

Implementation Barriers of Green Building Design In Indian Construction Sectors

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Abstract- Constructions of sustainable buildings are the mostly occurring in India but for these green buildings they are so many problems will be occurred. For the problems we want to do the questionnaire survey and then to find the drivers for growth of green development and to reduced consumption of materials, energy, water by green building design elements. This research explains how green building is slowly becoming more accepted but it is not occurring fast enough and it needed to be finding out the barriers that slowing down the adoption. The various factors, which becoming the barricades to the successful implementation of the green building in Indian construction industry are identified through the comprehensive study of the literatures. The identified problems are framed as a questionnaire and survey conducted over various construction organizations. The collected data were statistically analyzed through SPSS software and the results were examined.

Keywords- Rating, Response and percentage of Response for each factor, Relative Importance Index (RII).

I. INTRODUCTION

Construction of sustainable buildings is the mostly occurring in India but for these green buildings they are so many problems will be occurred. From those problems they want to do the questionnaire survey and then to find the drivers for growth of green development and to reduce consumption of materials, energy, water by green building design elements. Low-carbon building is the propelled impression of current "green building". Low-carbon innovations of building-coordinated are growing quickly. The summed up low-carbon innovations incorporate not just the innovation in logical and mechanical region yet in addition the thoughts and techniques in territory of administration and distribution of assets. In all encompassing way to deal with plan, development, and obliteration that limits the building's effect on nature, the tenants, and the group. By the definition of green buildings study on the elements of the green buildings design will be study the failures for adoption of green buildings in India,

In these sustainable buildings green roof systems are using to control the temperatures from outside to the house interior. During the summer season temperatures will be high at that case these green roof systems are used to control the temperature and it makes cool to the interior of the house and the temperature will be storied in the roof system when the temperature needed it will be transfer to the interior of the house like in the winter season. These green roof systems also affect the sustainable buildings in some of the cases like generally green buildings are light in weight, when apply the green roof structures it will be the added the more weight in the total structure for that reasons structure will be

damaged in most cases or that reasons also want to do survey on the design structure of green roof system.

Green building design can be more complicated than what is typically required for conventional buildings, considering that evaluation of alternative materials and systems is commonly necessary by the design team. In these way there is a so many affecting problems are occurring in the proper implementation of green buildings. So for that want to study the elements of the green building design and construction for sustainable building.

The major scope of these project is to study the carbon foot print (amount of carbon dioxide released in to the atmosphere) of building alongside the economic incidents to build green projects in India. For that study on the carbon foot print there is a using advance reflection of the green buildings are "low-carbon building". In the process of green buildings these low- carbon technologies are developed rapidly incorporate not just the innovation in logical and mechanical territory yet additionally the thoughts and techniques in region of administration and portion of assets.

Building layout plays a significant role in ameliorating energy efficiency of the building. Green buildings also take advantage of natural ventilation through the building's orientation. Green building is on the rise around the world, through a mix of voluntary certification and mandatory requirements. The overall LEED rating system of the USA has expanded its international presence. Around 40 percent of the LEED registered projects are located outside of the United States. For

developed nations, the focus on LEED registration and certification stems from the opportunity to reduce building operational costs. For developing nations experiencing rapid economic progress, there could be a tendency to focus only on new building construction.

II. AIM

- To identify challenges for green development.
- To identify Rating, Response and percentage Response for each factor.
- To calculate the Relative Importance Index (RII) and ranking for values for each factor.
- To calculate mean and standard deviation for each factor.
- To calculate combined arithmetic mean among the factors.
- Normality checking.

From the above three are major objectives of this project in that firstly important to identify challenges of the green development in India, to identify the Rating, Response and % of Response for each factor for the proper implementation of green buildings in India. Finally want to calculate the Relative importance Index (RII) and Non parametric test values for each factor by using SPSS Software.

III. NEED OF RESEARCH

- According to my project the research is to do the proper implementation of green constructions in India.
- To reduce the consumption of materials, energy, and water by green building design elements.

IV. METHODOLOGY

The complete project process is kept in the simple flow chart as a methods To do work one after the another work as shown in the Figure 1.

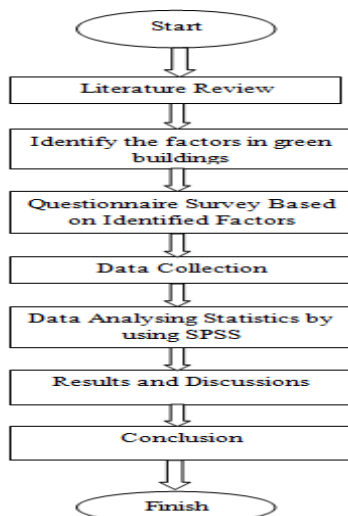


Figure 1 Flow chart of Methodology.

Figure 1 says there given the methodology of the project, firstly the research project to collect the literatures related to the project work, then secondly to identify the problems in the green buildings for the proper implementation in India, then to do a questionnaire survey for finding the major problems for the proper implementation in India. Then to identify the Mean, Standard deviation and combined mean standard deviation, Rating, Response and % of Response for each factor then finally want to calculate the Relative Importance Index (RII) and non-parametric test values for the factors.

V. RESULTS AND INTERPRETATION

Table 1 Demographic profile

	Frequency	Percent
Gender		
Female	11	31.4
Male	24	68.6
Total	35	100
Education		
Bachelor's Degree	15	42.9
Diploma	5	14.3
Master's Degree	9	25.7
P.H.D	6	17.1
Total	35	100
Designation		
Architecture	3	8.6
Contractor	5	14.3
Designers	9	25.7
Engineer	13	37.1
Labours	5	14.3
Total	35	100
Work Experience		
2-5 Years	18	51.4
6-10 Years	5	14.3
11-15 Years	3	8.6
16-20 Years	9	25.7
Total	35	100

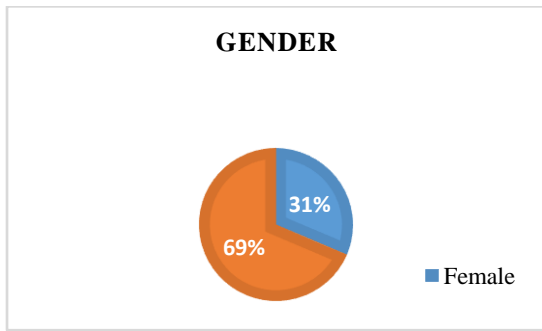


Fig. 2 Indicating response profile for education qualification.

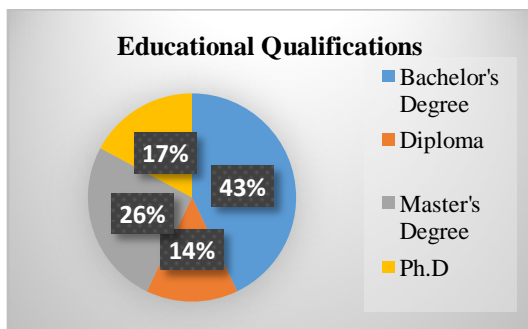


Fig 3 indicating Response profile for designation

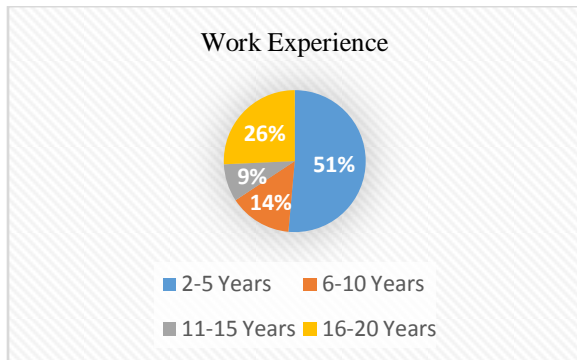


Fig. 4 Indicating Response profile for work experience

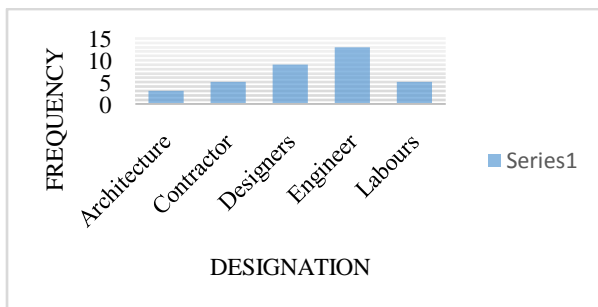


Fig. 5 Indicating response profile for work experience.

VI. CONCLUSION

The project result shows The response rates from male is maximum compare to female Candidates, as like Engineers (31.7%) were shown maximum interest to give Responses followed by Designers (25.7%), Contractors (14.3%) and architectures (8.6%). The candidates are those who having 2-5 years' experience (51.4%) given more responses followed by 6-10 years' experience (14.3%).

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