

Research on Indian architecture production system

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Abstract: : India ranks fourth in the world in terms of construction investment (2021), and the construction industry is expected to grow even further in the future due to the influx of people into urban areas. However, considering the state of construction sites near Delhi, there are concerns that the industry will no longer be able to meet the increasingly sophisticated demands of the construction market (quality, construction schedule, safety, etc.). This study will grasp the actual situation of management of building construction sites and consider the problems.

Key words: India, Construction Industry, Site Management, Safety, Productivity

1. Research method

The method was based on collection and analysis of external appearance information on construction sites in Delhi, and case studies based on interviews with construction management practitioners in Mumbai. A literature and preliminary interview survey will also be conducted.

2. Collection and analysis of construction site appearance information

In July 2022, exterior photos of 451 construction sites around Delhi were taken, and information was read from the photos and compiled into a database for analysis. The actual on-site equipment found in the survey hardly meets basic safety regulations such as IS. Operations that streamline processes by adjusting work zones and job types are not often adopted. More than half of the samples involved suspended construction.

3. Business formation case study interview

Interviews were conducted with 10 people in 8 cases in May 2023. Judgments about the risks borne by each party, depending on size and contract, result in different business formations in almost every case.

4. Summary of this research

In the future, As reconsideration about the organization structure of construction work and the order classification of each specialized work progresses, management and construction methods will be improved to be technically more rational, and productivity and safety will improve. [1]

[1] Tomoyuki Gondo, et al. " Recent building system of pencil houses in HANOI, VIETNAM," AIJ Journal of Technology and Design, Vol.24, No.56, pp.397-402, 2018.