INTRODUCTION

It gives me great pleasure to be invited and found worthy to be a Speaker on the topic of the day most especially at this critical period in our dear country, Nigeria.

This paper examines the causes of collapse of buildings and infrastructure, the liabilities and rights of affected persons. In conclusion recommendations are made to prevent or reduce the incidence of buildings collapse in Nigeria.

THE INCIDENCE:

The incessant buildings collapse in Nigeria mostly in Port Harcourt, Abuja, Kaduna and Lagos has risen to an alarming rate resulting sadly to serious injuries, loss of lives and properties which in turn have led to multiple connected problems such as loss of investment, bankruptcy, unemployment, physiological trauma, stroke, early grave etc.

The most recent of such collapse of building occurred in Lagos State on Friday, 12th September, 2014. It was a 7- Storey guesthouse building belonging to the Synagogue Church of All Nations within the Synagogue church premises in Ikotun-Egbe area of Lagos State. The uncompleted building collapsed completely and claimed the lives of 116 persons of different nationalities while score of people sustained serious injuries. This underscores the importance of our discourse today and great concern of all stakeholders, that is; professionals in
building industry, government, private developers, property owners, occupiers and the general public.

It must however be pointed out that the problem of buildings collapse is not limited to our jurisdiction as can be clearly observed from news around the world and social media. It is the frequency and rate of loss of lives and properties as well as injuries sustained by the people that almost single out the Nigerian experience.

**BUILDING LAWS AND REGULATIONS:**

Contrary to the belief and views held by some people, there have always been building laws and regulations in Nigeria that regulate and control construction of buildings and infrastructures. What has been lacking is the institution with power and resources to enforce or ensure compliance with the building laws and regulations by developers. Permit me to cite two personal experiences when I was Solicitor General of Lagos State.

Sometime in 2014, I observed commencement of construction at foundation level on a parcel of land in Magodo area of Lagos which was in dispute. On my request the Ministry of Physical planning confirmed that the developer had no approved plan and I directed the Ministry and Building Control Agency of the State to stop the construction. Despite service of necessary notices on the developer, the construction continued and I directed the Ministry and Agency in writing to demolish the illegal construction before it becomes a 4-Storey completed building. For months, the demolition did not take place and construction continued until the Governor became aware and he gave directive for the demolition before the illegal construction was demolished.

The second experience is that sometime in 2012, part of a building at Oloto Street in Lagos collapsed killing about 10 persons and the other half of the building was served with contravention and demolition notices. The occupiers were served quit notice and the structure marked for demolition. Despite the occupier abandoning the building in 2012 and the directives to the relevant government agency the demolition could not be carried out due to lack of fund. Therefore, the other half of the building was left hanging dangerously over adjoining buildings. It later became a hideout for social miscreants and refuse dump posing danger to the people’s health. The building finally collapsed by itself in 2015 injuring people in the neighbourhood.

A visit to any collapsed building scene is as revealing as it is pathetic and one could not but wonder why such building was allowed to stand one day after it
was discovered to be unsafe for human habitation or after being marked for demolition.

Unfortunately, there are still a number of distressed buildings and infrastructures dotting the skyline of many cities in Nigeria waiting to collapse while the government agencies look helpless as they lack the man power, resources and equipment to carry out the required work.

**CAUSES OF BUILDING COLLAPSE**

Generally, cause of building collapse can be classified under 7 major factors namely,

i. Bag design

ii. Faulty construction

iii. Poor quality material

iv. Foundation failure

v. Lack of supervision of building under construction

vi. Natural Phenomena

vii. Unlawful change of use of building

viii. Poor maintenances

ix. Lack or inadequate enforcement of planning laws and regulations.

• **BAD DESIGN:** Bad design does not only mean poor architectural design, but it involves some other professional’s design inputs. An Architect may contribute to building collapse by starting design without adequate visibility study such as suitability of the land and nature of the soil.

• **FAULTY CONSTRUCTION:** Studies have revealed that faulty construction contributed up to 40% of structural failures in building collapse occurrences. In many occasions, failure of contractors to build according to the plans and specifications or poor mixing and placement of concrete contribute largely to structural failures. Others may include form works vertical or lateral overloading, unstable bearing support and premature removal, all these often leads to collapse of many on-going structure or building.

• **POOR QUALITY MATERIALS:** Use of inferior material is also a contributory factor to building collapse cases in Nigeria. The blocks made by most of our block
industries are of low quality arising from failure to use the required measurement of cement, appropriate sand and water. Sometimes, the steel reinforcement used for some construction is substandard. For instance, a batch of structural steel, which appear sound might have evaded the quality control checks and in fact could be of substandard quality. It is very common among the contractors who like to cut corners not to use adequate materials specified.

- **FOUNDATION FAILURE:** Foundation of a building is part of walls piers or columns in direct contact with and transmitting loads to the ground. Building collapse as result of foundation failure can be caused by construction of foundation on poor sub-soil, building not uniformly loaded/inadequate foundation, soil erosion and earth movements.

- **NATURAL PHENOMENA:** This may occur in the form of flood, erosion, thunder, lighting and earthquake. These natural phenomena are referred to as “natural disaster” or “the act of God”. No one has power or control over such natural occurrence, but may be minimized if Environmental Impact Assessment (EIA) is made mandatory for all developers or applicant for building approval.

- **UNLAWFUL CHANGE OF USE:** Unlawful change of use has also contributed to building collapse. For instance, a residential building converted to commercial use or school or a single room apartment in a Storey building turned to family home of 10 people leading to overcrowding. Recently, a three-storey building used as a warehouse for building materials at Orile Iganmu, Lagos by the busy Odunade Bus Stop collapsed under the weight of 13 truckloads of water pump machines, which were stored on the middle floor. It was reported that the goods were kept in the building without permission of the owners of the building. The owner of the goods, believed to have caused the sudden collapse of the building, was said to have travelled out of town after he gave instructions that the goods be stored in the building. There is no machinery of government in place to prevent unlawful change of use of building.

- **POOR MAINTENANCE:** Buildings start to deteriorate from the time they are completed and from that time begin to need maintenance in order to keep them in good condition. The process of gradual deterioration is unavoidable, but the speed at which it proceeds can be reduced through the manner in which buildings are maintained. Poor building maintenance culture or practice of property owners including government can also contribute to building collapse. It was in recognition of this that the Lagos State Government established the Office of Faculty Management for maintenance of all public structures in the State.
• **LACK OR INADEQUATE ENFORCEMENT OF PLANNING LAWS AND REGULATIONS:** Most relevant government agencies are incapable of enforcement of the panning laws due to lack or inadequate funding, facilities and man power. These omission and inadequacy contribute in no small measure to building collapse in Nigeria.

**LIABILITIES AND RIGHTS OF AFFECTED PERSONS**

Having highlighted the reasons for buildings collapse it is imperative to examine the liabilities and rights of affected persons.

In recent times, building collapse in Nigeria has been a source of concern to so many people particularly those associated with the building industry. The recurring event of building collapse has forced some state governments to review and amend their laws and regulations to increase the liability of the owner of collapsed building and this include forfeiture of such collapsed buildings and prosecution of the owners.

In the case of Lagos State, by virtue of section 74 of the Urban and Regional Planning Law 2010, of Lagos State, in the event of collapse of any property or structure due to negligence on the part of the owner, or the developer, such property shall be forfeited to the State Government after due investigation and or publication in the State Official Gazette.

As a pre-emptive measure Section 71(1) of the Urban and Regional Planning Law 2010 of Lagos State provides that the Building Control Agency shall have powers to serve on a developer or holder for the time being of a planning permit, a demolition notice if a structure erected by the developer or holder of the permit is found to be defective as to pose danger or constitute a nuisance to the occupier or public.

Furthermore by virtue of 72(1) of the law after the expiration of the time specified in the notice served under sub-section (2) of Section71 of this Law, the Building Control Agency shall demolish the defective structure and recover the cost of demolition from the owner or developer.

In the light of the above provisions of the law, any Person Likely to be affected if a building is to collapse, has the legal right to institute an action in the High Court for an order of Mandamus to compel the State government or Building Control Agency or any other relevant government agency to demolish such building.

If the building or structure is demolished by government or it's agency, the owner of the demolished building shall be liable for the cost of the demolition to
the government and by virtue of section 75(6) of the Law any person who fails to pay the assessed cost of demolition shall be guilty of an offence and be liable to a fine not exceeding the sum of One Hundred Thousand Naira (#100,000.00) or one (1) month Community Service in addition to the payment of the assessed cost.

When a building collapses, most of the structural components and materials will be damaged often beyond re-use, while capital investments in most cases are not recoverable. This kind of situation, more than often leads to bankruptcy on the part of the investor and high negative implications on the nation’s economy and GDP. Therefore any person affected by a collapsed building has the right to sue the owner of the building with or without his Engineer for loss and damages as a result of their negligence in the construction of the collapsed building.

The owner and engineers of collapsed building are liable to be prosecuted for offence of negligent act causing harm contrary to section 250 of the Criminal Law of Lagos State 2011 and if found guilty sentenced to 2 years imprisonment.

Loss of human life has become a common report of most of the building collapse incidents in Nigeria. It is an irreparable loss to both victims’ relatives and the nation at large. Therefore a claim under Fatal Accident Law can be maintained by relatives of deceased victims against the owner of the collapsed building and his Engineer.

Furthermore, in the case of loss of life resulting from building collapse the owner and Engineer are liable to be charged with additional count of involuntary manslaughter contrary to Section 222 of the Criminal Code Law of Lagos State and if found guilty sentenced to life imprisonment.

**RECOMMENDATIONS**

Physical damage and psychological trauma are the aftermath or effects of building collapse, the degree of which is often beyond easy comprehension. Depending on the nature and extent of damage of building collapse incidents, the effects are felt almost in all human endeavours. Therefore, I wish to proffer the following suggestions that will help reduce the incidence of building collapse in Nigeria:

1. Developers should be compelled to comply with planning laws and Regulations before, during and post construction of any building or structure.
2. Government should ensure that all building construction works should be well designed and supervised by a registered member of Architects’ Registration Council of Nigeria (ARCON), Council for the Regulation of Engineering in Nigeria (COREN), Council of Registered Builders of Nigeria (CORBON) and Building Collapse Prevention Guild (BCPG). Only competent registered contractors should be employed to execute construction works or projects in the country.

3. There should be a review of the planning law and regulation in each state in Nigeria, to provide heavy penalties for contractors or developers who fail to have registered professionals in supervisory capacity in his building projects.

4. Systematic inspection and monitoring of building works should be enforced at the Local Government level and the branch or Cell of COREN or BCPG in each local government Area should be co-opted in the monitoring of development in the Local Government Areas.

5. All building construction materials like sand, cement, aggregates, reinforcement bars and particularly foundation soil should be tested before commencement of any construction. The mineralogy and alkalinity tests of coarse aggregates should be done to know whether the material contains some percentage of impurities, which may be injurious to cement and reinforcement rods.

6. Government should encourage and enforce periodic stability test of buildings and structures so as to protect human life and properties.

Once again, I thank the Nigerian Bar Association for giving me the opportunity to share my view as it concerns the worrisome increase in collapse of buildings and to proffer suggestions that will put an end to such incidence in Nigeria.

I thank you for listening.