditure. The socio-economic backgrounds of different countries have an impact on affordable housing.

The private sector in the formal and informal sectors remains the Nigerian biggest developers of housing units. Private sector schemes may be widely or may have far-reaching effects, different to government schemes that may be large-scale but usually have small influence (Otiso, 2003).

However, the United Nations suggested that the African nations should put the responsibilities of housing projects into the private sector through public-private partnerships (PPPs) (Ibem and Aduwo, 2012). The study of Miraftab (2004) discovers that public-private partnerships (PPPs) are considered to be arrangements for urban civil servants and methods in developing nations. In terms of the housing supply, the launch of PPP is based on its interest in increasing the capacity of the housing sector, as well as the growth of housing capacity and facilities (the Shelter Afrique, 2008).

With the UN suggestion to African nations, the Nigerian government implemented PPP (Owei, 2007) in the year 2004 to become more significant in housing construction in the cities, such as Abuja and Lagos. Nigeria's government considers that the PPP will increase the efficiency of public development and facilities deliver through private funding (Lagos State Government, 2008).

On the other hand, in spite of the attractiveness of PPP, the success and non-success of its application in housing development does not reviewed systematically (Alinaitwe and Ayesiga 2013). The practice of PPP in the housing project is not as the use of infrastructure projects (Abdul-Aziz & Kassim 2011; Ong 2003; Trivedi & Ajit 2014). Subsequently, in The 1990s, the PPP project has become the Department of Education, the Health and Transportation Infrastructure (Li and Akintoye 2008). Consequently, PPP in the housing project is hardly studied globally (Ong et al., 2002; Sengupta, 2005; Abdul-Aziz, 2012). PPP for housing has largely escaped theoretical investigation (Payne 2000) and has no different space for concept and application (Sengupta, 2005). Therefore, the descriptive elements for the positive delivery of PPP housing are still severely understood, particularly in the view of developing countries like Nigeria. The PPP initiative is within the early stages of most developing nations in the world and has not explored knowledgeable (Awodele et al., 2008). The PPP housing agendas with the care of the United Nations HABITAT (2011) are uncommon in the developing nations, and little practical data prove success development.

However, due to the current situation in Nigeria of the difficulties in accessing affordable housing for all income group and the unclear delivery of housing by PPP, this study tends to develop a model using the success factors of PPP to resolve the PPP problems and provide affordable housing for mostly low-income group in Abuja, Nigeria.

1.2 Problem Statement

The history of housing problems in Nigeria began long before independence. After independence, several policies have been developed to address Nigeria's housing

challenges, but these policies could not solve the housing challenge (Ibem, 2011). Ibem et al. (2011) reported that between 1962 and 2010, the Nigerian federal government launched a low-income housing program involving direct construction, such as the National Low-income Housing Program from 1962 to 1980. National Housing Program (1994 to 1995), National Prototype Housing Program (2000 to 2003), Presidential Housing Committee Program (PMHS) (2004 and PPP Housing Program, which is proposed to build 671,271 affordable housing units in the country). However, at the end of 2010, only 95,594 affordable housing units were completed, which is 15% of the 671,271 proposed affordable housing. (Ibem et al., 2011; Zayan, 2016). Ibem stresses that proper planning, implementation, corruption, and politics are some of the reasons behind the failure of the government in housing delivery. The low-income earners received a monthly income ranging from N30,000 to N120,000 while the repayment for a housing loan is between 20% to 30% of the monthly income (Ibem,2011).

However, in the recommendation of the United Nation to African, that the African nations should withdraw from housing delivery for their inability to meet housing demand and supply (UN-HABITAT, 2006). Therefore, the Nigerian Government adopted the PPP in 2004 in compliance with the recommendations of the United Nations to increase the housing supply in Abuja and Lagos and other parts of the nation (Daniel, 2014). The PPP method is used, especially in housing development, solid waste management, and transportation.

The Nigerian Federal Government is making up for the massive gap within housing demand and supply in the nation by adopting a new market-oriented method. The policy is intended to limit the responsibilities of governments, regulators, and suppliers. This led to the implementation of an extensive housing program in the Federal Capital State in 2000 based on the private sector-driven Nigerian housing policy. The program aims to way over the gap between demand and household supply and to provide a favorable environmental design for the active participation of the private sector (Ibrahim & Kwankur, 2012). The Nigerian Government has adopted public-private partnerships at all levels of government, shifting from national management methods and bureaucratic leadership to the market-oriented

surroundings. Public and private keys will complement and ease Nigeria's housing shortage (Owei, 2007). Therefore, PPP aims to improve the government ability to provide solutions, promote innovation, advanced methods, decrease the cost of housing and time of development, transfer specific risks to private partners, promote higher productivity to attract more bidders for temporary projects, and also offer opportunities for better expertise and technical skills with a view to improving housing supply in Nigeria (Li & Akintoye, 2003).

In spite of the practice of PPP in housing project, the housing problems in terms of quantity and quality are still inseparable. PPP has successfully provide housing only for the high income and not affordable housing in Nigeria (Ibem and Aduwo, 2012; Ahmed, Moohammad and Abubakar, 2010; Abdullahi and Abdul-Aziz, 2010), due to accessibility of land, corruption, financial limitations, lack of political determination, high facility costs, social constraints, limited supply of construction materials, high dependence on foreign building material, current status of the construction industry, financial institutions cannot fully undertake a rigorous analysis of the project, evaluate operations business skills, weak stakeholder awareness, administrative restraints, lack of incentive for private sector stakeholders, violating with regular planning, the paucity and lack of appropriate supervision (Ibem, 2010; Abdullahi and Abdul-Aziz, 2010, Dahiru, Abdul' Azeez, and Bala, 2013).

The study of Babatunde, et al. (2012), stated that PPP has used a success factor for infrastructural development such as competitive procurement processes, cost, and benefit assessment, a favorable legal framework, appropriate risk allocation, government guarantees, political support, stable macroeconomic conditions, sound economic policy, and appropriate financial market.

Studies in countries surveyed around the world using PPP affordable housing include Ong and Lenard (2002); Freut, (2005); UN-HABITAT, (2006b). These countries in developed countries include the United Kingdom, Canada, India and Australia, and developing countries including Malaysia (Saleh, 2008; UN-Habitat, 2011; Sengupta, 2015; Jooste et al., 2011). Others are concerned about the role of the government organizations for housing in PPP (Ibem, 2010) with the influence of PPP

to addressing metropolitan housing problem in Nigeria (Ibem, 2011a; 2011b; Adegun and Taiwo, 2011).

However, studies proved that United Kingdom, Canada, India and Australia, and developing countries including Malaysia have successfully addressed their affordable housing problem through the used of critical success factors of PPP to provide housing for all their income group (Abdul-Aziz, and Kassim 2011; Akintoye et al., 2017; Chan et al. 2010; Ismail, 2013; Li et al. 2005).

On the other hand, there was no study on the key success factors of the public-private partnerships for the affordable housing project in Nigeria. However, most scholars have focused on identifying CSF for PPP infrastructural projects, identifying micro-economic factors, socio-economic perspective and government policy (Ibem, 2012; Sanda et al., 2016), government policies (Adnan and Morledge, 2003; Aduwo, 2013; Sanda et al. 2016; Ibem, 2011), etc. Although the results of the study are still valuable, in the success of the PPP project, SF's affordable housing has a support model, particularly in the background of developing nations that are determined by weak organizations, economic and political environments. Therefore, the basis of this research is to develop a CSF of PPP model for affordable housing provision in Abuja, Nigeria.

1.3 Research Gap

Due to population growth and urbanization in Nigeria, there is a huge gap between housing demand and supply in Nigeria with a shortage of affordable housing delivery by the Government (UN-HABITAT, 2006). Demand for jobs appears to be higher due to population growth, and the high number of rural-urban migration. At the same time, supply has reduced, existing prices are unbearable, leading to homelessness, and contributed to 80% of the low-income group living in slum dwellers and deteriorating housing conditions (Mark, 1984; UN-Habitat, 2006; UN-Habitat, 2003). However, the Government of Nigeria proposes to build 671,271 affordable housing between 1962 to 2010, at the end of 2010 only 95,271 affordable housing was

built for 80% of the 200 million Nigeria. 40 thousand affordable housing proposed for Abuja the capital of Nigeria from a total of 671,271 propose affordable housing, at the end of 2010 only 5,200 affordable was build for 6 million low-income groups.

Therefore, a series of studies have been carried out to resolve the affordable housing problem in Abuja, Nigeria, including Ibem Research (2012), investigating the impact of public-private partnerships (PPPs) to increase the availability of affordable housing in Nigeria (Ibem and Aduwo, 2012)). He found that earlier public housing provision approaches, the public-private partnership approach did not make any significant contribution to affordable housing; instead, it tended to deliver housing for high-income people. Adnan and Morledge (2003) argue that if the future of these initiatives is to ensure PPP's challenges and opportunities for affordable housing, then it is necessary to determine the key criteria to be achieved for each joint venture project - why urban people inadvertently have housing needs, the key is not understanding. Sanda et al. (2016) found in his research that these houses far exceeded the target beneficiary's ability to withstand.

However, the study of (Ibem, 2011) explained that the PPP strategies are an official combined project partnership concerning government subsidized land, providing service plots or private sector partners to build family units. Although this approach offers land parcels and housing for some high-income elites, it contributes slightly to the amount of housing provision for the low and middle-income populations in Nigeria. Also, Aduwo (2013) disclosed the PPP experience in the Nigerian housing sector, particularly for high-income groups, but did not make any vital impact on Nigeria's affordable housing. He further recommended the research needs for affordable housing using the CSF using of PPP method in Nigeria. However, the majority of studies have concentrated on socio-economic perspectives (Ibem, 2012; Sanda et al., 2016), government policies (Adnan and Morledge, 2003; Ibem & Aduwo 2012; Sanda et al., 2016; Ibem, 2011) and micro-macro economics aspect (Ojebode, (2016), but did not consider the use of critical success factors of PPP for affordable housing provision in Abuja, Nigeria. Therefore, this study aims to address the affordable housing problem in Abuja, Nigeria, using success factors of PPP for

countries like Malaysia, the United Kingdom, Canada, India, and Australia to propose an overwhelming policy solution.

Malaysia, the United Kingdom, Canada, India, and Australia are some of the countries that have successfully used PPP for affordable housing. As a result, PPP has to turn out to be the primary solution to the housing problem as described in the literature, and most nations across the globe are presently using PPP to address their housing issue ('Ong and Lenard, 2002; Freut, 2005; UN-HABITAT, 2006b). However, due to the success of many countries using the PPP to address their affordable housing problems, other countries that have experienced housing concerns issues such as Nigeria (Ibem, 2011) need to adopt the system that is used by other countries that recorded success of providing affordable housing to date.

Therefore, the Nigerian government needs to have an appropriate model for balancing the situation of affordable housing because Malaysia, India, Canada, and Australia have succeeded in using PPP as an option. Although Nigeria's PPP still exists, Nigeria's PPP has not adopted success factors to solve the problem of affordable housing (Ibem, 2011; Taiwo, 2014; Ibem and Adowu, 2012), which has almost no success. Therefore, a critical analysis is conducted for the PPP project in Nigeria and determine the factors that led to its failure and considered the factors that influence success by other nations and considered in terms of Nigeria. Subsequently, success factors do not consider high-income, middle-income, and low-income groups. The affordable housing strategy for PPP projects in other countries will be seen as a viable housing supply model for the development of PPP in Nigeria.

Based on affordable housing systems in countries like Malaysia, the United Kingdom, Canada, India, and Australia that are using PPP to address the issue of affordable housing. The study aims to develop a critical success factors model using the success factors applied by Malaysia, UK, Canada, India, and Australia, to propose a solution to the lingering housing problem in Abuja, the capital of Nigeria where rural cities migrated rapidly, and with increased populations that lead to the high living costs, high costs of rental and high costs of housing (Morka, 2014). Therefore, the gap knowledge is the understanding of what the research is trying to achieve. Resolve

research gaps by providing solutions that support more developer investments to make the model work. The challenge of using PPP to treat affordable housing in Abuja, Nigeria, is being studied.

1.4 Research Aim

The study aim is to investigate the problems of PPP for affordable housing and developed a critical success factors of PPP model to ease the accessibility for affordable housing in Abuja, Nigeria.

1.5 Research Questions

Four research questions that will cover the research context of developing a structural CSF model for affordable housing were generated as follows;

1. What are the problems of PPP for affordable housing provision?
2. What are determinant critical success factors of the PPP for affordable housing delivery?
3. Is there any relationship between the CSFs and problem of PPP for affordable housing?
4. How to develop a CSF of PPP model for affordable housing provision in Abuja, Nigeria?

1.6 Research Objectives

1. To determine the problem of PPP for affordable housing provision in Nigeria.

2. To determine the critical success factors of PPP for affordable housing provision in Nigeria.
3. To evaluate the relationship between the CSFs and problem of PPP for affordable housing provision in Nigeria.
4. To develop a CSF of PPP model for affordable housing provision in Abuja, Nigeria.

1.7 Scope of the Study

The focus is on the delivery of affordable housing in Abuja, Nigeria, using the success factors of public-private partnerships in Nigeria's federal capital, Abuja. The Federal Housing Administration, any other form of housing provided by a private housing or private developer, is not part of a public-private partnership and is outdoor of the scope of this research.

This study starts with the concept and application of conceptual PPP and determines the success factors of affordable PPP in Abuja, Nigeria, through a broad review of the literature. The study identifies success factors for all-income people in Nigeria to provide affordable housing. After determining the most important factors for the success of PPP affordable housing, the study began to develop a Nigerian affordable housing supply structural model using PPP.

However, the study covers the supply of PPP housing in Abuja, the capital metropolis of Nigeria. The reason for choosing Abuja the capital of the nation as the case study is because Abuja is the federal capital of the country, with the largest number of civil servants, while more than 70% of other states in the country are low-income. Abuja is the capital of Nigeria with a population of approximately 8 million people and almost two million civil servants with 1.5 million low-income groups at 75% of 1.5 million. The rapid increase in population was due to the movement of the Federal Government from Lagos with Federal Government ministries and the parastatal headquarters to Abuja in 1991. In that year, all foreign consulates were also

instructed to transfer to Abuja. Several private business establishments in Lagos and another side of the nations have relocated to Abuja or opened branches to facilitate contact with ministries. This has led to a rapid population increase, resulting in no housing supply in Abuja. Abuja as the federal capital of Nigeria with the capacity and the estimated number of people to live in the capital has the highest number of civil servant as compare to other part of the country with more than 232,112 civil servant (Ibem et al., 2011).

1.8 The Study Area

Nigerian's federal capital territory Abuja is located between 8°25'N and 9°20' N north latitude, with a longitude of 6°45' E and 7°39' E at the Greenwich meridian. It is situated in the heart of Nigeria and has no primary ethnic ownership. The 'Federal Capital Territory' (FCT) Abuja was established in four (4) additional states in Nigeria, i.e., Kaduna, Plateau, Kogi, and Niger, as shown in Figure 1.1. Abuja has a land area of almost 8,000 square kilometers, of which the city area is approximately 250 square kilometers. In December year 1991, after fifteen years (15) of design and construction, Abuja formally substituted Lagos as the capital of the nation and the seat of the government of Nigerian. Designed as the capital city of the country, Abuja can accommodate 500,000 people after its full development; today, it can accommodate nearly 1.5 million people. The 1991 national census showed that the city could accommodate about 1.2 million people; in 2006, the national census figures, the FCT population was 1.4 million, and the National Bureau of Statistics predicted on March 2008 that it was 3,564,126 (Mai, 2008; Naoum, 2007).

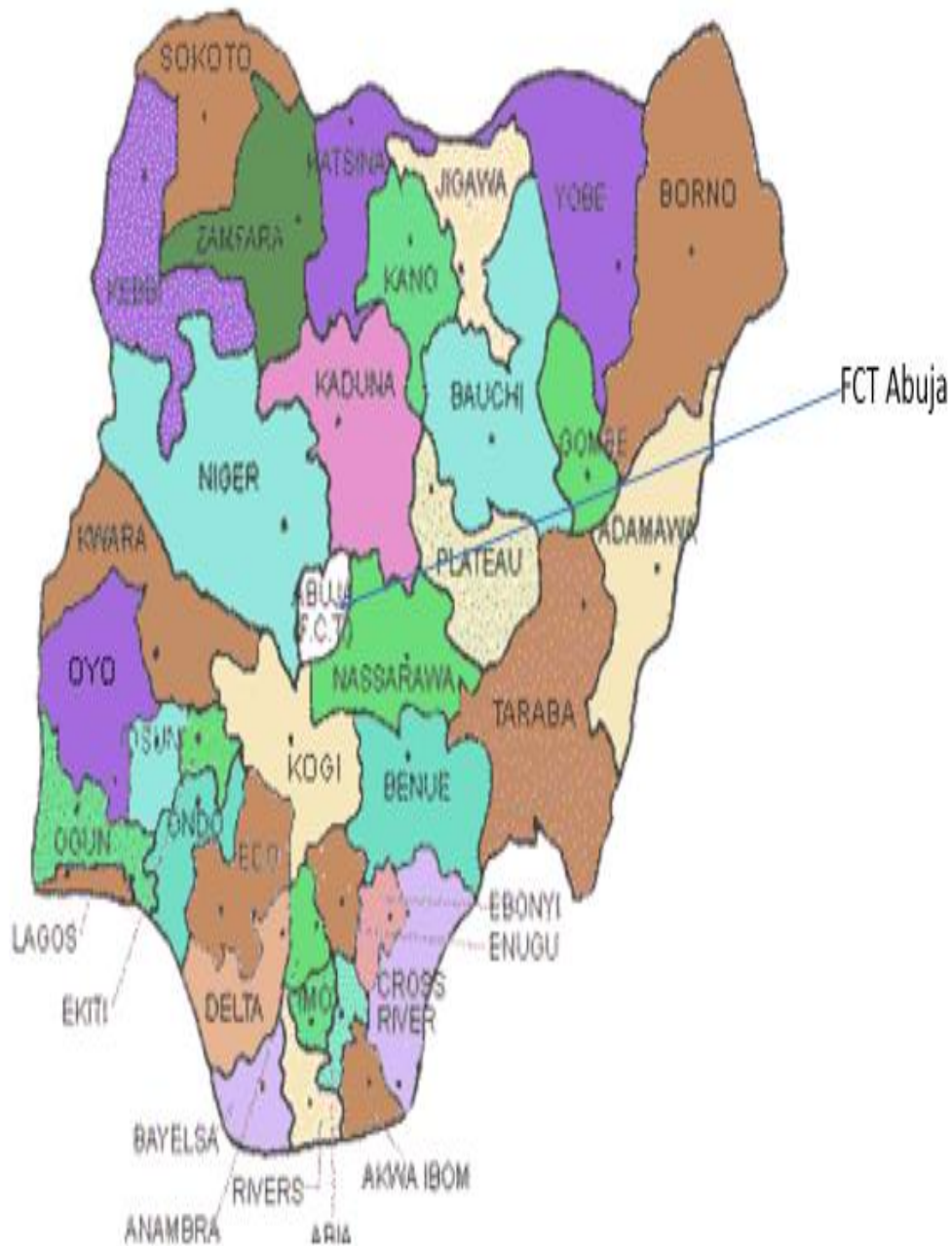


Figure 1.1 State Map of Nigeria (Source: Peter N.J et al 2018)

The FCT consists of six regional councils, as shown in Figure 1.2. These are the Abuja City Council, the Bwari Regional Council, the Gwagwalada, the Abaji, the Kuje Regional Council, and the Kwali Regional Council. The chief executive of the region is a minister, usually appointed by the Nigerian president (Mai, 2008). According to the development order of the overall plan, the urban committee is divided

into three stages. The first segment of the metropolitan is separated into five (5) constituencies. These consist of the central business district, Wuse, Garki, Asokoro, and Maitama. There are also five districts in the second phase. They are Kado, Durumi, Gudu, Utako, and Jabi, and the third stage is Mabuchi, Katampe, Wuye, and Gwarimpa.

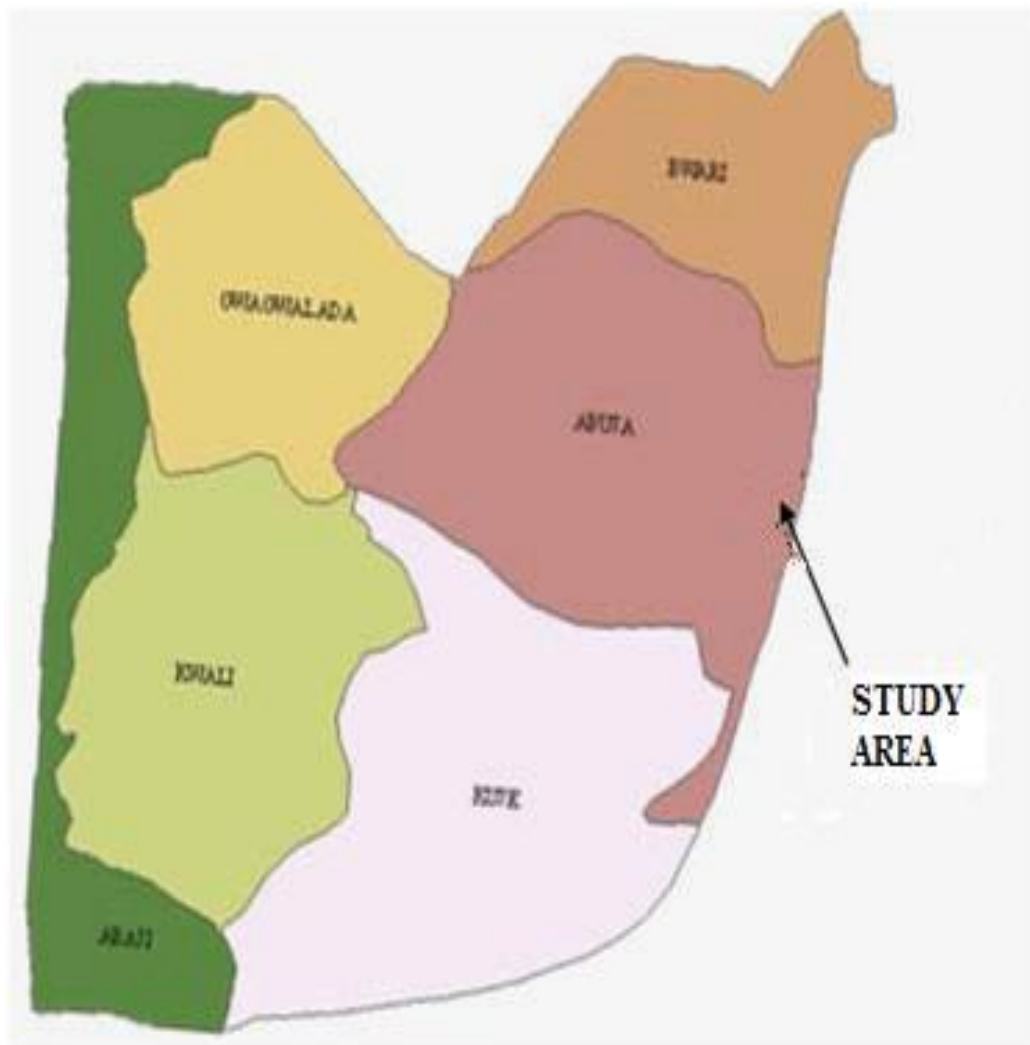


Figure 1.2: Map of the Six Area Councils of FCT, Abuja (Source: Peter N.J et al 2018)

Table 1.1 FCT Regional Council in Abuja

Name	Status	Population Census 1991	Population Census 2006	Population Projected 2016
Federal Capital Territory Abuja	Territory	21,081	1,406,239	3,564,100
Abaji	Area Council		58,642	148,600
Abuja municipal area council	Area Council		776,298	1,967,500
Bwari	Area Council		229,274	581,100
Gwagwalada	Area Council		158,618	402,000
Kuje	Area Council	44,338	97,233	246,400
Kwali	Area Council		87,174	218,400
Total				7,128,100
Nigeria	Federal Republic	88,992,220	140,431,790	193,392,500

Source: Peter N.J et al 2018

Table 1.1 shows the six local governments of Abuja, including the FCT, with the total population of the people within the six local governments and the FCT. The table indicates that Abuja has the total population of 7,128,100 against the initial plan of Abuja to accommodate only three million people.

1.9 Significance of the Study

The study will help to better understand the complex factors that are critical to the success of public-private partnerships. The study is anticipated to initiate the contribution of various SFs to the successful supply of PPP affordable housing. This understanding will help to capitalize on the success of Nigeria's PPP affordable housing provisions and provide a model for affordable housing. Therefore, the results of this study will improve the knowledge structure of PPP and will help low and medium income people to get affordable housing. It will also assist policymakers in developing public-private partnership policies as an alternate service to provide an approach for Nigeria and other developing nations, particularly those implementing PPP.

1.10 Research Process

In answering the outline of the problem statement and the research objectives, a process to effectively achieve these goals is needed. For the reason of the study, the study adheres to positive positivist paradigm. The theory of the study is that the results are determined by causes to discover the factors that regulate to purchase affordable housing in Nigeria using public private partnership. The research will build on the hypothetical contextual that certain vital factors are critical to the success of a PPP project.

The study used quantitative paradigms, mainly quantitative methods, and empirical studies. The survey was conducted and also expert feedback to determine the factors, followed by a questionnaire analysis.

The research collected data through the secondary source (textbooks, journal articles, papers, PPP policy documents, and FCTA reports) and major sources (questionnaires). In the survey, random sampling techniques are used to gather data from stakeholders (from the public and private sectors) involved in large-scale PPP

housing projects. Respondents are asked to rank and evaluate the importance of providing a successful SF list for PPP housing using the Likert scale.

Subsequent to the key steps of the research procedure outlined by ‘Creswell’ (2012), the study uses a four-stage conceptual framework.

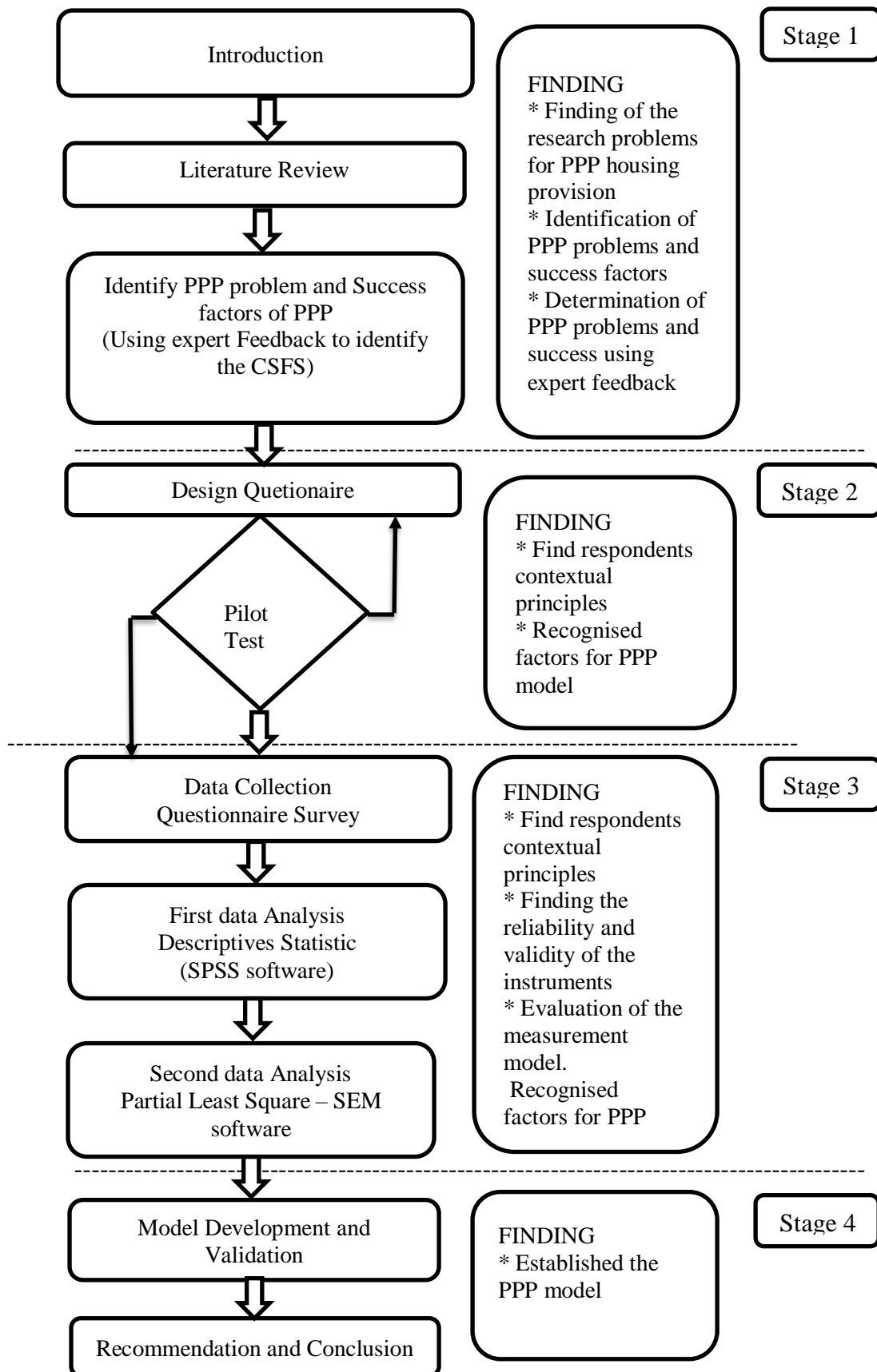


Figure 1.3 Research Process for the Study

The research started with Conceptualization of the thesis, literature review, the expert opinion, questionnaire, data acquisition and analysis and the reporting of the findings.

The Conceptualization of research and observes the PPP housing supply and preliminary literature search in the study area through mind mapping. This phase conceptualizes research by identifying research problems related to PPP's ability to provide affordable housing in the study area. The original literature search found that there is a study gap in the literature, that is, a lack of a complete model for assessing the success of PPP projects. With an award-winning failure story, the study aimed to investigate the challenges of PPP housing provision in FCT, Abuja's and determine its explanatory factors and assess the critical success factors of affordable housing supply with a view to develop a model that will bring an end to the current challenges of affordable housing delivery.

Based on the objectives of the study, the study conducted an extensive literature review to broaden the understanding of the concepts, benefits, types, key success factors, and applications of public-private partnerships. From the literature review, the conceptual framework of the variables and research methods to be measured is outlined.

The CSF and PPP problems are sent to an expert to get their feedback to determine the factors responsibly. The expert stated the CSF and PPP problem is significant according to their opinion. However, this thirty-nine CSFs use for a pilot study to test the reliability and validity. After obtaining the reliability, validity, and sampling adequacy of the research tools, the study conducted a comprehensive questionnaire in subsequent sections.

The questionnaire was designed after the expert feedback and test from the pilot studies, which proved that all the factors are valid and reliable for full-scale data collection.

The third stage of the study focused on data collection and analysis through empirical investigations. The study capture data through expert feedback with PPP experts and a questionnaire survey of PPP project participants in the research area. The statistical data is analyzed using analytical tools.

The report is the final stage of the process and involves presenting the findings, drawing conclusions, making recommendations, and proposing new cutting-edge recommendations for further research.

1.11 Organization of the Thesis

This study is separated into seven chapters. Chapter 1 is an introductory chapter that outlines the research background, problem statements, research aims and objectives, and the scope and significance of the research. The second chapter is a literature review and key theoretical frameworks.

The second chapter includes a literature review focusing on the housing supply approach and the concept of PPP. This chapter examines the concept and evolution of PPP, the theoretical basis, types and interests, and studies housing delivery in the study area. The reason for the review is to identify factors that affect the success of PPP and affordable housing supply and also identify the success factors of PPP. The third chapter contains the theoretical framework on which the research is based.

The fourth chapter presents the methods used in this study. This chapter describes the types of data required for research, methods, and tools for collecting data, sampling procedures, and data analysis methods. Chapter 5 presents the results of a study on the descriptive and measurement model of public-private partnerships by affordable housing. On the other hand, chapter 6 presents the evaluation of the CSF, PPP problem, and the PPP structural model for affordable housing proposals provided by Abuja, Nigeria.

Chapter seven is the conclusion of this study. In this chapter, the main results are summarized, and the conclusions are drawn. The limitations of this study have been discussed and are ultimately recommended for future research.

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