

Appraising Sustainability of Public Infrastructural Projects Development in Nigeria

Samuel I. J. Onwusonye
*Department Of Quantity Surveying
Imo State University, Owerri*

Abstract

The products of public infrastructural project include among others, highways, air traffic control and other social facilities of hospital, schools, prisons and industrial capacity. Activities associated with the development of infrastructural project by characteristics generate and release intrinsic growth momentum and further generation of wealth and income needed for a healthy economy through its multiplier and accelerator capabilities. The actualization of accrued benefits with adequacy and capable of driving a nation's gross development product [GDP] to sustainability through growth revolves on procurement economy effected on strategic public infrastructural project development. The study appraised sustains ability of public infrastructural project development in Nigeria between 2004 and 2014. The study used a sample of 69, received 52 of administered questionnaire, recording 75% success from government officials, consultants and other key players in the built environment. Data from structured questionnaire and personal interview were analyzed using descriptive percentile and mean item score. The results revealed that poor budget implementation remained the most mitigating factor affecting contribution to GDP followed by weak financial base, corruption and fraud, et etcetera. The study further showed that for 11 years, the contribution of public infrastructural project development to GDP was 2.13% on average and even on yearly basis did not hit the 4% global minimum. The role of foreign contractors who handled more than 90% of the project development was taken to have had a share in the glaring leakages and distortions. Recommendations such as the introduction of sanity into budget implementation, local contents, functionality of financial and capital markets, optimal development of non-oil sector, experienced quantity surveyor to coordinate and achieve realistic budget, etcetera were proffered.

Keywords: *Budget and implementation, Key players, National economy, Public infrastructural development, Sustainability*

Corresponding Author: Samuel I. J. Onwusonye

Background to the Study

The ultimate goal of any mindful government is to achieve a higher per-capita income for her citizenry. Hence, the desire to trigger positive actions on macroeconomic activities for sustained blissfulness remains imperative. The development of infrastructural projects has been empirically found to exert significant impact on the economy.

Infrastructure, submit CBO (2008), refers to facilities with the common characteristics of capital intensive and high public investment at all levels of government. They are moreover, dire critical to the activity in the nation economy. They include high ways, public transit systems waste water treatment works, water resources, air traffic control, airports, water supply and such social facilities such as hospitals, school, prisons and even industrial capacity.

World Bank (2005), stated that the adequacy of infrastructure helps determine one country's success but when lacking, results to failure in diversifying production, expanding trade, coping with population growth and urbanization or improving environmental condition. Thus, good infrastructure raises productivity and lowers production costs.

Nigeria's environment for infrastructural project development does not meet the needs of average investor resulting to low investment and high cost of doing business to poor infrastructure (NEEDS 2004). As a corroboration, oluwakiyesi (2011) posit that Nigeria is below realizing its potentials in infrastructural project development as the sector recoded the lowest (21%) among crop production, crude oil production and wholesale & retail trade 27 year compound Annual Growth Rate (CAGR) notwithstanding glaring deficit.

Furthermore, NEEDS (2004) described Nigeria economy as characterized by the policy thrust which encouraged growing dominance of the public sector over reliance on a single commodity (oil) and the pursuit of a highly import dependent, import substituting industrial strategy and the reliance on the export of few primary commodities. A number of measures have been formulated and implemented by successive Nigeria governments to improve the performance of infrastructural projects development with a view to earning known attributes for national development and possibly growth culminating to sustainability. For instance, NEEDS (2004) noted that the construction environment in Nigeria remained unattractive for average private investor in infrastructural project development Hence, a reform aimed at developing and maintaining adequate and appropriate infrastructure that is conducive to private sector driven economic development and growth ensuring private sector participation in the process and creation of a competitive business environment. Perhaps, this policy explains the attraction and involvement of numerous expatriate contractors who are comparatively loaded with enviable financial and technical capabilities, undertaking more than 90% of construction activities in Nigeria.

Objective of the Study

The aim of study is to appraise the sustainability of public infrastructural projects development in Nigeria. Specific objective include:

1. To identify the key players in the public infrastructural project development.
2. To access the factors affecting public infrastructural project development in Nigeria.
3. To evaluate accrued benefits of infrastructural project development and its sustainability in Nigeria.

Research Questions

1. Who are the key players in the public infrastructural projects development?
2. What are the factors affecting public infrastructural project development?
3. What benefits accrued in the development of infrastructural projects and its sustainability?

Recent revelations show that the performance of construction industry in Nigeria is below expectation and full of problems and challenges (Ogunsemi and Aje 2005). A little has been done as to addressing the retrogressive factors affecting the optimal realization of the attributes associated with infrastructural projects development in Nigeria, hence this study.

Scope and Limitation of the Study

The study covers a period of 11 years (2004 -2014). The time frame captures the period of major policy thrust and changes in the infrastructural projects development and effect on the economy of Nigeria. For instance, the implementation of National Economic Empowerment and Development Strategy (NEEDS) of 2004. In 2008, Infrastructure Concession Regulatory Commission (ICRC) was established with a view to actualizing vision 2020. These policies encouraged private sector initiative and participation in the provision of infrastructure;

In 2007, the Public Procurement Act (2007) emerged aimed at ensuring transparency, accountability, value- for money and efficiency in infrastructural project development; One limitation of the study is the disparity observed in the data published by National Bureau of statistics and the World Bank sources. However, this problem was addressed through the use of the data published by National Bureau of Statistics believed to have been generated empirically from domestic sources.

Literature Review

Key players in public infrastructural projects development

Public projects, Morledge et al (2006) refers specifically to work carried out wholly or partly with public funds. Furthermore, the procurement processes must have involved transparency, accountability, approved published policies, standing orders, and financial regulations including maximizing value for money through optimal combination of price, quality and time.

The key players of public project management or supervision, NEED (2004) are mainly public sector and project consultants. The public sector comprises anybody established for the specific purpose of meeting needs in the general interest and devoid of industrial or commercial character such as President, Governors, Ministers, Directors, and/or their representatives. Project consultants are mainly professionals in the built environment such as Project Managers, Architects, Engineers, Quantity Surveyors, etc.

Factors Affecting Public Infrastructural Project Development

1. Weak Financial Base

Nigeria as a developing economy is soaked with financial dualism, comprising unorganized money market which is noted for very high cost of capital and the organized money market with relatively low cost of capital that often prove to be unfavourable to infrastructural project development. (Jhingan 2003).

This perhaps, explains why most public private partnership turnkey project are handled by foreign investors who have enviable financial muscles. Expatriate constructors carryout 96% of the total construction works in Nigeria due to their technical and financial capabilities (Ogbebor 2002). In 2013, the world's largest 250 international contractor as a group, generated revenue profit of US \$543.97 billion from projects outside their respective home countries (Engineering News Record,2014).

2. Poor Feasibility Reports

Feasibility report, Patel (2000) seeks to incorporate among others, the objectives of the project, developed brief, technical specification, cost estimates, programme of implementation, benefits and risks. Nigeria appears not to rely on a report of this nature in its budget allocation. Mallam. Hussaini Abau Actionaid Country Director described the 2015 budget allocation to infrastructural development as worrisome. Thus, 30% capital expenditure against 70% recurrent will not help the economy to grow as adequate investment in infrastructure will strengthen the economy.

3. Poor Budget Implementation

The implementation of budget is a function of executive arm of government who are mostly politicians NEEDS (2004) posit that the implementation of approved budgets constantly experienced retrogressive forces such as lack of administration machinery, capacity to implement, transition problems, poor or vague and ambiguous project documentation, bad fiscal habits, political will and to a reasonable extent, uncontrolled government spending, policy sommersault and other unfavourable internal and external macro-economic forces.

Furthermore, <http://www.budgetmonitoring.ng.org> posits that Prof. Pat Ntomi, director of the Lagos Business School described successive government budget as one of such documents that raises the hope of the people, yet failed to meet the target as it affects the welfare of the majority of the people. It further stated that budget implementation in 2004 was 22%, 25% in 2005, 22% in 2006, 29% in 2007, 40% in 2008, 41% in 2009,31% in 2010,55% in 2011, 2012 is 51%, 52% in 2013 and 58% in 2014.

4. Corruption and Fraud

Stansbury (2007), submit that the construction industry was generally perceived as the most corrupt industry worldwide. She added that it would be safe to assure that where there is a significant construction project, there is often a very real possibility of corruption.

In Nigeria, Nwosu (2000), posit that most politicians are noted for unparalleled intolerance, lawlessness, greed, idleness, thievery, sectional, tribal rivalry and selfishness that opened the way for and sustained the persisting political and economic backwardness of the country and the destitute condition of the majority of its people. For example, Lai Mohammed, Nigeria Minister of Information and Culture, on January 18th, 2016 disclosed during media briefing that 55 government officials had been alleged to have defrauded the nation a whopping sum of N1.34 trillion between 2006 and 2013.

5. Poor Adherence to Policies

The Public Procurement Act (2007) provides the guideline, policies and criteria for the award of contracts for public goods and service. The act seeks to ensuring open competition, transparency, accountability, value for money and fitness of purpose including effecting award to the lowest Evaluated Responsive Bid whose rates have the capacity to drive the activities of construction to completion.

However, government, who are mostly made up of politicians had remained at liberty to choose for inclusion in the budget the nature, type and quantum of public goods and services for possible development with or without effecting regards to the laid down rules, policies for public capital projects procurement.

Accrued Benefits of Infrastructural Projects Development and Sustainability

Hillebrandt (2000), submit that an investment in construction activities generates wages for those (construction workers) who produce it which in turn generate profit for manufactures of consumer goods and so on right through the macro-economic. It follows that those activities of infrastructural project development release intrinsic growth momentum and further generation of wealth and income needed for a healthy economy through its multiplier and accelerator capabilities.

Sustainability, Brundland (2007), seeks to meet the needs of the present generations without compromising the needs of future generation. AEO (2012) stated that activities of infrastructural project development contributed 2.08% in 2011 against international standard of between 4% and 14% to GDP. The GDP of Nigeria as a developing nation is not only lean but also slow and oftentimes even negative (Ray 1983).

Methodology of the Study

Data collections were sourced from primary and secondary sources while the secondary sources were of published data

The primary sources were achieved using questionnaire, survey and in-depth interview. The multiple choice questionnaire was used on a 5 point Likert scale.

The populations of the study were spread in Abuja and Lagos. The researcher distributed some while professional colleagues and friends also assisted. The researcher personally conducted the interview.

Data Analyses

Statistical tools such as frequency distribution involving frequency tables for quantitative and qualitative parameters were used in the study. Questionnaires as well as percentiles were used to analyze the background information about the respondent. The study also adopted a variant of arithmetic mean to obtain a quantitative equivalent of the average response provided by the respondents in accordance with the 5 point Likert type scale.

The mean item score (MIS) was computed using $\text{Mean} = \frac{\sum fw}{n}$

Where $\sum fw$ connotes the sum of all weights and the frequency of the respondents opted for such heights. $\sum f$ is the total number of respondents.

Criteria for drawing inferences from the mean score:

4.90 < MIS ≤ 5.0 Very significant	3.70 < MIS ≤ 4.89 Significant
2.50 < MIS ≤ 3.69 Neutral	1.30 < MIS ≤ 2.49 Insignificant
0.00 < MIS ≤ 1.29 very Insignificant	

The interview segment of the research was conducted based on the senior management officers of government, experienced professionals in the built environment and construction firms.

Results and Discussions of Findings

Out of 69 questionnaires administered to respondents, 52 filled were returned achieving a 75% success. The results showed that Ministries, Parastatals and Agencies recorded 57%, 23% and 20% respectively. Furthermore, Quantity Surveyors, Engineers and Project managers each recorded 21.2% involvement while Architects and Construction firms respectively recorded 17.3% and 19.1%. All these remained critically involved in the area of study as key players.

Category	Classification	Frequency	Percentage
Location	Abuja	32	61.54
	Lagos	20	38.46
	Total	52	100
Public Actors	Ministries	30	57
	Parastatals	12	23
	Agencies	10	20
	Total	52	100
Built Environment Professionals and Actors	Quantity Surveyors	11	21.2
	Architect	9	17.3
	Engineers	11	21.2
	Project Managers	11	21.2
	Construction firms	10	19.1
	Total	52	100
Respondents years of experience	0-5 years	3	5.8
	6-10 years	20	38.5
	11-15 years	21	40.4
	16-20 years	4	7.5
	21-30 years	3	5.8
	Over 30 years	1	1.9
	Total	52	100

Table 4.2 Assessment of Factors affecting public Infrastructural Project Development

Variables	Mean	rank
Poor budget implementations	4.20	1
Weak financial base	4.02	2
Corruption and fraud	3.94	3
Political instability and civil unrest	3.92	4
Poor feasibility report	3.46	5
Leakages and distortion	3.25	6
Policy summersaults and other forces	3.24	7

Poor budget Implementations with a MIS of 4.20 was ranked highest among the factors mitigating infrastructural project development. Weak financial base, corruption and fraud, political instability and civil unrest ranked 2nd, 3rd and 4th respectively. Policy summersault and other forces belonged to least ranked.

Table 4.3 below captured the benefits in form of contribution by building and constructions sector to the Gross Domestic Product (GDP) for Nigeria on yearly bases (2004-2014). None of the years nor all the years as average (2.13%) appear to have positively impacted significantly to the economy.

Evaluation of Accrued Benefits in Public Infrastructural Project Development

Table 4.3: contribution of building and construction sector to gross domestic product (GDP) for Nigeria at 1990 constant basic prices.

S/N	Year	GDP	Total GDP	Percentage Contribution
1	2004	7,622,470,000.00	527,576,020,000.00	1.44
2	2005	8,544,480,000.00	453,891,390,000.00	1.88
3	2006	9,654,790,000.00	595,821,620,000.00	1.62
4	2007	10,912,570,000.00	634,251,270,000.00	1.72
5	2008	11,338,820,000.00	672,202,560,000.00	1.69
6	2009	13,816,340,000.00	718,977,340,000.00	1.92
7	2010	15,454,020,000.00	776,332,220,000.00	1.99
8	2011	17,325,570,000.00	834,000,840,000.00	2.08
9	2012	19,504,630,000.00	888,893,010,000.00	2.19
10	2013	2,676,280,000,000.00	80,092,560,000,000.00	3.34
11	2014	3,188,820,000,000.00	89,042,620,000,000.00	3.58
				AVERAGE= <u>2.13%</u>

Source: National Bureau of Statistics.

Discussions of Results

The study revealed that poor budget implementation with a mean of 4.20 and ranked 1st, exerted the highest significant impact mitigating infrastructural project development. This is in line with NEEDS (2004) which discussed budget implementation as experiencing retrogressive forces. Pat Utomi described budget as a document that failed to meet the target.

As revealed by the study, between 2004 and 2014, the infrastructural project development in Nigeria never attained the minimum of 4% Expected Benefits to the GDP either yearly or as average (2.13%) for 11 years. The relative improvement though of little significance on the GDP between 2009 and 2014 could be attributed to enhanced budget implementation and to a great extent, the effect of relative adherence to Public Procurement Act (2007) policies and guidelines.

The study above revealed that more than 90% of the infrastructural project development was handled by foreign contractors who came with them virtually imported resources/construction workers with little local contents, eventually transferred home most of the expected benefits, recording leakages and distortions to Nigerian economy thus giving credence to Engineering News Record, 2014.

The existence of sustainability regarding the subject of study is doubtful. The average (2.13%) contribution of the infrastructural project development over 11 years clearly confirmed the position of Ray (1983) that the GDP of most developing economies is not only lean but also slow and often times even negative.

The study further showed that the infrastructural project development no doubt had been positively contributing to Nigeria economy but owing to its low capacity there still exists persistent poverty, unemployment and inequalities occasioned by the absence of undeveloped technological and structural changes.

Resultantly, sustainability does not exist. Thus it behoves on the government to evolve and implement policies that will ensure uninterrupted, quantitative and qualitative infrastructural project development over at least a decade to achieve growth and thereafter sustainability.

Conclusion

The study concludes that the contributions of public infrastructural project development between 2004 and 2014 to the GDP of Nigeria remained below global standard occasioned by retrogressive forces, thus lacking the capacity to attain growth and/or sustainability.

Recommendation

The study recommends that:

Government should exhibit sincerity and transparency in its policies especially on budget implementation affairs so as to instil confidence in many categories of local and foreign investors on public infrastructural project. These are highly critical as non release, inadequate release or even late release of the budgeted sum remained counter-productive, mitigating positive contribution to GDP.

Government should come up with proactive policy which will minimize the dichotomy in infrastructural projects development to the extent of compelling the foreign contractors to further improve in the use of local contents during pre and post contract execution of their high technology and even management personnel. The results would not only assist in transferred knowledge but also improved GDP in the long run.

Government of various categories should ensure that only professionally qualified and experienced members of the built environment are commissioned to undertake the production of tender documents and/or feasibility study reports towards procuring and delivering infrastructural projects. This is necessary as the production and efficiency of these documents are highly technical and experience oriented and any deviation remains counter-productive.

Government should genuinely pursue partnership with advanced economy and/or corporate organizations that are endowed with appropriate related and suitable technology needed for optimum development of the known and unknown resources towards complementing the resources from oil. This action, it is believed will impact positively on the eradication of poverty, creation of employment, improved balance of payments and high Net National Product fundamentally needed for equilibrium of a healthy nation.

Government should improve on the functionality of the financial and capital markets especially the specialist's banks such as the Bank of industry, the Urban development Bank, the Federal Mortgage Bank of Nigeria etcetera through improvement of the regulatory environment business climate and privatization. These actions are viewed advantageous as the local contractors will benefit from low cost of capital, timely and uninterrupted flow of funds during site activities and bridge the financial gap between foreign and local contractors.

References

- AEO (2012). *Africa Economic outlook* <http://www.africaeconomicoutlook.org/en/countries/west-africa/Nigeria/> accessed 2 Dec. 2012
- Brundland (2007). *Sustainable development, exploring the contradictions*. World Bank Washington
- CBO, (2008). *New direction for the Nation works*. US
- Engineering News Records (ENR) (2014). *The top 250 International Contractors. Engineering News Records*. The McGraw Hill Companies, inc 2014 <http://www.budgetmonitoring.ng.org>
- Hillebrandt, P.M (2000). *Economic theory and the construction industry*. London: Macmillan Press Ltd ,
- Morledge, R., Smith, A. & Kashiwagi, D.T. (2006). *Building procurement*. London: Blackwell Publishing Ltd UK.
- NEEDS, (2004). *National economic empowerment strategy; national planning commission*. Abuja: Nigeria.
- Nwosu, E.J. (2000). *The Challenge of Poverty in Africa*. Skillmark Media Ltd Owerri
- Ogbebor, P.O. (2002). *Enhancing Indigenous Construction Industry as a National Goal in Nigeria Development*. Nigeria Construction Industry: Past, Present Problems and Prospects. Ibadan: University Printing pg;230-239.
- Ogurusemi, D.R & Aje, I.O. (2005). A model for contractors selection in Nigeria. *The Quantity Surveyor* 50 (1) pg 2-7.
- Oluwakiyesi, T. (2011). *Construction industry Report : A Haven of Opportunities: Vitiva Research (online)*. Available from oluwakiyesi@vitiva.com.
- Patel, B. M. (2000). *Project management strategy, financial Planning, Evaluation and Control*. New Delhi: Vikas Publishing House P.V. Ltd.
- PPA (2007). *Public Procurement Act*. National Assembly Abuja: Nigeria.
- Starsbury, N. (2007). *Exposing the foundations of corruption in constructions*. <http://www.transparency.org>.
- Jhingan, M. L (2003). *The Economics of development and planning*
- Ray, S. K. (1983). *Economics of the Thirdworld*. New Delhi: Prentice Hall India Private Limited.
- Worldbank, (2005), <http://devata>, <http://www.budgetmonitoring.ng.org>