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Actualizing Nigeria's Vision 20:2020: Imperatives of the Construction Sector

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Abstract

Nigeria's vision 20:2020 is aimed at placing the country in the league of the first 20 global economies by the year 2020 with a minimum GDP of US$900 billion and per capita income of no less than US$4000 per annum. The Nigerian construction sector provides the much needed physical infrastructure for economic development which is critical toward realizing this laudable vision. The sector's contribution to overall GDP dropped from 3.76% achieved in 2008 to 3.16% in 2009 and 2.86% in 2010. The Building and Construction sector also recorded a growth rate which slowed down from 12.8% in 2008 to 11.97% in 2009 and 11.85% in 2010. In 2011, the sector recorded a growth rate of 12.26% which is below the target of 19.0% set in the Transformation agenda. The study investigates through empirical means the impacts of the factors influencing the performance of the sector in providing the infrastructural base that contributes to national development. Bret Frischmann's theory of infrastructure and commons management was adopted to put the work in context. Relative Importance Indices (RII) of 17 relevant factors surveyed revealed that low investment in the construction sector, low involvement of private sector in the provision of infrastructural facilities, lack of policy to promote indigenous contactors, reverse order of industrial development and monumental corruption in the sector with RII of 0.88, 0.84, 0.84, 0.80, and 0.79 respectively are the most significant factors. It is recommended that in order to achieve the vision in the year 2020 there is need for investment in infrastructure development, resuscitation of the decayed infrastructure, private financing of public projects and the need for capacity building.

Keywords: Vision 20:2020, construction sector, economic development, infrastructure, Nigeria.

1. Introduction

The challenges of social and economic development have been an issue of great concern in Nigeria for quite a long time. Different nations adopt different strategies for achieving social and economic progress amidst numerous challenges. Olaseni and Alade (2012) observed that many African countries including Nigeria were committed to achieving economic and social development and have used development planning as strategy at independence. Development planning has been a consistent phenomenon in Nigerian administration since 1946 ranging from short term, medium term and long term plans with the latest in history of such development plan being the Vision 20:2020 with the aim of placing the country into the league of top 20 global economies by the year 2020. Vision 20:2020 is an articulation of the medium term intent to launch Nigeria onto the path of sustained social and economic progress and accelerate the emergence of a truly prosperous and united Nigeria (Olaseni and Alade 2012). Vision 20:2020 according to Musa *et al.* (2012) is a demonstration of the federal government's commitment to realizing the Millennium Development Goals (MDGs). Recognising the enormous human and natural resources in the country, the plan is to improve the living standard of its citizens and place the country among the top 20 economies in the world with a minimum GDP of $900 Billion and a per capita income of no less than $4000 per annum (FGN 2009). The Nigerian construction sector is a *sine quo non* for realizing the vision 20:2020 due to the role of the construction infrastructure in the process of socio-economic development which according to Lopes *et al.* (2011) has gained a new stimulus following the United Nations Millennium declaration at the Millennium summit in New York in September 2000. The sector has also been linked to urbanization and industrialization. Ede (2011) reported that in order to achieve the set vision the official consultant on the vision advised the leadership of the country to focus on five key elements of economic growth and sustainable development namely: manpower, capital resources, technology, basic infrastructure and innovation. From this recommendation the construction industry has a key role in the aspects of manpower development and basic infrastructure provision which are critical for the achievement of this laudable vision.

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2.0 The Nigeria's Vision 20:2020

Nigeria's vision 20:2020 is a national development plan to accelerate the process of economic and social development. In the past several developmental plans have been initiated to achieve national developmental goals but experience had been that of a failure (Asaju and Albert 2012). The Vision statement of the Nigeria's Vision 20:2020 is that **"***By 2020, Nigeria will have a large, strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and responsibly exploits its natural endowments to guarantee a high standard of living and quality of life to its citizens"* (NV20:20 2010)
Against the background of the numerous challenges and constraints obstructing the growth and development of the country, the plan identifies some of the actions that will ensure the successful realisation of the vision as follows:

i. Expansion of investments in critical infrastructure;
ii. Fostering private sector-led non-oil growth to build the foundation for economic diversification;
iii. Investing in human capital development to enhance national competitiveness;
iv. Changing the value system to encourage honesty, industry and eliminating the culture of worshipping money;
v. Entrenching merit as a fundamental principle and core value;
vi. Addressing threats to national security;
vii. Deepening reforms in the social sector and extending reforms to the states and local governments
viii. Correcting the weaknesses inherent in the revenue allocation framework;
ix. Intensifying the war against corruption; and
x. Establishing the process for free and fair elections

The 1st National Implementation Plan (NIP) aims to engender accelerated pro-poor growth, achieve an average GDP growth rate of 13 per cent, raise the GDP per capita from $1,075 in 2009 to $2,008.75 by 2013, generate jobs to absorb the teeming unemployed and create new opportunities, improve the nation's global competitiveness and raise public confidence in governance and the political system. These are geared toward attaining the Millennium Development Goals by 2015, and moving the nation towards achieving its Vision. In line with the above objectives, the plan has the following main policy thrusts: Addressing the infrastructure problems to promote economic growth and wealth creation; Making the best use of the sources of economic growth to increase productivity and competitiveness; Building a productive, competitive and functional human resource base; Developing a knowledge-based economy among others.

3.0 Theoretical Framework

To understand the imperatives of infrastructure provision in socio-economic development, Bret Frischmann's economic theory of infrastructure and commons management is adopted to put the work in context. The theory explains the importance of public accessibility to infrastructure. The major thrust of the theory is the fact that open access to infrastructure would generate significant positive results for a society (Frischmann 2005). The theory further explains that infrastructure would be used productively to provide development which is critical to the fabric of the society. The Frischmann's theory also recognised that the state is responsible for the provision of infrastructure through diverse revenue sources including state resources and tax from citizens and organizations. According to Frischmann (2005), traditional infrastructures are generally managed in an openly accessible manner. They are managed in a manner whereby all members of a community who wish to use the resources may do so. The government has played and continues to play a significant and widely- accepted role in ensuring the provision of many traditional infrastructures while private parties and markets play an increasingly important role in providing many types of traditional infrastructure (due to a wave of privatization as well as cooperative ventures between industry and government) to achieve socio-economic development.

4.0 The Nigerian Construction Sector and Economic Growth

The construction sector has been identified as one of the major sectors of the economy which posses the potential of stimulating economic growth and sustain the development of any nation (Ogusemi, 2004; Musa *et al.* 2012). The positive association between construction and economic growth according to Lopes *et al.* (2011) has been the subject of debate for the part of the proponents of endogenous growth theory and international organisations such as the World Bank in the structural Adjustment Programme. Garba and Yadima (2008)

recognised that the Nigerian Construction Industry is one active sector of the Nigerian economy which takes the largest part of governments spending on capital projects. Khan (2008) considered the construction sector and construction activities to be among the major sources of economic growth and development. The sector plays an important role in the economic uplift and development of the country.

Globally, the sector is considered as one of the largest fragmented industry with an estimate of annual global output of $ 4.5 trillion (Khan 2008).The National Planning Commission NPC (2011) reported that in Nigeria the Building and Construction sector's growth rate dropped from 12.8% in 2008 to 11.97% and 11.85% in 2009 and 2010 respectively. The sector's contribution to overall GDP dropped down repeatedly to 2.86 % in 2010 and 3.16% in 2009 from 3.76% achieved in 2008. This could be attributed to the low implementation of capital budget by the Federal Government. NPC (2011) further reported that, Building and Construction sector recorded a growth rate of 12.26% in 2011 which is below the target of 19.0% in the Transformation Agenda.

The construction sector which has a greater potential to expand the country's productive base recorded a share of 6.25% of real GDP in 2011 (NPC 2011). The report also revealed that the building and construction sector continued to register strong growth, standing at 12.26% in 2011 as against 11.85% in 2010, reflecting greater Government investments in both residential and non-residential building and other construction activities. Some major projects executed in 2010 which impacted positively on the sector's performance include: national roads rehabilitation totalling 1,975 km; Presidential Initiative Projects adding up to 853.82 km of roads; Public-Private Partnership projects; several Housing unit types, dredging of River Niger and railway lines. The nominal value of activities in the sector stood at ₦456.04 billion in 2011 as against ₦394.67 billion in 2010 while the sector's share of GDP growth improved from 2.86% in 2010 to 3.22% in 2011 (NPC 2011). The execution of several infrastructural projects outlined in NV20:2020 will likely improve the sector's performance in the future (NPC, 2011).

5.0 Role of the Nigerian Construction Sector in Infrastructure Development

Infrastructure refers to the network of transport, communication, public services - all functioning as a system or as a set of interrelated and mutually beneficial services provided for the well being of the population (Ogbuozobe, 1997). Adequate infrastructure development according to Ogbuozobe (1997) are indispensable for economic development which determines the success or failure of a country in diversifying production, coping with population growth, reducing poverty, improving economic conditions e.t.c. The construction sector is the sector that is responsible for the provision of physical infrastructure which determines the level of country's socio economic development; improves human welfare, contributes to economic activities and has considerable potential for directly reducing poverty (Ogunlana, 2010; Taye and Dada 2012). Ehebha (2011) noted that infrastructure development has in recent time assumed a central importance in Nigeria's flight to attain economic stability. According to Asaju and Albert (2012) the collapse of the infrastructural facilities and social services constitute a major constraint to developmental efforts in Nigeria. In view of this the Nigerian construction sector is challenged to provide the much needed infrastructure for the realisation of the vision.

6.0 Methodology

The theoretical aspect of the research involved the survey of literatures from journals, reports and other relevant resources. The empirical aspect dealt with the analysis of data obtained through questionnaire survey. The questionnaire method was chosen because of its effectiveness for this type of survey. 150 structured questionnaires were randomly distributed to professionals (architects, engineers, builders, quantity surveyors and estate surveyors) in the construction industry in the offices of consultants, contractors and clients who are involved in infrastructure provision and manpower development in the industry. The respondents were asked to rate the various factors surveyed from literature posing as challenges for the performance of the industry toward the provision of infrastructure for sustainable social and economic development aimed at realizing the laudable vision based on four (4) point likert type scale. This scale is 4 – very important, 3 – averagely important, 2 – somewhat important and 1 – slightly important. A total of 124 questionnaires were successfully retrieved and analysed indicating a response rate of 82.66%. Relative Importance Index (RII) was employed to analyse the data obtained through the questionnaire survey with the aim of establishing the relative importance of the various factors. The RII is given by equation (1)

$$RII = \left(\sum_{i=1}^{4} a_i x_i \Big/ 4 \sum_{i=1}^{4} x_i \right) \qquad (1)$$

Where a_i = constant expressing the weight given to i; x_i = variable expressing the frequency of the response for i = 1,2,3,4 and illustrated as follows:
x_1 = frequency of the "slightly important" and corresponding to $a_1=1$; x_2 = frequency of "somewhat important" response and corresponding to $a_2=2$; x_3 = frequency of "averagely important" response and corresponding to $a_3 = 3$; x_4 = frequency of "very important" response and corresponding to $a_4=4$;

Spearman's rank correlation coefficient was also employed to determine the agreement of the group of respondents on the rating of the various factors. It is denoted by r_s and given by equation (2)

$$r_s = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n(n^2-1)} \qquad (2)$$

Where:

r_s = Spearman's rank correlation coefficient

d = the difference in ranking between the usage groups

n = number of factors.

7.0 Results and discussion

7.1 Respondents Profile

34.67% (43) of the respondents were from contractors' organization, 29.03% (36) were from the consultants' organization while 36.29% (45) were from the clients' organizations. The general response rate for all the three categories of respondents was 82.66% (124 out of 150 respondents). The response rate of contractors was 86.00% % (43 out of 50 respondents), for the consultants 72% (36 out of 50 respondents) and 90% (45 out of 50 respondents) for Clients. The profile further revealed that 14.52% (18) of the respondents have 1-5 years of working experience, 23.39% (29) have between 6 to 10 years of working experience, 34.68% (43) have between 11 to 15 years of experience and 27.42% (34) have over 15 years of experience. Academic qualification of the respondents also indicated that majority (58.06%) in the three categories of organisations posses a high level of academic qualification, i.e. Master Degree, First Degree or H.N.D holders. 54.03% cover a wide spectrum of high ranking personnel in which 25.81% belong to the top management level, such as director, deputy director and principals. Therefore the information provided by the respondents can be considered as reliable.

7.2 Factors affecting the Performance of the construction sector for realizing Vision 20:2020

The ranking of the factors affecting the performance of the construction sector in line with actualizing the vision 20:2020 is presented in Table 1. The result indicates that low investment in infrastructure projects was ranked 1st by both the clients and consultants with RII of 0.8277 and 0.7917 respectively while the contractors considered monumental corruption in the construction sector as the first most significant factor with RII of 0.8314.

Table 1: Factors affecting the Performance of Construction Sector

S/No	Factor	Clients		Consultants		Contractors	
		RII	Rank	RII	Rank	RII	Rank
1	Low development of science and technology	0.7833	3	0.6944	8	0.8081	3
2	Decayed and ineffective vocational and technical education	0.7444	6	0.7222	5	0.7732	5
3	Poor state of manufacturing industry in the country	0.700	10	0.7500	3	0.7267	10
4	Low involvement of private sector in infrastructure development	0.7722	4	0.7362	4	0.7732	5
5	Poor maintenance of existing public infrastructure	0.7167	7	0.6736	11	0.7616	7
6	Diminished opportunities for local contractors growth	0.8167	2	0.7083	6	0.8023	4
7	High rate of imported construction materials	0.7056	9	0.6875	9	0.7441	9
8	Archaic nature of some local skills due to change in technology	0.6222	16	0.6319	13	0.6453	13
9	Low investment in infrastructure development	0.8277	1	0.7917	1	0.8198	2
10	Low state of local capacity	0.6556	14	0.6806	10	0.7500	8
11	Lack of policy for promoting the growth of indigenous contractors	0.7667	5	0.7917	1	0.7674	6
12	Reverse order of industrial development	0.6944	11	0.7083	6	0.7500	8
13	Monumental corruption in the construction sector	0.7667	5	0.7847	2	0.8314	1
14	Poor manpower development	0.6778	12	0.7014	7	0.6919	11
15	Loose regulation/enforcement relating to the business in the sector	0.7111	8	0.6458	12	0.6512	12
16	Instability discouraging foreign direct investment in infrastructure development.	0.6611	13	0.6111	14	0.7442	9
17	Low allocation of capital expenditures in the previous budgets	0.6278	15	0.7083	6	0.6919	11

7.3 Correlation Coefficient of Group rankings

The Spearman's rank correlation results for the three groups of respondents are presented in Table 2. The result indicates that the coefficient for the groups between clients and consultants, between clients and contractors and between consultants and contractors are 0.566, 0.867 and 0.548 respectively. All the p-values of the groups 0.018, 0.000, 0.022 are lower than the significant level ($\alpha = 0.05$) indicating a significant relationship between the ranking of the individual groups.

Table: 2 Spearman's rank correlation coefficient results

Group	Coefficient of Correlation	P-value
Clients and Consultants	0.566	0.018*
Clients and Contractors	0.867	0.000*
Consultants and contractors	0.548	0.022*

*correlation is significant at 0.05 level

From the overall ranking of the factors by all the respondents (Table 3) the first most significant factor is 'low investment by the government in infrastructure development' with RII of 0.8729. Investment in infrastructure is essential for the realization of vision 20:2020 due to the fact that infrastructure supports other sectors of the economy thereby improving the economic outputs. The 1st National implementation plan of the vision also recognised the commitment of the government to invest heavily in infrastructures such as roads and housing. It is therefore envisaged that there would be a greater construction activities during the period of implementation. This factor is also recognised as a significant factor by Olaseni and Alade (2012) because low funding has been established to be a major challenge to infrastructure development and consequently affecting economic output in other sectors.

Low involvement of private sector in infrastructure development is the second most significant factor with RII of 0.8447. The provision of large and capital intensive projects may require the participation of private sector in financing and timely completion. Despite the effort of government in trying to get the private sector involved in infrastructure provision, the level of involvement is still not significant in Nigeria as reported by Taye and Dada (2012). They further established that public-private-partnership (PPP) is an initiative that can best be employed in tackling the growing complex and multifunctional issues in infrastructure projects. The need for the involvement of private sector in infrastructure provision in Nigeria for economic development as a challenge has also been established by Alabi and Ocholi (2010).

The third challenge in the ranking of the respondents is 'lack of policy to promote the participation of indigenous contractor'. Indigenous contractors in Nigeria face the challenge of unfair competition from their foreign counterpart. Mbamali and Okotie (2012) also established the significance of the diminished opportunities of indigenous professional development as a threat for Nigeria's Building sector. This therefore will have an effect on the performance of the local contractors and consequently on the achievement of Socio-economic growth. Other factors with significant ratings are reverse order of industrial development (RII = 0.802), diminished opportunity for local contractors' growth (RII = 0.7923), corruption in the sector (RII = 0.7823) and instability in the country discouraging foreign direct investment (RII = 0.7742). Factors with least rating are low allocation of capital expenditures in previous budgets, high rate of imported materials, low state of local capacity and obsolete nature of local skills with RII of 0.7097, 0.7096, 0.6653,and 0.6652 respectively.

Table: 3 Overall ranking of factors by respondents

S/No	Factors	Weighting				RII	Rank
		4	3	2	1		
1	Low development of science and technology	42	38	33	11	0.7237	12
2	Decayed and ineffective vocational and technical education	47	40	24	13	0.7439	9
3	Poor state of manufacturing industry in the country	42	40	38	4	0.7419	10
4	Low involvement of private sector in infrastructure development	67	43	8	6	0.8447	2
5	Poor maintenance of existing public infrastructure	46	41	23	14	0.7399	11
6	Diminished opportunities for local contractors growth	53	47	16	8	0.7923	4
7	High rate of imported construction materials	41	39	27	17	0.7096	14
8	Archaic nature of some local skills due to change in technology	35	34	28	27	0.6552	16
9	Low investment in infrastructure development	71	45	6	2	0.8729	1
10	Low state of local capacity (local content)	37	36	23	28	0.6653	15
11	Lack of policy for promoting the growth of indigenous contractors	66	45	7	6	0.8447	2
12	Reverse order of industrial development	58	43	14	9	0.8024	3
13	Monumental corruption in the construction sector	52	46	16	10	0.7823	5
14	Poor manpower development	43	47	24	12	0.7520	8
15	Loose regulation/enforcement relating to the business in the sector	47	43	25	9	0.7581	7
16	Instability discouraging foreign direct investment in infrastructure development.	49	43	27	5	0.7742	6
17	Low allocation of capital expenditures in the previous budgets	43	35	29	17	0.7097	13

8.0 Conclusion

Physical infrastructure and human resource development are critical for the socio-economic development of any developing country. The Nigerian construction sector is challenged by the federal government toward the provision of physical infrastructure needed for the achievement of the country's vision 20:2020 by proposing to invest heavily in the sector between 2011 and 2013. The study established numerous challenges facing the construction sector that are influencing its performance and contribution to the economic growth over the years. The performance of the sector in 2011 was below the target set in the transformation agenda. The most significant factors affecting the construction sector include low investment in the sector, low involvement of private sector in the provision of infrastructure, lack of policy to promote indigenous contractors, reverse order

of industrial development and monumental corruption in the sector. In order to achieve the targeted performance the government should imbibe the culture of transparency, adequate funding of projects, greater private sector participation and improvement of the business environment for indigenous contractors to compete favourably with their foreign counterparts.

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