

NBRRI REPORT NO. 23

COLLAPSE OF BUILDINGS IN NIGERIA:

**TECHNICAL REPORT
ON THE COLLAPSE AT
ADENUBI CLOSE, IKEJA,
LAGOS STATE, NIGERIA**

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NIGERIAN BUILDING AND ROAD RESEARCH INSTITUTE
(FEDERAL MINISTRY OF SCIENCE AND TECHNOLOGY)

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NIGERIA

PROJECT TEAM

FALADE F. A., IHEONU E.E., DEDE S., SULYMON N. A.,
EGEGE C. C. AND MOZEA M. N.

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NIGERIAN BUILDING AND ROAD RESEARCH INSTITUTE

(FEDERAL MINISTRY OF SCIENCE AND TECHNOLOGY)

(Building Capacity and Setting the Pace in indigenous Construction Technology Development)

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OCTOBER, 2011

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October 2011

FOREWORD

Building failure is an unacceptable difference between expected and observed performance of a structure. A failure can be taken as occurring in a component when that system can no longer fulfil its original and principal functions. For example, a building structure that is deficient in satisfying any of the designed performance provisions can be said to have failed. Where the building structure can no longer provide shelter as originally designed, it is said to have failed.

In Nigeria, building failures occur so frequently today and this situation calls for urgent intervention from all stakeholders. Building failures have been attributed to faulty design, fault on construction site, foundation soil, product failure, faulty execution of work and use of inappropriate materials. Other causes of Building failures may include but not limited to environmental changes; natural and man-made hazards.

It is often said that a building cannot stand on a "weak" foundation. It is important to realize that no matter how well the structural engineering may be, the propensity for the soil underneath it, to move must also be evaluated and addressed to stand the test of time. Ideally, a built foundation should not move once put in place.

In Nigeria, efforts at curbing this menace appear to be uncoordinated, haphazard and sporadic. Initial interest and concern generated at the collapse of any building is hardly sustained, especially from professional bodies. It is in the light of the above that the Institute by her mandate, has considered it necessary to look into the issue of building collapse in Nigeria and come up with possible remedies that could assist in reducing to the barest minimum the incessant collapse of buildings in Nigeria. One of the building collapse investigations carried out by NBRRI is presented in this report.

This report contains the investigation of the causes of the collapse of a 5-storey building (under construction) at 9B Adenubi Close, Ikeja, Lagos State. It is expected that all Stakeholders will find the Report valuable and useful and assist in proffering solutions to the incessant occurrences of building collapse in Nigeria, particularly those under construction.

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October, 2011