International Journal of Innovative Research and Advanced Studies (IJIRAS)
Volume 5 Issue 8, August 2018

ISSN: 2394-4404

Critical Factors Affecting Infrastructure Development In Nigeria

Oladipo Francis Olukayode

Fatuki Adeola Mathew

Department of Quantity Surveying, Federal Polytechnic, Ado-Ekiti

Abstract: ***This study examines the critical factors affecting infrastructure development in Nigeria. Development in whatever dimension cannot result into good healthy living if infrastructure such as telecommunications, transport, water, health, housing and education are not invested on. The study therefore examines the current state of infrastructure in Nigeria, identify the factors affecting infrastructure development and suggest measures for mitigating the challenges facing infrastructure development in Nigeria. Data were collected using structured questionnaire. A total of fifty questionnaires were administered within the segment of construction industry involving in infrastructural facilities such as Bureau of public building and Kopek construction company limited and forty-two questionnaires was retrieved. Data collected were analyzed using relative importance index (RII). Results revealed that infrastructure are very important for the growth of our country and that infrastructural facilities in Nigeria are in poor condition. Road and electricity were discovered to be in very poor state. The factors responsible for this are numerous and these include poor leadership, corruption, lack of maintenance poor economic environment and inadequate funding. The numerous challenges can be overcome by giving serious attention in the development of infrastructure in order to integrate the economy and good government, good maintenance skills and socio-economic development were recommended.***

Keywords: ***Criticalfactors, Development, Factors, Infrastructure, Telecommunications, Transportation, Housing, Education***

I. INTRODUCTION

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 (Sulivan and Sheffrin, 2003). 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" (Fulmer, 2009).

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. It is fairly settled in the literature that infrastructure plays a critical and positive role in economic development. Infrastructure interacts with the economy through multiple and complex processes. It represents an intermediate input to production, and thus changes in infrastructure quality and quantity affect the profitability of production, and invariably the levels of income, output and employment. Moreover, infrastructure services raise the productivity of other factors of production (Adenikinju, 2005). The provision of infrastructure in most developing countries is the responsibility of the government. This is because of the characteristics of infrastructure investment. First,

infrastructure supply is characterized by high set-up cost. Its lumpiness and indivisibility precludes the private sector from investment. Second, its indirect way of pay-off, coupled with its long gestation period, makes it generally unattractive to private investors.

Infrastructures defined by social-economist are instruments considered as factors of production, increasing aggregate output and driving economic growth. From a development stand point: they are seen to enhance quality of life, improving average living standards. The demand for infrastructure is driven largely by economic and population growth. Looming energy crises and environmental factors are other but less pertinent reasons. Though many governments struggle with funding and procurement strategies aimed at addressing growing demand, infrastructure is not something that can be ignored or wished away by any government (Akinyosoye, 2013).

II. LITERATURE REVIEW

CURRENT STATE OF INFRASTRUCTURE IN NIGERIA

Akinyosoye [2013], argue that the net contribution of infrastructure to the economy is greater than the cost of its provision. Extending this argument, it is observed that infrastructure impacts on the quality of life, wellbeing of the social system, and the sustained growth of economic and business activities because it enhances easy distribution of resources and essential services to the public. Investment(s) in infrastructure stimulates economic growth by increasing production facilities, reducing cost of transportation, and generating employments.

According to Hornby, (2010), infrastructure is defined as the basic systems and services that are necessary for a country or an organization. This means that infrastructure is an essential ingredient for the smooth function of any economy and development of any nation. Ademola, (2003) noted that, development is the quantitative change or a progressive series of such change in economic system or environment. Such quantitative aspect of living is made possible by infrastructures such as roads, water supply, basic education, health care facilities, electricity housing scheme development, recreational and transport facilities.

Therefore, the term infrastructure refers to the technical structures that enhance living condition in any society which includes health facilities, agricultural facilities, good road network and telecommunications as well as energy and water supply. It is the focus of this paper to appraise how well the Nigeria nation has propelled the engine of nation building through infrastructural development. The assertion of Oladipo, (2011) may give us good hindsight. He noted that: Unfortunately however, as vital as infrastructures to the socio-economic well-being of a nation, successive civil and military administrations in Nigeria have paid little or no attention to their development. The result has been a comatose economy, crippled educational system and fractured health delivery. In other climes, the development of infrastructure is the rule. But it is the exception in Nigeria.

IMPORTANCE OF INFRASTRUCTURE TO INDUSTRIAL DEVELOPMENT

NEED FOR RURAL INFRASTRUCTURE: Abumere (2002) defined rural infrastructure to include the system of physical, human, and institutional forms of capital which enables rural residents to better perform their production, processing, and distribution activities, as well as help to improve the overall quality of life. Some of these infrastructures are roads communication network, irrigation, storage facilities, market facilities, research and extension institutions, schools and universities which train and turn out a variety of skilled agricultural workers.

ENERGY: A country's per capita consumption of energy is said to say a lot about that country's level of development. It implies that Nigeria low per capita consumption of energy tells of a weak industrial base. Unfortunately too, the poor energy infrastructure leads to low productivity in firms, drains capital meant for other investment.

Electricity contributes to economic growth by supporting industrial, semi- industrial, commercial, and agricultural activities according to Energy Sector management Assistance Program (1993). No meaningful development can be observed without access to modern energy services especially electricity (Eleri, 2009) for such activities like radio and television for extension programs which according to Zhan *et al*, (2003) pursue the overall goals of technology transfer and human resource development through efficient information delivery to the targeted clients, and for powering of appropriate technologies required for capacity development in the rural areas.

TRANSPORTATION: Transport is a key necessity for specialization- allowing products and consumption of products to occur at different locations. Aderamo & Magaji (2010) observed that transportations plays an important role in political, economic and social development of any society by providing aven1`ues through which different parts of any society is being linked together and making the rural areas not being isolated from the main stream of modern society. The authors further insisted that, with lack of good transport infrastructure has resulted in low productivity, low income and fall in standard of living of rural residents and also high rate of poverty. Good transportation system as well-known will facilitate enhanced marketing and rapid industrializations to the rural areas. This will enhance improved productivity through increase in export of processed goods from the small and medium companies.

PROCESSING TECHNOLOGIES: According to Adekoya & Babaleye (2009) processing technologies are about improving farm incomes and reducing rural poverty by empowering farmers and small and medium enterprises especially in the production and agribusiness, and as It also offers employment, often in rural communities, and it is an opportunity to package and brand products in an attractive manner using local resources.

INFORMATION COMMUNICATIONS TECHNOLOGY (ICT): The role of ICT in rural development as being highlighted by Caspary & O`Connor (2003) is to increase the attractiveness of merchandise trade and entrepreneurial activities with the reduction of isolating the area as in the case

of crop price information to the nearest urban centres. ICTs are ubiquitous and with diverse uses. They have become indispensable tools to SMEs, especially in developing country.

CRITICAL FACTORS AFFECTING INFRASTRUCTURE DEVELOPMENT

Nigeria is experiencing a stunted growth due to sluggish infrastructure development. Resources channeled to the provision of infrastructure services were largely inadequate and sub optimal. However, funds directed to the provision of infrastructures were either embezzled or out rightly diverted to less productive needs which are susceptible to corruption. This, however, created a lacuna in infrastructure development process. The average growth rate in Nigeria increased from 26% to 34% between 1970 and 1999. The increase was sustained by high revenue inflow from the oil sector.

However, the rise in the growth rate did not reflected on Nigeria's infrastructure development needs. The growth rate further declined substantially from 24.2% to 8.48% during the period 2000 and 2014 respectively. The downward trend in the growth rate could be attributed to the poor state infrastructure development. Recently, it was discovered that one of the major feature of Nigeria's dwindling growth performance has been massive decline in physical infrastructure development. There is need to invest on infrastructures in order to maintain a stable growth momentum in productivity and at the same time improve the quality of living standard of the people, Ogunlana *et al,* (2016).

Factors affecting the infrastructure development in Nigeria are:

POOR LEADERSHIP: 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 needed infrastructure to develop the nation (Oyedele, 2012).

INADEQUATE FUNDING: 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 is also rampant (Oyedele, 2012).

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 process before the issuance of Certificate of No Objection (Oyedele, 2012).

INEFFICIENCY OF OPERATIONS: The broadest indicator of inefficient performance by an infrastructure system is the extent of output lost in delivery. Unaccounted-for water (that portion of supply for which consumption is not recorded, largely because of technical and managerial failures) is typically two to three times higher in developing country systems than in countries that achieve the industry standards (Meng *et al,* 2013).

INADEQUATE TECHNOLOGY: Technology environment deals with the machineries which are used for the execution of projects (Meng *et al,* 2013). Nigeria as a country lack sufficient equipment for the construction of infrastructure facilities.

INADEQUATE MAINTENANCE: Closely related to operating inefficiencies is lack of maintenance: roads deteriorate, irrigation canals leak, water pumps break down, sanitation systems overflow, installed phone lines fail, and power generators are not available when needed. Capacity is then lost, output declines, and substantial additional investment is needed simply to sustain existing levels of service. In the road sector, inadequate maintenance imposes large recurrent and capital costs. Neglect of (relatively inexpensive) routine maintenance can compound problems so much that the entire surface of a road has to be replaced.(Meng *et al,* 2013). There are a number of issues related to poor maintenance of the available infrastructure (Wan-Rozaini *et al,* 2007).

LITTLE PROVISION: performances of most past leaders in the area of infrastructure provision, the agitation for infrastructure development overwhelm 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.

PROCUREMENT METHOD: Procurement problems are often a factor in weak operational performance. Systematic delays in purchasing by sector entities and inadequate supervision of contracts are estimated to increase costs of imported materials to some African countries by 20 to 30 percent. Contracting and bidding procedures may also favor large-scale enterprises, which tend to use more equipment-based methods of construction and maintenance than is appropriate given relative factor costs. Some 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. (Oyedele, 2012).

POOR ECONOMIC ENVIRONMENT: 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. (Oyedele, 2012).

MEASURE TO MITIGATE CHALLENGES OF INFRASTRUCTURE DEVELOPMENT IN NIGERIA

According to Oyedele 2012, the challenges of infrastructure development in third world countries are many. 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.

Good governance will be the only antidote that can bridge the wide gap. Secondly, good governance promotes accountability, reduces corruption and therefore minimizes resource wastage through inefficiency. And finally, good governance ensures stability (economic and political) and reduces the level of risk associated with large and lumpy infrastructure investments. This in turn facilitates the mobilization of both public and private sector financing resources that are critical for infrastructure development.

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 should embrace infrastructure technology skills and methodologies.

Nigeria has the potential to house a large number of the world's investments, but due to poor state of infrastructure development, this potentials could not be showcased to a greater height. The deplorable state of infrastructures and poor state of repairs and maintenance are evident on electricity, roads, railways and water facilities. Infrastructure deficit have decimated Nigeria's growth potentials and made doing business very difficult and restrictive. For Nigeria to realize its growth potentials, a fully structured and sustainable infrastructure development policy is desirable. Infrastructure development and management constitute the critical area which requires efficient developments that the society heavily relies upon and this would provide a good yardstick of measuring socio-economic development (Oyedele, 2012).

III. RESEARCH METHODOLOGY

With the review of existing literatures relating to the subject matter, it is intended to fashion out an appropriate methodology for the study, which can advise a specific objectives of the research. This discusses issues such as target population, the sample design in the data collection, sampling techniques and sample size, the method of data collection, the instrument of data collection and method of data analysis.

A descriptive survey was employed. In practice, it is difficult to find complete list or record of the element in the survey population. The target populations for this study are the professionals in the construction industry at the western part of Nigeria. The sample sizes are draw from quantity surveyors, Architects, Civil Engineers and Builders etc. Sixty [60] questionnaires were distributed while a total of Fifty [50] were collected which are duly considered for analysis of results. The sample frame is the list of the entire population from which a sample can be selected from the population. The information gathered as a sample for this research was derived from construction organization, government parastatals and individuals enterprise.

The method used for the analysis of this research work is basically statistical package for social science [SPSS] using ranking. During the analysis of data for this research, the method employed is the frequency method under which two of its tools were adopted. The tools are; Percentile method, Mean score method. The background information of respondents was analyzed using percentage. The mean level of score questions was assessed by the mean score. The confident interval will be 95% while the significant level will be 5%.

- ✓ Percentile method [%]
- ✓ During the analysis of the data those questions relating to the respondent were analysed by rating option as a percentage of the total. This is achieved by giving the highest percentage as the most valid option of each question.
- ✓ Mean score method [x]

This frequency method helps to derive the average of more option and arriving at mean score for decision making. The mean score here is derived as : $\frac{\sum x}{\sum f}$

Therefore, the empirical will be: X = means F = frequency

s/n	Items	frequency	Percentage[%]	Cum.percentage [%]
1	Type of			
i	respondents	13	26.00	26.00
ii	[50]	25	50.00	76.00
iii	Architect	7	14.00	90.00
iv	Quantity	4	8.00	98.00
v	surveyor	1	2.00	100
	Civil engineer			
	Builder			
	Others			
2.	Years of			
i	experience	2	4.00	4.00
ii	[50]	3	6.00	10.00
iii	0 – 5	15	30.00	40.00
iv	6 – 10	20	40.00	80.00
v	11 – 15	10	20.00	100
	16 – 20			
	21 and above			

3.	Number of			
i	project	1	2.00	2.00
ii	handled [50]	10	20.00	22.00
iii	0 – 5	15	30.00	52.00
iv	6 – 10	22	44.00	96.00
v	11 – 15	2	4.00	100
	16 – 20			
	21 and above			
4.	Qualification			
i	of respondent	19	38.00	38.00
ii	[50]	26	52.00	90.00
iii	HND	2	4.00	94.00
iv	B.Sc	1	2.00	96.00
v	M.Sc	2	4.00	100
	Ph. D			
	OTHERS			

Source: Field Survey 2018

Table 1: presentation of bio-data section of the questionnaire

From table 1.0, it can be observed that 26 percent of the respondents are Architects, 50 percent are Quantity Surveyors, 14 percent are Civil Engineers, 8 percent are Builders and 2 percent are others.

For the year of experience, 4 percent has year of experience of 0-5 years, 6 percent has year of experience of 6-10 years, 30 percent has year of experience of 11-15 year, 40 percent has years of experience of 16-20 year while 20 percent has years of experience of 21 year and above.

On the number of project handled, it can be observed that respondents of between 0-5 handled 2 percent of the project, 6-10 of the respondents handled 20 percent, 11-15 of the respondents handled 30 percent, 16-20 of the respondents handled 44 percent while 21 years and above handled 4 percent.

Likewise, out of 50 respondents that were used for the study, it was observed that 38 percent of the respondents are HND graduate, 52 percent of the respondents are B.Sc graduate, 4 percent of the respondents are M.Sc graduate, 2 percent of respondents are Ph.D graduate and 4 percent of the respondents were covered by others.

IV. ANALYSIS OF OBJETIVES

	Level of infrastructure in Nigeria in order of importance		Mean	Rank
✓	1.	Road	4.76	1
✓	2.	Electricity	4.64	2
✓	3.	Water	4.64	2
✓	5.	Telecommunication	4.48	4
✓	4.	Education	4.45	5
✓	6.	Health	4.29	6

Source: Field Survey, 2018.

Table 2: Levels Of Infrastructure In Nigeria In Order Of Importance

COMMENTS: Table 2 shows the importance of infrastructure in Nigeria in order of importance. Road has a mean score of 4.76 and it is ranked one, (1) as the most important, electricity and water has the same mean score of 4.64 which are ranked as two, (2) followed by telecommunication, 4.48, education, 4.45 and health, 4.29 of ranked 4, 5 and 6 respectively.

	Factors affecting infrastructure development in Nigeria	Mean	Rank
✓	Poor leadership is a factor that affect infrastructure development	4.36	1
✓	Corruption	4.31	2
✓	Inadequate maintenance	4.19	3
✓	Poor economic environment.	4.14	4
✓	Inadequate funding	4.02	5
✓	Lack of competent management retard the development of infrastructure	4.02	5
✓	Inadequate technology	4.00	7
✓	Little provision	3.74	8
✓	Approaches to procurement in infrastructure is poor	3.71	9
✓	Inefficiency of operation	3.57	10

Source: Field Survey, 2018.

Table 3: Factors Affecting Infrastructure Development In Nigeria

COMMENTS: Table 3 shows the factors affecting infrastructure development in Nigeria. Poor leadership has the highest mean of 4.36 and is ranked as 1 followed by corruption ranked 2, and the other factors are inadequate maintenance, poor economic environment, inadequate funding lack of competent management, inadequate technology, little provision, poor procurement methods and the lowest inefficiency of operation ranked 10.

	Measure for mitigating the challenges of infrastructure development in Nigeria.	Mean	Rank
✓	Good government is an antidote to bridge infrastructure development challenges	4.40	1
✓	Implementation of good maintenance skills	4.33	2
✓	Socio-economic development of a nation helps in overcoming infrastructure challenges	4.24	3
✓	Promoting the relationship of a country with other countries will aid in overcoming challenges of infrastructure	4.10	4
✓	Provision of adequate funding	4.05	5
✓	Implementation of efficient operation	3.98	6

Source: Field Survey, 2018.

Table 4: Measures For Mitigating The Challenges Of Infrastructure Development In Nigeria

COMMENTS: Table 4 shows the measure for mitigating the challenges of infrastructure development in Nigeria. Good government is an antidote to bridge infrastructure development challenges has a mean score of 4.40, implementation of good maintenance skills has 4.33, socio-economic development of a nation has 4.24, promoting the relationship of a country with other countries has 4.10, provision of adequate funding has 4.05, and implementation of efficient operation has the least mean score of 3.98.

V. DISCUSSION OF FINDINGS

From the findings, descriptive variables from the research topic of critical factors affecting infrastructure development in Nigeria. In which the objectives are; to examine the current state of infrastructure development in Nigeria, identify critical factors affecting infrastructure development in Nigeria, and to propose measure for mitigating the challenges of infrastructure development in Nigeria.

Hence, from Objective one (1), table 2 reveals the importance of infrastructure in Nigeria in order of importance. Road is the most important followed by Electricity and Water, Telecommunication, Education and Health consecutively.

From Objective two (2), table 3 identifies the factors affecting infrastructure development in Nigeria. The highest is ranked as one, (1) is the most important factor affecting infrastructure development in Nigeria, followed by the one ranked 2, 3, 4, 5, 7, 8 and the lowest ranked nine (9).

And From Objective three (3), table 4 proposed the measures for mitigating the challenges of infrastructure development in Nigeria. The analysis shows that good government is an antidote to bridge infrastructure development challenges as the most important measure with a mean score of 4.40, implementation of good maintenance skills followed with 4.33, socio-economic development of a nation, 4.24, promoting the relationship of a country with other countries, 4.10, provision of adequate funding, 4.05, and implementation of efficient operation with the least mean score of 3.98.

VI. RECOMMENDATIONS

The following recommendations are made based upon the findings of the study.

- ✓ The numerous challenges facing infrastructure in Nigeria can be mitigated by applying the necessary measures such as good government and provision of adequate funding.
- ✓ Serious attention in the development of infrastructure is needed in order to integrate the economies of our nation, Nigeria.
- ✓ The government should sincerely dedicate themselves in the infrastructure sector and maintain good leadership manners.
- ✓ Proper measure for maintenance should be considered very important by the maintenance team or agencies responsible for the facilities and the end-users as well. Thus, maintenance measure should be practically put in place by all and sundry.

REFERENCES

[1] Abumere, S. I. (2002). "Rural Infrastructure and the Development Process in Rural Nigeria", Research Report 36, Development Policy Centre, Ibadan, Nigeria
[2] Adekoya, A.E. and Babaleye, T.(2009). "Consistency of Technology Adoption among Farmers in Northern Nigeria", Journal of Food, Agriculture and Environment, 7(3&4), 460-557.
[3] Ademola, A. (2003). Yahya Jammeh and Gambia Revolution Ibadan: Stoling Hordan Publishers.
[4] Adenikinju, A. (2005). Analysis of the Cost of Infrastructure Failures in a Developing Economy: The Case of the Electricity Sector in Nigeria. Department of Economics and Centre for Economics and Allied Research, University of Ibadan. Ibadan.
[5] Aderamo, A.J. and Magaji, S.A. (2010), "Rural Transportation and the Distribution of Public Facilities in Nigeria: A Case of Edu Local Government Area in Kwara State", Journal of Human Ecology, 29(3),171-179.
[6] Akinyosoye, M. (2013), "Nigeria Infrastructure: Investment Opportunity for Fiduciaries of Pension Funds", Outlook for Pension Fund Managers vf.276180303.
http://greenhillts.com/yahoo_site_admin/assets/docs/
[7] Central Bank of Nigeria. (2011). Infrastructure Finance. Available at
[8] www.cenbank.org/devfin/infrastructurefinance.asp
[9] Eleri, E.O. (2009), "Energizing Rural Transformation in Nigeria: Scaling up Electricity Access and Renewable Energy Market Development, in Collaboration with Federal Ministry of Power and steel. International centre for energy, environment and development (ICEED) Press.
[10] Fulmer, Jeffrey (2009). What in the world is infrastructure? Private equity international, PEI Infrastructure Investor (July/August):30-32
[11] Hornby, A.S. (2010). Oxford advanced learner's dictionary (8th edition). Oxford: Oxford University Press.
[12] Meng, C.C, Samahi, B. A and Omar, S.Z (2013). A Review Paper: Critical Factors Affecting the Development of ICT Projects in Malaysia. Canadian Center of Science and Education, Asian Social Science; 9(4)
[13] Ogunlana, O.F, Yaqub, J.O and Alhassan, B.T (2016). Infrastructure finance and development in Nigeria. Arabian Journal of Business and Management Review (Nigerian Chapter). 3(12)
[14] Oladipo,E.O. (2011), "The Gowow Regine and Post Civil War Reconstruction in Nigeria: A Case of Infrastructure Development by Compulsion". Proceeding of 56th Annual Congress of the Historical Society of Nigeria Held at Osun State University, Osogbo.
[15] Oyedele, O.A (2012). The Challenges of Infrastructure Development in Democratic Governance. TS01C-Construction Economics and Management I, 6119. FIG Working Week (2012), Knowing to Manage the Territory, Protect the Environment, Evaluate the Cultural Heritage Rome, Italy, 6-10 May.
[16] Sulivan, A. and Sheffrin, M. S. (2003). Economics: Principles in Action. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall.
[17] Wan Rozaini, S. O., Zahurin, M. A., Huda, I., Nor Iadah, Y., & Nafishah, O. (2007). Ke Arah Memperkasakan Komuniti Luar Bandar: Penilaian Situasi Semasa Pusat Internet Desa (PID). Paper presented at E-Community Research Center Coloqium, Bangi, Selangor, Malaysia.
[18] Zhan, M., Sukprasert, P., Khewan, M., Arayaphong, U., Virawongprom, S. & Tongpuy, C. (2003), "The Comparison of Implementation of Rural Development by

ISSN: 2394-4404

Agricultural Extension System at Grassroots Level between Thailand and China", Kesetstart Journal (Sco.Sci), 24, 192-206.