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## **Issues of Corruption in Construction Projects and Infrastructure Development in Nigeria – An Empirical Approach**

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### **Abstract**

Corruption is a major problem that ravage many construction and infrastructure development projects in Africa and the world over. In Nigeria, this social menace has severely crept into the activities of the construction industry and is currently affecting the quality of project performance negatively. This paper identified project milestones and their susceptibility to corrupt tendencies at both pre-contract and post-contact stages. It further examined the frequency of occurrence of identified construction corruption sources; and assessed the severity of impact of identified construction corruption sources. The methodology used involved descriptive survey and the research design was by structured questionnaire administered to a study population involving major construction industry stakeholders with operations in North Central geopolitical zone of Nigeria. A total of 120 questionnaires were judgmentally distributed, out of which 100 returned, thus representing 83.33% response rate. Findings of the study revealed that bidding and construction stages ranked highest with 65 and 70 points respectively with regards to corruption susceptibility of project milestones at pre-contract and post-contract stages; while contract fraud and bribery recorded the highest frequency of occurrence of 70 and 65 points respectively among eleven (11) identified construction corruption sources studied. The findings also revealed that contract embezzlement, fraud and cost -cutting ranked most in severity of impact on project performance with 85, 80 and 78 points respectively among other identified sources corruption in Nigeria. The study concludes that corrupt activities in construction project delivery in Nigeria remain a cankerworm that severely impacts project performance. The study recommends the institutionalization of the culture of transparency, good practice, ethical conduct and accountability at all phases of construction project and infrastructure development in Nigeria.

**Keywords:** Construction, Corruption, Development, Infrastructure, Projects.

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## **1. Introduction**

The Nigerian construction industry is highly vulnerable to corruption due to its characteristic nature. It is comparatively disorganized, uncontrolled and often difficult to clearly understand the actual interest of her stakeholders as many are there solely for the profit. Also, the industry is characterized by somewhat complex contract procurement processes, variegated interests and objectives of construction stakeholders, diversity of personnel skills, different project phases, varying size of projects, locational and geological differences, and many others, thus making the industry prone to corruption. Corruption has been defined by many researchers and organizations. Ernest et al. (2017) adopted the UN definition for corruption as giving, receiving, offering or soliciting directly or indirectly anything of value to influence the action of an official in the procurement or selection process or in contract execution. Olatunji and Muhammed (2013) noted that the definition of corruption is dependent on so many factors such as cultural, political and civilization as it varies from one society to the other. For instance, giving gift to a government official in appreciation for good performance is regarded as a means of motivation in Nigeria but this gesture may be seen as an act of corruption in the western world. Kayode et al (2013) defined corruption as a selfish interest that affects the ability of the agent (government) in providing basic services to the consumers (public), in the right place, right quantity and right quality.

According to Uwak (2016), corruption ranges from embezzlement of public funds, diversion of public fund and giving of bribes for contract in public offices. Corruption leads to backward development of a country as people occupying influential positions often misuse it for selfish purposes and wealth accumulation, rather than a call to service. There is no generally accepted justification for corruption but majority of studies relate it to poverty and greed. Ayodele et al. (2011) concludes that greed, poverty, god-fatherism in contract award, unethical behavior of professionals and profit maximization by contractors are the major causes of corruption in the construction industry.

### **1.1 Problem of Study**

All over the world, the construction industry is continually growing due to its dynamic nature and high socio-economic impact on the economy of nations. Unfortunately, the industry in Nigeria is plagued with a variety of challenges, of which corruption is key. Corrupt tendencies in Nigeria construction projects arise from multifarious sources and pervade various milestones of project execution covering both the precontract and post contract stages. Corrupt activities in construction project delivery in Nigeria, severely impacts project performance and this cankerworm, constitutes a major obstacle to the optimal realization of the nation's mass infrastructure projects considering Governments huge capital budgeting and expenditure towards their realization.

### **1.2 Research Objectives**

- 1) To identify the project delivery milestones at precontract and post contract stages and their susceptibility to corrupt tendencies in construction projects in Nigeria
- 2) To examine the frequency of occurrence of identified construction corruption sources in construction projects in Nigeria

- 3) To assess the severity of impact of identified construction corruption sources in construction projects in Nigeria

## **2. Introduction**

### **2.1 Overview of Nigeria Construction Industry and its Socio-Economic Significance**

Globally, the construction industry is one of the major drivers of an economy. According to Afzal et al. (2017), the industry contributes immensely to the GDP and employment of any country. The construction industry is a critical and pivotal sector in the European Union (EU) as all other sectors of the economy are dependent on it. In the EU, it contributes about 10% and 7% to the GDP and workforce respectively (EISC, 2012). It is also a major sector in the economy of China, as its contribution to the growth of the economy is about 7% in GDP and also creates over 30 million job opportunities (NBSC, 2015).

The Nigeria construction industry has since independence played a dominant role in the economic advancement of the country. Isa et al (2013) revealed that the construction sector had an impact of 3.76%, 3.16%, 2.86%, and 3.22% on the national GDP in 2008, 2009, 2010, and 2011 respectively. Adeagbo (2014) posited that combined efforts of both the construction and real estate sector contributed no less than 3.41% in 2012, and 3.59% in 2013. Furthermore, Andawei (2018) avers that the construction sector contributed 4.34% and 4.13% in 2015 and 2016 respectively.

### **2.2 The Concept of Corruption and its Impact on Nigeria Construction Industry**

Oluwakiyesi (2011), Mbamali and Okotie (2012), Adeagbo (2014), and Atomen et al (2015) states that although the Nigeria construction industry is significant to the socio-economic emancipation of the nation, it is unfortunately plagued with a variety of challenges, of which corruption is key. Corruption constitutes a major drawback for the operation of the construction industry in Nigeria (Olusegun et al, 2011). Transparency international defines corruption as the abuse of entrusted power for personal gain. Nigeria has a very high potential to build a stable economy, reduce poverty, provide basic services like education, health and infrastructure but clear evidence indicates that the Nigerian resources have not been judiciously used to meet the need of the populace in terms of human capital development due to high level of corruption (Nwankwo, 2014). In 2017, Transparency International ranked Nigeria 148th out of 180 countries in its corruption perception index with 27 points on a scale from 0 (most corrupt) to 100 (least corrupt) as compared to other countries.

The menace of corruption cuts across all sectors in Nigeria, with the construction industry also not left out (Olufemi and Omolayo, 2013). In appraising the impact of corruption on sustainable development of the Nigerian construction industry, Kasimu and Kolawole (2015) argue that majority of failures in the nations infrastructural project is as a result of corruption within project stakeholders stating that contractors sometimes give bribe to rig the outcome of a tender, delay project execution for personal gains, compromise quality of project and reduce quality supervision and monitoring. Corruption in the industry takes many forms like the allocation of lucrative monopolies, bribery, fraud and poor construction due to use of inferior or substandard materials (Sohail and Cavill, 2008; Olufemi and Omolayo, 2013). Faith (2016) study on appraisal of the factors influencing delays and cost overruns

on construction projects in Nigeria, found among others - that high level of corruption within the government and the industry is a major causative agent. Similar studies by Sohail and Cavill, 2006; Ayodele et al, 2011; Ijewereme, 2015; Locatelli et al, 2016; Ernest et al, 2017, asserts that corruption exists in the form of bribery, fraud, favoritism, embezzlement, conflict of interest, nepotism, kickbacks, collusion tendering and bid rigging in the industry. Corruption constitutes a major drawback for the operation of the construction industry in Nigeria (Olusegun et al, 2011). This has led to the Nigeria's poor project performance leading to gross underdevelopment and large absence of basic infrastructure, unstable economic outlook, and mass poverty.

### **2.3 Project Management perspectives in Construction Project Performance**

A project life cycle consists of different stages during which deliverables are created and end with approval of the deliverables (Rashmi, 2008). These stages include: initiation, planning, execution, monitoring and control, and closing. The concept of project delivery involves customer satisfaction especially in meeting/exceeding clients' expectations which is a way of actualizing set goals and objectives on any given project. Successful outcome in project management is usually achieved through a carefully structured process involving all the stages associated with project delivery. This process enables projects to be planned within the scope, quality, schedule, risk, resources as well as budget. The ability of a project manager to meet these requirements ensures project success. However, the success of this process can be marred by corruption through each and every stage of project delivery. The way and manner corruption take its shape or form is different through the project stages, and also dependent upon the stage a particular project is at a particular point in time. Sohail and Cavil (2008) noted that corruption occur in construction projects at both precontract and post contract stages. The corrupt tendencies cut across the planning and design stages and extends to pre-qualification and tendering, project execution, inspection, maintenance and management stages.

## **3. Research Methodology**

The study is a descriptive survey and the research design involved use of a structured questionnaire. The questionnaire fundamentally sought responses on the sources of corruption, and their severity of impact on project performance. The study's population of interest included several construction industry practitioners including engineers, quantity surveyors, architects, builders, and project managers. These professionals work in construction companies, professional consultancy firms, client organizations, building materials manufacturing firms, etc. located in North Central Geopolitical Zone of Nigeria. A total of 120 questionnaires were judgmentally distributed, out of which 100 returned, thus representing 83.33% response rate. This return rate was considered adequate for a zonal study of this magnitude. Consequently, a total of 100 valid responses formed basis for data presentation, analysis, conclusion and recommendation of study.

## **4. Study Results**

### **4.1 Demographic features of respondents surveyed**

*Table 1: Analysis of respondents by gender*

Gender	Frequency	Percentage	Cumulative percentage
Male	63	63	63
Female	37	37	100
Total	100	100	

Source: Authors Field Survey, 2018

**Table 2: Analysis of respondents by age**

Age Range	Frequency	Percentage	Cumulative percentage
20 – 24	9	9	9
25 -29	38	38	47
30 - 34	11	11	58
35 - 39	29	29	71
40 – above	13	13	100
Total	100	100	

Source: Authors Field Survey, 2018

**Table 3: Analysis of respondents by level of education**

Qualification	Frequency	Percentage	Cumulative percentage
HND	19	19	19
BSc/BEng/BTech	39	39	58
MSc/MEng/MTech	28	28	86
PhD	14	14	100
Total	100	100	

Source: Authors Field Survey, 2018

**Table 4: Analysis of respondents by level of education**

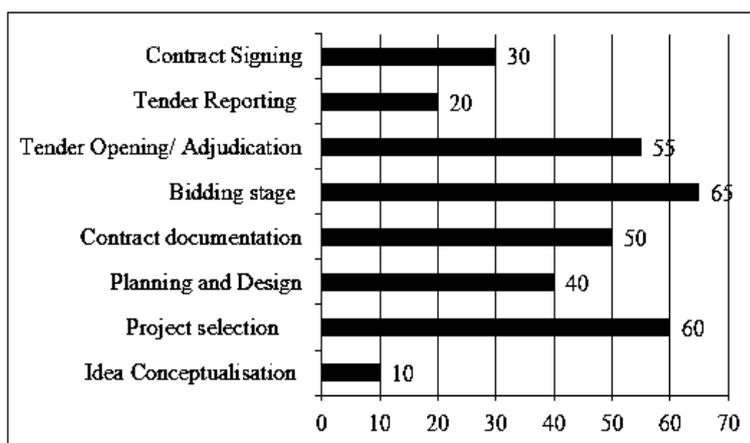
Discipline	Frequency	Percentage	Cumulative percentage
Civil Engineer	33	33	33
Quantity Surveyor	18	18	51
Architect	14	14	65
Project Manager	26	26	91
Builder	9	9	100
Total	100	100	

Source: Authors Field Survey, 2018

**Table 5: Analysis of respondents by professional experience**

	Frequency	Percentage	Cumulative percentage
1 – 5	31	31	31
5 – 10	24	24	55
10 – 15	18	18	73
15 – 20	16	16	89
Over 20	11	11	100
Total	100	100	

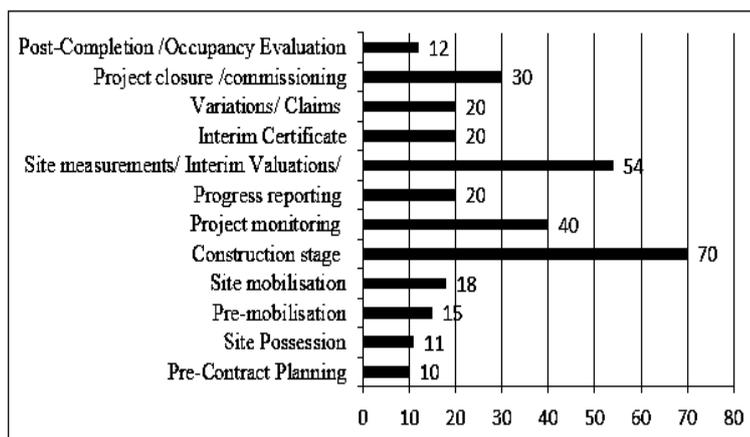
Source: Authors Field Survey, 2018



#### 4.2 Responses on issues of corruption in Nigeria construction project delivery

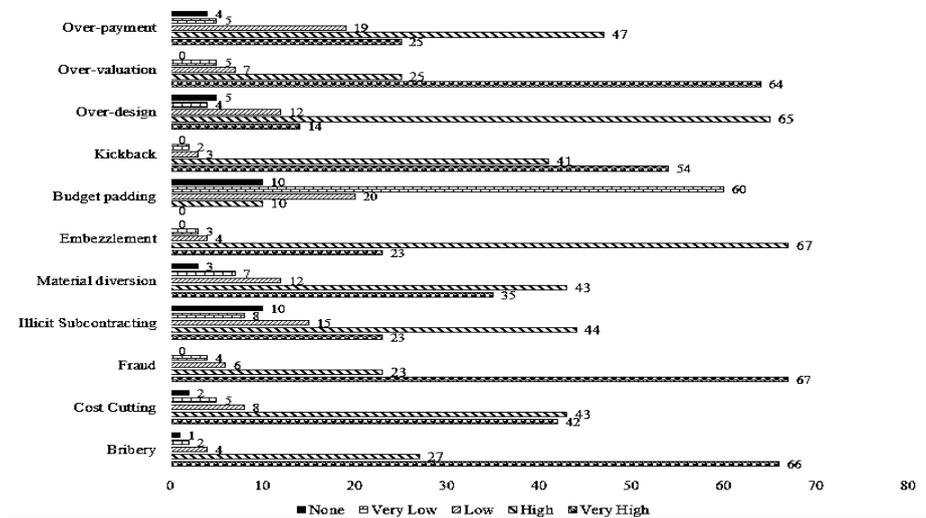
**Figure 1: Susceptibility of pre-contract project delivery milestones to corrupt tendencies in Nigeria**

Source: Authors Field Survey, 2018



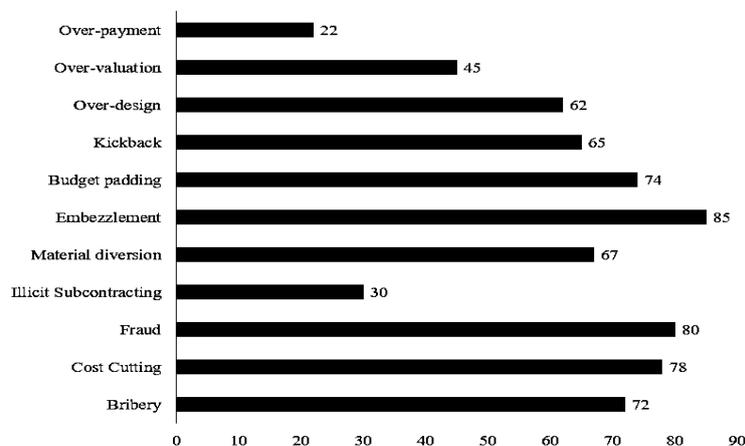
**Figure 2: Susceptibility of post-contract project delivery milestones to corrupt tendencies in Nigeria**

Source: Authors Field Survey, 2018



**Figure 3: Identified corruption sources and their frequency of occurrence in construction project delivery in Nigeria**

Source: Authors Field Survey, 2018



**Figure 4: Identified corruption sources according to their severity of impact on construction project performance in Nigeria**

Source: Authors Field Survey, 2018

## 5. Conclusion

Corrupt tendencies in Nigeria construction projects arise from multifarious sources and pervade various milestones of project execution covering both precontract and post contract stages. Corrupt activities in construction project delivery in Nigeria has been variously identified as a cankerworm that severely impacts project performance. Findings of the study revealed that bidding and

construction stages ranked highest with regards to corruption susceptibility of project milestones at pre-contract and post-contract stages; while contract fraud and bribery recorded the highest frequency of occurrence among identified construction corruption sources studied. The findings also revealed that contract embezzlement, fraud and cost -cutting ranked most in severity of impact on project performance among other identified sources corruption in Nigeria.

## **6. Recommendations**

- 1) Entrenching the culture of transparency, good practice and ethical conduct in construction project and infrastructure procurement in Nigeria.
- 2) Ensuring integrity of project participants especially in the appointment of consultants and selection of contractors.
- 3) Developing a template for cost control and ethical performance of all project stakeholders throughout the pre-contract stages, post-contract stages, and entire project development circle.
- 4) Institutionalizing project accountability and auditing in all construction and infrastructure development projects in Nigeria.

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