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## Effect of COVID on Construction Industry in India

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**Abstract (11Bold)** : Since the world is facing the challenge of pandemic covid situation from march 19, there is huge loss to world regarding economy health etc. The infrastructure and construction industry sector which is primarily responsible for Indian growth they also suffering from the damage. The demand of construction project is fallen day by day. In this paper we will study about the different factors comparison in construction industry before and after the pandemic. While low economic activity in other sectors will impact construction services through forward linkages.

**Keywords (11Bold)** –covid 19, economy, construction industry

### INTRODUCTION

In 2019 WHO Announces covid nineteen as a virulent disease and suddenly government of Asian nation declares national imprisonment since in India March 2019 until currently matters is constant with some modification. Whole country is laid low with this covid. All business and construction sector facing crucial scenario the development business, as a big growth driver of the economy with no exception, has conjointly been fully stop working. All the developments and comes were delayed till additional notice. It is, therefore, a prudent to handle the impact of the pandemic at the point and finish of the crisis to arrange for any future chance and gain lessons for plans.

This study aims to research the result of COVID nineteen on the development industry's survival. The study involves survey concerning the impact on the present scenario from totally different stakeholders. Throughout the pandemic, matters drastically deteriorated by first off shortage of construction material provide, that then compact the development business. Following the unfold of the virus, several countries started implementing many measures to scale back movement of individuals, which has in the main blocked the development as a result of it needs on-site work and each project member should be obtainable to figure, check, and monitor all the work activities. Job loses is additionally a significant disaster throughout the escalating scenario of the pandemic. Globally, countless staff have lost their jobs amid the COVID nineteen crisis. within the housing industry, all the staff lost their jobs and most of the tiny enterprises don't seem to be ready to pay salaries throughout lockdowns. Literature within the subject of the pandemic continues to be scarce, particularly within the housing industry sector. Hence, it's crucial to research the impact of the epidemic within the housing industry. This text aims to spot the impact and assess them supported their level of severity.

#### 1.1 Objective

- 1) Assessment of Impact on construction sector
- 2) To find out economic losses related to construction industry by studying different parameters.
- 3) To overcome from the situation
- 4) To maintain safety own people
- 5) To use different technologies to gain operational leverage.

## II.METHODOLOGY

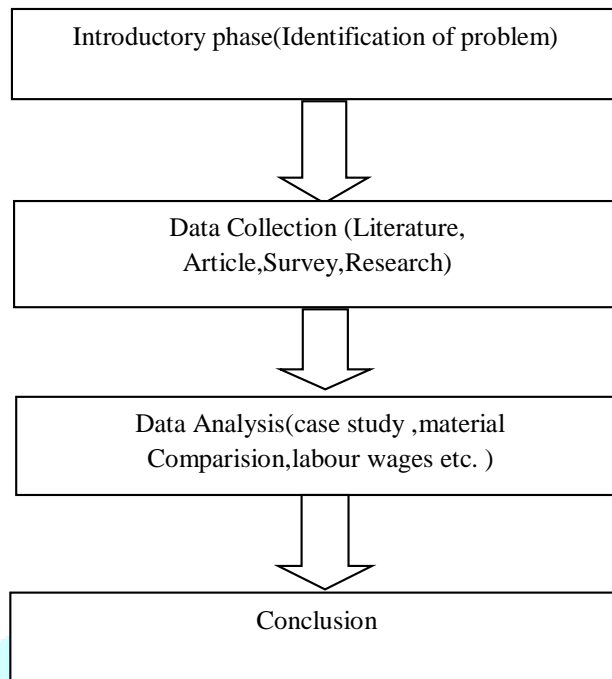


Fig.2.1 Methodology Of Project

This study is a cross-sectional investigation which was based on a self-administered online discussion. The study included civil engineers aging between 22 and 65 years, who are currently working either in an office job or a field job from various construction firm whose offices and projects are all located nearby area. The data collection took place from June 2020 to August 2020, during which 50 engineers as well as faculty participated in discussion. It also based on various workshop, FDP, expert lecture etc attended by faculty through online mode.

## III.CASE STUDY

### CASE STUDY OF CONSTRUCTION SITE -

Site-Commercial Cum-Residential Project  
Region-Sangamner, Maharashtra  
Area of site-4200 Sq.feet

This case study undertaken for commercial and residential project under construction to exemplify the impact of covid-19 on construction projects. The project is scheduled for the commercial operation in 32 month of time. The project consist of commercial at ground floor and residential at first floor, the instruments required for this project are comprised cranes, concrete pumps, batching plant, ladders, transit mixer, excavator, welding machine etc.

Various impacts on construction work before and after lockdown period are as mentioned below ;

### I Impact on material prices

SrNo.	Material	Description	Price before lockdown	Price after lockdown
1	Cement	Ultra-tech OPC 53 Grade	290 per bag	320 per bag
2	Sand	Natural	3800 per brass	4100 per brass
3	Aggregate	20 mm	1700 per brass	2100 per brass
4	Bricks	4 inches width	3800 per 1000 no of bricks	5400 per 1000 no of bricks
		6 inches width	7500 per 1000 no of bricks	9200 per 1000 no of bricks
5	Steel	Tor fe500 Ductile	39000 per ton	54000 per ton
6	Concrete admixtures	Ultra-tech water proofing	275 per litre	330 per litre

## II. Impact on Labor Rate in INR per day-



## III. CONCLUSION

From the above study we conclude that covid19 pandemic is economic, social healthcare crisis that affected not only health of peoples but also all economic sectors since construction industry is an essential pillar of economy. From the case study we conclude that the material prices are increased by 10-20% after lockdown. As the migrant workers get migrated to their own places the labor wages also increases by 40-50%. Due to lockdown period all projects get extended their fore overall cost and completion time of project get affected. so to recover the situation preventive measure should be taken so it can minimize future loss

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