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BUILDING COLLAPSE IN NIGERIA: ASSESSING THE ROLE AND EFFECTIVENESS OF REGULATORY BODIES IN THE BUILT ENVIRONMENT

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Abstract:

This paper examines the challenges of building collapse, focusing on the role of regulatory bodies in the built environment in Nigeria. The overriding mission of professional regulatory bodies is to minimize the economic waste, litigations and the risk to the public that may arise from the practice of the various professions in built environment. Along the environmental hazard bedeviling the Nigeria society today is the incessant challenges of building collapse, which has been unabated, irrespective of various efforts of government and the professionals to mitigate this menace. Data for this work were sourced from Journals, projects, research works, conference, communique, seminar, textbooks, internet, workshop and colloquium across these regulatory bodies in the built environment in Nigeria. Findings revealed that professional bodies (Town Planners, Architects, Quantity Surveyors, Engineers, Estate Surveyors, Land Surveyors, and Builders), have the code of conduct and ethics of practice which could help to regulate and reduce accident and quackery but lack the implementation of institutional control. In conclusion, policy measures were suggested among which is the overhauling of the entire laws that established and are guiding the practice of the members of these professional bodies.

Keywords: Code, collapse, Environment, Quacks, Regulatory

Introduction

The building industry is the most complex of all the industries in the economy (Myers, 2022). The basis of its complexity is promised on the centrality of the building industry to other industries and the socio-economic attributes of a nation (Liu & Zainul-Abidin, 2024). Building industry performs an important and dynamic role in the process of sustainable economic growth and development of any nation (Khaertdinova et al., 2021). Corroborating this, Galadima, (2021) asserted that building industry are the barometer to gauge and determine the economic health or ill- health of a nation. More importantly, World Health Organization

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(WHO) (2021) submitted that among the primary functions of the building industry is the ability to provide shelter from outside aggression.

To put it simply, a profession is a calling that calls for a certain understanding. This kind of information requires extensive and rigorous preparation. According to Raj et al. (2021), a profession is a "disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognized body of learning derived from research, education, and training at a high level and who are prepared to apply this knowledge and exercise these skills in the interest of others" (Australian Council of professions, 2016). All individuals involved in this calling collectively make up the profession.

Inherent in these definitions are the following; that a profession consist of a group of persons brought together by training and education; have "a legal monopoly for the practice of the profession" and "a system of control over the practice of the calling and education of the practitioners through associations and codes of ethics" as are the fact that it is defined by a unique body of knowledge and skills and that it applies these skills to benefit others (Aster and Ofem, 2015). Each profession's activities are governed by a code of ethics and professional conduct that establishes and requires high standards of conduct and behavior that go beyond individual moral obligations with regard to the services it offers the public and with regard to professional colleagues.

The built environment is man-made as compared with the natural environment. Professions is the built environment include the following town planning, engineering, land surveying, estate management, quantity surveying, architecture, builders and fine artist (Aster and Ofem, 2015). Each of these professions has specific roles in making the built environment livable. Therefore, to be described as a professional, this demands strict adherence to the standards of practice of that profession. For instance, built environment professions in Nigeria began with the formation of “professional associations” these include: Nigeria Institution of Town Planners (NITP), Nigerian Society of Engineers (NSE), Nigerian Institute of Architects (NIA), Nigerian Institution of Estate Surveyors and Valier’s (NIESV), Nigerian Institution of Surveyors (NIS), Nigerian Institute of Builders (NIB), and Nigerian institute of Quantity Surveyors (NIQS).

These associations are guided by their constitutions which are determined by the membership. Example is the NITP as stated in Sec.2.1 of the 2010 constitution as “Attainment of sustainable Human Settlement”

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see the table below**,** likewise the other professions. The question is, how effective or protective are they toward practices of their profession in Nigeria, particularly in issues of building collapses.

According to Evans and Silbey (2022), the profession has a governing or regulatory organization that has been authorized by law to do so. The hallmark of a regulated profession is this official recognition. However, Evans & Silbey (2022) assert that "self-regulation" is the most prevalent type of professional regulation. Professional self-regulation is a regulatory model that allows the government to have source control over a profession's practice and the services that its members provide without needing to maintain the specialized, in-depth knowledge that direct regulation would require. Also performing this role, commitment to an ideology of service is equally required. The government, therefore, only maintains a foothold in these regulations. The mechanism by which the government ensures professional regulation is through legislation of a statute of all acts. These statutes define the scope of the legislative authority granted to the profession's regulating body and offer the framework for professional regulation. The differences between professional associations and professional regulating organizations are highlighted in Table 1 below.

Methodology

The paper employs a qualitative research method, gathering data from various secondary sources such as journals, research projects, conference communiqués, seminars, textbooks, the internet, workshops, and colloquiums across regulatory bodies in the built environment in Nigeria. This approach enables the authors to critically examine the role of these regulatory bodies and their effectiveness in addressing the problem of building collapse.

Table 1: Professional associations and regulatory Bodies for Built Environment Professions in Nigeria.

S/No	Profession	Professional Association	Professional Regulatory Body
1	Town Planner/urban and Regional Planners	Nigerian institute of Town planners (NIPT)	Town Planners Registration Council of Nigeria (TOPREC)
2	Architects	Nigeria Institute of Architect (NIA)	Architects Registration Council of Nigeria (ARCON)
3	Quantity Surveyors	Nigerian institute of quantity surveyors (NIQS)	Quantity Surveyors Registration Board of Nigeria (QSRBON)

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4	Engineers	Nigeria Society of Engineers (NSE)	Council for Engineering Regulation in Nigeria (COREN)
5	Estate Surveyors	Nigeria Institution of Estate Surveyors and Valier's (NIESV)	Estate Surveyors Registration Board of Nigeria (ESVARBON)
6	Land surveyors	Nigeria Institute of surveyors (NIS)	Surveyors Registration Council of Nigeria (SURCON)
7	Builders	Nigerian Institute of Builders (NIB)	Council of Registered Builders of Nigeria (CORBON)

Source: Adapted from Opuenebo, B.O. (2016)). Lecture delivered at 29th induction ceremony and award of TOPREC, 2016.

Table 2: Distinctions between Professional Associations and Regulatory Bodies

Professional Regulatory Bodies

- Define criteria for registration with and certification by the professional regulatory body
- Provide guidance to members in the form of code of ethics, rules of professional conduct and standards of practices
- Codes of conduct are legally binding covenants which are to be vigorously enforced
- Maintain a public register which contains information about individuals, and organizations registered with the profession and all members must comply with the established standards of practice
- Investigate complaints about members and discipline member as required.
- Complement quality assurance programmes
- All decisions made by regulatory bodies are subject to judicial review by the courts and individuals have legal right of appeal to the courts.

Professional Associations

- Provide networking opportunities
- Publish information of interest to its members
- Conduct research
- Stage conferences, seminars and workshops
- Maintain job boards
- Negotiate preferential rates for their members for various products and services
- Lobby governments to influence policy in furtherance of the interests of their members.

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Challenges of professional Regulations in the Built Environment in Nigeria

A person's knowledge, abilities, ethics, and attitude determine their vocation. According to Opuenebo (2016), the purpose of a professional body's regulations is to guarantee that members adhere to ethical, technical, and professional standards and that the right quality and expertise are supplied. "Formal rules based upon the laws enacted by the legislature that govern specific social or economic activities" is the definition of white regulation (Kyriakopoulos, 2021). Regulation are the means by which a regulatory agency implements laws. Therefore, the code of professions conduct and ethics of a profession are the regulations of that specific regulatory body drafted to guide the conduct of its members in fulfilling their professional obligations. It serves as the "holy grail" of the self-respecting professional. (Opuenebo, 2016). For instance, the Town Planners Registration Council of Nigeria produced the code of conduct and practice Regulations in October, 1998. This was published by the Federal Government a Government notice No. 121 in an extraordinary Gazette No. 54, Vol. 86, and dated 4th August, 1999. This is also applied to other professionals in Nigeria see table 3 below.

Table 3: Professional; Regulatory Bodies and their Codes of Conduct.

S/No	Professional Regulatory Body	Date Established	Title of Regulatory Instrument	Date Published
1	Town Planners Registration Council of Nigeria (TOPREC)	Established by Decree No. 3 of 1988 (CAP T7, LFN 2004)	Code of Conduct and Practice Regulations	1998
2	Architects Registration Council of Nigeria	CAP A 19 LFN 2004 (Established by Decree 10 of 1969)	Code of professional Conduct and Ethics	2009
3	Quantity surveyors Registration Board of Nigeria (QSRBON)	Established in 1986 (CAP Q 1 LFN, 2004)	Rules of conduct and Disciplinary Procedures	2000

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4	Council for Engineering Regulation in Nigeria (COREN)	Established by Decree 55/70 (now CAP E11, 2004)	Engineers code of conduct	Revised Edition 2015
5	Estate Surveyors Registration board of Nigeria (ESVARBON)	Established by Decree No. 24 of 1975 (now CAP E 13 LFN 2007)	Code of Professional Ethics and Practice	2015
6	Surveyors Registration Council of Nigeria (SURCON)	Established by CAP 425, Laws of the Federation of Nigeria, 1990	Code of Ethics in the Survey Profession	1997
7	Council of Registered Builders of Nigeria (CORBON)	Established in 1989 (now Cap B 13 LFN 2004)	Code of Ethics and Professional Conduct for Builders	2009

Note: The Code of Conduct for Architects and Quantity Surveyors were Produced by the Nigerian Institute of Architects and the Nigerian Institute of Quantity Surveyors respectively.

A code of conduct is a public document, it is instructive as well as puncture. The laws establishing each of these regulatory bodies are national laws. These professional regulatory bodies' specific duties include identifying members, ensuring that those who wish to become members meet the standards of knowledge and skill, keeping a list of those who are permitted to practice the profession, regulating and controlling the practice of the profession in all of its facets and consequences, upholding discipline within the profession, and carrying out any other task that can support their operations.

An overview of building collapse in Nigeria

In Nigeria, significant building collapses date back to the 1970s. For example, a multi-story structure that was being built in Mokola, Ibadan, fell in October 1974, killing 27 people. Three years later, in August 1977, a residential structure in Kaduna's Barnawa Housing Estate collapsed, killing twenty-eight people. In June 1990, a three-story building collapsed in Port Harcourt, killing between fifty

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and fifty-five persons. It demonstrates that not enough has been done to prevent building collapses in the nation, particularly by building professional groups. Buildings are designed to give people shelter and comforts, but they can also be dangerous traps, claim Olatunbara and Kasim (2013). The reason for this is because a building must fulfill a number of fundamental standards, including constructability, design performance, cost effectiveness, quality, safety, and timely completion (Osuizugbo, 2021). A structure should ideally be stylish, secure, and useful, yet many projects are limited and fall short of these fundamental standards. Because of this, building collapses have become more common in Nigeria, which has become a significant problem for the built environment. The number of deaths and property losses is increasingly concerning and worrying. Table 4 lists a few documented instances of building collapses in Nigeria.

Table 4: Some Reported Cases of Collapse Buildings in Nigeria (2000 to 2013)

S/N	Building location	Building use	Date	Suspected causes	Deaths/injuries
1	Mushin, Lagos	Residential	2000	Faculty Construction	3 injured
2	Oke-Bola, Ado-Ekiti	Residential	2000	Poor quality control, rain storm	Nil
3	Ogbagi street, Ikare	Residential	2001	Fire disaster	Nil
4	Odo Ikoyo, Akure	Residential	2001	Foundation problem	Nil
5	Iba, Lagos	Residential	2002	Structural failure	15 died and many injured
6	Ojuelegba, Akure	Residential	2003	Poor workmanship & under-reinforcement	Nil
7	Idumagbo, Lagos	Commercial	2003	Explosive	30 died and many injured
8	Onyearugbulem market, Akure	Commercial	2003	Poor workmanship & under-reinforcement of cantilever	Nil
9	Ebute meta, Lagos	Residential	2003	Structural defect	8 injured
10	Elias street, Lagos	Residential	2004	Rain storm	8 died
11	Umuahia, Abia state	Residential	2004	Structural degeneration	4 died many injured
12	Iponri, Lagos	Residential	2005	Inappropriate foundation	Nil
13	Oke suna, Lagos	Mixed uses	2005	Structural degeneration	1

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14	Aba, Abia state	Residential	2005	Excessive Load and Faculty Construction	4 died
15	Iludun, ogun state	Residential	2005	Structural defect	10 died
16	Port Harcourt	Mixed uses	2005	Defective foundation	6 died
17	Port Harcourt	Commercial	2005	Deviation from approved plan, overloading	11 died
18	Broad street, Lagos	Commercial	2006	Rainstorm	Not disclosed
19	Ebute Meta, Lagos	Residential	2006	Structural defect	37
20	Oworonsoki, Lagos	Residential	2006	Faculty construction	1
21	Abuja	Residential	2008	Faculty construction	3 died, 10 injured
22	Apongbon, Lagos	Residential	2008	Structural defect	3 injured
23	Ikeja, Lagos	Residential	2008	Faculty construction	Several injured
24	Alade street, Lagos	Commercial	2008	Structural defect	3 died, 5 injured
25	Ojerinde street, idiaraba, Lagos	Residential	2009	Excessive Loading, faculty construction	9 died, 3 missing, 21 injured
26	Ajegule,ApapaLagos	Residential	2009	Structural degeneration	Not disclosed
27	Abuja	Residential	2010	Faculty construction	Not disclosed
28	Garki, Abuja	Mixed uses	2010	Overloading	23 died, 10 injured
29	Kano	Residential	2011	Rain storm	6 died
30	Abuja	Residential	2011	Overloading	10 died
31	Gwarinpa, Abuja	Residential	2012	Unsupervised demolition	2 died
32	Jakande Estate, oke Afa,Lagos	Residential	2012	Weak and defective structure	3 died
33	Iju-Ishaga, lagos	Residential	2012	Dana Air Crash Impact	6 died
34	Ebute Meta, lagos mainland	Residential	2013	Overloading and defective structure	5 died
35	Surulere Lagos	Residential	2013	Structural defect	1died 3 injured
36	Kaduna	Residential	2013	Faculty construction	6 died
37	Maitama, Abuja	Residential	2013	Defective structure	Nil
38	Lekki, Lagos	Commercial	2016	Building beyond the approved floors	34 died

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Sources: Oke (2009); Dimuna (2010); Ayedun et al (2012); Fakere et al (2012); Adapted from Olatubara C.O & Kasim (2013).

Since the events are growing more frequent and persistent, the government and others involved in the nation's construction sector are getting increasingly concerned (Okunola, 2022).

Causes of building collapse in Nigeria

Structural collapse happens elsewhere in the globe, but it happens in Nigeria at an alarming rate. These can be linked to anomalous elements that are often unavailable in other developing nations. Design defects, aging, material fatigue, harsh environmental and operational conditions, accidents, terrorist attacks, and natural hazards are some of the causes. Nevertheless, the "Nigeria factors" emerged as a significant challenge in the built environment (Mbazor et al., 2023). The use of inferior materials, poor craftsmanship, low-quality blocks and concrete, poor compaction and consolidation of foundation soil and weak soils, greed, incompetence, corruption, poor planning, inadequate public awareness and education, and a lack of financial and technical resources are just a few of the numerous reasons why buildings in Nigeria fail (Ede, 2010), Oni. (2010), Akinpelu. (2002), Pearson and Delatte. (2005) and Yusuf. (2006). According to Ayinmuola and Olalusi (2004), local construction methods are used without design codes since modern building materials are expensive. Ahmed (2004), however, ascribed the collapse of the structure to a number of factors, including the growth and staining of fungi, the erosion of mortar joints, the deterioration of plastered rendering, the cracking and breaking of walls, rotted floor boards, termite or insect attacks, dampness and penetration through walls, and unstable foundations.

However, in a developing country like Nigeria, corruption has been linked to high building material costs and a decline in the quality of construction projects, according to Ozerdem (1999), Agbola (2005), and the Global Corruption Report (2005). According to their argument, corruption occurs throughout the contract award, planning, design, and construction phases. In the constructed environment, the professional bodies have to deal with the prevalence of quacks, the employment of unskilled labor by competent professionals, and illiteracy. According to Ayininuola and Olalusi (2004), one of the most fatal causes of building collapses in Nigeria is the approval of client modifications during construction without informing the relevant authority.

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Roles of Building Environment towards Militating Building Collapse in Nigeria.

Building collapse is a serious issue, and one of the primary causes is clients', project managers', and contractors' noncompliance with regulations. First and foremost, there are regulations. Land surveyors provide the perimeter survey, architects are artists who create impossible things, engineers implement the designs in structures, and quantity surveyors collaborate with town planners to receive project approval.Then, even a normal building can collapse if that link is gone. Therefore, the issue might have arisen from the design. There is also the issue of adhering to specifications. "When you have a building, a beam carries weight and the weight is transferred to a column to the ground," states Murtala (2015). Now, they will be unable to support the building's weight if one of the columns is weak or if there are issues with the beams' constituent parts. However, even with well-written requirements, contractors can cut shortcuts and compromise on quality when it comes to the size and amount of things used. It is highly efficient for supervisors to keep an eye on things to make sure they are done correctly. Process and cost guidance, but not component advice, is the responsibility of the quantity surveyors. In Lagos, a professional organization known as the Building Collapse Prevention Guild (BCPG) exists. They raise the alarm and also take part in the investigation if it eventually happens. They educate people on why they need to conform to standard and specifications.

CONCLUSION

A nation that exhibits uniformity and respect to regulations does not experience this crises, with the exception of natural disasters like earthquakes. Although the built environment has many problems and complexities, there would be fewer building collapses if individuals followed the rules. Use quantity surveyors for costing, engineers for designs, architects for house designs, and town planners for approval. Let each person work in accordance with their primary area of expertise.

RECOMMENDATION

The availability of standard and high-quality construction materials is essential for improved building technology, which is a preventative measure against building collapse. In addition, the following suggestions can be put into practice.

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- All engineering projects should incorporate land or quantity surveyors, architects, town planners, and builders.
- Regular workshops and ongoing professional development programs should be held by professional bodies to enhance members' professional competency.
- Members who make mistakes ought to be disciplined.

- Government should come up with professional policies sanction indiscriminate building construction by non- professionals and regulatory bodies.
- Code of conducts, rules and regulations of professional bodies should be overhaul in order to protect and enhancing sustainable quality buildings in environment.
- Professionals should stop compromising their professional ethic with the juice or jumbo portfolio from the politicians

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