

# The Role of Local Government Authorities in Controlling Incessant Building Collapses in Nsukka Local Government Area

**Kenneth Chidiebere Ezebuilo, Obinna Davidsyn Awuzie, Oghenero Roy Amorue**  
University of Salford, Manchester, United Kingdom

**Chioma Anastasia OMENYI**  
University of Luxembourg, Esch-Belval, Luxembourg

**Abstract:** This study sets out to examine the role of local government authorities in controlling incessant building collapses with particular focus on Nsukka-Central in Nsukka Local Government Area of Enugu state, Nigeria. The objective of this research work is to highlight the roles to be played by the local government authorities in controlling incessant building collapse in Nsukka Local Government Area in Enugu state, Nigeria in Nsukka with a view to proffering appropriate suggestions to guide against future occurrence. By adopting a descriptive survey method, the study tries to ascertain the root causes of building collapses in Nsukka Local Government Area (Nsukka-Central). The data used for this research work were gathered through questionnaires, which were randomly administered to the professional Estate Surveyors and Valuers, Architects, Town planners, Quantity Surveyors, Engineers (structural and civil), building contractors and landlords and from documented materials from authors who have written on building collapse. The study revealed that the local government authorities have vital roles to play in controlling incessant building collapses in Nsukka L.G.A such roles include; making sure that all the building erected, or under construction all have approved building plans. It was concluded that local government authorities in Nsukka Local Government should prioritize regular inspections and monitoring of construction sites to detect potential hazards. One of the recommendations made was that local authorities should rigorously enforce building codes and regulations to ensure that all construction projects adhere to safety standards. This includes ensuring that builders use quality materials and follow approved designs.

**Keywords:** Local Government Authorities, Incessant Building Collapses And Nsukka Local Government Area.

## INTRODUCTION

The structure of the building is therefore that part of the building construction which gives the construction sufficient strength to withstand the load to which it is subjected to. A building structure does this by carrying the load imposed on it and transferring same safely to foundation hence, into the ground. Buildings are utilized primarily for living, working, storage and are categorized into three: First, is the monumental structure which comprises of the churches, sport arena and city halls. Second is the institutional structures comprising of structure such as the block of flats, tertiary institutional buildings for academic and administrative purposes. Third category comprises of industrial structures like the ordinary small scale industrial types (Macginley, 1998). Building collapse can simply be defined as a total or a partial/progressive failure of one or more components of a building leading to the inability of the building to perform its principle function of comfort, satisfaction, safety and stability (Olagunju, Aremu and Ogundele, 2013). A building may collapse

when one or more of its essential component fail ( Fakere et al. 2012). Building failure is defined as an act of omission or occurrence or performance failure could also be defined as non-occurrence, non-performance running short, breaking down, ill-success, insolvency and unsuccessful attempt (Ayuba, Olagunju and Akande, 2012). Building failure is also defined as an unacceptable difference between expected and observed performance in a building component when that component can no longer be relied upon to fulfill its principal function. Limited deflection in a floor which causes a certain amount of cracking/distortions in partitions, ceilings and floors finishes could be referred to as failure, but sudden dislocation or given way of a structure is classified as building collapse (Abimbola and Rotimi, 2012). Building collapse has so often been associated with structural failure. The structure of the building is that part of building construction which gives the construction sufficient strength to withstand the load to which the whole building is subjected. The structure is that which carries load and transfers the load from the point of load application to the point of load support. A building structure carries the load imposed on it and transferring same safely to foundation hence, into the ground. There are two broad subdivision of the structure. The first is the frame structures which resist the applied loads by virtue of their geometry. The second type is the mass structures which resist applied loads by virtue of their weight (Fakere et al. 2012). Generally, structures do fail over time as a result of human factors such as negligence, design flaws, ageing, material fatigue, extreme operation and environmental conditions, accidents, terrorists, attacks and natural hazards. Building failure could be of two types namely; Cosmetic failure that occurs when something has been added or subtracted from the building, thus affecting the structure outlooks while structural failure affect both the outlook and structural stability of the building (Ayuba et al., 2012). The structural function of a building is therefore to transfer the loads of human beings, furniture, goods, wind, etc. including its own weight safely down to the foundation and subsequently into the ground. Hence, failure occurs when a building is not able to perform the function (Ukpata, 2006).

### **STATEMENT OF PROBLEM**

There is no substantial recorded evidence so far available to show that building collapse in Nsukka Local Government Area has been fully studied. Yet, one cannot fully appreciate building technology without a comprehensive knowledge of the causes of building collapse in building. n Owing to the inadequate study of building collapse in Nsukka Local Government Area as a whole, there has been unresolved argument about the building collapse and Nigeria at large. The implication of this is a rampant occurrence of building collapse in Nsukka and Nigeria at large.

### **RESEARCH QUESTION**

- Are there some roles to be played by the local government authorities in controlling incessant building collapse in Nsukka L.G.A and Nigeria at large?

### **RESEARCH OBJECTIVE**

- To highlight the roles to be played by the local government authorities in controlling incessant building collapse in Nsukka Local Government Area in Enugu state, Nigeria.

### **CONCEPT OF BUILDING COLLAPSE**

Building collapse is a catastrophic failure of a structure wherein it loses its stability and load-bearing capacity, often resulting in partial or total destruction. It is a serious concern in the fields of civil engineering, urban planning, and public safety. A collapse can happen during construction, occupancy, or renovation, and it typically results in the loss of lives, property, and resources. The phenomenon highlights the need for stringent building codes, professional ethics, and quality control. According to Levy and Salvadori (2002), building collapse reflects either a failure in design, materials, construction or maintenance or sometimes a combination of all.

One of the primary causes of building collapse is flawed structural design. If a structure is not engineered correctly to distribute loads, it becomes vulnerable to stresses that exceed its capacity. Misjudgments in load calculations, foundation sizing, and reinforcement detailing can all contribute

to failure. Feld and Carper (1997) discuss numerous examples where improper design led to tragic failures, stressing the importance of compliance with structural design codes. For instance, underestimating wind or seismic loads in high-rise buildings can result in lateral instability and eventual collapse.

Even a well-designed building can collapse if inferior materials are used or if construction techniques are substandard. Poor quality concrete, corroded steel reinforcement, or defective construction joints can compromise structural integrity. In developing countries, the use of substandard materials is a significant problem due to cost-cutting and corruption (Ghosh, 2014). Additionally, deviation from the architect's or engineer's specifications during construction—whether deliberate or accidental—has often led to fatal consequences. These issues were evident in the Sampoong Department Store collapse in South Korea in 1995, where unauthorized modifications and poor materials led to 502 deaths (Kim & Kim, 2001).

Another major factor contributing to building collapse is foundation failure, often due to poor geotechnical assessment. If a building's foundation is not designed based on accurate soil tests, it may settle unevenly or sink, leading to structural damage. Differential settlement, soil liquefaction during earthquakes, and erosion can weaken the base of a structure. The Ronan Point collapse in London in 1968 demonstrated how a localized explosion could initiate a chain reaction in a poorly connected prefabricated building, where inadequate anchoring and weak joints were aggravated by foundation limitations (Levy & Salvadori, 2002).

## **ROLES OF LOCAL GOVERNMENT AUTHORITIES IN CONTROLLING INCESSANT BUILDING COLLAPSE**

### **1. Approval of Building Plans and Permits**

Local government authorities serve as the first line of defense against unsafe buildings through their power to approve or reject building plans. Every construction project must begin with a planning application that includes architectural drawings, structural calculations, land surveys, and environmental impact assessments. It is the responsibility of local planning and development departments to evaluate these documents for compliance with applicable laws such as zoning ordinances, setback regulations, and national building codes. This process is crucial for ensuring that buildings are designed to withstand environmental loads, accommodate proper drainage systems, and fit within the designated use of the area (e.g., residential, commercial, or industrial). Unfortunately, in areas where this process is poorly regulated or influenced by corruption, substandard or illegal developments may be approved, creating a high risk for future structural failure.

### **2. Enforcement of Building Codes and Construction Standards**

Once a building plan is approved, local authorities must enforce the actual implementation of construction standards as set by national and local building codes. These standards cover all aspects of construction—structural integrity, fire safety, ventilation, lighting, energy efficiency, and the use of materials. Enforcement is necessary to prevent developers from cutting corners, especially when financial gain is prioritized over safety. Local building departments are tasked with ensuring that materials used—such as cement, steel, and concrete—meet prescribed quality standards and are appropriate for the proposed structure. This role also includes ensuring that construction workers follow the proper procedures for mixing concrete, laying foundations, erecting beams, and installing critical structural components. Failure in code enforcement has been identified as a major factor in many building collapses in countries like Nigeria, Ghana, and Bangladesh.

### **3. Site Supervision, Inspection, and Compliance Monitoring**

Continuous on-site supervision is a vital component of local government involvement in the construction process. Building inspectors, engineers, and planning officers from local councils are required to visit sites at key stages of construction—foundation, framework, roofing, and finishing—to assess whether work aligns with approved designs. These inspections allow

authorities to identify unauthorized design changes, poor workmanship, or material substitution early enough to correct them before further damage is done. In many collapse cases, buildings deviated from approved plans or used low-grade materials without detection. The absence of regular inspections or inadequate documentation of site visits contributes to these lapses. A robust system of documentation, including photographic evidence, inspection reports, and compliance certificates, is critical in holding builders accountable and ensuring structural safety.

#### **4. Prevention and Demolition of Unauthorized Constructions**

A significant proportion of building collapses occur in structures that were never approved by the appropriate authorities. These unauthorized buildings are often erected in informal settlements, peri-urban areas, or marginalized communities where monitoring is weak. Local government authorities are tasked with identifying these illegal developments early through surveillance, community reporting mechanisms, and land use audits. Once detected, appropriate action should be taken—either to stop construction, enforce regularization procedures (if feasible), or order the demolition of non-compliant structures. This preventive approach not only protects public safety but also reinforces the importance of following due process. In cities like Lagos and Nairobi, demolition of dangerous buildings has become a necessary (though sometimes controversial) tool for urban safety management.

#### **5. Public Education, Stakeholder Engagement, and Advocacy**

In addition to technical enforcement, local governments have a responsibility to build public awareness around safe construction practices. Many property owners and small-scale developers are unaware of building regulations or the risks of non-compliance. Local authorities should launch education programs through town hall meetings, local radio, flyers, and social media to inform the public about the importance of permits, professional supervision, and the use of quality materials. These campaigns should also emphasize the role of the community in reporting suspicious buildings or construction practices. Moreover, collaboration with community associations, religious groups, and school programs can amplify safety messages. A well-informed public is more likely to demand accountability from developers and cooperate with authorities in preventing disasters.

#### **6. Legal Sanctions and Prosecution of Offenders**

When a building collapses, local governments are responsible for launching investigations to determine the cause and identify liable parties. These investigations may involve structural engineers, safety inspectors, and legal officers. If the collapse is due to negligence, unauthorized construction, or fraudulent approvals, the local authority must initiate legal proceedings against the developer, contractor, or even internal staff who may have enabled the process. These legal actions should result in sanctions such as fines, imprisonment, revocation of building licenses, or blacklisting of companies involved. The enforcement of legal consequences serves not only as justice for victims but also as a deterrent against future violations. Transparency in the legal process also builds public trust in the regulatory system.

#### **7. Institutional Strengthening and Inter-Agency Collaboration**

To fulfill all these roles effectively, local governments must invest in their institutional capacity. This includes recruiting and training qualified professionals such as town planners, architects, civil engineers, and building inspectors. Modern tools and technologies like GIS mapping, drone inspections, and digital permit systems should be adopted to enhance oversight. Local authorities must also collaborate with professional bodies such as the Council for the Regulation of Engineering in Nigeria (COREN), the Nigerian Institute of Architects (NIA), and public works departments for technical support and peer review. Furthermore, partnerships with law enforcement and emergency response agencies improve coordination in cases of building collapse and strengthen enforcement actions. Institutional reforms, staff accountability, and adequate funding are essential to empower local governments to play their roles effectively in safeguarding lives and property.

## **METHODOLOGY**

Nsukka town is in Nsukka L.G.A of Enugu state, Nigeria. It is the headquarters of Nsukka L.G.A. The town is situated some sixty-five kilometers to the North of Enugu, the administrative headquarters of the state. Nsukka town is located approximately on the latitude 7 degree North and longitude 7 ½ degree East. It lies in the transitional zone between the rainforest of southern Nigeria. It has a mixed vegetation of grassland and rainforest (Eze, 1998). Nsukka is bounded on the North by ObukpaAsadu and the South by Ieija and Obimo, on the East by Ede-Oballa and Eha-Alumona and on the West by Edem-Ani and Aro-Uno. The people of Nsukka live in a scattered home steads. Nsukka has three main quarters namely; Mkpunano, Nru and Ihe/Owerre, in their order of seniority. This study adopted a surveys research style which operates on the basis of statistical sampling; only extremely rarely are full population surveys possible, practicable or desirable. This style employs the principles of statistical sampling to secure a representative sampling for economy and speed. This style allowed samples to be surveyed through questionnaires, that is by introducing the questionnaires to the respondents for them to answer or fill in the structured questions contained in it. The estimated figure of the population of Nsukka according to 2006 census is 99,608. The research population comprised all the Engineers (structural and civil), Building Contractors, Architects, Estate Surveyors and Valuers and Town Planners in Nsukka L.G.A who are involved in planning and construction of buildings.

This study adopted cluster sampling technique with multi stage selection. This technique involves breaking down the population into sub-groups and a sample taken from only a portion of the sub-groups at a time until all the groups have been sampled. Nsukka L.G.A has three main quarters namely: Mkpunano, Nru and Ihe/Owerre, in their order of seniority. In each of these three quarters, the purposive sampling method was used to select only the respondents needed for the study. Purposive sampling technique was employed to enable the researcher select and interview the Engineers (structural and civil), Building contractors, Architects, Estate Surveyors and Valuers and Town Planners who resides in the area sampled. This study adopted questionnaire and works of some authors whose work are related to the topic as the research instruments. This study adopted parametric statistical tool for data analysis. This tool allowed random distribution for data set and also for the data collected to be analyzed and conclusion drawn from the analysis. The conclusion drawn was based on the reasons gotten from the data analysis.

## **ANALYSIS**

Are there some roles to be played by the local government authorities in controlling incessant building collapse in Nsukka L.G.A of Enugu, Nigeria?

The local government authorities have vital roles to play in controlling incessant building collapses in Nsukka L.G.A such roles include; making sure that all the building erected, or under construction all have approved building plans. They should also make sure that unskilled labor, inexperienced professionals, and the tendency of some professionals to cross-carpet to lucrative specialists' duties where they lack skills, are ignorance and the use of abundance of quack in the building industry are not allowed.

## **CONCLUSION**

In conclusion local government authorities in Nsukka Local Government Area must play a pivotal role in mitigating building collapses by enforcing strict building regulations and ensuring compliance with safety standards. They should prioritize regular inspections and monitoring of construction sites to detect potential hazards. Additionally, local authorities can promote public awareness campaigns about the dangers of substandard construction practices. Collaboration with professional bodies and stakeholders in the construction industry is essential for improving quality control. Effective zoning and land-use planning can also help prevent the construction of unsafe buildings in vulnerable areas. Furthermore, local governments must establish a robust system for addressing complaints and investigating accidents promptly. By adopting these measures, the local

government can significantly reduce the frequency of building collapses and safeguard public safety.

## RECOMMENDATIONS

- Local authorities should rigorously enforce building codes and regulations to ensure that all construction projects adhere to safety standards. This includes ensuring that builders use quality materials and follow approved designs.
- Conduct regular and random inspections of ongoing construction projects to identify potential structural weaknesses and prevent the use of substandard materials. Inspections should also extend to completed buildings to check for compliance with safety norms.
- Local government officials involved in construction oversight should receive continuous training on modern construction techniques, safety protocols, and risk assessment. This would help improve their efficiency in monitoring and controlling building practices.

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