The Impact of Policy and Procedural Framework on Project Performance Within the Building Industry in Abuja, Nigeria

Usman, N. D¹.; Kamau, P. K.² and Mireri, C.³ ^{1, 2,3Department} of Environmental Planning and Management, School of Environmental Studies, Kenyatta University, Nairobi, Kenya

Abstract - The building industries in the developed and some emerging economies were able to effectively contribute to socio-economic development through the creation of employments, provisionof shelter to millions as well as the provision of basic infrastructure, through a sound policy framework compliance. However, poor policy compliance in the Nigerian Building Industry has been linked amongst other things to the industry's inability to deliver services effectively and efficiently and this has been detrimental to Nigeria's economy. This study therefore sought to investigate how policy/procedural framework influences the performance of projects in the Nigerian buildingindustry.Explanatory and descriptive design approaches were used to obtaindata from completed projects files and interviewsin Abuja respectively. Stratified random sampling was used to select three projects from both public and private sectors. The study established that policy and procedural frameworks guide in achieving project delivery but the stake holders do not adhere to these guidelines as stated in National Building Code. The study recommends that strict compliance to policy/procedural framework should be adopted to improve project delivery of time, cost and quality standards.

Keywords: Building Industry, National Building Code, Policy, Procedural framework, project performance

INTRODUCTION

According to Daft (2010) project management is the attainment of organizational goals in an effective and efficient manner through planning, organizing, leading and controlling organizational resources. Usman, Kamau & Mireri (2014) added that the growing complexity of the building industry calls for increased effectiveness in the planning and control of projects. However, construction methods use a range of traditional to modern techniques to meet client's needs based on global economic development. As a result of population explosion and continued demand for new kinds of buildings, there is the need for professional practitioners who are versed in project management systems

(Inuwa and Usman, 2008; Usman*et al*, 2014) to display their ability in improving performance by complying policy/procedural frameworks.

Policies and procedural frameworks are regulations guiding the building industry. These rules and regulations include Environmental laws, health and safety, Environmental Impact Assessment, approval processes, construction and other ethical practices. These ethical standards are used in enhancing project performance within the building industry. These are laid down rules and regulations guiding the various stake holders on project delivery within the building industry in Abuja, Nigeria.

Policy/procedural frameworks are laws governing the building industry (BI) to successful project delivery. In developed economies, building laws, regulations and codes are established for use in the building industry. For example, UK has professional and regulating bodies, research institutions as well as effective utilisation of their tertiary institutions to ensure the production of buildings and proper management at every stage (Jambol, 2012).

The production and management of buildings have various articulated requirements backed by law such as:

- Method of controlling (inspecting and reporting building productions
- How services, fittings and equipment may be used
- The inception and maintenance of any service, fittings or equipment

In a similar study, USA developed building legislation from a Uniform Building Code (UBC) to the Standard Building Code (SBC) and to International Building Code (IBC) (Ofori, 2014). Like the UK legislation, the American system promotes good building practice in USA.

In Nigeria, Jambol (2012) and FRN (2006) points that the National Building Code (NBC) has elaborately provided for safety of operations at all stages of the building production processes.

In section 13, it provided for the control of building works under building enforcement units. This is applicable to all three-tiers of government by the various professionals. The professionals have adequate powers to control building works as provided in section 13.1.1.3 (1-16). Scope is covered (section13.2); with powers at pre-design (section 13.2.1 (1&2); design (section 13.2.2 (1&2); construction (section 13.2.3 (1&2) and post construction (section 13.2.4 (1&2). Contract document for building production management are as provided in section 2.32. For actual production, section 13 provides for control of building works as stated in section 13.12 (1-4) with respect to workmanship and supervision.

However, Jambol (2012) lamented that the Nigerian Building Industry (NBI) is fragmented, underperforming, uncoordinated, undisciplined and operating as if there are no laws guiding its operations. This is evident, according Jambol (2012), by disrespect for constituted authority, no industrial training, the products of the professionals are not commensurate to their practices and technology is rudimentary. These are serious threats to project delivery within the building industry.

Impacts of policy/procedural frameworks

Policy/procedural frameworks are supposed to be the guiding principles for building production within the built environment; unfortunately Government officials do not follow standards of town planning provisions, thereby allocating plots without following rules and procedures (Ede, 2010). This was in agreement with Ike (2012), that town planning departments were no longer performing their role as laid down by law. Contrary in Dubai, studies have shown that before any project starts, specialized property development consultants are engaged (Ike, 2012; Ede, 2010). These consultants study the soil and conducts investigation. The design carried out based on the reports of the soil investigations. Usman *et al* (2010) points that in Nigeria, policies are there but lack of compliance is what's happening in practice.

For instance, in Dubai, it takes eight months for a building plan to be approved (Ike, 2012). He added that contractors are not allowed to mobilize to site until after the approval processes. Besides, materials have to be certified by a consultant before they're use on site; and each level of the building processes, must be inspected and approved. With these, government and professional bodies track and monitor building production from the initial to completion phases.

In spite of the laws guiding the NBI, the problem substandard materials and lack of compliance have continued on the increase (Idoro, 2012). This is a serious bone of contention that influences cost, time and quality standards which affect project delivery.

According to Ofori (2014), experience has shown that houses built by government are outrageously expensive when compared with similar houses built by non – governmental agencies or individuals. Such houses have the following characteristics:-

- i) The quality standards are too high
- ii) The space standards are too generous
- iii) Fees charged by professionals are too high

iv) Project margins of contractors are excessively high Idoro (2014) and Ofori (2014) observed that many building

firms are small and cannot raise money through public

offers. Lacking in collateral, borrowing costs for such firms are therefore higher and this discourages investment in capital equipment and banks consider small building firms too risky to offer loans. Mbamali (2002) and Idoro (2012) argued that the erratic economic conditions which Nigeria witnessed during the second half of the 1980s have made contract overruns in terms of time and money a regular feature of building projects in the country.

Contract clauses provide the basis for claims; it is the contractor's responsibility to initiate, prepare and present such clauses in a clear and convincing manner according to standard practice. However, Idoro (2012) observed that most contractual claims are either totally rejected or settled with relatively insignificant awards. This leads to lack of substantiating evidence and lack of contractual basis for claims. Huge investment running into several billions of Naira has been put in the building industry in Nigeria through low-cost housing programmes under the Shagari administration (Kehinde *et al*, 2002).

It is interesting to note that both civilian and military administrations have made the issue housing for all (new or improved) a policy or programme that was workable but unfortunate the implementation was not impressing. Poor management and delays of projects have led to indigenous contractors suffer.

The inability to implement policies, plans or projects is widely recognized as a major weakness of contemporary planning in developing countries (Achuenu *et al*, 2000; Idoro, 2012; Kamau, *et al*, 2013). If a project does not result in change necessary to achieve desired goals and objectives, it is meaningless. Goals and objectives have to be translated into action and it is their implementation that provides progression from plan to action and to changes in economic, social and physical environments (Usman, *et al*, 2014).

Policy and procedural framework is a means of avoiding the ills inherent in the construction sector and which lead to project failure, incompletion, and abandonment (Idoro, 2012; Idoro, 2014; Kamau *et al*, 2013). However, the success of any building project in public or private sectors depends on the level of compliance to policies and procedures and control, and strict monitoring of time, cost, material, quality and environmental constraints (Nwachukwu & Fedelis, 2011, Kamau *et al*, 2013).

Environment comprises of external, natural, physical and residential conditions which directly or indirectly affect man, and which are influenced by economic decisions and technological development (Chandra, 2010).

Project compliance can be used to mean the whole process of translating broad policy and procedures and specific programmes of action that can enhance project delivery. This forms the interaction between the setting of goals and the actions required to achieve them. However well formulated a policy, unless action is taken to implement it, it remains only as paper work. Adherence to policy and procedures is the full range of managerial activities associated with putting the chosen strategy into place, supervision of its pursuit, and achieving the targeted result (Shen *et al*, 2010, Idoro, 2012).

However, if there is no commitment from the organization's leaders to implement policies and procedures to achieving quality, any effort to actualize it can lead to cynicism and lessen the likelihood of its adoption and success in future. Proper compliance results from administrative decisions on how to do things and create fits between management policies and operations. Kabir *et al*, (2009) and Idoro, (2012) opined that administrative and managerial elements are necessary to put a management policy into place and that full implementation can take several months to years depending on the amount of coordination involved.

Methodology

The study used explanatory survey method (case study). Data were obtained from project files of both public and private sectors through stratified random sampling techniques. For the purpose of this analysis, three projects from public and private sectors were used respectively. This study was carried out in Abuja, Nigeria.

In Nigeria, the building industry is critical to the Nigerian economy and provides shelter and gainful employment to the citizens. The movement of the administrative capital of Nigeria from Lagos to Abuja brought about an expansion of infrastructural development in the Federal Capital Territory (FCT), Abuja that is driven by public and private sectors. This resulted from the need to cater for the increasing population.

The study was carried out in Abuja the Federal Capital Territory of Nigeria. The territory is located north of the Niger and Benue Rivers. It is bordered by the States of Niger, Kaduna, Nasarawa, and Kogi, lying between latitude 8.25 and 9.20 north of the equator and longitude 6.45 and 7.39 east of the Greenwich Meridian. Abuja is located in the Centre of Nigeria. The Federal Capital Territory covers an area of approximately 7,315 km², and Abuja occupies 275.3 km² of it with a population of 1,568,583. It is situated within the Savannah region with moderate climatic conditions. The territory is made up of six Local Councils: Abuja, Abaji, Gwagwalada, Kuje, Bwari and Kwali. The Local Government Authorities are controlled by the Federal Capital Development Authority, Abuja.

The Master Plan for Abuja was designed by the International Planning Association (IPA) and approved by the Federal Government in 1979. Construction work began in 1980 and the FG finally shifted from Lagos to Abuja in 1991. The Land Use Act of 1978 was the principal law guiding land acquisition, resettlement, and its allocation to all eligible Nigerians, private sectors, Government Organizations and Non-Governmental Organization (Jibrin, 2006).

Results and analysis

Data was analyzed using explanatory and descriptive techniques from project files of both public and private firms.

Project	Initial	Final	Period	Initial Cost	Final Cost	Cost	Sector
·	Period	Period	Variation	(million	(million	Variation	
	(Months)	(Months)	(Months)	USD)	USD)	(million	
						USD)	
А	28	60	32	0.91448	0.91618	0.0017	Private
В	24	64	40	1,133.75	1,165.5	31.75	Public
С	26	47	21	0.49265	0.49412	0.00147	Private
D	24	56	32	0.44718	0.45371	0.00653	Private
E	30	76	46	0.60668	0.64308	0.0364	Public
F	28	64	36	0.35477	0.41136	0.05659	Public
			Courses Eist	d Comment 2012			

Source: Field Survey, 2013

Table 1 shows the effect and influence of project performance of time, cost and quality standard. The analysis indicated that little delay has serious implications on time and cost overruns. The analysis indicates that most projects were completed at a sum and period higher than planned. For instance, public projects B, E and F (Table 1) were completed at \$1,165.5 million, \$0.64308 million and \$0.41136 million as against \$1,133.75 million, \$0.60668 million and \$0.35477 million respectively. These projects were completed at a period of 40, 46 and 36 months higher than scheduled. One could wonder why these variations are.

How well are the policies implemented and strictly followed?

For instance, projects A, B and D carried out Environmental Impact Assessment, while projects C, E and F were not conducted. According to National Building Code (NBC), EIA is mandatory for any project in the building industry (FRN, 2006). Equally projects approvals should not be more than 3 months as per as the regulatory requirements are met (FRN, 2006). In spite of this, projects A, B, C, D, and F were approved 10, 12, 14, 8, 15 and 18 months respectively. This delay has affected time and cost overruns. The prices of materials have gone high due to inflation especially during the petroleum crisis. The cost of skilled labor is also high. In the same vein, the delays increase the rate of corruption due to bureaucracy especially with public projects.

It is a policy that once project is approved, contractors should mobilize to site within 3 months (FRN, 2006). However, only project A met this standard; whereas, projects B took 7 months, C 6 months, D 4 months, E 8 months and F 9 months respectively. In the same vein, projects B, C and E were commissioned, while, projects A, D and F were not commissioned. The statutory requirement demands that all projects must be commissioned at the takeoff (FRN, 2006). This scenario creates unethical professional practice which affects time, cost and quality standards.

Besides, projects are supposed to be decommissioned after completion; but from the findings, no singled project was decommissioned. Thus, the non- compliance results to delay, high cost and time overruns. It is therefore, a clear indication that projects cannot be delivered under such conditions. The BI is engulfing with corruption, bureaucracy, and unethical professional practice, nonadherence to regulations, politics, ineffective monitoring and supervision.

These findings indicate that policy/procedural frameworks are significant factors in enhancing project performance within the building industry in Abuja. These policies/procedural frameworks must be implemented as planned in order to deliver projects successfully within the building industry in Abuja.

This finding is in agreement with other research findings that in Nigeria building regulations are not adhered to; and policies are poorly implemented especially in the building industry (Jambol, 2012; Ike, 2012, Idoro, 2014; Ofori, 2014; Usman *et al*, 2010)

From the above discussion, it implies that the more the delay, the higher the duration and the higher the cost which is an impediment to project performance. This could be accounted for non- compliance to the policies and ethical standards. Ofori (2014) opined that the BI could not perform due to wrong policy adoption, inappropriate policies and non- compliance to correct policy/ procedural framework. Besides, he suggests that a long term strategy for the BI to be developed synchronized continuously, coordinated and monitored. This will ensure project delivery.

The study therefore established that project performance depends on how well the policy measures/procedural framework is being adhered. Although there is policies/procedural framework, however, the level of compliance is minimal. Perhaps that is why project are rarely not complicated within quality standards, cost and time overrun. Impact of policy/procedural framework on project delivery Although there are policy measures/procedural frameworks within the building industry in Abuja but there is little or no compliance. Procedural such approvals of building plans, mobilization fee, mobilization to site, safety and health provisions, standardization and other ethical provisions as stipulated in the National Building Code (NBC) (FRN, 2006) were rarely observed.

Jambol (2012) reiterated that NBC spelt out clearly contract documentation for building production as provided at section 2.32. For actual production, section 13 provides for control of building works as highlighted in section 13.12(1-4) with respect to workmanship and supervision. Quality of materials section 13.15; tests of materials section 13.16; building construction requirements section 11; post construction requirements section 12; building materials and components requirements section 10, sections 7, 8 and 9 are for architectural, civil and engineering design requirements. More so, section 13.19.3 is for building condition survey report. Section 6 provides for environmental and general building requirements. In addition, section 6.1.3 provides for working drawings; while section 6.3 provides for general building limitations. Others include health and safety and quality management plans supported by a policy and focus on the availability of adequate resources for the project (FRN, 2006). Idoro (2012) and Ofori (2014) added that the building industry is guided by law throughout its operations from initial to completion of the project.

The research discovered that the building industry is unable to deliver projects efficiently and effectively; and there several reports of poor management of projects, the unnecessary rush in project implementation, inadequate planning and budgetary provisions, time and costly project execution, inefficient service delivery and abandoned or non-functional facilities and collapsed buildings.

It is against this background that the recommendations below are made. Despite its limitations, this study should be able to benefit contractors, clients and professionals to improve their performance in project delivery in the building industry in Abuja, Nigeria, as well as in the global building industry. In addition, construction firms and other organizations may also use the findings in personnel training workshops on management systems and project performance to help staff keep abreast of best-practice in the profession.

The findings of this research can also be used to help a project management team face the challenges of project management in the building industry. This is because, through management systems, prediction of challenges and how to mitigate them becomes easier. Project managers are able to plan for eventualities in the building industry. It can also enhance communication between the designers and the contractors to improve efficiency in project performance. The findings will aid public and the private sectors to improve services and project delivery in building construction. The findings will broaden the literature in management systems, project performance and the management of building projects. The study will demonstrate the usefulness of employing effective management systems in achieving a desired project performance. This will be useful to future research, reference and teaching.

CONCLUSION

Despite policy/procedural framework successful use in the building industry worldwide, its use in Nigeria is yet to be adequately exploited. Several questions emerge: is policy/procedural framework being applied only by a section of the industry in Nigeria or by the entire building industry? Is policy/procedural framework seen by industry players as an effective tool that will ensure quality and durability in the building industry? Is there resistance to the application of policy/procedural framework by the industry? These posed a serious challenge in the delivery of projects on quality, cost and time overruns; however, these challenges can be mitigated by compliance and adherence to professional ethics within the building industry in developing countries especially Nigeria.

The parameters for measuring project performance are cost, time and quality standards. Clients usually demand for a better value from their investments. As such, they want projects to be completed on time, within cost and with the

REFERENCES

- Achuenu, E.; Izam, Y. D. and Bustani, S. A. (2000). Investigating the activities of Indigenous Contractors in the Nigerian Construction Industry. *Nigerian Journal of Construction Management and Technology*, 3 (1) 91-103.
- Chandra, P. (2010). Project Planning, Analysis, Selection, Financing, Imlementation and Review, Seventh Edition. New Delhi: Tata McGraw-Hill Education, Private Ltd.
- Daft, R. L. (2010). *New Era of Management Ninth Edition*. China: Translation & Printers Services, Ltd.
- Ede, A. N. (2010). Building collapses in Nigeria: The trend os casualities in the last decade (2000-2010). *International Journal of Civil and Environmental Engineering, IJCEE/IJENS*, 10(6).
- Idoro, G. (2014). Address presented by the Co-Chair at the opeoning Ceremony of CIB conference held at Orhid Hotels & Events Centre,. *Proceedings of CIB Conference*. Lekki, Lagos, Nigeria: CIB W107.
- Idoro, G. I. (2012). Influence of Project plans on the outcome of construction projects procured by Design-Build in Nigeria. *Journal of Construction in Developing Countries*, 17 (2) 77-99.
- Ike, A. C. (2012, May 15th 16th). Case histories of auditing collapses in Nigeria. Proceedings of National Technical Workshop on Building collapses in Nigeria, Nigerian Building and Road Research Institute (NIBRRI), pp. 41-57.
- Inuwa, I. I. and Usman, N. D. (2008). Analysis of Project Management in the execution of public construction projects in Nigeria: A case study of

right quality (Rashid *et al*, 2006). The above parameters were not followed perhaps that is why projects are not delivered according to plan. For instance, most of the projects studied, were completed at a higher cost and time overrun. However, in Nigeria is just a lip service.

In conclusion, the current traditional system is not working, but if law enforcement is employed, it could improve project performance; and will reduce the cost and time overruns.

Recommendations

Basing generalizations on the findings of this study, the researcher recommends that

- professional bodies should ensure capacity building in order to improve competencies within the built environment
- erring professionals should be punished for unethical practices
- Government and professional bodies should improve sensitization outlets to enable client's patronized qualified professionals
- Government and professional bodies should set up a mechanism for law enforcement within the building industry

Bauchi State. International Journal of Environmental Science, 4 (4) 48-54.

- Jambol, D. D. (2012, May 15th 16th). Building collapses phenomenon: Sanctions, Liabilities and Legal Implications. *Proceedings of National Technical Workshop on Building collapse in Nigeria*, *National Building and Road Research Institute* (*NBRRI*), pp. 83-105.
- Jibrin, I. S. (2006). *Computerization of the Cadastral and Land Registry: The Abuja Experience*. Retrieved from http://en.wikipedia.org/wiki/Abuja
- Kabir, B.; Bello, A.; Kolo, B. A. & Bustani, S. A. (2009).
 Factors inhibiting the growth of local construction firms in Nigeria. *ARCOM Conference* (pp. 351-359).
 Nottingham, UK: ARCOM, 7th-9th September.
- Kamau, P. K.; Mireri, C. and Usman, N. D. (2013). An assessment of Life Cycle Management system for Project Performance within the Building Industry in Abuja, Nigeria. SABS Conference on Promoting Sustainable Built Environment. Nairobi, Kenya: Jomo Kenyatta University of Agriculture and Technology.
- Kehinde, J. O.; Aiyetan, A. O. & Ibrahim, B. (2002). A Study of delays in payment of public sector building construction projects in Nigeria. *Journal* of Environmental Sciences, 7 (1) 106-111.
- Mbamali, I. (2002). Limiting factors to good claims preparation and presentation by Nigerian Building Contractors. *Journal of Environmental Technology*, 1 (1) 1-6.
- Nigeria, F. R. (2006). *National Building Code*. Johannesburg, South Africa: LexixNexis Butterworths.

- Nwanchukwu, C. C. and Fedelis, I. E. (2011). Building construction project Management success as a critical issue i real estate development and Investment. *American Journal of Social and Management Sciences*, Vol. 2 (1) 56-75.
- Ofori, G. (2014). Nature of the construction industry, its needs and its development: A Review of four decades of research. *Proceedings of the CIBW107 International Conference*, (pp. 28th - 30th January,10-19). Lagos, Nigeria.
- Shen, I.; Tam, V.; Tam, I. & Ji, Y. (2010). Project feasibility study: The key to successful implementation of sustainable and socially responsible construction

management practice. *Journal of Cleaner Production*, 18 (3) 254-259.

- Usman, N. D., Chen, J. A. and Lodson, J. Y. (2010). Environmental Sciences and the Challenges of collapse buildings in Nigeria. *Journal of Environmental Sciences and Agriculture in Developing Countries*, 2 (2 & 3).
- Usman, N. D.; Kamau, P. K. and Mireri, C. (2014). Application of Life Cycle Management for project performance in developing countries. *Proceedings* of the CIB W107 International Conference, 28th-30th January, (pp. 200-209). Lagos, Nigeria.

