CRITICAL FACTORS AFFECTING DEVELOPMENT OF INFRASTRUCTURE IN NIGERIA

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Abstract- This study is specially designed to investigate the critical factors affecting development of infrastructure in Nigeria focusing on the Nigeria fourth republic (1999 till date). Questionnaire was used to obtain information on factors that affect development of infrastructure in Nigeria. The targeted sample population for this study comprises of two hundred (200) Nigerian citizens in the study Area. Analysis and interpretation of data was used of frequently distribution table and simple percentage. Chi – Square statistical method was used in testing the hypotheses in order to arrive at valid conclusion. The data shows the Factors Affecting Development of Infrastructure in Nigeria. The findings in the table depicted that 20% Strongly Agreed, a majority of 60% agreed. However, a few 17% of the respondents disagree while 10% of the respondents strongly disagreed that Dearth of Visionary Leaders is one of the major factor affecting the Development of Infrastructure in Nigeria. Also demand and supply as a factor affecting development of infrastructure: majority of 51% of the respondents Agreed, 23% strongly Agreed, 20% disagreed while the lowest percentages (10%) strongly disagreed to the statement. Low Level of Technology; majority 86% of the respondents Agreed, 13% strongly agreed while 1% disagreed. Capital Flight, Capital Sink and Capital Stagnancy: 49% of the respondents agreed while majority of 51% strongly agreed to the statement. Corruption pestles Analysis and Development Matrix: 49%, 38%, 31% agreed respectively, 38%, 49%, 37% strongly agreed respectively, 6.5%, 6.5%, 17% disagreed respectively, while 10%, 10%, 15% strongly disagreed to the statements respectively. The factors affecting of infrastructure development in fourth republic are many. It was conclude that Political, Economic, Social, Technology, Legal, Environmental have effect on Infrastructure Development in Nigeria. The demand surpasses the supply and finance that will stimulate rapid provision is not there. Due to wide gap between provision and needs, the leadership classes are in arrears in all sectors. The political situation is not encouraging to foreign investors. Governments do not set the priority right in infrastructure development. Projects are supposed to meet objectives, but in most cases, projects embarked upon are white elephant projects.

Keywords- Affecting, Critical, Development, Factors and Infrastructure.

I. INTRODUCTION

Infrastructure contributes to economic development by increasing productivity and providing amenities which enhance the quality of life. The services generated as a result of an adequate infrastructure base will translate to an increase in aggregate output. Infrastructure development has in recent times assumed a central importance in Nigeria's fight to attain social and economic stability. The federal government and all state governments are using infrastructure as the focal point of their administrations and policy enactments. Infrastructure generally has to do with the fixed provision of tangible assets on which other intangibles can be built on. Not limited in scope, it revolves the provision of Housing, Power (electricity), Transport, Education, Communication, and Technology.

Infrastructure is the basic physical and organizational structures needed for the operation of a society like industries, buildings, roads, bridges, health services, governance and so on. It is the enterprise or the products, services and facilities necessary for an economy to function. Infrastructure can be described generally as the set of interconnected structural elements that provide framework supporting an entire structure of development. It is the means of achieving an objective or set of objectives and also includes the objectives. It is an important term for judging a country, region or state's and individual's developments/status. The term typically refers to the technical structures that support a society, such as roads, water supply, sewers, electrical national grids, telecommunications, and so forth, and can be defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions". Viewed functionally, infrastructure facilitates the production of goods and services, and also the distribution of finished products to end-users (markets), as well as basic social services such as schools and hospitals; for example, roads enable the transport of raw materials to a factory. In military parlance, the term refers to the buildings and permanent installations necessary for the support, redeployment, and operation of military forces.

The word infrastructure, originally mean "The installations that form the basis for any operation or system". Infrastructure in developing countries connotes roads and transport infrastructures. The advent of telecommunication infrastructure in Nigeria brought infrastructure to the front seat as the products and services necessary for the performance of an entity. There are two types of infrastructure, "Hard and Soft" infrastructure. Hard refers to the large physical networks necessary for the functioning of a modern

industrial nation, whereas "soft" infrastructure refers to all the institutions which are required to maintain the economic, health, and cultural and social standards of a country, such as the financial system, the education system, the health system, the governance system, and judiciary system, as well as security. Nigeria has one of the most promising pipelines of infrastructure private Partnership Projects (PPP) in Africa. With a rapidly growing population, the need to develop the country's infrastructure is paramount to allow the economy to continue to develop unchecked. Accordingly, Nigeria is the focus of a great deal of attention from the international infrastructure sector currently, as a result of its infrastructure gap and the commitment of Federal and State governments to fill this gap. Unreliability of power infrastructure has no doubt been a factor in sluggish development in certain parts of the economy, particular in process plant related industries. However, as a number of newly-financed independent power producers(IPPs} come on line in the next few years, assisted by Nigeria's power privatization initiative, the increasing stability of power infrastructure and increased exposure of international and local investors, as well as development finance institutions (DFIs) and export credit agencies (ECAs), to the Nigerian market should assist the process of developing Nigeria's anticipated pipeline of infrastructure projects. Lack of adequate power; roads and similar infrastructure will continue to hamper economic development in the country.

II. OBJECTIVE OF THE STUDY

The general objective of this study is to examine the critical factors affecting development if infrastructure in Nigeria with particular reference to Nigeria fourth

Republic (1999 till date). The specific objectives are:

1) To critically look into the challenges facing the infrastructure development in Economic growth and development in Nigerian.
2) To appraise governments role on infrastructure development.

III. RESEARCH QUESTION

The questions are;

i. What are the challenges of the infrastructure development in the economic growth and development in Nigerian?
ii. Should the government continue in her liner infrastructure development structure or diversify?
iii. HYPOTHESIS
iv. Ho: Political, Economic, Social, Technology, Legal, Environmental does not have any effect on Infrastructure Development in Nigeria.
v. Hi: Political, Economic, Social, Technology, Legal, Environmental have effect on Infrastructure Development in Nigeria.

IV. THE FACTORS AFFECTING INFRASTRUCTURE DEVELOPMENT IN NIGERIA

The factors affecting the infrastructure development in Nigeria are:

- Dearth of Visionary Leaders: Visionary leaders are the builders of a new dawn, working with imagination, insight, and boldness. They present a challenge that calls forth the best in people and brings them together around a shared sense of purpose. Visionary leaders are change agents. Nigeria contains few change agents and therefore lacks the neededinfrastructure to develop the nation.
- Demand and supply: Due to poor performances of most past leaders in the area of infrastructure provision, the agitation for infrastructure development overwhelms the provision. With a land mass of 9,110,000 square kilometers of land and over 150,000 million people, Nigeria has a total road network of 193,200KM. This comprise of 34,123KM federal roads, 30,500KM state roads and 129,577 KM local government roads. Unfortunately, over 70% of the federal roads are in bad state of repair. In the area of housing, Nigeria requires about 17 million housing units and 60 trillion naira in order to meet its housing needs.
- PESTLES Analysis: The factor affecting infrastructural growth and development of Nigeria can be discussed under PESTLES Analysis. Factor affecting infrastructural development can be: political, economic, social, technology, legal, environmental and safety. Political environment has to do with the political stability, policy formulation and politics of the project environment both within and without. Economic environment deals with issues like interest rate, inflation, currency exchange rate, price fluctuation etc. Social environment has to do with workforce diversity including cultural difference, age difference etc. Technology environment deals with the machineries which are used for the execution of projects. Physical environmental issues like site topography, geology and climatology is also essential. Safety issues have to do with health and safety and security of resources on site, that is human, material and financial. While some countries have been able to implement individual projects to alleviate those difficulties, Nigeria does not have common

strategic targets for infrastructure development. Good governance is crucial for ensuring the effective and efficient provision of infrastructure. This is largely because, firstly, good governance means that resource allocations will reflect national developmental priorities and thus respond to societal demands.

- Development Matrix: The four requirements of any physical infrastructure projects are: design, finance, technology and management. The appropriate designs that will ensure value for money are not adopted. The finance is not adequate, is procured at high interest rates and financial management is lacked by most Nigerian contractors. The technology of construction is scarce and the management of infrastructure is lacking. The maintenance culture of Nigerians is poor thereby allowing most projects to decay.
- Capital Flight, Capital Sink and Capital Stagnancy: Infrastructure development projects in Nigeria suffer from capital flight, capital sink and capital stagnancy. A lot of materials and managerial services are procured outside the country. The contracts are full of loop-holes that allow leakages of funds. In some cases, there are over-design for the designers to earn more professional fees which are percentage of the contract sum. Capital stagnancy due to abandoned projects are also rampant.
- Procurement Method: The procurement methods being adopted are prone to criticisms. The Public Finance Initiatives, especially the Concession Method and Public/Private Partnership (PPP) are questionable and seems to mortgage others who are not part of the arrangement to the scheme's future. The 105-kilometre Lagos-Ibadan Expressway which, under the PPP scheme, the federal government did concession to Bi-Courtney Consortium in 2009 for N89.53 billion for 25 years is not the best arrangement possible and has not change the situation of the road.
- Corruption: Corruption does not only raise the price of infrastructure, it can also reduce the quality of, and economic returns from, infrastructure investment. The corruption in Nigeria is very high and unbearable for effective infrastructural development. The Bureau of Public Procurement (BPP), the Independent Corrupt Practices Commission (ICPC) and Economic and Financial Crimes Commission (EFCC) have not been able to eradicate corruption in the country. The BPP has saved the country a whopping sum of N216.6 billion during the 2010 Appropriation year from its review of contract processes before the issuance of Certificate of No Objection.

V. RESEARCH METHODOLOGY

This part of the study involves the use of some statistical tools for data collection, selection analysis and testing of hypotheses. In doing these, the study discussed research method, research instrument, sampling, procedure and sampling design and problem encountered during the study. The study considered survey method of research as appropriate for sourcing and analyzing data. In the survey, sample is selected from the population and used as inference to generalization of the population's variable. The surveys serves as guide to decisions on a research and it is advantageous for providing original and reliable information.

VI. DESIGN OF THE STUDY

The research design is a miniature of activities or specific procedures and strategies to follow so as to obtain the most valid answers to research questions. It is a blue print indicating how data relating to a given problem should be collected and analyzed. The research method will be centered on questionnaire, which is the primary source of data collection. Ten questions will be asked to determine the Factors Affecting Development of Infrastructure in Nigeria reference to Nigeria fourth republic (1999 till date).
Location and Period of Study.

The study was carried out between May to July, 2014 in randomly selected Nigerian citizens with a minimum qualification of (NCE), and randomly selected population of Akure in Ondo State and Ado Ekiti in Ekiti State. These include; politicians, mass media, civil servant, professionals such quantitysurveyors, architects, lawyers, builders e.t.c.Akure is a city in south-western Nigeria, and is the largest city and capital of Ondo State. The city has a population of approximately 360,268. The people are of the Yoruba ethnic group. Ado-Ekiti is a city in south- western Nigeria, the state capital and headquarters of Ekiti State with a population of about 308,621of 2006 population census. The people of Ado Ekiti are mainly of the Ekiti sub-ethnic group of Yoruba. Ado Ekiti City has a State ownedUniversity - formerly called University of Ado Ekiti now Ekiti State University, Ado-Ekiti,a privately owned University - the AfeBabalola University, Ado-Ekiti, a Polytechnic - the Federal Polytechnic, Ado Ekiti, two local television and radio stations, - NTA Ado Ekiti, Ekiti State Television (BSES), Radio Ekiti, Progress FM Ado Ekiti. Various commercial enterprises operate in Ado Ekiti. The city is the trade centre for a farming region where yams, cassava, grain, and tobacco are grown. Cotton is also grown for weaving.

VII. TARGET POPULATION

The targeted sample population for this study comprises of two hundred (200) Nigerian citizens in the study area.

Sample Size

The sample size for this study was drawn from the population of two hundred (200) respondents in Akure in Ondo State and Ado Ekiti in Ekiti State. Using simple random techniques. The selected samples from the population are One hundred and sixty two (162) respondents of Akure in Ondo State and Ado Ekiti in Ekiti State.

VIII. METHOD OF DATA ANALYSIS

Analysis and interpretation of data would involve the use of frequently distribution table and simple percentage. Chi – Square statistical method were used in testing the hypotheses in order to arrive at valid conclusion

ANALYSIS OF RESULT: TABLE 1- DEMOGRAPHIC INFORMATION OF RESPODENTS

Parameters	Frequency	Percentage (%)
Gender		
Male	92	57
Female	70	43
Total	162	100
Educational Qualification		
NCE/OND	45	28
BA/BSC/	44	27
MSC	15	10
OTHERS	52	35
Total	162	100
Age Limit		
31-40	97	60
41-50	35	21
51-60	20	13
61 and Above	106	
Total	162	100
Occupation		
Civil Servant	27	17
Arch	70	43
Quantity Surveyor	30	18
Builders	20	12
Others	15	10
Total	162	100

Source: Researcher's field survey (2014)

IX. DISCUSSION

Table 1 above shows the demographic characteristics of the respondents. There are more males (57%) than females (43%) in this study. 28% of the respondents has NCE/OND certificate, (27%) of the respondents has BA/BSC/BED, (10%) MSC has (12%) while others educational qualification has (35%). The 31 -40 age group has the highest percentage (60%), 41 -50; (21%), 51 – 60 years; (13%) and 61 and above; (6%). The occupation group has the highest percentage of (27%) were civil servant, (43%) were Arch, (18%) were Quantity Surveyor, (10%) were Builders while the lowest percentages (10%) were other profession.

Table 2 Factors Affecting Development of Infrastructure in Nigeria

actors Affecting Development of Infrastructure in Nigeria	A	SA	D	SD	Total
Dearth of Visionary Leaders Percentage (%)	98 60%	20 13%	27 17%	17 10%	162 100
Demand And Supply Percentage (%)	83 51%	37 23%	32 20%	10 6%	162 100
Low Level of Technology Percentage (%)	140 86%	20 13%	2 1%	- -	162 100
Capital Flight, Capital Sink and Capital Stagnancy Percentage (%)	80 49%	82 51%	- -	- -	162 100
Corruption Percentage (%)	80 49%	62 38%	10 6.5%	10 6.5%	162 100
PESTLES Analysis Percentage (%)	62 38%	80 49%	10 6.5%	10 6.5%	162 100
Development Matrix Percentage (%)	50 31%	60 37%	27 17%	25 15%	162 100

Source: Researcher's field survey (2014)

Table 2 above shows the Factors Affecting Development of Infrastructure in Nigeria. The findings in the table above depicted that 20% Strongly Agreed, a majority of 60% agreed. However, a few 17% of the respondents disagree while 10% of the respondents strongly disagreed that Dearth of Visionary Leaders is one of the major factor affecting the Development of Infrastructure in Nigeria. Also demand and supply as a factor affecting development of infrastructure: majority of 51% of the respondents Agreed, 23% strongly Agreed, 20% disagreed while the lowest percentages (10%) strongly disagreed to the statement.

Low Level of Technology; majority 86% of the respondents Agreed, 13% strongly agreed while 1% disagreed. Capital Flight, Capital Sink and Capital Stagnancy: 49% of the respondents agreed while majority of 51% strongly agreed to the statement. Corruption, pestles Analysis and Development Matrix: 49%, 38%, 31% agreed respectively, 38%, 49%, 37% strongly agreed respectively, 6.5%, 6.5%, 17% disagreed respectively, while 10%, 10%, 15% strongly disagreed to the statements respectively.

HYPOTHESIS

Ho: Political, Economic, Social, Technology, Legal, Environmental does not have any effect on Infrastructure Development in Nigeria.
Hi: Political, Economic, Social, Technology, Legal, Environmental have effect on Infrastructure Developmentin Nigeria.

The above hypothesis will be tested using the PESTLES Analysis of respondent to determine (Political, Economic, Social, Technology, Legal, Environmental does not have any effect on Infrastructure Development in Nigeria)

PESTLES Analysis	A	SA	D	SD	ROW TOTAL
Observed Expected Value	40 39.4	50 50.8	7 6.4	6 6.4	103
Observed Expected Value	22 22.6	30 29.2	3 3.6	4 3.6	59
Column Total	62	80	10	10	162

Source: Researcher's field survey (2014)

To get the value in brackets, use the stated formula below;

$$E = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$$

i.e. $\frac{RT \times CT}{GT}$

The critical value from the chi Square table at 5% or (0.05) level of Significance. The degree of freedom = (r-1)(c-1)= (2-1)(4-1)
= (1x 3) = 3
X^2 t = 9.82

DISCUSSION

Decision rule is that since X^2cal (9.2) is less than X2 t (9.82) i.e 9.2 < 9.82 we reject the alternative hypothesis and accept the null hypothesis Political, Economic, Social, Technology, Legal, and Environmental has effect on Infrastructure Development in Nigeria. This agrees with (Adeyinka 2004) who opined that Factor affecting infrastructural development in can Nigeria can be: political, economic, social, technology, legal, environmental and safety.

CONCLUSIONS AND RECOMMENDATIONS

The factors affecting or challenges of infrastructure development in fourth republic are many. The result reveals that Political, Economic, Social, Technology, Legal, Environmental have effect on Infrastructure Development in Nigeria. Adeyinka (2004) stated that Factor affecting infrastructural development in can Nigeria can be: political, economic, social, technology, legal, environmental and safety. The political situation is not encouraging to foreign investors. Governments do not set the priority right in infrastructure development. Projects are supposed to meet objectives, but in most cases, projects embarked upon are white elephant projects. Nigeria's growth rate has begun to experience a significant decline since the highs of 11% recorded in 2004. 2008 figures of 5% speak volumes. It could be argued that the global boom periods and recession had a part to play. Nonetheless, from the foregoing, it is clear that inadequate infrastructure is also a contributing factor. Lack of adequate power; roads and similar infrastructure will continue to hamper economic development in the country.

Nigeria is now so strategically important that it cannot be ignored by investors, and increasing international interest is being matched by increased commitment by DFIs. Nigerian infrastructure PPPs to date have had a rocky start, but the market outlook still remains promising to those prepared to work hard and find an appropriate balance of risks and opportunity that will allow their project to stand the test of time.

The country has a big land mass that makes it possible to spread out. Connecting the people of Nigeria with roads, National Grid and potable water will be tasking. High cost of materials for infrastructure development is also a challenge. The local content of production of goods and services must be increased to reduce production cost. Corruption level in Nigeria is too high and allows incompetent hands to handle contracts. Professionals are not allowed to handle projects due to corruption. The cost of governance and recurrent expenditure are so high leaving little for capital expenditure. The high level of unemployment is a dis-incentive to market and to capital development.

Based on the top ranked factors discovered to have effect on success of infrastructural development in Nigeria, it is recommended that experts in Infrastructure development (ID) should embrace infrastructure technology skills and methodologies.

This will go a long way to enhancing the role of ID-experts and system analyst as Infrastructural managers. It is only an ID-expert that have good ID training or capabilities that can develop a realistic schedule for any project and been able to win the support of top management.

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