

## Impact of Covid-19 on Manufacturing Sector in India

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### ABSTRACT

*The first wave of COVID-19 outbreak resulted in shutting down an extensive number of sectors, including manufacturing, services, retail, and tourism. Manufacturing sector in India contributes approximately 20% to the GDP, and was already suffering long before the pandemic. The impact of the pandemic on the Indian economy is huge across sectors, in various scenarios of complete, protracted, and partial lockdown, and at various levels of capacity utilisation. In an optimistic scenario, India's economy could just manage a positive growth of 0.5%, but the 2nd and 3rd waves could result in a negative growth of 3–7% in 2022–23. The impact has been severe on, manufacturing and MSME sectors. COVID-19's likely impact (deceleration) on the industrial sector from best to worst case scenarios might be as low as 5.5 to 20%. This study aims to assess the impact of Covid-19 on Indian manufacturing sector during the period 2020-21 and, to suggest remedial strategies for progressing in the post-covid era.*

**Keywords:** Covid-19, Pandemic, Manufacturing sector, Indian Economy

### 1. INTRODUCTION

After the great depression of 1930s, the COVID-19 pandemic has probably given the biggest blow to the world economy. The corona effect has harmed the manufacturing industry in a variety of ways. As the COVID-19 pandemic worsens, manufacturers are facing continuous downward pressure on demand, production, and revenues. Furthermore, many are experiencing cash-flow liquidity issues as well as difficulties managing debt commitments. As a result, depending on how powerful and successful any government intervention and support is, and how long the COVID-19 issue lasts, some manufacturers may struggle to recover – and perhaps declare bankruptcy. Because the majority of the business's workers is involved in on-site occupations that cannot be done remotely, the industry is particularly vulnerable. Manufacturers should also be generating social distancing



in workplaces that are normally worker-dense, given the nature of the sector (e.g., manufacturing plants, material movements, warehouses, and logistics, etc.).

### **1.1 Objectives of the Study**

The main objective of the study is to find out how Covid-19 has affected the manufacturing sector in India, what are the main prospects of manufacturing sector and how the industry thrive in post-covid era.

### **1.2 Methodology of Research**

This study follows exploratory methodology required for a qualitative research. It involves secondary data collection from various publications available on internet and other sources.

### **1.3 Development of Framework**

In India, there is good availability of competent quality human resources. Technology can help achieve economies of scale while also enhancing quality. Many programmes, such as the implementation of ISO9000/14000, 5-S, Lean manufacturing methods, TPM (Total Productive Management) practises, and so on, are aimed at improving quality. The number of Indian companies that have won the Deming prize (32 out of 72 companies outside of Japan have won this prestigious accolade since 2000) is an evidence of this. The production process has become more competitive as a result of the deployment of appropriate technology. The manufacturing sector (particularly MSMEs) must equip with new technologies and modernise as a result of innovation and competition. This process is likely to be accelerated by COVID-19. The main challenge is to produce novel and personalised products on a regular basis while utilising the most advanced process technology (Singh et al. 2007). The major challenge is to continuously provide innovative and customized products using the best available process technologies (Singh et al. 2007). According to Ajitabh and Momaya (2004), a firm's competitiveness in such an environment is determined by its capacity to supply goods and services more efficiently than competitors. It's also worth noting that competition practise, research, and literature are still in their infancy, with a lot of room for development, particularly in India (Momaya 2019).

## **2. IMPACT OF COVID-19 ON MANUFACTURING SECTORS IN INDIA**

### **2.1 The manufacturing sector in pre-COVID times**

The fact that the automobile sector accounts for 50% of the manufacturing sector's contribution to the GDP paints a clearer picture. Mainly because, the auto sector had reported a 15% drop in sales and over 10% fall in production even before the pandemic. The problems are mostly attributed to the slowing economy, poor demand, and disruptions in foreign supply lines created by China's lockdown.

### **2.2 Challenges of the manufacturing sector during the lockdown**

The Purchasing Managers' Index (PMI), a key indication of current and future business conditions in the manufacturing sector, demonstrates this. The index fell from 51.8 in March to 27.4 in April 2020, lowest in over 15 years. For further information, an index reading of greater than 50 indicates manufacturing expansion, while a rating of less than 50 indicates manufacturing decline. First, a labour exodus returned home owing to a lack of



money and insecurity. Second, all manufacturing had ceased, with the exception of rice grinding. Even in this area, production has decreased by half. Following then, the flow of raw resources came to a standstill. Furthermore, manufacturers of critical goods encountered difficulties in obtaining raw materials produced by non-essential enterprises. Finally, during the lockout, demand fell and the supply chain was disrupted. Let us take some manufacturing sectors like pharma manufacturing industry, Food and beverage manufacturing company, Paint and coating manufacturing company, Specialty chemical manufacturing company and personal care & cosmetics manufacturing industry.

### **2.2.1 Pharma Manufacturing Industry**

The Indian pharmaceutical industry is a vital part of the global healthcare system, saving millions of lives each year. However, it, like all other industries, has been impacted by COVID-19, which has resulted in a variety of adjustments. Supply networks in the pharmaceutical industry have come to a halt. Raw material prices have risen sharply due to a scarcity of supply, production plans have been disrupted, facilities have been closed, and shipping costs have skyrocketed in most nations. The impact on the Indian pharma sector is typically evident, given that most raw materials are procured from China, the epicentre of the outbreak.

With the movement of people and goods restricted amid lockdowns, manufacturers of generic drugs are unable to launch products or conduct clinical trials. As a result, drug filing deadlines have been pushed back. Furthermore, cash flows from new generic drug launches have either been wiped out or delayed. Indian drug manufacturers face other challenges as well. Only when the US FDA has inspected and approved an Indian pharmaceutical plant can it sell pharmaceuticals in the US. Due to the ban on international travel, inspection is ruled out, making it hard for Indian pharmaceutical companies to sell in the United States and other foreign markets. The epidemic has also pushed contract and captive generic medication producers to postpone the launch of new products.

When giant global pharma corporations delay product introductions and clinical trials, the drug businesses from which they get ingredients bear the brunt of the blame. Low sales, therefore, pose another major concern for Indian drug manufacturers supplying to international pharma giants. Some Indian pharmaceutical plants were forced to close when workers tested positive for COVID-19. In short, production timelines have changed drastically.

### **2.2.2 Food and beverage manufacturing company**

Companies involved in the processing of raw food materials, packaging, and distribution of prepared and packaged foods, as well as alcoholic and non-alcoholic beverages, make up the food and beverage sector. The rise in the number of on-the-go consumers and increased consumption of ready-to-eat food were the key drivers of the food and beverage industry's expansion prior to the COVID-19 pandemic. In addition, the food and beverage industry's growth was aided by rising population and per capita income, as well as changing lifestyles. However, the shutdown of restaurants and other seating spaces is one of the major factors affecting the food and beverage industry following the pandemic.



### **2.2.3 Paint and coating manufacturing company**

COVID-19 has been the greatest disruptive force in recent memory for the global paint and coatings sector. Shutdowns have had a negative impact on the paint and coatings industry and its activities. On March 25, when India had reported only 500 cases, the country went into what was one of the strictest lockdowns in the world. This first set of constraints was in effect until April 14th, and it was then extended four times, each time with incremental relaxations. Between March 25 and May 17, 2020, the country went on one of the harshest lockdowns in the world, with nearly the whole country locked down for more than 50 days. Barring essential services, almost all other commercial and industrial activities were shut down during this period. All paint manufacturers in the country were forced to halt production for more than 30 days. Following that, limited production was resumed in stages at several of the manufacturing units. Capacity utilisation in the Indian paint and coatings industry, on the other hand, has remained low to date.

### **2.2.4 Specialty chemical manufacturing company**

Despite the fact that manufacturing has been authorised in certain important sectors such as medicine and related industries, the Indian chemical industry has faced issues such as manpower shortages at plant locations, product handling/loading, and transportation shortages. A sizable portion of the global workforce works from home and communicates via digital methods. This is expected to continue, becoming a trend. The reliance on automation in warehousing and manufacturing is anticipated to grow, and global MNCs may rethink their existing supply chain reliance on China, potentially boosting India's chemical industry. Developed countries are also anticipated to look into other sources for critical medical equipment and pharmaceuticals. The Indian chemical sector must also search for ways to reduce costs and grow into value-added products. If done right, India could benefit as a manufacturing hub in the mid-term

### **2.2.5 Personal care & cosmetics manufacturing industry**

The personal care & cosmetics manufacturing industry that can be classified into skincare, haircare, fragrances & perfumes, and other cosmetics, has experienced a downfall in sales during the COVID-19 outbreak due to the closing of offline stores at various locations across the globe. Many countries still being in the lockdown mode across the globe, personal care & cosmetics manufacturers have had to shut down their production units due to labor shortage, and reduced demand, with finding markets where goods can be exported to, becoming hard. The personal care and cosmetics business, like other industries, has been adversely impacted on the supply chain front. The primary cause of this issue is a halt in factory activities in China. These trends are likely to continue to have an impact on the sector in the near future, with e-commerce giants like Amazon and Flipkart suspending the supply of non-essential products (including cosmetics).

## **3 PROSPECTS OF THE MANUFACTURING SECTOR POST COVID-19**

Overall, analysts believe that businesses that produce high-quality items, have skilled labour, high efficiency, and well-maintained equipment will be in a better position to resume operations following the lockdown than those that do not. Manufacturing companies may still have to deal with the following difficulties.



### **3.1 Severe workforce crunch**

Businesses are resuming operations in most parts of India now that the lockdown has been lifted. They are, however, facing a serious labour shortage as a result of the return of millions of migrant workers. Furthermore, the locals may not be well-suited or skilled for some vocations. The motor, engineering, and textile industries, which rely heavily on outstation labour, may bear the brunt of the heat. Fortunately, state governments are loosening interstate travel prohibitions, and several major corporations are setting up travel arrangements to bring back workers.

### **3.2 Uncertainty looms**

Nonetheless, in the absence of a COVID-19 cure or vaccination, uncertainty may outweigh all efforts to reintroduce the labourers. Inter-state travel facilities may not be enough to persuade workers to return to work after experiencing the intense burn of lockdown. Besides, will the labourers be able to find shelter if they agree to migrate to other states. Fear psychosis is at work here.

### **3.3 Piling expenses and low profitability**

Businesses may not be in a position to begin operations soon when limitations are eased since they are cash-strapped. Even if income/profits dropped dramatically, businesses incurred fixed expenses such as rent and labour. When you factor in the expense of machinery upkeep, it's easy to see why manufacturing companies wouldn't be able to immediately resume operations and earn revenue following the lockdown.

### **3.4 Safety above all else**

However, the safety of the personnel is the most vital thing to consider. Didn't COVID teach us to appreciate human resources as one of the most important lessons? While certain manufacturing companies have been very aggressive in instituting safety measures such as maintaining physical separation and equipping staff with masks, hand sanitizers, and gloves, this must continue. Businesses may struggle to survive and expand without these safeguards.

## **4 HOW CAN THE MANUFACTURING SECTOR THRIVE IN THE POST-COVID ERA?**

Regardless of the obstacles that the manufacturing industry faces, companies can still rise to the top and redefine themselves.

### ***4.1 Manage fixed costs***

Manufacturing firms can improve their output while lowering fixed expenses such as direct material, inventory keeping, and manufacturing overheads. They can also improve their labour efficiency by reducing non-value-adding operations and automating important processes.

### ***4.2 Add new items to the product mix***

Due to the pandemic, demand for specific items such as personal hygiene and healthcare increased dramatically. Businesses can take advantage of this by expanding their product offerings.

### ***4.3 Offer incentives***

Experts also believe that, in addition to special transportation, workers may require additional incentives to return to work. To entice labourers to return to work, they propose offering appealing monetary compensation and incentives, COVID-19 insurance, and inexpensive housing. Furthermore, a crucial lesson that firms may



take away from the current scenario is the importance of maintaining enough financial reserves in the future. This would help them avoid layoffs while simultaneously providing incentives to workers.

#### ***4.4 Boon in disguise***

COVID-19 has also taught businesses a valuable lesson on survival. Many businesses have realised that having all of their manufacturing units in one location is inefficient. Instead, businesses can distribute their manufacturing units among a few locations so that they can continue to operate even if one unit fails. Even before COVID-19, that is, in mid-2019, 200 American corporations were considering to shift their manufacturing divisions from China to India. However, anticipating fast action in this area would be premature at this time, because the US and other economies may relocate manufacturing activities to address their own employment problems.

#### ***4.5 The role of Atmanirbhar Bharat Abhiyan***

Prime Minister Narendra Modi promised a massive economic stimulus package around Rs 20 lakh crore to help India become self-sufficient. The mission was dubbed "Atmanirbhar Bharat Abhiyan" by him. Several programmes introduced as part of the package promote "Make in India" and the usage of native goods rather than imported commodities from other countries. The Rs 3-lakh-crore collateral-free loans granted to MSMEs to assist them restart their operations is one such scheme.

#### ***4.6 Beyond being Atmanirbhar***

However, some experts believe that this potential offers more than just self-sufficiency. They propose bringing 'Make in India' to a global scale. Apple and Lava International are both interested in relocating their production operations to India. To take advantage of the production-linked incentives (PLI) system, Apple wants to relocate around a fifth of its production from China to India. What's the harm in that? After all, the PLI provides a 4% to 6% incentive to enterprises who use Indian-made items. Lava, on the other hand, is considering moving its export design and manufacturing centre from China to India.

#### ***4.7 Potential demand for processed goods***

India exports rice, milk products, tea, honey, and other processed organic and horticultural products in large quantities. The government had selected 21 agricultural goods that India could export even before COVID, when China was slapped with trade restrictions. With the world evaluating China's imports of processed and agricultural goods, India has a golden chance to seize. The administration has taken a step in this direction by introducing the Atmanirbhar package, which includes a plethora of initiatives.

## **5 CONCLUSION AND SUGGESTIONS**

All the major sectors of the process manufacturing industry are suffering in the time of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> wave of COVID-19 pandemic. Reduced demand, and disrupted supply chain have been their major headaches. However, with challenge comes opportunity. Once the dust settles, process manufacturers will realise that staying relevant will require them to innovate and adjust over time. The need of the hour though, for them, is to:

- Introduce worker safety measures, along with best hygiene & sanitization practices, at work



- Revisit their sourcing strategies, and line up alternate suppliers
- Rationalize their product ranges
- Evaluate supply chain agility, and make it more resilient
- Review their crisis or emergency response plans
- Optimize & streamline e-commerce & distribution networks
- Revisit their pricing, and promotion strategies

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