

Coping with Challenges of Public-Private Partnership (PPP) for Housing Delivery in Nigeria

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Abstract

Although public-private partnerships continue to gain popularity in infrastructure provision, the application of the strategy in housing delivery is bedevilled with many challenges particularly in the context of developing countries like Nigeria. This article aims to offer solutions to the challenges of PPP for housing delivery in Nigeria. Using a case study approach, the article investigated the challenges of PPP housing project in the federal capital territory [FCT] Abuja, Nigeria. The study found that “lack of transparency in the procurement process”, “inappropriate risk allocation”, “poor administrative machinery”, “corruption”, and incompetent private sector” are the major challenges that militate against successful housing delivery through public-private partnership in Nigeria. In conclusion, the paper outlined solutions for coping with the challenges of PPP for housing delivery in Nigeria.

Keywords: Challenges; Housing delivery; Nigeria; Public-private partnership; Sustainable Solutions.

1. Introduction

Rapid urban growth throughout the developing world is seriously outstripping the capacity of most state authorities to provide adequate public works and services for their citizens. Consequently, many states are increasingly promoting interdependence with the private sector in the provision of housing, infrastructure, transportation, power and telecommunication, education, and health sectors [1].

Over the last three and a half decades, Public-private partnership has gained popularity as an alternative option for remedying the observed inefficiency in traditional service delivery approach [2]. In worldwide practices, however, there are mixed results [3] as contradictory stories indicating both successes and failures have been reported [4].

An extensive literature has contributed to the debate and understanding of the application of PPP model. Various research studies have focused on the contribution [5, 6] and the challenges [7–9] of PPP delivery strategy. However, there is dearth of literature focusing on solutions for coping with the challenges of PPP delivery particularly in the context of housing delivery. For instance, although [9] attempted to identify the challenges posed by the introduction of the PPP policy in the federal capital territory [FCT] Abuja in infrastructure provision in general, the author failed to advance sustainable solutions that will guarantee the successful and sustainable application of the PPP model in housing delivery in Nigeria.

This article investigated the PPP housing project in FCT Abuja, Nigeria with a view to proffering solutions for coping with its challenges. The article is organized into five sections. Succeeding the introduction in section one, section two reviews literature to identify the determinants of successful PPP. Section three outlines methodology and explain the study area. Section four assesses the

PPP housing project in the FCT Abuja, identified challenges and offered recommendations for coping with the challenges. The paper concludes with a discussion and future research direction in section five.

2. Literature Review

2.1. Determinants of Successful Public-private Partnership

The problems encountered in the application of PPP have prompted many studies to focus on investigating the explanatory factors for successful public-private partnership projects. For instance, [10] investigated the determinants of PPP in infrastructure based on empirical analysis of the cross-country and cross-industry public-private partnership arrangements. The authors identified macroeconomic stability, institutional quality, PPP experience, expected marketability, and technology as the major determinants of PPP. Using a case of Ugandan energy sector, [11] observed that the successful implementation of a PPP depends largely on capacity development, sound legal procedures, agreements, and clearly defined contracts.

Similarly, many researchers employed the concept of critical success factors [12] to explain the factors that influence the success of PPP projects. CSFs are those factors whose existence significantly contribute to the success of a project [13] and which, if not taken seriously, might lead to the failure of a project [14]. The CSF approach is, therefore, an attempt to isolate vital areas that are essential for management or projects to achieve success [15]. The identification of critical success factors is crucial to realizing project success [16].

Several researchers have developed different lists of CSFs for different PPP projects. For instance, [17] identified seven factors

influencing the performance of BOT infrastructure development in Asia. Akintoye et al. [18] identified success factors that contribute to the achievement of the best value in PFI projects in the UK. On the other hand, [19] identified eight independent CSFs for Build-Own-Transfer [BOT] projects in China. [20] identified CSFs from the reflection of an Australian sports stadium project; [21] identified CSFs for PPP implementation in the telecommunications sector of Lebanon.

Given the complementarity among the lists of factors, many authors categorized CSFs into broad categories of principal success factors each with a list of success sub-factors to show the relationship between inter-related variables [22]. For instance, using factor analysis method, [23] grouped key success factors for public-private partnerships in the UK into five groups. Borrowing from the earlier work of [23–26], this study adopt a framework of PPP project success comprising of five broad categories of CSFs [Fig 1]. The five categories of CSFs have received recognition due to the frequency of citation they received by numerous authors [27]. The five categories of the CSFs each with a list of success sub-factors [SSFs] is given in Table 1.

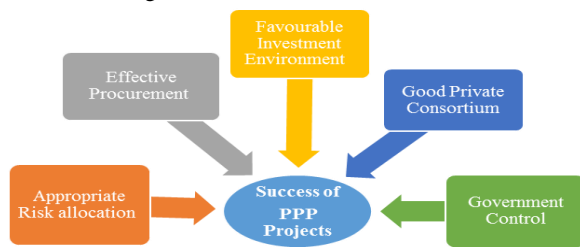


Fig. 1: Framework of PPP Project Success

Table 1: CSFs with a list of SSFs

Critical Success Factors	Success Sub-factors
Effective Procurement process	Transparent procurement process Competitive procurement process Good governance Well-organized and committed public agency Trust and openness between parties
Appropriate risk allocation	Equitable risk allocation in contractual agreement Equitable risk allocation in operational agreement Equitable risk allocation in loan agreement Equitable risk allocation in design/build contract agreement
Favourable investment environment	Stable political system Favourable economic system Fair and efficient legal framework Availability of financial market Supportive and understanding community
Judicious Government control	Government guarantee Efficient approval process Consistent monitoring Action against errant developers
Competent Private Consortium	Technical competence Financial capability Vast experience in partnering

3. Methodology and Study Area

3.1. Methodology

This article is based on a desktop study where secondary data were collected from journal articles, official reports, and websites of government agencies. Literature review identified the determinants of successful PPP projects in general. Based on the review of literature, the authors adopted a framework of PPP project success to assess the design and implementation of PPP housing project in the federal capital territory, Abuja Nigeria. Similarly, relevant documents with regards to the application of the PPP model for housing delivery in the FCT were compiled via online search and visits to the department of mass housing, federal capital territory administration in Abuja from May to October 2016. Google

Scholar database was used for searching relevant academic documents, using keywords related to the title of the paper. Data were analyzed using qualitative content analysis where themes related to the objectives of the paper were generated. The design and implementation of the PPP housing project in FCT was then appraised in relation to the determinants of successful PPP delivery derived from the literature.

3.2. The Study Area

The Federal Capital Territory [FCT] Abuja became the new administrative capital of Nigeria when it was discovered that Lagos, the Nigeria's capital since 1914, could no longer serve the dual role of both the state and federal capital. The problems experienced with Lagos include acute housing shortage, traffic congestion and overstressed infrastructure [28]. When the federal government relocated the Federal Capital from Lagos to Abuja, the idea was to develop the FCT with 100 percent funding by the government [7]. From the onset up to the mid-2000, the Federal government was involved in the provision of houses, infrastructure, and services. However, since the late 1990s, funds allocated to the FCTA by the federal government have continued to dwindle. This shortage of funds makes the FCTA unable to develop the city with the abnormal rate of population influx into the territory.

3.3. Design and Implementation of the PPP Housing Program in FCT

In order to meet the growing housing need in Abuja, the FCTA introduced the Mass Housing Scheme in the year 2000 under its Public-Private Partnership program. The scheme aims to enhance private sector participation, bridge the gap between supply and demand of the housing stock, and take off the burden of providing infrastructure from the government.

Under the scheme, government is to provide primary infrastructure and allocate land to private developers who will, in turn, provide secondary and tertiary infrastructure as well as develop and sell completed houses to members of the general public [29]. Land allocations were made to 356 private developers in three phases between 2000-2003, 2004-2007 and 2008-2011 with a total land area of 12,691.7 hectares [30]. In addition, the private developers are issued with a "Letter of Intent" to allow them to source for fund from any financial institution to enable them carry out their obligations in the partnership. The FCTA also deferred collection of land charges till after the development on site must have been completed to enable the private developers to commit every available funds in the development process. The implementation of the housing scheme was initially managed by an ad hoc committee, referred to as PPP-Unit. However, in 2005 a substantive department — the Mass Housing Department was established to effectively co-ordinate the implementation of the scheme. The Department of Mass Housing issued out guidelines to provide a standard procedure for access to land and housing development in the federal capital territory, Abuja [31].

4. Assessment of the PPP Housing Program in Abuja

Although the PPP housing program in the FCT has been designed to enhance private sector participation, both the planning and implementation of the scheme in FCT is identified with a number of challenges. A closer examination of the scheme reveal some gaps particularly in view of the compliance of the scheme with the determinants of successful PPP established in the reviewed literature as follows:

- (i) Effectiveness of the procurement process

A vital principle of partnership is that the PPP procurement process must be open, fair, and diligent [32]. However, contrary to

the best international practice, the tendering process in the FCT PPP housing project was characterised by lack of transparency and competitiveness in the procurement process. For instance, evidences suggest that land allocation under the program was incongruent with the program's guidelines, which stipulates that the maximum land allocation is 10 hectares for the city and 5 hectares for satellite towns. As quoted by [29], one interviewee stated that 'anyone who comes in with a paper from a big man can get as much land as they want', despite the guidelines stipulation.

Political influence and favouritism have played important role in deciding which firms get the largest allocations. For instance, CGC Nigeria Ltd and Larix Company Ltd got the largest allocations of land under the program [29]. While CGC Nigeria Ltd is a financial giant Chinese company involved in numerous projects in Nigeria, Larix Company Ltd was reported to be financed by money embezzled from Afribank Plc [The Nation, February 2011]. Furthermore, [29] also observed that some highly placed officials the FCDA or the Minister himself, through proxies, illegally sell allocation letters at exorbitant high prices.

While "commitment" is also one of the fundamental principles for the successful PPP project [33], both the partners do not show commitment to the success of PPP housing project in the FCT. While the FCTA did not uphold its commitment to provide primary infrastructure, the private developers were busy building houses without providing the secondary and tertiary infrastructure as agreed. The tune of the language 'the FCTA shall, subject to availability of funds, provide primary infrastructure' evidently proves the lackadaisical commitment by the FCT government [8]. It was observed that most developers were not interested in providing ancillary infrastructure facilities in the proposed estates. Given their contractual complexity, the management of public-private partnerships requires a high level of capacity on the part of the public sector to successfully procure PPP projects [34]. However, the PPP housing scheme in the FCT indicates lack of public sector capability to steer the program to success. The provisions of the partnership agreement stipulates that the FCTA will provide the required primary infrastructure in the earmarked districts. However, contrary to the agreement, the FCTA failed to provide such infrastructure as stipulated [35]. As observed by [36], many of the mass housing districts were not provided with infrastructure for more than ten years.

(ii) Appropriate risk allocation

An equitable risk allocation mechanism is crucial to the successful implementation of PPP projects. In any PPP arrangement, risks should be allocated to the party best able to manage them cost-effectively [32]. Contrary to the caution by [32] the FCTA shifted the macro-level risks including political, legal and social risks to the private developers in the PPP housing project. The shifting of the macro-level risks over-burdened the private developers, which in turn, limited the success of the project.

(iii) Favourable investment environment

Housing delivery through PPP in Nigeria has been constrained by the nature of the prevailing environment in the country. The unstable macroeconomic condition, inadequate legal framework and endemic corruption in Nigeria has reduced the proportion of risks private sector would be willing to accept, which in turn, make PPP projects difficult [37]. Limited access to finance [38] and high-interest rates [39] are some of the drawbacks that militates against the success of PPP housing projects in Nigeria. The non-completion of housing construction and provision of infrastructure are attributed to stringent interest rates [30] which is over 20% [40] Because the private developers were issued with a Letter of Intent instead of a formal Right of Occupancy, which is the standard practice, they could not use it to access reasonable loans from commercial banks [30].

(iv) Judicious Government control

PPPs do not imply 'less government' but a different governmental role [41]. The government needs to maintain its involvement and control, either as a partner or a regulator. Government need to exercise control particularly where accountability is required, timeframe is long, or where societal norms need to be protected. The absence of effective administrative machinery, on the part of FCTA, for coordinating and controlling the actions of private sector participants has limited the success of the PPP mass housing scheme in the FCT. Ibrahim and Kwamkur [8] attributed the operational constraints of the scheme to the ad hoc nature of the PPP unit which hastily made decisions were as events unfold. For instance, because the private developers moved to site without securing the necessary approval, many houses were constructed on green areas and road reservations.

(v) Strong private sector

Appropriate selection of a private partner is one of the most critical elements for the long-term success of the partnership [42]. Accordingly, the public sector entity should ensure that the private sector consortium is technically competent, financially capable, and has the prerequisite experience for executing the projects. While only a few allocations were made to competent companies, the bulk of the allocations were given to well place companies with little financial capacity [8]. Because many developers had more land than they could develop; they resorted to land subdivision into single plots and made dubious profit under the PPP program [36]. Table 2 shows the level of implementation of the PPP housing project in the FCT.

Table 2: Level of implementation of the PPP housing project in the FCT CSFs with a list of SSFs

Design Provisions	Level of implementation	Remarks
Provision of land to developers by the FCT	Implemented	356 land allocations were made by the FCT
Provision of required primary infrastructure	Partially Implemented	FCT failed to provide primary infrastructure due to lack of funds.
Development of houses and secondary infrastructure in the sites.	Partially Implemented	Because FCT failed to provide primary infrastructure, most private developers focused on housing provision without secondary infrastructure.
Promotion of private sector participation in housing delivery.	PPP strategy adopted since the year 2000	-
Issuance of title documents to beneficiaries.	Not implemented	The FCT is yet to commence issuance of title documents to beneficiaries.
To build and sell completed houses to individuals	Partially Implemented	Selling pieces of land rather than houses turned the housing program to land subdivision program

4.1 Sustainable solutions for Coping with the Challenges of PPP housing Delivery

Although, the PPP housing initiative in the FCT was established to ease housing shortages, the program could not achieve its objectives due to its non-conformity with the established determinants and tenets of a successful partnership. In line with world best practices, the current policy thrust of PPP housing delivery in Nigeria must be structured in line with the principle of partnership as follows:

(i) Transparent and competitive procurement process

Lack of transparency and unethical behaviour has adversely affected procurement processes in Nigeria [Transparency-

International 2005]. Because the tendency for government officials in Nigeria to be corrupt is very high, due to weak governance institutions [43], the authors recommend, in line with [24] that an effective procurement process must be transparent and competitive throughout the process. Similarly, because government departments and their agency are fundamental institutional structures for successful PPP implementation [44], the public sectors in Nigeria should establish procurement team that have the necessary management skills and technical ability to achieve effective procurement.

(ii) Appropriate risk sharing

Public-Private Partnerships should allocate roles and responsibilities to the party best able to manage them cost-effectively [32]. Accordingly, this study recommends that risk allocation in PPP projects in Nigeria, the public sector should retain macro-level [political, legal and social] risks, while the micro-level [construction, design, operation, finance, and revenue] risks should be allocated to the private sector.

(iii) Providing a favourable environment for private sector participation

The willingness of private investors to participate in PPP projects depends significantly on the nature of the environment in which the projects are cited. The success of PPP housing projects depends on the economic strength, prevalent political environment and housing tradition of a particular state [45]. For this reason, the government should, as suggested by [46] create stable political, economic, social, legal, and financial investment conditions for PPP projects to thrive well. To improve access to finance, it is suggested that a low-interest long-term fund be put in place that could easily be accessed by middle and high-income groups and the private sector developers.

(iv) Government control

Although, public-private partnership is premised on the principles of limiting the role of the public sector, the role of government changes rather than disappear in a partnership. For this reason, the public sector needs to intensify its involvement in terms of regulations, supervision, and control.

(v) Competent private sector

Public-Private Partnerships are contractual relationship where a private party takes responsibility for all or part of government's functions. The private sector partner plays an important role in the successful implementation of PPP projects by undertaking far more commitment and assuming much broader risks than a mere contractor [25]. Therefore, the existence of a strong private consortium is essential towards achieving project success. In contracting out PPP projects, the government should ensure that the private sector partners are technically competent and financially capable of delivering the projects.

5 Conclusion

This article examined the challenges militating against sustainable housing delivery with particular reference to PPP strategy. Contrary to a key principle that a PPP project needs to be carefully planned and implemented, the procurement process of the project was not accorded an adequate consideration it deserve. The FCTA adopted the PPP approach without greater articulation of the determinants of PPP model regarding the provision of a favourable investment environment that will guarantee efficient procurement process for private sector participation.

Consequently, the application of public-private partnership model, as also observed by [47] did not make any significant contribution

towards boosting the supply of urban housing in Nigeria. In view of the findings of the study, the paper outlined sustainable solutions for coping with the challenges of PPP housing delivery in Nigeria. Given the dynamic and constant changes in the socioeconomic and political systems in Nigeria, the potentials in PPP housing research endeavours regarding recurrent challenges and associated solutions is inexhaustible.

References

- [1] Awodele OA, Ogunsemi DR, Rotimi JOB, Private Participation in Infrastructure [PPI] Development in Developing Economies - The Nigerian Experience. In: *The construction and building research conference of the Royal Institution of Chartered Surveyors*, Dublin; 2008.
- [2] Siemiatycki M., The Global Experience with Infrastructure Public-Private Partnerships. *Plan Environ Law*. 2012; 64[9]:6-11.
- [3] Loxley J. Are public - private partnerships [PPPs] the answer to Africa's infrastructure needs? *Review of African Political Economy*, 2013; [March 2014]:37-41.
- [4] Duffield CF. PPPs in Australia. In: *Public Private Partnerships - Opportunities and Challenges*, Hong Kong; 2004. p. 1-10.
- [5] Abdullahi BC, Abd-Aziz NA. The role of private sector participation in achieving anticipated outcomes for low-income group: A comparative analysis of housing sector between Malaysia and Nigeria. *African Journal of Business Management*, 2011; 5[16]:6859-90.
- [6] Ibem EO, Amole OO. Evaluation of Public Housing Programmes in Nigeria: A Theoretical and Conceptual Approach. *Built and Human Environment Review*, 2010; 3:88-117 p.
- [7] Ibrahim UJ, Kwankur TG. The Challenges of Housing Development and Needs in Abuja Nigeria. Rome, Italy; 2012.
- [8] Ukoje JE, Kanu KU. Implementation and the Challenges of the Mass Housing Scheme in Abuja, Nigeria. *American Journal of Contemporary Research*, 2014; 4[4]:209-18.
- [9] Abubakar IR. Abuja city profile. Cities. 2014; 41:81-91.
- [10] Hammami M, Ruhashyankiko J, Yehoue EB. Determinants of Public-Private Partnerships in Infrastructure. *IMF Working Paper*, 2006. Report No.: WP/06/99.
- [11] Nsaira R, Basheka BC, Oluka PN. Public Private Partnerships [PPPs] and Enhanced Service Delivery in Uganda: Implications from the Energy Sector. *International Journal of Business Administration*, 2013; 4[3]:48-60.
- [12] Osei-Kyei R, Chan APC. Review of studies on the Critical Success Factors for Public-Private Partnership [PPP] projects from 1990 to 2013. *International Journal of Project Management*, Elsevier Ltd and IPMA; 2015; 33[6]:1335-46.
- [13] Toor S, Ogunlana SO. Construction professionals' perception of critical success factors for large-scale construction projects. *Construction Innovation: Information, Process, Management*. 2009; 9[2]:149-67.
- [14] Ngiri EG. Factors influencing performance of Rural Development Community-based Projects in Murang' A South District, Murang' A County. Kenyatta University; 2012.
- [15] Tsai M-H, Mom M, Hsieh S-H. Developing critical success factors for the assessment of BIM technology adoption: part I. Methodology and survey. *Journal of Chinese Institute of Engineers*, 2014; 37[7]:845-858.
- [16] Tabish SZS, Jha KN. Identification and evaluation of success factors for public construction projects. *Construction Management and Economics*, 2011; 29[8]:809-23.
- [17] Tam CM. Build-operate-transfer model for infrastructure developments in Asia: Reasons for successes and failures. *International Journal of Project Management*, 1999; 17:377-82.
- [18] Akintoye A, Hardcastle C, Beck M, Chinyio E, Asenova D. Achieving best value in private finance initiative project procurement. *Construction Management and Economics*, 2003 Jul [cited 2014 Oct 9]; 21[5]:461-70.
- [19] Qiao L, Wang SQ, Tiong RLK, Chan T. Framework for Critical Success Factors of BOT Projects in China. *Journal of Project Finance*, 2001; 7[1]:53-61.
- [20] Jefferies M, Gameson ROD, Rowlinson S. Critical Success Factors of the BOOT Procurement System: Reflections from the Stadium Australia Case Study. *Engineering Construction and Architectural Management*, 2002; 9[4]:352-61.
- [21] Jamali D. A Public-Private Partnership in the Lebanese Telecommunications Industry: Critical Success Factors and Policy Lessons. *Public Work Management Policy*; 9[2]:103-19.

- [22] Norusis M. SPSS 16.0 *Advanced Statistical Procedures Companion*. Prentice Hall Press; 2008.
- [23] Hardcastle C, Edwards PJ, Akintoye A, Li B. Critical Success Factors for PPP / PFI Projects in the UK Construction Industry: A Factor Analysis Approach. *Construction Management and Economics*, 2005; 23[5]:1–9.
- [24] Li B, Akintoye A, Edwards PJ, Hardcastle C. Critical success factors for PPP/PFI projects in the UK construction industry. *Construction Management and Economics*. 2005; 23[5]:459–71.
- [25] Zhang X. Critical Success Factors for Public–Private Partnerships in Infrastructure Development. *Journal of Construction Engineering and Management*, 2005; 131[1]:3–14.
- [26] Helmy MA. Investigating the Critical Success Factors for PPP Projects in Kuwait. Royal Institute of Technology, Stockholm; 2011.
- [27] Chan APC, Lam PTI, Chan DWM, Cheung E, Ke Y. Critical Success Factors for PPPs in Infrastructure Developments: Chinese Perspective. *Journal of Construction and Engineering Management*, 2010 May; 136[5]:484–94.
- [28] Imam A, Mohammed B, Wilson DC, Cheeseman CR. Solid waste management in Abuja, Nigeria. *Waste Management*; 28[2]:468–72.
- [29] Umoh N. Exploring the Enabling Approach to Housing through the Abuja Mass Housing Scheme. Massachusetts Institute of Technology; 2012.
- [30] Kanu KU. Appraisal of the Implementation of Mass Housing Programme in the FCT, Abuja. Ahmadu Bello University, Zaria, Nigeria; 2013.
- [31] Department of Mass Housing. Gazetted guidelines for Mass Housing Programme of FCTA, EC 39[09] II. Abuja, Nigeria: Federal Government Printer; 2009. p. 13.
- [32] UN-HABITAT. Public-private partnerships in housing and urban development. Nairobi: UN-HABITAT; 2011. 36 p.
- [33] Hemming R. Public-Private Partnerships, Government Guarantees, and Fiscal Risk. Washington; DC; 2006.
- [34] OECD. Dedicated Public-Private Partnership Units A Survey of Institutional and Governance Structures [Internet]. Organisation for Economic Co-operation and Development; 2010. p. 117.
- [35] FCT Committee on Mass Housing. Briefing on the Mass Housing Scheme in the Federal Capital. 2007.
- [36] Abdullahi BC, Abd-Aziz NA. Nigeria's Housing Policy and Public-Private Partnership [PPP] Strategy: Reflections in Achieving Home Ownerships for Low-Income Group in Abuja, Nigeria. In: *22nd International Housing Research Conference. Istanbul*; 2010. p. 4–7.
- [37] Tolani O V. An Examination of Risk Perceptions and Allocation Preferences in Public-Private Partnerships in Nigeria. [Calgary, Alberta]: University of Calgary; 2013.
- [38] Ugonabo CU, Emoh FI. The Major Challenges to Housing Development and Delivery in Anambra State of Nigeria. *Civil and Environmental Research*; 3[4]:1–20.
- [39] Ayedun CA, Oluwatobi AO. Issues and Challenges Militating against the Sustainability of Affordable Housing Provision in Nigeria. *Business Management Dynamics*, 2011; 1[4]:1–8.
- [40] Abubakar IR, Doan PL. New towns in Africa: Modernity and/or decentralization? In: 53rd annual meeting, African studies Association. San Francisco, USA; 2010.
- [41] Jamali D. Success and failure mechanisms of public private partnerships [PPPs] in developing countries. *International Journal of Public Sector Management*, 2004; 17[5]:414–30.
- [42] National Council for Public Private Partnerships. Keys to Successful Public-Private Partnerships. 2008.
- [43] Ogun TP. Infrastructure and Poverty Reduction Implications for Urban Development in Nigeria. Helsinki, Finland; 2010. Report No.: 2010 / 43.
- [44] Mustafa A. Public-private partnership: an alternative institutional model for implementing the private finance initiative in the provision of transport infrastructure. *Journal of Project Finance*, 1999; 5[1]:56–71.
- [45] Brown A, Orr A, Lou J. The suitability of Public Private Partnerships in the provision of sustainable housing in China. *World Review of Entrepreneurship, Management and Sustainable Development*, 2006; 2[1/2]:101.
- [46] Kwak YH, Chih Y, Ibbs CW. Towards a Comprehensive Understanding of Public Private Partnerships for Infrastructure Development. *California Management Review*, 2009 Jan; 51[2]:51–78.
- [47] Ibem EO, Aduwu EB. Public-Private Partnerships [PPPs] in Housing Provision in Ogun State, Nigeria: Opportunities and Challenges. In: *4th West Africa Built Environment Research [WABER] Conference*, 24–26 July 2012. Abuja, Nigeria; 2012. p. 653–62.