



Public-Private-Partnership; A Panacea To The Problems of Infrastructure Development In Nigeria

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Abstract-*The quality of life and health of a Nation is dependent on the state of its infrastructure. There is the urgent need for pragmatic strategy to salvage the ever worsening infrastructural shortfall and deterioration in Nigeria. This study was aimed at evaluating the use of Public-Private-Partnership (PPP) System of Procurement as an option towards solving the infrastructure development problems in Nigeria. The objectives included; identifying factors inhibiting the use of Public-Private-Partnership on the Nigerian economy; to identify the Public-Private-Partnership system of procurement use for the Public Infrastructure in Nigerian. To achieve these objectives, the design adopted was field survey research while data were collected through the instrument of structured questionnaires directed to various participants of Public and Private Sectors. Data collected were analyzed using Relative Importance Index (RII). The analysis revealed that, the major factors limiting the usage of Public-Private-Partnership included; limited competition, loss of control, construction risks, and regulatory risks. The finding equally showed that political and economic risks rank highest among factors inhibiting the embrace of PPP in Nigeria while major effects of use included stimulating growth of Nigerian economy, provision of mega infrastructure among others. This study however concluded that PPP System of Procurement was having a positive effect (impact) on the nation's economy. The study proffered solution on how to enhance the effectiveness of the use of Public-Private-Partnership in Nigeria. PPP was recommended for attracting private investors to help in the development of this much-needed infrastructure, as the public sector alone could not provide the required fund for such development.*

Keywords: Construction Risks, Development, Economy, Infrastructure, Procurement, Public- Privat-partnershipnt.

1.0 Introduction

Ibrahim, Oyedele and Adogbo (2010): Opined that with the current estimated population of over 140 million and an annual growth rate of about 2.4%, Nigeria faces huge deficit of basic amenities and essential public infrastructure for the majority of her citizens. For Nigeria to meet her Millennium Development Goals (MDGs), there is urgent need for pragmatic strategies to salvage the ever worsening infrastructural shortfall and deterioration. Consequently, governments across the three tiers now encourage the application of Public-Private-Partnership (PPP) mechanisms in project procurement across diverse sectors of the economy by involving the private sector in the provision of public infrastructure and services.

Obozuwa,(2011); asserts that the traditional way of procuring public infrastructure and services through fiscal budgets is increasingly becoming unviable particularly, in developing economies, in view of the endemic budget deficits. Macroeconomic instability and growing investment requirements have shown that public financing is limited, volatile and often inefficient. (Citing Chege, 2001).

Akinyosoye (2010), asserted that the huge cost associated with infrastructure investment could be overwhelming. To address this, a procurement strategy different from the traditional approach, seems a more optimal route to go. Traditional procurement methods remain the major vehicle for procuring infrastructure projects within Nigerian and Africa, in general. However there may be risks inherent with them often in the areas of schedule completion delays and cost overruns. More long term strategic impact includes: Poor Maintenance cultures; Short-term gains; Long term revenue generation risks, financial risks.

The aim of this study is to assess the effectiveness of the use of Public- Private-Partnership Systems of Procurement in Nigerian Public Infrastructure, with a view to enhancing National economic development. To achieve this aim, the following objectives are set: To identify factors inhibiting the use of Public-Private-Partnership in Nigeria; to identify the Public-Private-Partnership systems of procurement used for the Public infrastructure in Nigeria; to evaluate the effects of PPP on the Nigerian Economy.

Ibrahim Oyedele and Adogbo, (2010); and Akinyosoye, (2010): Are works on Infrastructure Development and Public-Private-Partnership among other previous literature. While the former finds that, for Nigeria to meet her Mellenium Development Goals [MDGs], there is the urgent need for programmatic strategies to salvage the everworsening infrastructural shortfall and deterioration; the latter summarized his findings that, to attain significant accelerated development over the next 10-15 years, Nigeria will have to expand its infrastructure development funding in tangible capacity by 24% of GAP over 10 years by 24% of GAP over 15 years to catch-up with most Asian Countries present level of development.

This research identifies that the procurement system despite the previous studies, has not be embraced. The study will also serve as a guide and precautionary measure to the participants, such as contractors, consultants, project companies in decision making during concession and implementation of projects as well as useful for lecturers and students researching on the subject matter.

In view of some constraints such as time, fund and the sheer size of the country, the study area for this research work will be delimited to Lagos State and Osun State. The delimitation is informed because of concentration of Public-Private-Partnership projects being executed and large concentration of the professional participants in Lagos State. Besides, while it is the commercial nerve centre of the nation, Osun State is to serve a representative capacity of the country side states.

2.0 Public Private Partnership System

Ibrahim, Oyedele and Adogbo (2010): A Public-Private-Partnership is an agreement between a public agency and a private sector entity that combines skills and resources to develop a technology, product and/or service that improves the quality of life, for the public. The private sector has been called upon numerous by various governments to use its resources, skills and expertise to perform specific tasks for the public sector. Historically, the public sector has frequently taken an active role in spurring technological advances by directly funding the private sector to fulfill a specialized need that cannot be completed by public sector itself. Therefore an Infrastructure Concession Regulatory Commission (ICRC) was established in November 2008, to regulate PPP infrastructure arrangement in the country.(AFDF, 2010).

The instant author opines that this is a good step in the right direction; all efforts must be made to immune the new ICRL against endemic corruption.

Dairu, (2012). The private sector is playing increasingly important roles in producing goods and providing services that were once considered "public" and therefore exclusively the responsibility of governments (Cuttaree, 2008). Moreover, international assistance organizations such as the World Bank and the International Finance Corporation often require as a precondition for infrastructure loans to developing countries, that governments mobilize private investment and improve public service delivery. Privatization of State Own Enterprises (SOEs) is usually a basic component of economic reform programs and PPPs can help privatize commercially viable services. (Wilson, Songer and Diekmann, 1995) and (Grimsey and Lewis, 2007).

Hamilton, (2004): Asserts that PPPs refer to contractual arrangements between government and the private sectors to build, finance and manage public infrastructure. Such projects are not backed by sovereign guarantees, the risk in the projects is mainly borne by the private sector. Developing and transition economies often experience inadequate housing, poor transportation facilities and roads, lack of access to safe drinking water and dangerous levels of emissions from industries (e.g. mining, manufacturing, etc). PPPs effectively increase investment in necessary infrastructure as well as improving the delivery of social services such as health and education projects.

Dahiru, (2012): Asserts that interest in PPPs and other forms of government-private sector cooperation has emerged in countries around the world for a variety of reasons. Neither national nor local governments in most countries have sufficient budgetary resources to extend services and infrastructure or to subsidize inefficient state enterprises or agencies. The United Nations Development Program (2010); Points out that in developing countries "the current and projected revenue base of most municipalities is inadequate to finance capital improvements and associated operating costs and many municipalities have large debt obligations, leaving little room for major new loans. Public dissatisfaction with the quality and coverage of government-provided services and the slowness with which national and local governments extend infrastructure often pressure them to seek more private sector participation. (Osborne, (2010), cited in Olasijibomi and Oloruntobi, (2012).

The instant author is of the view that while the scenario is applicable to Nigeria, the Nigerian situation is certainly more critical.

2.1 Typical Models of Public-Private Partnership

Obozuwa, (2010); Babatunde, Opawole & Ujaddughe, (2010): Opine that the following terms are developed from commonly used terms to describe PPP agreements globally as in Nigeria.

- i. *Design And Build (DB) or "Turnkey" Contract:* The private sector designs and builds infrastructure to meet public sector performance specifications, often for a fixed price, so the risk of cost overruns is transferred to the private sector. (Many do not consider DB's to be within the spectrum of PPP's).
- ii. *Service Provision: (E.g., Specific customer services or operation & maintenance) contract:* A private operator, under contract operates a publicly-owned asset for a specified term. Ownership of the asset remains with the public entity.
- iii. *Management Contract:* A private entity contracts to manage a Government owned entity, and manages the marketing and provision of a service.
- iv. *Lease And Operate Contract (LO):* A private operator contracts to lease and assume all management and operation of a government owned facility and associated services, and may invest further in developing the service and provide the service for a fixed term.
- v. *Design-Build-Finance-Operate (DBFO):* The private sector designs, finances and constructs a new facility under a long-term lease, and operates the facility during the term of the lease. The private partner transfers the new facility to the public sector at the end of the lease term.
- vi. *Build-Operate-Transfer (BOT):* A private entity receives a franchise to finance, design, build and operate a facility (and to charge user fees) for a specified period, after which ownership is transferred back to the public sector. This has been used in telecommunications service contracts.
- vii. *Renovate-Operate And Transfer (ROT):* Under this variance, the developer renovates an already existing building/ facility, which he is henceforth permitted to operate so as to recoup his investment before transferring it back to the original owner. This variant is relatively different from others; in that the structure in question is already in existence as against other variants in which the structure is developed by the developer.
- viii. *Build-Lease And Transfer (BLT):* Under this variance, the developing firm or consortium is allowed to lease (out) the completed facility and recoup its money before transferring the completed facility to the owner at an agreed time.
- ix. *Investment-Management And Investment Services (IM/IS):* This variance allows a development firm to complete the construction of the facility while independent investment management firm manages the facility on behalf of both parties, for the period of occupancy by the developer for the purpose of recouping the capital invested by the developer and for ensuring that the facility is in good standing by the time of handing over to the owner, finally.

- x. *Buy-Build-Operate (BBO)*: Transfer of a public asset to a private or quasi-public entity usually, under contract that the assets are to be upgraded and operated for a specified period of time. Public control is exercised through the contract at the time of transfer.
- xi. *Build-Own-Operate (BOO)*: The private sector finances, builds, owns and operates a facility or service in perpetuity. The public constraints are stated in the original agreement and through on-going regulatory obligations.
- xii. *Build-Own-Operate & Transfer (BOOT)*: The Private Sector builds, owns, operates a facility for a specified period as agreed in the contract and then transfers to the Public.
- xiii. *Operating License (OL)*: A private operator receives a license or rights to build and operate a public service, usually for a specified term. Similar to BBO arrangements. This is often used in telecommunications and ICT projects.
- xiv. *Finance Only (FO)*: A private entity, usually a financial services company, funds a project directly or uses various mechanisms such as a long-term lease or bond issue. (Menheere, and Pollalis, 1996).

Dahiru (2012): Reiterates on extensive research on Private Finance Initiatives (PFI) projects delivered in United Kingdom which had identified factors that impede the achievement of best value for money in PFI projects. These include: high cost of the PFI procurement process, lengthy and complex negotiations, difficulty in specifying the quality of service, pricing of facility management services, potential conflicts of interests among those involved in the procurement, and the public sector clients' inability to manage consultants. (Akintoye, Beck & Hard Castle, 2003).

2.2 *How Public-Private-Partnership Systems Help In Financing Project*

PPPs well implemented can help overcome some of these pervasive challenges. PPPs can mobilize additional sources of funding and financing for infrastructure. PPPs can help improve project selection, subjecting assumptions to the market test of attracting private finance. The key characteristics of project finance include: cash flow generated by the project must be sufficient to cover payment for operating cost, service the debt (capital repayment and interests) and return on equity: lenders have only limited recourse (or no recourse) to the sponsors after the project is completed; sponsors' liabilities are limited to their equity contribution (beyond that amount, sponsor are liable only in special conditions when finance is arranged on limited recourse basis); and, sponsors may be required to provide collateral to lenders. (World Bank, 2012), and (Buger and Hawkesworkesworth, 2011).

2.3 *Rationale For PPPs In Nigeria*

In the recent times, Nigeria has undertaken several policy reforms with a view to improving standard of living of the people. Millennium Development Goals, National Economic Empowerment and Development Strategy (NEEDS), State Economic Empowerment and Development Strategy (SEEDS) 2004-2007, Seven-Point Agenda 2008-2011, Vision 2020-20; focusing on making Nigeria one of the twenty largest economies in the world by Year 2020.

Nigeria, as a nation has got to shift from the Traditional Procurement system to the PPPs for the following reasons: For the purpose of mobilizing funds through Private Investments; The need to divest government of the role of infrastructure developer and operator to facilitator and governance; To institutionalized Management Efficiency- through Newer Technologies, Work Place Efficiency, Personnel Development, Shared Resources and Platforms Access to Diverse Sources of Capital. Fill the resource gap in infrastructure delivery and operation; Accelerate Infrastructure Provision / promote faster implementation of projects through engender reduced whole life project costs; Better risk allocation between public and private sectors; Better and sustainable incentives for private sector performance; engender accountability in final utilization; improve overall quality of service; generate additional revenue for government; improve overall value for money for the entire economy and discipline for transforming strategic intent into actions and results on a permanent basis, creation of jobs and employment opportunities through an enabling policy framework; improved access to finance and skills for enterprise (AfDF, 2010).

To address the problems of shortfall and deteriorating infrastructures; the Federal Government of Nigeria established the Infrastructure Concession Regulatory Commission (ICRC) in November 2008, to

develop guidelines and specific procedures for PPP projects and to monitor compliance of PPP contracts. (AfDF, 2010).

3.0 Research Methodology

The design for this study was field survey research while the instrument for collection of primary data was structured questionnaire.

Sample size; of 68 determined through purposive Simple Random Sampling technique, distributed to relevant professionals in the construction industry. Out of which only 50 (i.e 73.53%) were returned and found worthy of analysis.

Data obtained from respondents were analysed using simple statistical tool of Relative Importance Index (RII); evaluated by the formula / expression:

$$RII = \sum \frac{wn}{AN} \quad (0 \leq \text{Index} \leq 1)$$

Were w = Weighting given to each factor by the respondents and ranged from 5 to 1;

n = Number / frequency of respondents

A = Highest weight (i.e. in this case = 5)

N = Total number of respondents

The measure scale on the degree of significance means 5 = Highest / Most, while 1 = Least / Never

Table 1: Constraint Factors Affecting the Use of Private Public Partnership in Nigeria

Factor Affecting	5	4	3	2	1	Total	RII	Rank
	Frequency							
PPP Projects tend to have longer payback and buy-out period and are often susceptible to political and regulatory interference	30	14	4	2	0	50	0.888	1st
Most local financial markets have limited capacity to finance infrastructure projects	20	30	0	0	0	50	0.880	2nd
Low or non-existence credit rating limits the Public Sector's abilities to attract private investors	22	24	4	0	0	50	0.872	3rd
Lack of pool of operation and maintenance	20	20	6	2	2	50	0.816	4th
Inability to achieve value-for-money in the provision of infrastructure and public services	20	20	2	2	6	50	0.784	5th
Poor overall governance – corruption	10	20	20	0	0	50	0.760	6th
Inability to identify and share or allocate risks, appropriately	6	30	8	6	0	50	0.744	7th

Field Survey, August 2014.

Table 2: PPP Systems For Infrastructure Development in Use of Procurement in Nigeria

	5	4	3	2	1			
Public Private Partnership Systems	Frequency					Total	RII	Rank
Build – Operate – Transfer (BOT)	12	26	2	10	0	50	0.760	1st
Service Provision (e.g., Specific Customer Services / Operation And Maintenance)	10	30	0	10	0	50	0.760	1st
Design And Build (DB) or “Turn Key” Contract	18	18	4	4	6	50	0.752	3rd
Design – Build – Finance – Operate (DBFO)	16	20	4	4	6	50	0.744	4th
Management Contract	13	20	6	6	5	50	0.720	5th
Build – Own – Operate & Transfer (BOOT)	14	16	4	8	8	50	0.680	6th
Operating License.	6	16	14	12	2	50	0.648	7th
Lease And Operate & Contract	10	16	8	2	14	50	0.624	8th
Build – Own – Operate (BOO)	4	14	18	8	6	50	0.608	9th
Renovate Operate And Transfer (ROT)	6	18	6	10	10	50	0.600	10th
Build, Lease And Transfer (BLT)	4	16	16	4	10	50	0.600	10th
Finance Only	10	10	12	6	12	50	0.600	10th
Investment Management / Investment Service (IM / IS)	2	14	20	4	10	50	0.576	13th
Buy-Build-Operate (BBO)	8	6	16	10	10	50	0.568	14th

Field Survey, August 2014.

Table 3: Effects / Contribution Of The Use Of PPP Systems In Nigeria

Effects /Contribution Of Private Partnership In Nigeria.	5	4	3	2	1			
	Frequency					Total	Mean	Rank
Stimulating growth of the Nigerian Economy	30	18	0	2	0	50	4.520	1st
Providing Mega Infrastructure	30	14	4	2	0	50	4.440	2nd
Creating enabling environment and mobilizing additional sources of funding and financing for infrastructure development.	30	10	10	0	0	50	4.440	3rd
Motivating increased efficiency and full utilization of facilities	22	24	4	0	0	50	4,360	4th
Providing Employment Opportunities to Nigerian Youths	18	26	6	0	0	50	4.240	5th
PPP system also encourage a life cycle approach to planning and budgeting	8	24	12	0	0	50	3.44	6th
Providing shelter for the populace	14	14	8	4	10	50	3.360	7th

Field Survey, August 2014.

4.0 Summary of Findings

According to table 1; the result of question on constraint factors affecting the use of PPP in Nigeria, reveals that PPP projects tend to have longer payback and buy-out period, and often susceptible to political and regulatory interference; is ranked highest; followed by Most local financial markets have limited capacity to finance infrastructure projects; and Low or non-existent credit rating limits the public sector’s ability to attract private investors.

Table 2; As scored by the respondents, the PPP systems most used in Nigeria are Build-Operate-Transfer (BOT); Customer Service Provision Design and Build or Turn-Key Contract; Design-Build-Finance and Operate (DBFO), respectively.

Table 3; on the question of effects / contribution of the use of PPP systems in Nigeria, the scores by the respondents depict that the most notable are as follows: Stimulating growth of the Nigerian economy; Providing mega infrastructure; Creating enabling environment and mobilizing additional sources of funding and financing for infrastructure; Motivating increased efficiency and full utilization of facilities, respectively.

5.0 Conclusion

The study concludes that with regards to factors affecting/ inhibiting the use of Public-Private-Partnership in Nigeria, are:

PPP project tend to have longer payback and buyout period, and are often susceptible to political and regulatory interference; most local financial market have limited capacity to finance infrastructure project; low or non-existent credited rating limits the Public Sector's ability to attract private investors among others.

It is also concluded that Public-Private-Partnership variances – Build-Operate And Transfer (BOT); Customers Service (Operation and Maintenance); Design And Build or Turn-Key Contracts are the most frequently used of Public-Private- Partnership systems of procurement in Nigeria.

The study further concludes that the effects / contribution of the use of Public- Private-Partnership on Nigeria Economy are: Stimulating the nation's economy; Providing Mega infrastructure; Creating enabling environment and mobilizing additional source of funding and financing for infrastructure; Increased efficiency and full utilization of facilities.

In view of the foregoing findings and conclusion; the following recommendations therefore, become imminent:

That government should put in more efforts to implement more of Public-Private-Partnership projects in the country by:

Developing a holistic framework for attracting private investors to help in the development of these much needed infrastructure, as the public alone cannot provide the required infrastructure.

Entrenching proper procedures to investigate and ensure that the right PPP variances are adopted for specific project proposals.

Training public officer to have good understanding of PPP concepts, as most of the times, their experience as monitoring officers are needed for the smooth execution of the partnering contracts, which are to help stimulating the nation's development and provisions of more enabling environment.

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