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Public Private Partnership, a Veritable Tool for Sustainable Construction in Achieving Quality and Affordable Shelter in Nigeria

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Abstract:

Public Private Partnerships (PPPs) are arrangements between governments and private sector entities for the purpose of providing public infrastructure, community facilities and related services. PPP as a relatively new concept in Nigeria had proved to be a veritable tool in the development of infrastructural facilities in most countries. This paper presents a study on ways and means of utilizing PPP as a tool in providing quality and affordable shelter in Nigeria. Field survey was carried out using structured questionnaire. A total of one hundred questionnaires were distributed out of which sixty eight were returned. Result of the study showed that PPP as a procurement process can be very useful in Nigeria if the enabling environment is created. In conclusion, it can be drawn from the results of the study that the attitude of all stakeholders must change so that the performance of PPP as a veritable procurement tool can be achieved.

Key words: Public private partnership, veritable, sustainable, affordable, shelter

1. Introduction

The importance of quality and affordable shelter to any community or nation cannot be over emphasized. This is a result of its satisfaction to human needs and serves as indispensable infrastructure in assessing the development of a country.

The procurement systems documented in literature (Oyediran, 2008) are:

- Traditional procurement
- Design and build procurement
- Management procurement
- Public/private partnership procurement
- Labour only procurement
- Direct labour

There has been a growing trend in recent years towards reduced public spending on infrastructure projects. This has been demonstrated by governments or either agencies placing major projects into the private sector rather than the traditional domain of public sector, but by using this strategy. According to such a strategy, the private sector promoter generally provides financing for the project. It also builds and as well own and operate the project over a certain period of time before the project is transferred at the end of that period. Often the procurement is executed as a concession contract (as can be seen in Lekki-Epe road in Lagos, Nigeria). This form of project procurement does not require direct funds from the client which in this case is the government of Lagos State.

Public private partnership is gaining ground as can be seen in home grown versions of PPP in some of the projects executed by the Lagos State Government.

Ashworth (2006) opined that sustainable construction has several definitions. It can be defined as the construction needs of today being compatible with and not compromising the needs of future generations. It includes construction practices that strive for integral building quality, including economic, social and environmental performance.

Thus, sustainability involves the entire life cycle of buildings by taking environmental and functional quality and future values into account.

However, sustainable construction is an inherently complex subject, with a very large range of variables that interact and are frequently contradictory. Objective studies have often shown that many of the interactions are counter-intuitive and there are many misconceptions about sustainable construction issues perceived by the construction industry. For example, it is commonly held that recycling will substantially reduce the quantities of future materials extracted. Objective studies have shown that the quantities of waste arising from demolition are too small for the current demand for materials recycling to dramatically reduce the quantities of materials extracted. Recycling is nevertheless very important as a strategy for preserving land fill capacity.

Ashworth (2006) further stated that sustainable development involves effective protection of the environment which requires activity on many wide-ranging different fronts. There are four main objectives of sustainable development, which are:

- Limit global environment threats, such as global warming
- Improve the energy efficiency of buildings.
- Combat fuel poverty through social action
- Provide economic growth through a more efficient use of resources, such as reuse, recycling and the recovery of waste products.

2. Literature Review

The United Nations estimates that Nigerian's population in 2005 stands at 141 million, and predicted that it would reach 289 million by 2050 (Encarta 2007). The United States Census Bureau projects that population of Nigeria will reach 265 million by 2050. Nigeria will then be the 8th most populous country in the world (Encarta 2007). Rapid growth in population creates demand pressure towards shelter and efficient supply and distributions of basic utilities and services for the city dwellers. In most of our urban centers the problem of housing is not only restricted to quantity but to the poor quality of available housing units. The effect which is manifested in overcrowding in houses. Nigeria is perhaps the fastest urbanizing country in the African continent. One of the most important challenges facing the country is the provision of affordable housing. As more and more Nigerians make towns and cities their homes, the resulting social, economic, environmental and political challenges need to be urgently addressed (Raji, 2008).

A recent study of housing situation in Nigeria put existing housing stock at 23 per 1000 inhabitant. Housing deficit is put at 15million houses (Mabogunje, 2007) while \$\frac{\text{\text{M}}}{12}\$ trillion will be required to finance the deficit. This is about 4 times the annual national budget of Nigeria (FHA, 2007). Home prices and rents, on the other hand have grown ahead of general inflation. Making matters worst, the composition of homes for sale and rent on the market has been inexorably shifted towards very expensive home (Nubi, 2008).

The effort to ensure that there is an increase in the nations stock, and to enhance cordial working relationship between government and the corporate private partner's developers, which will promote efficiency and proper delivery, the Obasanjo's administration espoused public private partnership (PPP) in infrastructural development in Nigeria (Dahiru, Abdul Azeez and Bala, 2013). PPP as defined by Lawther (2002) in Dahiru and Abdul Azeez (2010), is the relationship between government agencies and private or nonprofit contractors that should be formed when dealing with services or products of highest complexity.

Aderibigbe (2008) stated that PPPs are arrangements between government and private sector entities for the purpose of providing public infrastructure, community facilities and related services. Such partnerships are characterized by the sharing of investment, risk, responsibility and reward between the partners. The reasons for establishing such partnerships vary but generally involve the financing, design, construction, operation and maintenance of public infrastructure and services (Batley 1996, Murtala 2007 and IP3 2009)

Public private partnership offers a long term sustainable approach to improving social infrastructures, enhancing the value of public assets and making better use of tax payer's money. These initiatives have taken many forms such as the outright privatization of previously nation- owned industries, contracting out services to private organizations and the use of private finance in the provision of social infrastructures and services. PPP are thus been promoted as a means of providing traditional public service more efficiently by focusing on public service output, they offer a more sophisticated and cost effective approach for the management of risk by public sector than is generally achieved by traditional input-based on public sector procurement(Carr., 1998 and Babalakin, 2003). Thus PPP are veritable tools for the development of the nation's infrastructure. They offer the state a unique tool for obtaining large capital improvement, that if properly structured can yield benefit in performance, reliability, reduce risk and costs savings. That is why PPP arrangements are growing in use and acceptance as an alternative and effective method to mobilize additional financial resources and benefit from private sector efficiencies. The application of PPP to project is only limited to the imagination of those entrusted with executing the completion of these projects. Despite the myriad advantages associated with PPP, it does not provide a miracle solution for a quick fix and should only be used where appropriate and where it is able to deliver clear advantages and benefits. According to Dahiru et al (2013) there is need for effective management through an appropriate regulatory frame work, appropriate monitory process and peer review mechanism, demand for value for money and appropriate risk allocation. This means that for Nigeria to find faster ways of developing infrastructure, with greater efficiency and at optimum value for money, there is the need to find ways and means of enhancing the use of PPP for infrastructural growth (Dahiru et al, 2013). This is a report on an investigation of procedures for improving PPP as a viable option for infrastructural advancement. This was achieved through the following major steps:

- Study the concept of PPP with special emphasis on the enabling environment, procedures for the procurement of projects using PPP, various types of PPP and the types of projects that are procured using PPP arrangements.
- Examine how it is used in the procurement of infrastructural facilities in Nigeria.
- Investigate the problems militating against effective use of the system in Nigeria.
- Gauge professional's perception on the ways of enhancing PPP in the provision of infrastructural services.

3. Research Methodology

This research work was done through:

- Literature review: Text books, the internet, journals and conference materials were used to carry out a wide literature review in order to articulate existing knowledge on the subject.
- Field survey: Field survey was carried out using structured questionnaires as the instrument of the study. A total of 100 questionnaires were administered to professionals in the construction industry. Sixty eight questionnaires were well completed and returned. Attention was paid to only four cities of Lagos, Ibadan, Enugu and Abuja where most of the construction works in Nigeria had taken place and are still taking place.

3.1. Results and Discussion

Data that were obtained from the field survey are presented below under the following headings:

3.1.1. Details of the respondents

A total of 68 questionnaires were returned and properly completed, which represented 68% of the overall questionnaires distributed. Details of the respondents were as follows: Architects were 26.47%(18), Builders were 14.71%, Engineers were 17.65% (12), Quantity Surveyors were 22.06%(15), estate surveyors were 10.29%(7), Town Planners were 4.41%(3) and others were 4.41%(3).

The educational background of the respondents were as follows: National Diploma holders were 29.41%(20), Higher National Diploma holders were 36.77% (25), Bachelors Degree were 13.23%(9) and Masters degree holders were 13.25%(9) and other qualifications were 2.94% (2). None of the respondents had a Ph.D.

3.1.2. Legal Framework

International Committee of the Red Cross (ICRC) in 2009 enunciated of existing legislations that were used to determine the existence of the necessary legal instrument that will protect parties to PPP agreement and enhance the success of programme in Nigeria. The legislations were as follows

- The Privatization and Commercialization Act 1999
- The Infrastructure Concession Regulatory Commission (Establishment) Act 2005
- The Fiscal Responsibility Act 2007
- The Public Procurement Act 2007
- Other relevant legislation

There is consensus of opinion that there is room for improvement as regards to the legal framework that need to be put in place so as to empower the public authorities to enter into agreement with the private sector and as well protect the interest of private sector. Major part of the major constraints has to do with absence of guide to public authorities on the procurement of PPP and drafting of contract. Besides there is the lack of effective dispute resolution machinery.

3.1.3. Institutional Framework

This is another institutional framework that will ensure accountability is an important issue which will include:

- Coordination of communication between public authorities
- Development of standardized document.
- Guidance for the benefit of state governments.
- Access to relevant guidance, training, expertise and resources.

These and other factors were used to assess the measures put in place aimed at ensuring the success of the provision of infrastructural facilities using PPP.

3.1.4. Procurement Process

Procurement process study was also undertaken using a checklist of the major steps involved. This was compared with how it is practiced in Nigeria. Steps involved at preparatory stage are:

- Technical, legal and financial advice from external sources if possible
- Consultation with private sector to determine their capacity and willingness
- Cost-benefit analysis
- Evaluation of options for meeting project objectives
- Analysis of project risks and mitigation measures
- Affordability analysis

However the factors that should be considered when evaluating most appropriate procurement strategy are:

- Factors outside the control of the project team.
- Client resources
- Project characteristics
- Ability to make changes
- Risk management
- Cost issues

- Timing
- Quality and performance.

Further to be above, results of investigation show that almost all the important steps that are supposed to be taken before, during and even after, are not followed.

3.1.5. How PPP is used in the procurement of infrastructural facilities in Nigeria

Major projects where PPP arrangement were used in the procurement of infrastructural in Nigeria was first and foremost assessed by the respondents as regards how they see them using likert scale. The scales are Poor (P), Fair (F), Average (A), Good (G) and Very Good (VG) and were assigned a value of 1,2,3,4 and 5 respectively.

S/n	Areas and the success achieved									
		Frequency								
		1	2	3	4	5	f	Fx	Mean (X)	
1	Transportation	2	3	10	16	35	68	277	4.07	
2	Water and waste water	9	20	20	9	10	68	195	2.87	
3	Education	2	5	6	12	40	55	278	4.28	
4	Health/Hospital	3	9	20	17	15	55	232	3.32	
5	Public housing, land and development	4	8	10	6	39	67	269	4.02	
6	Information/technology	14	24	9	6	15	63	188	2.76	
7	Justice/prisons	3	14	18	10	20	65	225	3.46	
8	Defense	3	13	8	17	26	67	251	3.75	

Table 1: Areas where PPP were used successfully

Source: Field Survey, 2014

Table 1 above shows areas where PPP have been used in Nigeria successfully. Transportation averaged 4.07 (Good), Education averaged 4.28 (Very good) and Public housing, land and area development averaged 4.02 (Good), showed high importance of PPP engagement while Health/Hospital averaged 3.52 (Good), Justice/Prisons averaged 3.48 (Good) and Defense averaged 3.75 (Good) showed importance the respondents attached to PPP engagement. However, Water and waste water averaged 2.87 (Average) and Information Technology averaged 2.76 (Average) showed assessment of respondents to them as they are just average.

3.1.6. Problems affecting the efficient use of the system in Nigeria

Survey on factors affecting the effective use of the PPP was carried out the respondents were requested to work the common problems faced in the use of PPP in Nigeria based on their perception using scale 1-5 where 1= Poor, 2=Fair, 3=Average, 4=Good and 5=Very Good.

S/N	Problems								
		1	2	3	4	5	f	Fx	Mean (X)
1	Nigerian factor (care free attitude to government properties)	1	4	10	20	33	68	284	4.18
2	Lack of experience in PPP	4	14	25	13	11	67	204	3.04
3	Engaging projects that do not suit PPP	2	2	10	30	24	68	276	4.06
4	Corruption		4	15	11	38	68	287	4.22
5	Lack of basic infrastructures	8	28	8	13	10	67	180	2.69
6	Political bottleneck	3	5	6	25	28	67	271	4.05
7	Wrong selection of partner for PPP	1	5	10	25	26	67	271	4.05
8	Inconsistent government policies	2	4	6	25	32	68	287	4.22
9	High cost of social amenities		6	15	28	18	67	259	3.87

Table 2: Problem affecting PPP in Nigeria

Source: Field Survey, 2014

Table 2 above showed problems associated with PPP in Nigeria are many. Nigerian factor averaged 4.18 (Good), Lack of experience in PPP averaged 3.04 (Average), Engaging projects that do not suit PPP averaged 4.06 (good), Corruption averaged 4.22 (Good), Lack of basic infrastructures averaged 2.69 (Average), Political bottleneck averaged 4.05 (Good), Wrong selection of partner for PPP averaged 4.05 (Good), Inconsistent Government policies averaged 4.22 (Good) and High cost of social amenities averaged 3.87 (Good). However, it is observed from table 2 showed problems being faced in Nigeria and some developing nations.

3.1.7. Discussion of Results

From the field survey, it could be seen in the areas where PPP had been used to achieve relative success like transportation, education, public housing, land and area development averaging between 4.02 to 4.28 which can be improved upon.

However, it could be seen that the problems areas are so much from table 2 ranging from Nigerian factor, Engaging projects that do not suit PPP, Corruption, Political bottleneck, Wrong selection of partner for PPP, Inconsistent government policies and High cost of social amenities (Enabling environment) as they all averaged between 4.05 to 4.22.

4. Conclusion

From this research work, it can be established as follows:

- That the governments need to establish mechanism that will help in fighting corruption among PPP stakeholders.
- Enabling environment need to be created to carry out PPP arrangements/projects so as to achieve high success.
- Due to high turnover of I.T. facilities, PPP should be used to procure them.

4.1. Recommendations

Further to the above, it is hereby recommended as follows:

- The attitude of all the stakeholders must change so that the performance of PPP as a veritable procurement tool can be achieved in Nigeria.
- The enabling environment such as good leadership, power, security and good road should be improved to guarantee effective management of PPP projects.
- Long term policies in support of PPP need to be in place to guide against incessant changes that usually happen when there is a change in the leadership of government in Nigeria.
- Future generational needs should not be compromised today but proper PPP project delivery arrangement should be made to utilize human, financial, natural and other resources in an efficient manner.
- Mechanism that improves dispute resolution and ensures public security and safety and environmental safety in order to prevent failure of the PPP projects

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