**SOCIO-ECONOMIC EFFECT OF BUILDING COLLAPSE**

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ABSTRACT

Building collapse has been a phenomenon of concern over some years allover the world. The building collapse has traumatized a lot of people with attendant losses. The study carried out an exploratory research to the concept of Building collapse presented succinctly the social economic benefit derivable therefrom. Sample of 80 respondents were used to censored the parameters. The results were collated and analyzed with SPSS analytical tool. It was discovered among other things that part of the effects include loss of property, loss of resources among others. The study recommended careful planning

Comprehensive assessment of risk and its cost implication and engaging qualified professionals on sites.

Keywords— Assessment, Effect, Materials, Concepts, Construction, Collapse, Building.

` **I. INTRODUCTION**

   The concept of Building collapse is a global phenomenon that is not limited to a particular continent, people and nations has been working on the task of eliminating the menace. In [1],[2],[3],[4] and [5] it was stressed that every economic developmentstrategy in a country is aimed at improving the economic, political, and social well-being of its citizenry. The key to development, especially in developing countries lies in four (4) fundamental factors: Population, Natural resources, capital formation (domestic or imported), and technology. Building failure precedes collapse. In [6], [7],[8] and [9], thus, achieving a dynamic and vivacious economic developmentstrategy for meeting  housing needs must include a vibrant building and construction sector whose other highlights must include efforts at ensuring sound and sustainable infrastructural development (transportation-road, rail, air, sea modes), commercial enterprise development (construction of industrial parks and factories), construction of institutionalized buildings, among others. Attaining a sustainable and cost effective building and construction sector requires a proper project management strategy that will ensure building to specification and in using the appropriate materials and labour force. It is therefore the objectives of the study to: identify remote and immediate cause of building collapse; to identity the types of buildings involved in collapse incidents; to determine the number of collapse buildings; to study factors that influences building collapse; to situate the effects of Building in economic development and to examine strategies that could help prevent building collapse [5],[6] and [7].

II. METHODOLOGY

A.Research Approach

Structured questionnaire research instrument for the study. These instruments or tool has questions or items to which individuals can respond. The questionnaire is in no small measure the most frequently used instrument in educational research. The questions were both designed as structured or fixed response questionnaire and the unstructured or open ended questionnaire. The questionnaire was designed to elicit information from the respondents. Questionnaire were administered to obtain information as regards social economic effects of building collapse in Lagos state A suitable design was structured along five points Likert scale type of strongly agree, agree, strongly disagree, disagree, neutral. The questionnaire was divided into five sections.

It is not easy to determine the best presentation opinion: there probably is no one single best option. Each potential approach has its strong point and shortcomings, therefore the approach to be adopted may not be free from critique. However, there is need to employ appropriate method of data analysis so as to accurately process the data that will be collected on this research from the field survey. Based on this assertion therefore, three methods of data analysis will be employed for this research. The aspect of the questionnaire relating to the background of respondents will be analysed using percentage and the other section of the questionnaire will be analysed using relative importance index method.



**I.Remote and immediate cause of building collapse**

The respondents were requested to evaluate the Remote and immediate cause of building collapse by picking their response as appropriate from the options provided in the questionnaire.

From the table below, Improper structure being the major Remote and immediate cause picked by the respondent has a mean value of (0.93), Incompetent contractual workers (0.92), Incompetent temporary workers (0.89), Poor Town Planning endorsement/improvement observing procedure (0.88), Bad Design (0.88), Utilization of inadequate materials and supplies (0.87), Defective development procedure (0.86) Bumbling transformation, change of utilization , poor support culture (0.85) Non-consistence with determinations (0.83), Deficient supervision or review/observing (0.80) and Economic pressures (0.78). The findings indicates that majority of the respondent identified Improper structure as the Remote and immediate cause of building collapse [8] and [9].

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| --- | --- | --- |
| **Variable**  | **Mean** | **Ranking** |
| Improper structure | 0.93 | 1st  |
| Incompetent contractual workers | 0.92 | 2nd  |
| Incompetent temporary workers | 0.89 | 3rd  |
| Poor Town Planning endorsement/improvement observing procedure | 0.88 | 4th  |
| Bad Design | 0.88 | 5th  |
| Utilization of inadequate materials and supplies  | 0.87 | 6th  |
| Defective development procedure | 0.86 | 7th  |
| Bumbling transformation, change of utilization , poor support culture  | 0.85 | 8th  |
| Non-consistence with determinations | 0.83 | 9th  |
| Deficient supervision or review/observing | 0.80 | 10th  |
| Economic pressures | 0.78 | 11th  |

**II. Strategies could help prevent building collapse in Lagos State**

The respondents were requested to evaluate the Strategies could help prevent building collapse in Lagos State by picking their response as appropriate from the options provided in the questionnaire.

From the table below, Proper presentation and interpretation of working drawing being the major strategies that could help prevent building collapse in Lagos State picked by the respondent has a mean value of (0.91), Adequate supervision (0.90), Carried out site investigation (0.89), Ensure buildings are constructed in accordance to designs (0.89), Avoid the use of quacks and follow specification (0.89) Design strictly to code of practice (0.89) Strictly adherence to working drawing (0.88) Design with experience (0.88) Determination of bearing capacity of soil before designs (0.87) and Produce working drawings before commencing construction on site (0.85). The findings indicates that majority of the respondent identified Proper presentation and interpretation of working drawing as the top strategies could help prevent building collapse in Lagos State [6],[7] and [8].

|  |  |  |
| --- | --- | --- |
| **Variable**  | **Mean** | **Ranking** |
| Proper presentation and interpretation of working drawing | 0.91 | 1st |
| Adequate supervision | 0.90 | 2nd  |
| Carried out site investigation | 0.89 | 3rd  |
| Ensure buildings are constructed in accordance to designs | 0.89 | 4th  |
| Avoid the use of quacks and follow specification   | 0.89 | 5th  |
| Design strictly to code of practice | 0.89 | 6th  |
| Strictly adherence to working drawing | 0.88 | 7th  |
| Design with experience | 0.88 | 8th  |
| Determination of bearing capacity of soil before designs | 0.87 | 9th  |
| Produce working drawings before commencing construction on site | 0.85 | 10th  |

**III. What type of buildings get involved in collapse incidents in Lagos state**

The respondents were requested to evaluate what type of buildings get involved in collapse incidents in Lagos state by picking their response as appropriate from the options provided in the questionnaire.

From the table below, Commercial buildings being the major type of buildings get involved in collapse incidents in Lagos state picked by the respondent has a mean value of (0.75), Uncompleted (0.74), Residential (0.73), Industrial (0.73), Educational (0.72) and Institutional has (0.70). The findings indicates that majority of the respondent identified Commercial buildings as the major type of buildings get involved in collapse incidents in Lagos state [1],[4] and [8].

|  |  |  |
| --- | --- | --- |
| **Variable**  | **Mean** | **Ranking** |
| Commercial  | 0.75 | 1st  |
| Uncompleted  | 0.74 | 2nd  |
| Residential | 0.73 | 3rd  |
| Industrial | 0.73 | 3rd  |
| Educational | 0.72 | 4th  |
| Institutional | 0.70 | 5th  |

**IV. How can building be of an effect to economic development**

The respondents were requested to evaluate how can building be of an effect to economic development by picking their response as appropriate from the options provided in the questionnaire. During downturns in the economy, expenditures in this sector would employ relatively large numbers of people, whose spending would help restore growth was ientified with scores of (0.71). The findings indicates that majority of the respondent identified An abundance of new housing can lower the cost of living for a community, making it attractive to new residents and industries as the factor on how can building be of an effect to economic development this toes the lines of submission in [3],[5],[6]and [10].

**IV. Discussions**

The causes of building failure, from the public view can be summarized under improper design, incompetent contractor, faulty construction methodology, poor Town Planning approval /development monitoring process; non-compliance with specifications/standards by developers/contractors; use of substandard materials and equipment; inadequate supervision or inspection/monitoring, economic pressures, incompetent conversion, change of use of buildings, aged buildings, poor maintenance culture. Data analysis of these factors shows that Improper structure Incompetent contractual workers and Incompetent temporary workers were the three Remote and immediate cause of building collaps**e** witnessed in Lagos [3],[5],[6]and [10].

Furthermore, analysis shows that Proper presentation and interpretation of working drawing, Adequate supervision and carried out site investigation among other respected factors are the top three strategies that could help prevent building collapse in Lagos State. Looking into the type of buildings that are mostly involved in building collapse, analysis shows that Commercial buildings, Uncompleted buildings and residential buildings among other listed types of buildings are the top three mostly involved in building collapse in Lagos state [10],[11],[12] and [13].

Finally, The revenues of the state, local, and federal governments can increase as the result of a housing development project, the economic impact creates a ripple effect that moves beyond the building-related professions to the entire local economy, during downturns in the economy, expenditures in this sector would employ relatively large numbers of people, whose spending would help restore growth and so on this was supported by view expressed in [14],[15],[16] and [17]. Amongst the factors that can building be of an effect to economic development from the the public view, An abundance of new housing can lower the cost of living for a community, making it attractive to new residents and industries. Better housing might lead to higher productivity, by improving health, reducing absenteeism and so forth and Housing been obviously an investment: costs are incurred over a period of months in order to produce a stream of services that are enjoyed for decades, are been seen as benefiting ways the by which building can have a positive effect on economic development [7], [16],[18] and [19].

**V.Conclusion**

The study has presented various effects of the collapse on the from the socio-economic dimension, However certain actions needed to be taken to forestall collapse of Building, it includes elimination of corruption tendencies among construction practitioners, use of quality materials, provision of workable building collapse prevention penal code, elimination of sharp practices, maintaining the correct order of responsibility delegation among others.Similarly factors such as political factor, economic factors and the like should be well observed since they have tendency to jeopardize quality of building production on site.

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