Addressing the Building Collapse Problem in Nigeria: Exploring the Builder's Potentials, the Builders' Liability Insurance Option and the Health and Safety Management Plan

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Abstract
The aim of this paper is to provide a framework for solving the building collapse problem in Nigeria via the Builders Liability Insurance and the Health and Safety Management Plan. It also explores the utility of the latent potentials of the professional builder which has remained largely untapped and the novel regime of building insurance to address the ugly phenomenon. The paper draws from existing literature, provisions of the insurance statute and hands-on experience to provide a better understanding of the building collapse phenomenon. The paper contends that the building profession has evolved to become part of an intricate mesh of skills and strengths which confers on him the responsibility for managing the construction process and solving the multifarious construction problems including building collapse. The paper distinctively considers section 64 of the National Insurance Act 2003 (the builders' liability insurance) which provides that certain categories of buildings must be compulsorily insured against collapse and associated hazards as a proactive legislation with great potentials for checking the frequent collapse of buildings under construction. It is recommended that Builders' Liability Insurance and the Health and Safety Management plan be compulsorily made part of approval documents required by the planning authorities before embarking on any building construction project in Nigeria. This will help in the area of enforcement and reduce the influx of quacks and high casualty rate resulting from building collapse in Nigeria.

Key words: Builder, Building Collapse, Builders Liability Insurance, Health and Safety Management Plan, Nigeria

Introduction

There can be little doubt that over the last two decades the design, construction of new buildings and the incidence of frequent building collapse in Nigeria had become so controversial and confounded that government and construction professionals/stakeholders (Designers, Builders and Clients) now seek ways of wriggling out of the negative cycle of unsustainable practices in which the industry is trapped. The prevailing scenario in most cases is for each profession to justify its sincerity of purpose by laying blames at the door step of another profession on the basis of incompetence, greed, corruption, inadequate supervision and ignorant society (Oloyede, Omoogun and Akinjare, 2010). This unsustainable construction atmosphere and lack of cooperation among construction professionals has been described as wasteful and therefore contributes to a diminution of quality in both design and construction (Latham, 1994; Egan, 1998).

The demand for buildings increases on a daily basis. Nduka, (2005) maintains that less than 40% of this demand comes from the public sector, while the rest comes from the private sector (This is quite evident by taking a walk around town and counting how many of the buildings belong to government). It is thus the responsibility of construction professionals to enlighten the

public on the requirements for producing buildings, how the construction industry produces and regulates them and what the benefits are to the individual client, the community, the environment and the nation at large.

The process of producing new buildings is a complex activity reflecting the skills, perceptions and expectations of many professionals who must endeavour to respond to the technical and philosophical challenges associated with team work. Understanding the building production process in terms of what should be done and who should do it minimizes the negative constraints on the quality of buildings delivered to the client. In Nigeria, the unpleasant incidences of building collapse and poor reputation of the building sector in the construction industry calls for this understanding.

A building must provide such functions as stability, durability, resistance to weather and fire, security, safety to lives and property as well as comfort to users (Oni, 2010; Taiwo and Afolabi, 2011; Olise, 2011). When a building fails to provide these functions, it has failed in terms of performance. Simply put, if a building or its component fails to perform the function for which it is designed or intended, that building has failed. This implies that failure can occur in any component of a building and therefore differs from collapse. While failure is the inability of a constructed facility or its components to perform as intended in the design, building collapse occurs when the entire or a substantial part of the building structure completely comes down thereby losing the ability to perform its functions.

This again shows that building collapse may be total or partial depending on the extent to which the structural members or components have fallen down (Wardhana and Hadipriono, 2003).Although building collapse is a global phenomenon, the rate of occurrence in Nigeria has gone beyond acceptable limits. According to Ogunlade, Taiwo and Kayode (2012), the frequency of building collapse in Nigeria has become so disturbing that one wonders if it is a deliberate design to reduce the population of the country.

A literature scan on the collapse of buildings in Nigeria shows that the phenomenon has taken a demeaning and embarrassing shape despite ostensible efforts to contain it. Each building collapse carries with it tremendous effects that cannot be easily forgotten by any of its survivors (Ede, 2010). The economic, health and social consequences in the form of loss of precious human lives increase in the number of widows and fatherless, injuries, loss of incomes and properties has amplified the crises of confidence, trust and dignity among professionals and stakeholders in the construction industry.

The above scenario calls for proactive action by all stakeholders to forestall negative practices in the industry. It is worthy to note that if there is any area Nigeria has failed since her Independence, it is in the area of regulation and control of the building construction practices. Anecdotal evidence shows that in Nigeria, people see building and construction business as a quick and easy way to make money. For instance, you see a Lawyer, a Microbiologist, a Political Scientist or even a Trader venturing into the Building and Engineering professions undisturbed. These professions are purely technical knowledge areas which a layman not trained in them would not understand. As such, it is not about knowing how to read a mere Architectural drawing or having money to go into real estate and property development that makes one a Builder or an Engineer. It is all about having the required skill and academic discipline to marry the profession.

Given the above construction practice scenario in Nigeria, this paper is an attempt to address the current situations and highlight consequences, with a view to understanding the Building profession and the professional Builder, possible explanations of the building collapse phenomenon and proffering solutions by exploring the Builders Liability Insurance

option and the Health and Safety management Plan.

Overview of the current scenario and consequences to the National Economy

Given the rapid population growth and productive activities needed to sustain the average Nigerian, the demand for buildings of all types has become more imperative (Ede, 2010). However, in other to meet this demand, industry stakeholders have adopted different approaches, including non-standard and informal forms of procurement and this has resulted in structures of dubious qualities. To lay a foundation for this section, there is need to reflect on the roles of construction professionals in the building delivery process in Nigeria.

The building industry consists of basically seven professional groups, namely:

- Town Planners;
- Estate Surveyors and Valuers;
- Architects;
- Engineers (various streams);
- Builders;
- Surveyors (including Geo-informatics); and
- Quantity Surveyors.

These professionals play various roles in the building production process. The Town Planners are experts in the orderly, social and economic utilization of land; the Estate Surveyors and Valuers are experts in the management of interest on land and valuation of assets; the Architects are known for their expertise in the imaginative form and architectural arrangement of spaces and aesthetic provision of external and internal features of buildings; the Engineers could specialize in any of the streams (Structural, Mechanical, Electrical and Geo-technical); Builders are experts in Building Production Management, Construction and Maintenance of Buildings; Surveyors are experts in the management and identification of items and features over the surface of the earth, underneath and space; while Quantity Surveyors are concerned with the economic aspects of developments projects.

In the early practice, (traditional procurement) clients engaged the services of Architects and other members of the professional group called the 'Design Team'. The Architect was the leader, but due to the complexity of modern building projects and changes in technology, the Architects span of expertise became limited to form, aesthetics and the distribution of space within the building. The Architect now has to rely more on other professionals for materials and workmanship quality; structural stability, engineering services, construction methodology; project quality management plan, health and safety management plan and cost management of the building. The idea of arrogating leadership to a specific profession has now become irrelevant. Clients, particularly in the United Kingdom resort to commissioning of individual professionals directly and leadership is devolved on which of them has the highest quantum of leadership qualities (Akindoyeni and Bamisile, 2003).

However, the building production process is complex and so requires convocation of the unique skills and expertise of the various professionals. In this regard, the tools needed to realize the project objective is knowledge and experiences of the professionals in their various specialized fields. The basis of obtaining a robust and reliable structure therefore lies in the professionals' willingness/ability to appreciate each other as trusted partners in the building delivery process.

Building collapse can generally be attributed to either natural or man-made phenomena. The natural phenomenon consists natural disasters such as earthquakes, flood, hurricanes, typhoons, tornadoes, while man-made phenomenon consists of acts borne out of negligence in areas such as soil investigation, design, planning for excess loads and stress from strong winds for tall buildings, foundation works, quality of building materials, strict monitoring and supervision of workmen and quality of work (Oloyede, Omoogun and Akinjare, 2010).

In Nigeria, the consensus of opinion among authors is that buildings collapse due to; buildings standing on geophysical foundations not suitable for their design; poor material specifications; materials with dysfunctional mechanical properties; adoption of poor construction methodology; lack of project quality management plan leading to poor workmanship; structural/foundation failure; wrong use of buildings leading to excessive loading; lack of compliance with standards and non-enforcement of building codes/regulations by the relevant authorities; hasty construction; Ignorant and greedy clients; use of incompetent and unqualified contractors; endemic poor work ethics; corruption; poor maintenance culture; falling standard of education, lack of skilled and experienced craftsmen, extreme operational and environmental conditions, accidents and terrorism (Bamidele, 2000; Akindoyeni and Bamisile, 2003; Ede, 2010; Oloyede *et al*., 2010; Okolie, 2011; Windapo and Rotimi, 2012).

In recent years, the rate at which buildings collapse in Nigeria has become so rampant that one has virtually lost count of the number in quantitative terms. The geographical spread of the phenomenon suggests a high prevalence in the country's major cities of the South, namely; Lagos, Port Harcourt, Abuja and Enugu. Recently, commercial towns like Onitsha and Awka, the state capital of Anambra state, including some other smaller towns are not left out (Odogwu, 2012). In fact, this ugly phenomenon is no longer restricted to the country's major cities. The Anambra state chapter of the Nigerian Institute of Building (NIOB) has recently initiated a number of public service campaigns through the state house of assembly, radio and television programmes to arrest the ugly trend.

Most of the reported cases of building collapse in Nigeria occur during the construction stages and could be traced to corruption. Ede (2010) reports that the 'Nigerian factor' such as corruption, lawlessness and the presumptions that any professional in the built environment can assume all forms of responsibilities in the building process without the basic skills has become prominent issues to contend with in the industry.

Corruption finds expression in the greed and tendency to cheat in virtually every aspect of the construction process ranging from poor materials and quality of workmanship to the quantity of materials delivered to site by suppliers and sub-contractors. The tendency to disobey civil laws by many Nigerians finds a fertile ground in non-adherence to existing building laws and regulations. Ede (2010) argues that the use of unskilled labour, inexperienced professionals, tendency of some professionals to poach into lucrative specialist fields where they lack the skill, ignorance and greed among construction clients are all facts to contend with and traceable to the Nigerian factor.

Nevertheless, very few people know the difference between the various professionals in the construction industry (Akindoyeni and Bamisile, 2003). To many, the generic term for a builder or any construction professional is a 'contractor'. However, for the avoidance of doubt, it is important to differentiate between a builder and a contractor in this context. A builder is a person with the appropriate academic training in the science, technology, management, process of producing and maintaining buildings as well as sufficient hands-on experience; and statutorily registered by the Council of Registered Builders of Nigeria (CORBON). A contractor on the other hand is an individual or a corporate organization satisfying the demands of clients, undertaking construction services on the basis of an independent design team's specifications and supervisions or assumes direct responsibility for all aspects of design and construction management directly to the client for profit (Tunstall, 2006).

It can therefore be argued from the foregoing that a builder is a contractor but a contractor is not necessarily a builder. Presently, any one that has been instructed in technical drawing at secondary school level sets up an office as an expert in

architectural and building services. Once a notice board is put in front of such office as building contractors, they get more jobs than most builders and architects because their fees are attractive and not regulated. The service fees of these fly-by-nighters (quacks) can be as low as the client's purse or greed and this encourages the influx of unregistered builders and engineers into the construction industry.

The Building Profession and the Builder

Until few decades ago, nothing would have been written about the building profession as a career, except, perhaps, that building is one of those subjects taught in Architecture or Civil Engineering. An explanation to this poor perception was provided in the works of Tunstal (2006). Tunstal (2006) reports the subsistence of debates in academic and professional circles, regarding the criteria that might distinguish 'buildings' from 'Architecture'. Tunstal (2006) argues that the Architect was originally regarded as the chief builder or master craftsman in an age when the designer and the builder was the same person and it could reasonably be argued that by definition, 'Buildings were Architecture'. By the nineteenth century, the two roles were separated and this created a climate of conflict between Architects and Builders which to some extent still exists. Tunstal (2006) concludes that the elitism of generations of Architects has been eroded by technological changes and sheer complexity of modern buildings which really demand a teamwork approach to the creation of buildings.

Today, the building profession has evolved to become part of an intricate mesh of skills and strengths. These skills and strengths stretch not only across the construction industry but also across related areas of knowledge including consultancy, public, financial, academic and research sectors. Simply put, the building profession is multi-disciplinary and therefore cuts across professional boundaries. The enormous strength it receives from the basic sciences makes the builder versatile in the level of services provided to the client.

The definition of a builder as earlier stated confers on him the responsibility for managing the construction process on site; including planning and programming, budgeting, costing and ensuring that the standards and quality of buildings meet the requirements of the developer or client (Nduka, 2005; Obiegbu, 2005; Okolie, 2011).The builder has a generic scope of services rendered to the client, a standard scale of fees and a professional conduct to which members can subscribe. The builder is therefore a professional by all intents and purposes.

The core professional practice of the builder is building production management. This covers the provision of such services as

- Buildability and maintainability analysis;
- preparation of building production documents (construction methodology, construction programme, project quality plan, health and safety plan and early warning systems charts);
- management of production and maintenance process;
- project management;
- building surveying;
- contract management; and
- building facilities management.

A professional builder should attain high educational standards which makes him the critical thinker in the building industry (Okolie, 2011). The builder understands the dreams of the architect as translated into working drawings, the structural engineer's calculations and analysis as summarized in the structural drawings and bending schedules, and the quantity surveyor's permutations and calculations detailed in the Bill of Quantities (BOQs). The builder utilizes all these to erect a physical structure which is the end product desired by the client.

The builders training covers virtually all broad areas of academic disciplines, including Law and Arbitration, Economics, Arts, Sociology, Architecture, Marketing, Purchasing and Supply, Surveying (Land, Quantity and Estate), the various streams of Engineering (Structural and Geotechnical,

Electrical, Mechanical, Telecommunication, Materials and Metallurgical), Management, Statistics, Natural Sciences, Health Sciences, Industrial Relations as well as practical skills in technological know-how and craftsmanship (Jambol, 2004).

Given the above background, it is apparent that the expectations from a professional builder is enormous and if one fragments the builders responsibilities/expertise as reflected in the above disciplines, the context within which the builder is referred to as a critical thinker need no further explanation. The above expose further shows that the scope of a builders training provides him with sufficient skill and academic discipline to marry the building profession.

In a building stakeholder's forum held at Abuja, Akindoyeni (2004) argues that the building industry utilizes twenty one (21) trade groups and over seventeen (17) manufacturers. In all these, the builder is the only person who knows how and where each of these groups fit into the building production process. It is clear therefore that among the various professions in the building industry, no other professional training programme covers such wide knowledge areas as that which produces the builder. The professional builder therefore demonstrates expertise and skills needed to solve the multifarious construction problems including building collapse. Nevertheless, the latent potentials of this great intellectual synergist in building production (the builder) remain largely untapped by clients and other stakeholders in Nigeria.

The negative trends being witnessed today in the building industry is a reflection of the casual approach to the issue of health and safety in the Nigerian construction industry. In the building procurement process, best practices must be adopted, particularly, in matters relating to health and safety. This forms the basis for the project health and safety management plan prepared by the builder. Perhaps, this health and safety management document and the builders' liability insurance under the National Insurance Act of 2003 may serve as veritable tools that could be explored to boldly confront the menace of building collapse in Nigeria.

Project health and safety management and the builders' liability insurance under the National Insurance Act 2003

In building delivery process, the most hazardous is the construction or production phase (Akindoyeni, 2012). This phase involves the congregation of all stakeholders on site, excluding the tenant. The various hazards and risks associated with construction and their mitigating strategies are captured in the builders' document called project health and safety management plan. This document accentuates the builders' obligation on construction health and safety and this must be thoroughly understood by other stakeholders in the building production process.

The project health and safety management plan provides the safest and healthiest working conditions that are reasonably practicable at all times by adopting health and safety measures of international standards on site (Bamisile, 2004). It therefore imposes obligations on the contractor to ensure that health and safety issues are adequately planned and controlled during the construction process. One of the most crucial issues in a construction project relates to decisions on the management and control of health and safety risks. Exposure to health and safety risks associated with construction hazards may lead to death or permanent disability, serious bodily injury or work related illness which may require casualty treatment or first aid treatment. The health and safety management plan describes what must be done to prevent or control certain hazards that may lead to injury, illness or death.

For builders, risks appear in various forms throughout the construction phase. Some may continue onto the future and perhaps affect the lives of generations of subsequent occupants. For example, failing to properly locate or cover an underground high voltage electricity cable may seriously

injure or kill an unsuspecting worker or occupant. This error, according to Tunstal (2006) may result to claim of negligence. Other risks may be limited or controlled within acceptable limits and yet, some may remain indefinitely throughout the project's life.

One of the effective ways of controlling and responding to risks is to transfer them by providing an insurance cover to the risks. The insurance cover ensures that employees or individuals who lose their lives or injured at construction sites or workplaces receive financial support or compensation. The obligation to provide the insurance cover lies with the contractor/builder who must also comply with other statutory requirements applicable to the construction works, including obtaining all approvals and consents from government agencies, and paying all fees and charges (Ho, 2010). Since builders are compelled to adopt professional best practices; it will amount to a professional misconduct and in fact an offence, if statutory obligations, including building insurances are not complied with.

In Nigeria, it is not uncommon that contractors/construction professionals do not procure or procure inadequate insurances to cover the potential health and safety risks in several construction sites. This practice has left many victims of building collapse and their relatives with little or no compensations. This state of affairs is abnormal and therefore unacceptable in the Nigerian building industry***.***

The National Insurance Act 2003

Against the backdrop of Nigerians dying helplessly from the collapse of buildings and negligence of contractors or construction professionals without adequate compensation, the National Assembly made some insurance products compulsory for all builders and property owners/developers. The insurance products now known as *compulsory insurances* and other similar legislations are contained in the *National Insurance Act 2003*. This law places an obligation on any building contractor/developer as well as other construction and medical professionals to comply with its provisions. According to Akindoyeni (2012), the National Insurance Act was enacted to cover those to whom others might be caused to be injured by other people's actions or inactions. The Act further relates to other laws by which an ordinary Nigerian may be affected as a result of their occupation or state of health. A breach of this law is punishable on conviction by a term of imprisonment or an option of fine or both.

Under the National Insurance Act 2003, the products directly made compulsory by the appropriate sections of the Act include:

- Builders Liability Insurance (Section 64 of the Insurance Act)
- Occupiers Liability Insurance (Section 65 of the Insurance Act)
- Motor Third Party Liability Insurance (Section 68 of the Insurance Act)

Other sister legislations and relevant Insurance regulations are:

- Group Life Insurance (In line with the Pension Reform Act 2004)
- Healthcare Professional Liability Insurance (Under section 45 of the National Health Insurance Act 1999)
- Employee's Compensation (which replaced Workmen Compensation) as required by section 33 of the Employee's Compensation Act, 2010

The builders' liability insurance provides compensation to workmen or third party on site who may suffer loss, bodily injuries or damage to third party property. Occupiers' liability insurance ensures that compensations are paid to any member of the public or third party who may suffer any loss, death or injury caused by the hazard insured against. The motor third party insurance is easily the most notable insurance consumers. It provides compensation to third party in the event of bodily injury or damage to property. Similarly, the group life insurance provides securities to employees while in employment. It does not only subsidise

pension provision in event of mental or physical disability, but also provides compensation to employee's beneficiaries in the event of death while in service. The health care professional liability insurance again offers compensation to patients who may suffer injuries, loss or death arising from negligence of health care professionals. Again there is the Employee's Compensation Act 2010 which abrogated the Workmen's Compensation Act.

Under the new 2010 legal regime, every employer is required, within the first two years of the commencement of the Employee's Compensation Act, to make a minimum monthly contribution of 1% of the employer's total employees' monthly payroll to the Employee's Compensation Fund. The Employee's Compensation fund is created to pay adequate compensation to employees or their dependents for any injury, disease or disability arising out of or in the course of the employee's employment.

In recognition of the fact that enacting a piece of legislation is one thing but getting Nigerians to obey the law so enacted is another, the National Insurance Commission (NAICOM) which is the regulatory authority on all insurance matters in Nigeria decided to take the initiative to educate and mobilise the people in furtherance of the ends of the compulsory insurances law as contained in the Insurance Act of 2003 and sister legislations. Series of public service campaign were also initiated in the press, on billboards, radio, television and other media of mass communication (Dialoke, 2012). One of such Public Enlightenment and Insurance Education Initiatives was held at Enugu by NAICOM in conjunction with the Council of Registered Builders of Nigeria (CORBON) between January 30thand February 3rd, 2012.

The Compulsory Builders' liability insurance

Section 64 of the National Insurance Act 2003 states:

(1) ''No person shall cause to be constructed any building of more than two floors without insuring with a registered insurer his liability in respect of construction risks caused by his negligence or the negligence of his servants, agents or consultants which may result in bodily injury or loss of life to or damage to property of any workman on the site or any member of the public.

(2) 'The duty to insure under subsection (1) of this section shall arise when a building is under construction.

(3) a person who contravenes subsection (1) of this section commits an offence and on conviction shall be liable to a fine of N250.000 or imprisonment for three years or both."

The provisions of the above act are founded on two conditions, namely:

- That the buildings must be under construction; and
- The buildings must be more than two (2) floors

The implication of the above provision is that all builders and developers of real property with more than two floors must compulsorily register and ensure such a building against all construction risks resulting from the builders' negligence or the negligence of the builders' servants, agents or consultants which may result in bodily injury or loss of life or damage to the property. According to Akindoyeni (2012), the provisions of this section means that all buildings which are three (3) stories or more in height, whether one or more of the stories, lay below the natural ground or street level, are covered under the act.

Where the building lies on a sloping site and therefore designed to have three levels, it shall fall under the provision of the Act. The typology of the building, whether residential, industrial, commercial or the shape of the building is irrelevant. The location of the building, whether in urban or rural areas, is irrelevant and the business of the proprietor/client, whether private or

public, is also irrelevant. The fact that the law says 'No person' shall construct such a building without insurance places an obligation on both the owner and /or contractor of the building under construction, sub-contractors, agents, servants and consultants of the contractor or owner of the building to ensure that such insurance is taken.

The inclusion of other parties, other than the owner and contractor recognises the principle of vicarious liability. It must be noted that under the standard form of building contract, the contract provides an indemnity by the contractor to the owner against any expense, liability, loss, claim and damage which may be caused to his employees and his sub-contractor's employees or to the premises and its contents, the works or neighbouring properties. This indemnity clause is wide enough to cover most, if not all possible injuries or damages to persons and properties arising from carrying out of the works.

However, there is one important exception to the rule. It is well established that if a person obtains an indemnity against the consequences of certain acts, the indemnity is not to be construed as to include the consequences of his ***own negligence*** unless those consequences are covered either expressly or by necessary implication. Thus, the indemnity does not cover the consequences of a *negligent act* committed by those for whom the owner is responsible under the express terms of the contract, and others for whom the owner is in law vicariously responsible (Parris, 1985).

This explains why the law provides that both the client and the contractor including the other parties mentioned above are liable. Since negligence is one of the prevalent causes of building collapse in Nigeria, this law accentuates the contractors' duty of care on site and so discourages the entry of unqualified and negligent contractors/developers into the building construction business.

Policy coverage and persons protected

The policy covers construction risks of every description resulting in death or injury to site workers and death or injury to any member of the public. It also covers property damage to the site workers, any member of the public, or to the surrounding properties. According to the Market Development Restructuring Initiative (MDRI) of NAICOM, the policy does not cover death or injury to the principals of the contractor or the building owner/proprietor, nor does it cover personal loss or damage to the proprietor's property. This means that the policy only protects persons and properties of third parties.

Akindoyeni (2012) states that the industry practice is for the main contractor to take the insurance and later reimbursed in the interim certification by the proprietor. The inclusion of this item is based on the presentation of the insurance certificate to the Quantity Surveyor during the interim valuation process. Akindoyeni (2012) further argues that it is unusual for the consultancy agreements to contain the clause. Nevertheless, consultants may take out appropriate insurance against liabilities arising out of professional negligence.

Claims by a site worker or member of the public

According to NAICOM, what a site worker or member of the public gets as compensation for injuries suffered in a construction site depends on the degree or extent of the damage suffered by the parties. These claims depend on whether the staff is on the payroll of the contractor or a casual worker on site. Against this backdrop, the recommendations given by NAICOM are as follows:

- **For a non-payroll site worker or member of the public, the claims include**:
  - ✓ Death ……....N2.0m
  - ✓ Permanent Disability …… N2.0m
  - ✓ Other level of injury……...% of N2.0m depending on degree of disability
  - ✓ Medical expenses Local…… Max. N2.0m

- ✓ Foreign…… Max. N5.0m Property damage

- **For a site worker, 3rd Party or Surrounding Properties, the claims include:**

- ✓ A maximum of N50.0m total including legal cost and expenses

It must be note that a maximum of N1.0m reimbursement for defence costs to the contractor is applicable if the matter goes to Court. The court may also award financial compensation below or beyond the amounts stated above but what is recommended by NAICOM is the maximum liability of the underwriter. The injured party may reject the amount offered by the underwriter and sue the contractor/owner and the underwriter for any amount considered appropriate by him. For this reason, it is advisable to take this policy (Builders' Liability Insurance) as part of a Contractors All Risks Insurance.

Abandoned Buildings

Where a building is abandoned or left uncompleted for a long time, the owner or contractor is under obligation to continue to insure the building until it becomes occupied or for at least ten (10) years from the start of construction. The insurance company may appoint an independent Valuer to determine the value of the contract work. It is possible to insure building contracts that are excluded by the law. For example, bungalows, one storey buildings, etc.

Premium to be paid

The premium to be paid by the **building contractor** depends on the contract sum of the building. Thus, NAICOM recommends the following:

- For a building contract of N10.0m – N50.0m, N4, 000 is paid per annum for every N1.0m contract value.
- For a building contract of N51.0m – N250.0m, N3, 500 is paid per annum for every N1.0m contract value.
- For a building contract of N251.0m – N500.0m, N3, 000 is paid per annum for every N1.0m contract value
- For a building contract of N501.0m – N999.0m, N2,500 is paid per annum for every N1.0m contract value
- For building contract of N10.0m – N50.0m, N4, 000 is paid per annum for every N1.0m contract value
- For building contract above N2.50b, N1, 500is paid per annum for every N1.0m contract value.

NAICOM is the sole regulatory authority on this and all insurance matters in Nigeria. Where claims are made but not satisfactorily responded to by any insurance company or service provider, complaints should be made to the Commission. NAICOM therefore regulates the insurance companies in much the same way as the Central Bank regulates the commercial banks

Findings and Conclusion

This paper has presented issues around the collapse of buildings in Nigeria and their implications on economic and overall national development. It also explored the approach to construction practice in Nigeria and showed that industry stakeholders do not follow basic principles of good practice as obtainable in other developing countries. Unless there is a conscious intervention from government agencies and construction professionals, cases of collapsed buildings will worsen and the challenges facing the industry will continue to increase.

The professional that is specifically trained and equipped by academic and practical experience to manage the production process of buildings on a daily basis is the builder. The paper therefore explores the latent potentials of the professional builder which has remained largely untapped in Nigeria. The engagement of this professional in building delivery process constitutes good practice and this should be encouraged by industry stakeholders.

Construction risk management is the process of controlling exposure to health and safety risks associated with construction hazards. Under the standard form of building contracts, it is a statutory obligation of property owners or their agents

to ensure the safety of everyone who enters onto the property. For buildings under construction, the client/developer and his contractor /agent are jointly and severally liable for any injury or damage to any person who enters onto the property. The builders' health and safety management plan ensures that health and safety issues are adequately planned and controlled during the construction process.

The paper further exposed the dynamics of building insurance as one of the most effective ways of responding to construction health and safety risks. The introduction of compulsory insurance in form of the builders' liability insurance into the building industry will curtail the damaging and painful effects of several cases of building collapse which has been recurring in Nigeria. The key essence of compulsory insurance is to instill responsibility into all stakeholders that are connected with putting up public buildings, including town planning authorities, architects, surveyors and landlords*.*

The novel regime of the insurance of buildings in Nigeria is considered a proactive legislation in the building industry. The provisions of the National Insurance Act of 2003, particularly, section 64 (Builders liability Insurance) has great potentials for putting in check the frequent collapse of buildings under construction in all parts of Nigeria. However, the biggest challenge to full implementation of the compulsory insurance still remains poor awareness and enforcement of the law. Enforcement and public enlightenment must be reinvigorated and this calls for concerted efforts by all stakeholders to arrest the ugly trend.

Recommendations

This paper recommends that:

- Consultants and Professional Builders in charge of part of or a whole building should ensure due diligence in the production process.
- Care must be taken that the appropriate insurance clause is inserted in the construction contract including the payment of premium for the builders' liability insurance in the contract Bills of Quantities
- More awareness seminars and courses should be organized by NAICOM to enlighten all operators and the general public on the risks of undertaking a building project without insurance cover.
- Government at all levels in collaboration with professional groups should intensify efforts towards arresting the ugly trend of building collapse. This can be done through free intensive enlightenment programmes and monitoring of professionals operating in the building industry.
- Builders Liability Insurance should be made a prerequisite for securing mandates from clients for services from contractors and consultants. This will foster good practices among service providers and therefore improve the quality of building stock in Nigeria.
- The presence of builders certified as construction health and safety managers should be mandatory in every building site. This calls for intensified efforts by government and professional bodies towards eliminating professionals managing building production without the required academic and practical skills.
- Builders' Liability Insurance and Construction Health and Safety Management plan should compulsorily be made part of the approval documents required by the planning authorities before embarking on any building construction project in Nigeria. This way, a lot of grounds will be covered in the area of enforcement and this will reduce the influx of quacks and high casualty rate (from building collapse) in the Nigerian building industry.

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