

A STUDY ON ISSUES, CHALLENGES AND PROBLEMS FACED BY CONSTRUCTION BUSINESSES IN MUMBAI CITY

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Abstract

The construction sector holds a pivotal position in India's economy, ranking second only to agriculture. Its significant contributions to national income, job creation, and attraction of foreign investments underscore its crucial role. As a key driver of infrastructural and industrial development, the sector is poised for further growth, fuelled by factors like industrialisation, urbanisation, economic progress, and societal aspirations.

The construction industry forms a vital part of the nation's socio-economic progress, creating a web of backward and forward linkages that generate substantial employment opportunities. Recognising its importance, the Indian government has permitted 100% foreign direct investment for the construction of modern townships, further boosting the sector's growth potential.

However, despite its positive impact, the construction industry faces numerous challenges. High operational and maintenance costs, expensive financing, a shortage of skilled labour, outdated technology, and supply and demand constraints are among the key issues. Small contractors, in particular, struggle to raise necessary finances. Understanding and addressing these constraints are crucial for sustaining and enhancing the sector's contribution to India's overall development. The research paper under consideration aims to delve into these challenges, focusing on the scale of operations of construction businesses to propose effective solutions for a thriving construction industry under the title:

A Study on Issues, Challenges and Problems Faced by Construction Businesses in Mumbai City

Keywords: Construction Industry, Small Sized Construction Business, Medium Sized Construction Business, Large Sized Construction Business, Developers and Contractors.

INTRODUCTION

The construction industry is essential for our country's development, but it faces many challenges. Issues like high costs, difficulty in raising funds, shortage of skilled workers, and outdated technology trouble the sector. Even though the global economy has slowed down, the cost of construction materials rises by 4-5% annually. At one point, the construction sector was labelled an 'Industrial Concern' to support it with timely finance at reasonable rates.

Major challenges for construction companies include capacity constraints, lack of standard contracts, shortage of skilled workers, procurement bottlenecks, high costs, outdated laws, government clearance delays, and absence of smooth operation norms. Established firms like Larsen & Toubro and Jaypee dominate the industry, engaging in significant projects like highways, power plants, and dams.

The proposed research paper aims to identify and analyze the constraints affecting the construction industry in India, focusing on "A Study on Issues, Challenges and Problems Faced by Construction Businesses in Mumbai City". This research is crucial to understand and address challenges in the construction sector for overall improvement.

Conceptual Framework:

(1) **Construction Industry:** The construction industry encompasses a broad sector covering the planning, design, and execution of building projects, infrastructure development, and related activities, contributing significantly to economic growth and development.

(2) **Large Construction Companies:** Large construction companies are corporate entities with substantial resources and diversified portfolios, involved in major infrastructure projects such as skyscrapers, highways, and public facilities.

(3) **Medium-size Construction Business Houses:** Medium-size construction business houses operate on a moderate scale, managing diverse projects within specific regions or sectors of Mumbai.

- (4) **Small-size Construction Business Houses:** Small construction houses refer to independent business entities engaged in construction projects on a smaller scale, most of whom are proprietary or partnership in nature.
- (5) **Developers:** Developers are key stakeholders in the construction industry responsible for conceptualizing, financing, and overseeing real estate projects, playing a pivotal role in bringing construction ventures from ideation to completion.
- (6) **Contractors:** Contractors are entities or individuals engaged in the execution of construction projects, responsible for tasks such as construction management, labour coordination, and ensuring adherence to project specifications and timelines.

Research Objectives:

The present paper is an attempt to investigate and identify the major challenges affecting the construction industry in India and tries to establish if the issues and challenges faced by large construction companies and small construction houses are same or different.

Research Hypothesis:

Against the above background and objectives, the present paper aims to establish the following hypotheses:

H0: There is no correlation between the size of construction business and nature of problems faced by their owners.

H1: There is a correlation between the size of construction business and nature of problems faced by their owners.

RESEARCH METHODOLOGY

Nature of Research:

The present research is an exploratory research study. It tries to explore the problems which are peculiar to construction industry in urban areas and will make suggestions to minimise the adverse impact of such problems on completion of construction project and total cost of the project.

Universe:

All large corporate houses in the construction sector such as Larsen & Toubro (L&T), Shapoorji Pallonji Group, Hindustan Construction Company (HCC), Gammon India, Godrej Properties, Jaypee, J. Kumar, Ackruti, Rustomjee, HDIL, DLF, etc., and medium and small developers, including those undertaking small construction contracts in Mumbai city constitute universe for the present study.

Sample:

The present study is based on the responses sought from 200 respondents directly or indirectly related to construction sector. The following table gives the details of the various categories of respondents selected for the purpose of the present study:

Classification of Sample according to Categories of Respondents

Type of Respondent	Frequency	Percent	Valid Percent	Cumulative Percent
Small Sized Construction Business	79	39.5%	39.5%	39.5%
Medium Sized Construction Business	92	46.0%	46.0%	85.5%
Large Sized Construction Business	29	14.5%	14.5%	100.0%
Total	200	100.0%	100.0%	

Source: Field Survey.

The researcher has used random sampling methods to select 200 respondents concerned with the construction industry from the city of Mumbai to have an in-depth understanding of the problems faced by the industry and generate tentative solutions to these problems and make recommendations to the policy makers for the implementations of the same. The sample is distributed over different categories of respondents and also to different geographical areas and is therefore, well defined and well diversified.

Sources of Data:

Data for the purpose of present study have been collected from both the sources, i.e., primary as well as secondary.

(a) **First-hand Data (Primary Source):** The present study is both descriptive and exploratory in nature. The primary data for the purpose of the present study has been collected from various categories of respondents associated with the construction activity such as developers, architects, contractors, employees of construction companies, etc.

(b) **Second hand data (Secondary Sources):** Secondary data for the purpose of the present study has been collected from the published materials, various books, magazines, journals, research studies, articles, survey of government agencies, trade journals of the construction industry, etc.

Tools of Data Collection:

Considering the nature of respondents, the researcher has made use of closed ended-questionnaire for seeking specific responses of the respondents. In addition to that opinionnaires have been used to collect view points of experts and tap various suggestions for solving the problems faced by the construction sector in India.

Time Frame:

The present study is based on the data collected as a part of a research study during the period ranging 2022-2023.

Data Presentation:

Tables, graphs, charts and diagrams have been used to represent data.

Data Analysis:

For testing the null hypothesis, chi-square test has been resorted to which specifies that there exists no major difference between the expected and recorded result.

Chi-square is calculated by taking the summation of the square of difference between (O) – observed value and (E) – expected value which is divided by the expected value in all required categories.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where, χ^2 = Chi-square

O = sum of observed frequencies.

E = sum of expected frequencies.

E = Expected frequency.

The computed value of the chi-square is compared with the tabulated value and if the calculated value is more than the tabulated value of chi-square then in that case, H_0 is rejected at the desired level of significance, generally taken to be 5% and vice-versa.

Report:

The research report has been presented in the format of popular research report. Popular research reports are meant for public at large and it gives detailed description regarding research work and its methodology including findings, conclusions and recommendations thereof.

DATA ANALYSIS

What are the main reasons for project delay during the pre-construction period? (You can choose more than one option)

Main Causes of Delay at Pre-construction Stage

	No. of Responses	Percentage
Acquisition of Land	189	95
Evacuation of Tenants	132	66
Permission from MCGM	172	86
Clearance of Land	23	11
Total	200	100

Source: Field Survey.

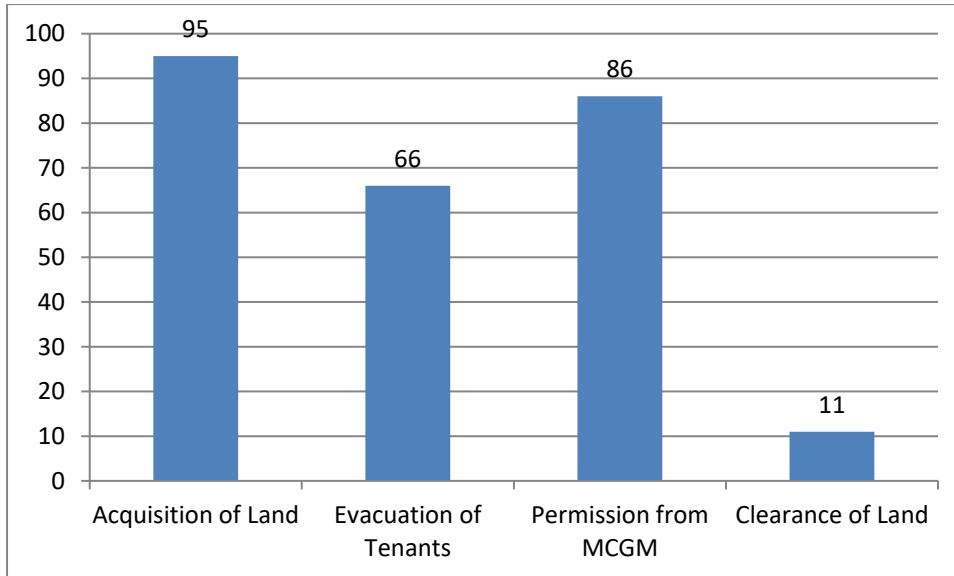


Fig. Main Causes of Delay at Pre-construction Stage

Analysis & Interpretation:

It was noted in the field survey that various factors causing project delay at the pre-construction stage in the descending order of their severity are as under:

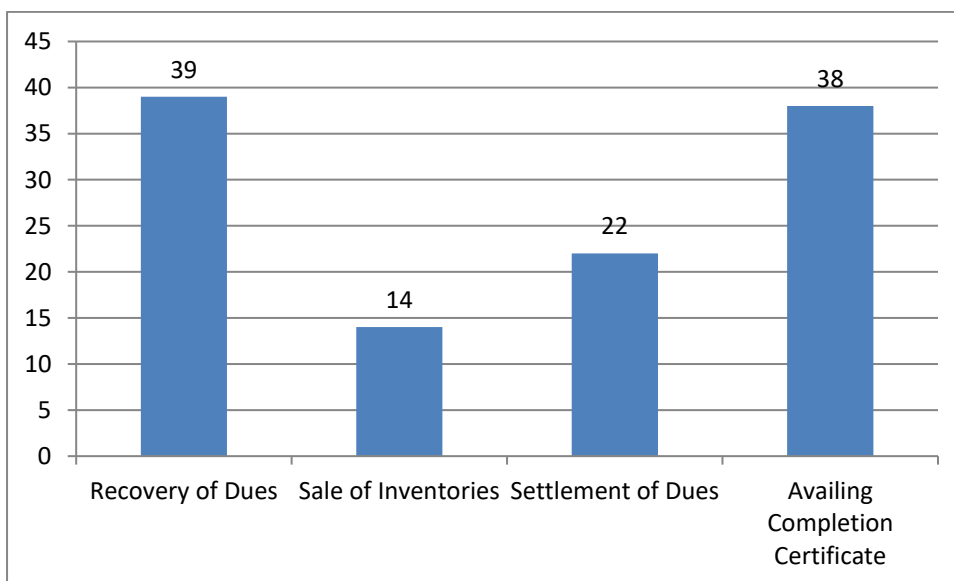
- (a) Acquisition of Land (95%)
- (b) Permission from MCGM (86%)
- (c) Evacuation of Tenants (66%)
- (d) Clearance of Land (11%)

What is the main problem encountered in post-construction period? (You can tick more than one option)

Main Problems Experienced by Construction Industry in Post-construction Period

	No. of Responses	Percentage
Recovery of Dues	78	39
Sale of Inventories	27	14
Settlement of Dues	45	22
Availing Completion Certificate	75	38
Total	200	100

Source: Field Survey.



Main Problems Experienced by Construction Industry in Post-construction Period

Analysis & Interpretation:

It was noted in the field survey that various challenges faced by construction business houses during the post-construction stage in the descending order of their severity are as under:

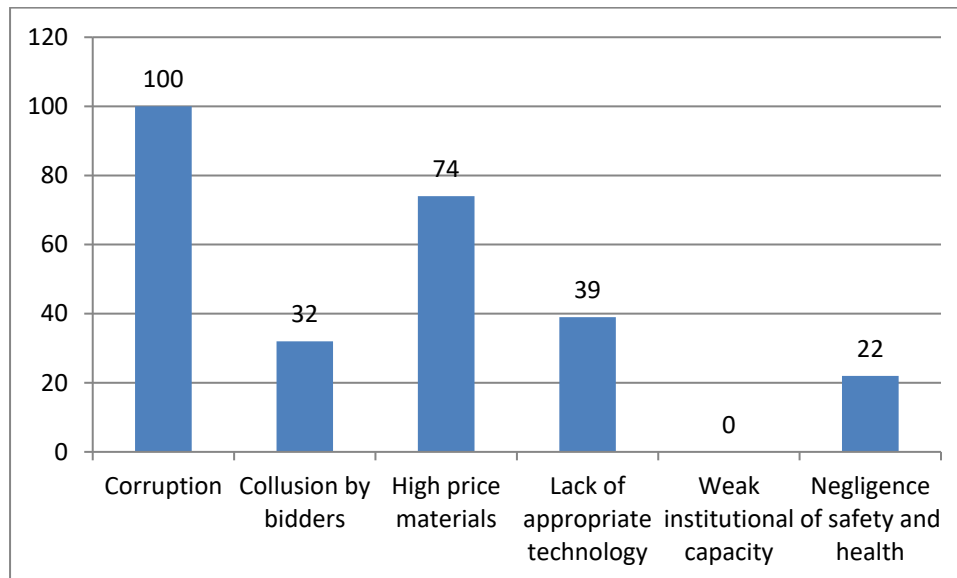
- Recovery of Dues (39%)
- Availing Completion Certificate (38%)
- Settlement of Dues (22%)
- Sale of Inventories (14%)

Which are the other constraints faced by you in the industry from the following? (You can tick more than one option)

Other Constraints Faced by the Construction Industry

	No. of Responses	Percentage
Corruption	200	100
Collusion by bidders	64	32
High price materials	148	74
Lack of appropriate technology	78	39
Weak institutional capacity	0	0
Negligence of safety and health	44	22
Total	200	100

Source: Field Survey.



Other Constraints Faced by the Construction Industry

Analysis & Interpretation:

It was noted in the field survey that other challenges faced by construction business houses in the descending order of their severity are as under:

- Corruption (100%)
- Collusion by bidders (32%)
- High price materials (74%)
- Lack of appropriate technology (39%)
- Weak institutional capacity (0%)
- Negligence of safety and health (22%)

Testing of Hypotheses:

H0 There is no correlation between the size of construction business and nature of problems faced by their owners.

H1 There is a correlation between the size of construction business and nature of problems faced by their owners.

Observed Values	Low	Moderate	High	Total
Small Sized Construction Business	21	44	14	79

- Small businesses should focus on effective financial planning, budgeting, and cost control to ensure sustainability and growth.
 - Building strong collaborations with local stakeholders, subcontractors, and suppliers can help overcome resource constraints and foster community support.
- (d) **Overall Strategies:**
- Embrace modern construction technologies to improve productivity, reduce costs, and stay competitive in the rapidly evolving construction industry.
 - Stay updated on local regulations and compliance requirements to avoid legal issues and delays in project execution.
 - Invest in training and development programs for the workforce to enhance skills, safety practices, and overall productivity.
 - Encourage participation in industry associations, conferences, and networking events to stay informed about industry trends, challenges and potential solutions.
- (e) **Sustainability Practices:**
- Integrate sustainable construction practices to align with environmental regulations, reduce costs in the long term, and meet the growing demand for eco-friendly construction solutions.
 - Tailoring these suggestions to the specific needs and challenges faced by each type of construction unit in Mumbai can contribute to effective management and sustainable growth in this dynamic market.

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