



Evaluation of Security Risk on Construction Project Cost in Nigeria

Nnadi E.O.E¹, Okeke F.N² & Alintah-Abel.U³.

¹Corresponding author: Quantity Surveying Department; Federal University of Technology, Akure.

^{2&3}Co-authors: Quantity Surveying Department; Institute of Mgt. & Tech., Enugu

Highlight: Cost of construction activities is increasing geometrically in Nigeria. This increase affects her economic growth as it deters the effective contribution of construction industry to the GDP of the country. Security situation in the country has prevented efficient operations within the industry. It results to high overhead cost and total cost increase.

Moreso, out of the six geopolitical zones of the country, some are noticeably a security threat region, while construction activities are unhindered and less costly in other regions of the country.

This necessitated the research work which thus revealed that security situations in different part of the country have a huge influence over the cost of construction works.

Abstract: Issues on security challenges and safety are matters of grave concerns in Nigeria today. Presently, life has always been precarious in the country and the impact of this massive sense of insecurity on the human living especially in the construction industry cannot be overemphasized. The paper examines in a thematic form, the importance of security to the nation's economic growth, overview of Nigeria construction industry and notable security crisis facing some geopolitical zones in Nigeria. The study identifies the effect of security challenges on the overall project cost in the four geopolitical zones in Nigeria using questionnaires, structural interview and case study as the research methods which were analyzed using descriptive method. Investigation confirmed security porosity as a threat on the economic development of the affected areas and revealed effect of poor security on construction works.

Keywords: Construction, Cost, Economic growth, Nigeria, Security.

Introduction

The concept of security

The concept of security would be best understood by reflecting on some of the definition given on security. Security refers to "the situation that exists as a result of the establishment of measures for the protection of persons, information and property against hostile persons, influences and actions", Awojobi citing Akin (2008) [1]. It is the existence of conditions within which people in a society can go about their normal daily activities without any threats to their lives or properties. It embraces all measures designed to protect and safeguard the citizenry and the resources of individuals, groups, businesses and the nation against sabotage or violent occurrence (Ogunleye [14]). According to Igbuzor [10] it demands safety from chronic threats and protection from harmful disruption.

Security can be defined as being in total safeguard from the livelihood from unprecedented daily harm and protect them from unconditional stress. Security however, can be described as stability and continuity of livelihood (stable and steady income), predictability of daily life (knowing what to expect), protection from crime (feeling safe), and freedom from psychological harm (safety or protection from emotional stress which results from the assurance or knowing that one is wanted, accepted, loved and protected in one's community or neighbourhood and by people around. It focuses on emotional and psychological sense of belonging to a social group which can offer one protection). This description structured the concept of security into four dimensions. However, these dimensions can be weaved together to give a composite definition of security as the protection against all forms of harm whether physical, economic or psychological. It is generally argued however that security is not the absence of threats or security issues, but the ability to rise to the challenges posed by these threats with expediency and expertise. On the other hand, insecurity can be opined by different people according to how they were affected. Insecurity include: want of safety; danger; hazard; uncertainty; risk; want of confidence; doubtful; inadequately guarded or protected; lacking stability; troubled; lack of protection; and unsafe, to mention a few. All of these have been used by different people to define the concept of insecurity. These different descriptors, however, run into a common reference to a state of vulnerability to harm and loss of life, property or livelihood. Beland [2] defined insecurity as "the state of fear or anxiety stemming from a concrete or alleged lack of protection." It refers to lack or inadequate freedom from danger. This definition



reflects physical insecurity which is the most visible form of insecurity. Security can be classified into many other forms such as psychological security; economic security and social Security

Importance of Security To The Economy Growth

A society that is well policed and secured from security crisis tends to bring about economic development. This is because no society can develop where there are violence and constant threats to peace and stability, Gameni [6]. A sensory look at Nigeria during crisis situation will further give credence to the importance of security; which include:

Mobilizes inactive savings: The security market mobilizes saving for economic development. The instruments which are used in security market have liquidity and they are easily available. Hence, people secure their saved property by purchasing financial investments. The interest rate is also attractive in those instruments. So, people like to mobilize more savings.

Economic growth: For the economic growth or development of a country, saving and investment are prerequisites. Hence, financial market helps the efficient utilization of resources and economic growth by lending out some funds to the contractors. No construction industry or investor would want to invest in a trouble and conflict infested society. Nigeria currently experience bomb blast in various part of the country.

Promotion of trade: The security market helps in promotion of construction firms. It increases both internal as well and external trade by providing the means of exchange. The firms will equally have their thrust and support which in turn will bring about progress and development, Garuba [5] is known to be an environment that safe and conflict free, tends to attack the people's confidence and also integrate the various sectors of the economy. No construction industry or investor would want to invest in a trouble and conflict infested society. A feeling of happiness and general public contentment also springs up. It attracts investment to the country.

Channel savings to investments: Through security market a large amount of capital can be collected by selling the instruments like stock, bond etc. and the income earned from them can be used to pay debt. The investment on these securities provides interest and dividend. In the absence of security market, even those having adequate capital cannot use capital in productive sectors.

Promotes long term investments: The long-term loan needed for individuals, households, government and business, can be obtained from the security market. The fund raised by this market can be invested in agriculture, construction industries, services etc.

Increases quality of investments: The construction firms mobilize unproductive funds into productive sectors. The investors always try to invest in the areas yielding high rate of return. The construction firms assist in selecting appropriate opportunity to mobilize fund effectively by creating more jobs to both artisans and other professions within the state

Provides liquidity: Since there is liquidity and less risk of loss in financial instruments, the savers are stimulated to invest in stocks, bonds, real estate etc. The investors can receive cash promptly selling those securities into secondary market.

Attracts foreign capital: The construction firms present the clear picture of the economy. On account of this, both foreign construction firms and local contractors are attracted, thereby borrowing some foreign assistance which will eventually help in developing our country at large.

Enhances economic growth: The rate of saving and investment in the country increases from the activities of security market. This increases productivity and brings a wave of progress in industry, agriculture and trade sectors. Hence, it leads to an increase in the rate of economic growths.

Security and Nigeria Construction Industry

The Overview of Nigeria Construction Industry

In Nigeria, like most developing countries, the construction industry plays a dominant role in the economic activities of the country. In fact, it is a key barometer for economic performance. According to Omole [15], the construction industry contributes an average of 5 percent to the annual gross domestic product and an average of about one-third of the total fixed capital investment. It is also responsible for employing approximately 8 million people, having a population of approximately 140 million and this represents approximately 20% of Nigeria's workforce (National Bureau of Statistics, 2006 cited in Kolo and Ibrahim [12], perhaps, making it the largest employer of construction labour in Africa. When the construction industry was booming in the 1970's, the country's economy experienced similar effects during that period. However, from early 1980s to mid-1980's, the industry experienced a jolt and its effect was felt in all spheres of national life (Isiadinso [11]).

Buhari [3] reported that the lull in construction of early 80's was not limited to Nigeria alone. The lull also occurred in Western Europe and America. But the parent companies of these big timers in our midst were not



only able to stay afloat the stormy ocean but were able to expand their sales. They were able to do this by initiative, creativity and research.

Consequently, the Federal and State governments resorted to taking foreign loans as a quick solution to the problem. However, some of the measures taken by Government in order to revitalize the economy have further aggravated the situation. One obvious implication of this development is that the cost of imported raw materials and subsequently of the finished products has substantially increased (Husseini [8]). These substantial increases as reported by Mbachu and Nkado [13] have obvious negative implications for the major players and the industry; undermining the viability and sustainability of the industry.

The Current Security Situation in Nigeria

Nigeria's historic presidential election in 2015, in which an opposition candidate won against a sitting president for the first time, opened new prospects for the continent's demographic and economic giant to strengthen governance, clean up corruption, and reverse the spread of the Boko Haram insurgency in the north. With that peaceful transfer of power, President Muhammadu Buhari faces a flagging economy as a result of low global oil prices and unresolved conflicts in the Niger Delta and in the Middle Belt. Despite the administration efforts in flushing crimes and corruption; the security risk in the country soars due to the activities of militants with ethnic and religious background.

Notable security risk geopolitical section of Nigeria

Niger Delta Area: More than 30 years after the demise of Major Isaac Jasper Adakaboro, there was a resurgence of the armed protest against the federal government and the multi-national companies engaged in the oil industry of the Niger Delta. Most of the armed groups were made up of raggedy, ill-equipped, restive youths, who are spread across the length and breadth of the Delta region. Most of these groups have developed very sophisticated arsenal that would have been the boast of any group in the history of guerilla warfare. Among these groups are Niger Delta People's Volunteer Force, Movement for the Emancipation of the Niger Delta (MEND), Joint Niger Delta Liberation Force (JNDLF), Egbesu, Niger delta avengers and many others. All these groups compete on daily basis on level of destruction meted on the national facility in their domain thereby posing much environmental risk, security risk, economic and social risk to their communities and national risk to the country and the globe at large.

Militancy in the south west: The Western states of Nigeria are home to the Yoruba people. The region hosts a militancy group called Oodua People's Congress (OPC). Recorded clashes between the OPC and law enforcement agencies, primarily the police, intensified the activity of a dissident group within the OPC, which ultimately broke away to form the Oodua Liberation Movement, sometimes also known by the name Revolutionary Council of Nigeria (RCN). This splinter group became far more militant in its operations. This group opposes Nigeria's federal system of government and wants the Yoruba to secede from Nigeria and form a sovereign Oodua Republic, Adams [7]. Apart from the threat poses by the militant groups, the region is also known for other ills like kidnapping, ritual killings and so on.

Northern militant groups: This part of the country has been witnessing the activities of the militants from one time to the other. Notable among these groups was the Maitatsine sect led by Sheik Muhammadu Maruwa fought mainstream Muslims who refused to accept its path in Islam. Coincidentally, there were frequent violent and bloody intra-religious clashes between members of Izala and the Tariqah sects. The Izala, headed by Shiekh Abubakar Muhammadu Gummi, regarded the Tariqah sect as un-Islamic and prevented them from leading Jumat prayers. This prohibition led to violence that erupted (Ibrahim [9]).

Fulani herdsmen, nomadic cattle grazers, have been named one of the deadliest terror groups in the world comparable to Boko Haram, ISIS, the Taliban and al-Shabaab. The group has wreaked enough havoc to be acknowledged by the global community as the fourth deadliest terror group in the world. The "Fulani militants", as they have come to be known, is made up of members of the Fulani or Fula ethnic group, a tribe of over 20 million people, 70 per cent of whom are nomadic grazers, who are native to at least seven West African countries (Naij.com [17]). The activities of the militants in that part of the country led many people homeless and most children orphans. Those who manage to escape to neighbouring countries like Chad, Cameroon in a hungry, exhausted and hopeless condition with different grade of infections especially among the children. This clearly depicts security collapse in the affected area.

South eastern Nigeria: More than two decades after the end of the Nigerian civil war, there emerged the Movement for the actualization of the Sovereign State of Biafra (MASSOB). This movement has a firm root in the five South-East states of Nigeria that are home to the Ibo people including their brother states of Delta, Rivers, Cross river and Akwa Ibom States. MASSOB has been reported to be well armed and there have been reported cases of confrontation with the Nigerian police and the military. MASSOB, IPOB and other forms of militancy in the region adopt the Biafra national flag and this can be seen displayed in the affected



political zones of the country. The conspicuous display of the Biafra flag in a territory that would otherwise be Nigerian sovereign territory suggests that a state of Biafra still exists—at least in the minds of the people. Apart from this, kidnapping, armed robbery and Fulani herdsmen invasion are among notable evils in the south-eastern region.

General identified risks in Nigeria nation

Kidnapping according to Oxford Advanced Learners Dictionary is abducting and holding the victim captive, typically to obtain ransom. Though the definition given by the dictionary is to obtain ransom, some modern-day kidnapping has gone beyond that. South east is gradually turning to a land where people see evil act as a means of making huge money. The victims are subject to various degrees of inhuman treatment ranging from rape; maim and death as the case may be. Every part of Nigeria has been engulfed with the activities of kidnapers; though at different degrees. South east and south-south regions are more prone to the activities of the kidnapers than other parts of the country.

Meanwhile the most memorable kidnapping incidence in Nigeria is the one carried out by the northern militant group called Boko Haram. On the night of 14–15 April 2014, the report had it of the kidnapped of 276 female students from the Government Secondary School in the town of Chibok in Borno State, Nigeria. Nigeria accounted for 26 percent of kidnap and ransom incidents globally in the first half of 2013, recent statistics released by NYA International, specialist crisis prevention and response consultancy, indicated. In the data on the kidnapping incidence released by Risk Map Report in 2014 subtitled “Global Kidnapping hot-spots”, Nigeria is seen as the 5th among the countries that have experienced high kidnapping incident in that year. Another risk consultancy firm, Control Risks, reported recently too that 74 percent of kidnappings recorded in Africa in 2012 occurred in Nigeria, (Daily Independence, [4]). According to Overseas Security Advisory Council (OSAC), Nigeria in the recent years is among the top ten countries with high kidnapping incidence globally.

Both the foreign and local business men in Nigeria have experienced the cruel treatments of kidnapers in the country. Some foreigners who wanted to invest in the country after hearing the story of kidnapers in the country decided to quit instead of having their money hijacked by the hungry kidnapers in the country (Uzochukwu [16]). Those that manage to invest in the country or carrying out construction activities decided to hike their price in order to pay for huge security. Hence, this invariably affects the cost of construction cost in Nigeria and most especially the affected states or regions.

Effect of poor security on construction projects

According to the case study evidence, horizontal inequalities appear to be most likely to lead to conflict where they are significant, consistent across dimensions, and widening over time. Apparently, due to security challenges on different geographical zone in the country; this increases the companies’ overhead and insurance costs which affect the total construction cost.

The security factors have led many contractors to abandon their site and flee the vicinity because of their attacks and damages on their workers, property and equipment.

Insecurity results into decrease in quality of investment and evade economic growth. The multinational construction outfit would prefer to hire equipment, recruit staffs and workforce from the locality that is prone to attacks rather than bringing in their high-quality equipment or experts. This has hitherto reduced the quality of job carried out in the affected places.

Overhead and insurance cost as a security risk measures

Construction insurance and overhead are required on every single construction project and in many instances; it is a requirement to have some sort of specific coverage in order to be awarded. Construction insurances and overhead can provide coverage for material, risks, natural disasters, employees and even your own business. However, the insurance industry along with the construction industry is always looking to comprehend and provide the latest coverage on every single and unique situation

Research Method, Collection and Analysis

The study examines the effect of security challenges on the overall cost in Nigeria construction industries. The population is restricted to contractors in private and public sectors of Nigeria construction industry. The data collection instruments used is questionnaires, structured interview and case study of project executed in four geopolitical zones of the country. Three of the selected zones are high risk zones while the remaining is a control or checked zone. Data collected were analyzed using descriptive method. The reliability of the test was verified by three experts.

Tables 1 below shows the data gathered from contractor A (name withheld) operating in the identified geopolitical zones to find the impact of security challenges on construction cost of projects being executed. Data



was gathered from the three-security risk geopolitical zones of south-south; north east and south east while south west as a controlled zone

Table 1: Rate comparison of reinforced in situ concrete (1:2:4/19mmagg) in four geographical zones in

	Variable	Location of Bid Submission							
		South East		North East		South-South		South West	
Pricing Of Reinforced In-Situ Concrete (1:2:4/19m magg)	Labour		10,500.00		9,500.00		12,500.00		10,500.00
	Materials		32,500.00		34,500.00		31,250.00		28,500.00
	Sub-Total		43,000.00		44,000.00		43,750.00		39,000.00
	Overhead	35%	15,050.00	55%	24,200.00	45%	19,687.50	25%	9,750.00
	Sub-Total		58,050.00		68,200.00		63,437.50		48,750.00
	Profit (30%)		17,415.00		20,460.00		19,031.25		14,625.00
	TOTAL		75,465.00		88,660.00		82,468.75		63,375.00

Nigeria.

RATIO	1.19	1.40	1.30	1.00
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The analysis in table 1 shows huge difference in overhead being charged by the company on the same or similar jobs at different locations in the country. North East has the highest rating of 55%, followed by the South-South (45% while South West has the least overhead consideration of 25%. The finding further shows discrepancies in the labour and materials rates. Several factors like closeness to manufacturer/source; availability of labour and cost of living in the location are among factors responsible for such variances. Thus, the increase in prices of work shown through ratio levels would affect the construction cost in the locations as well as make impact on their economy.

Meanwhile, further investigation through interview reveals that security tops the list of the company during bidding processes at the mentioned locations. More security outfits are employed for the safety of the workmen and the equipment as it is under serious threat in those areas. Mentioned also is the issue of kidnapping and vandalism. Hence, south west; North central and North West are fairer to construction activities than the remaining zones.

Note: Other major construction materials were analyzed and the ratio is similar. This implies that the effect is duly considered at the course of bill pricing by the company.

Table 2: Breakdown of overhead make-ups (factors) on construction cost in affected region



Overhead Variables	North East		South-South		South East		South West		Group Average	
	RII	Rank	RII	Rank	RII	Rank	RII	Rank	RII	Rank
Communication And Other Off Base Expenses	0.83	2	0.82	2	0.82	2	0.81	3	0.82	2
Security	0.90	1	0.87	1	0.88	1	0.86	2	0.88	1
Administrative/Management Salaries	0.82	3	0.79	3	0.80	4	0.79	4	0.80	3
Stationeries And Office Equipment	0.55	6	0.56	6	0.59	6	0.68	5	0.59	6
Electricity/Office Employees Etc.	0.72	4	0.75	5	0.82	2	0.88	1	0.79	4
Office Insurance/Rent	0.69	5	0.76	4	0.71	5	0.65	6	0.70	5

Table 2 shows the details of variables that make up overhead cost of an average priced item. Findings reveals that security is the highest considered variable while pricing overhead in the three-major security challenged regions of Nigeria (The North east; South-South and the South East) while electricity etc, tops the list of considered variable in the South West with RII of 0.88. This was closely followed by security with RII of 0.86. Thus, the group average ranked security as the first variable with RII of 0.88; communication and other off base expenses came second with RII of 0.82; Administrative salaries and electricity came third and fourth with RII of 0.80 and 0.79 respectively. The findings confirm the literature about the issue of security in Nigeria and its threat on the economic development of the affected areas. No wonder Garuba[5] asserts that no construction industry or investor would want to invest in a troubled and conflict infested society.

Conclusion:

Security just like other elements in the business environment enhances and optimizes business activities but insecurity hinders these activities and so it constitutes a threat to business organizations.

North East tops the most security challenge region in Nigeria construction industry; followed by the South-South and South East in second and third respectively. The high overhead cost as noticed in construction sector due to security challenges of the affected region gave birth to high cost of living; poor investment level and overall low economic performance to the area.

The ugly trend is gradually crippling the national economy and correspondingly dimmed the actualization of the Vision 20:2020 project, which is merely four years away. As a result, serious attention should be given to security for the nation to be able to move forward.

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