Commentary Article

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Checking the Incidence of Collapsed Structures in Nigeria

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Ripples set off by collapsing engineering structures in Nigeria are enormous and are yet to subside and could exacerbate in the future event if not thoroughly checked. The growing spate of incidences of structural collapse in Nigeria is of a huge concern and as a result, portends threat to the safety of lives and properties, national security as well as socio-economic growth.

Engineering structures such as roads, bridges, buildings, fly over, dams and the likes are imperative for the daily existence of man and therefore wield a magnificent influence on man and his environment should any danger occur. This therefore, calls for drastic measures to check the occurrence of such failures in the society.

In most instances, the collapse of engineering structures hinges on poor sub-structural investigations, that is, poor foundation; inadequate structural and architectural designs, the use of untrained personnel and quack contractors, improper pedological investigation in order to ascertain the strength of the soil in carrying the construction project to be done. More so, the use of sub-standard building materials such as rod, sand, aggregates as well as inadequate mixing of the materials also leads to the collapse of engineering structures. In most structures, there are conspicuous indications of very poor structural efficiency in the entire structure of the construction work. Other factors that contribute to engineering structural failures include; poor geological and geophysical survey to ascertain the ability of the terrain where the construction project is to be sited to carry the structures, as well as the suitability of the rock aggregates being used for the construction work. More so, negligence of salient engineering issues such as; where there should be nominal reinforcement, the iron rods are usually widely space than required and are of substandard quality could as well trigger collapse. Also, building of engineering columns on already existing walls as well as building of fourth floor where three were approved by the planning authorities due to greed all contributes to structural collapse of construction projects.

The impact of collapsing engineering structures in our society could be asserted negative all through, as it is an ill- wind that blows no one any good. Precious lives and valuable properties that worth millions of naira are lost to this menace, hence, engendering economic set back on our nation's economy as huge amount of money were involved in executing construction such construction projects. The recent building collapse in Lagos state, where pupils and other citizens lost their limbs or even died is grossly unacceptable. Environmental degradation also occur due to the debris of the failed structures which could constitute a mega nuisance in the environment by turning the rubbles to potential habitat for hazardous pests and insects such as mosquitoes, scorpions, snakes, rodents and the likes, which are harmful to human health. Furthermore, the agricultural sectors is not spared, as agricultural pests such as squirrel could hide in the failed engineering structures and inflict damages on crops of nearby farms and agricultural projects thus, limiting yield. The debris of the failed structures could as well hamper effective irrigation of agricultural projects in the affected areas. More so, national peace and security could also be threatened as hoodlums such as kidnappers and other criminals could make the collapsed building their hideouts to perpetrate crime. Of a truth, the effect of collapsing engineering structures in our society can never be over emphasized. They are more of ills than good, hence, the need to check the occurrence of such incidence in the future. To do so, the hiring of untrained professionals to undertake structural construction projects and, awarding of contracts to quack contractor should be discouraged. Also, an effective development control agency should be established so as to ensure a closer supervision and inspection of ongoing contraction works within the national, states, as well as Local government levels should be ensured and should be properly staffed with well to do personnel. They should ensure that quality materials were used by contractors when carrying out both private and government engineering construction works, and that they met the standard of mixing of the building materials in order avoid unnecessary cave-in of the structures. City and town planning authorities should ensure that all completed construction projects are cleared and approved by them before allowing residents to reside in such structures. The government on her own should set up panel of enquiry to investigate incidences of collapsed structures in Nigeria, and should be comprised of experienced professionals to ascertain both minor and major causes of the failed structures, and their report should be implemented so as to guard against such loop holes in future design and construction work. The legislative arm of the government should promulgate and implement building and construction codes of conduct with drastic punitive measures taken against offenders. Sanctions should be made on culpable engineers and contractors who supervised, designed, and undertook failed building, roads,

bridges, and other engineering structural projects in the nation. Inhabitants of uncompleted construction projects should desist from such as it exposes them to danger. And, residents in certain engineering striations should watch out for any cave-in or strange indication of possible collapse and alert the authorities for necessary emergency actions. Demolition of offending structures as well as the revocation of awarded contracts that are culpable against the construction code of conduct should be done without sentiment in order to safe guard live and properties. Emergency agencies should ensure the availability of efficient rescue equipment in order to reuse lives trapped in the rubbles of failed structures during emergency rescue operation.

Conclusion

In conclusion, efforts should therefore be made to put to a hold the incidences of engineering structural mishap in Nigeria. The time to act is now!