



# COVID 19, ITS IMPACT AND AFTER EFFECTS ON THE MANUFACTURING SECTOR

by

**Dr. L. Chandrakala, Asst. Professor, GDC, Uppal  
D S Ravi Kiran, Ph.D. Research Scholar, Dr B R Ambedkar Open University**

The Covid pandemic led to multiple changes in the mindsets of the public, the entrepreneurs, the governments, and the overall business fraternity. The manufacturing sector witnessed a revamp globally and changed the overall dynamics. The future scenario of the business environment undergoing tremendous change of the future of the business. The business models are evolving based on the contemporary environment, be it the online or the offline or the work from home model (Hybrid) and the manufacturing sector is adopting to working with full or half the staff capacity actually intended. The manufacturing sector is diverse, however the severity of the pandemic's impact varied considerably depending on several attributes. The research paper intends to highlight attributes of the manufacturing sector companies setup over the last few years in the vicinity of the Greater Hyderabad. This paper intends to understand, analyse impact on attributes like employment, revenues, government SOPs, profitability cashflows etc. laying emphasize on the online or the hybrid model of working, keeping in view the challenging times along with a focus on the after effects and dynamic changes in the manufacturing sector.

*Keywords: Covid 19, Manufacturing sector, Business models, WFO, WFH or Hybrid models of working.*

## **Introduction**

Coronavirus put a prompt end to numerous business exercises across the globe, as a few nations had closed down their ports, air terminals and homegrown transportation while forcing cross country lockdowns, prompting an aggravation in business and common life. The lockdown in India affected all business models, manufacturing sector, and the service sector globally. India went to extraordinary lengths to control the spread by forcing perhaps the longest lockdown on the planet, to pad the scant accessibility of medical services. The monstrosity of the lockdown impacted manufacturing sector and supply chains likewise, disturbing the overall economy.

While India recuperated decently from the primary wave, the subsequent wave has hit the country the hardest as far as fatalities, it has prompted further State-wise imposed lockdowns, affecting the economy while setting up a few limitations on key organizations. This was trailed by a log jam in labor-serious enterprises including producing, land, development, and framework, because of the diminished work accessibility during this period. With learnings from the main wave, the nation utilized its insight to battle the impacts of the subsequent wave. Key lockdowns and backing off of the equivalent have assisted various States with checking the spread of disease while furnishing the business with extensive administrative drive to reestablish predictability. With proactive measures, the nation is gradually and consistently battling against the extremist second wave, India's job in the post-COVID-19 period, especially in the modern area, is a subject of great interest, trust, and theory to the world.

## Effect of the 1<sup>st</sup> and the 2<sup>nd</sup> wave

**The 1<sup>st</sup> Wave:** India's manufacturing sector had undergone through different periods of advancement lately. The sector added to roughly 16-17% of the GDP, providing employability to about 20% of the nation's labor force. During the 1<sup>st</sup> wave of the pandemic, lockdown-forced limitation on the overall development of merchandise and individuals affected labor force limit and upset supply chains, carrying virtually all manufacturing activities to a near stop. The manufacturing business impacted in more ways than one because of the pandemic prompting to low-scale activities, and ultimately, an adverse consequence on the overall production volumes. Over a period, this antagonistically impacted the turnover and income.

The partial and the lockdowns had both demand and supply-side effects on the manufacturing segment. On the inventory side, the restricted development of merchandise, administrations, and staff impacted the production activities of an organization. The slump in monetary movement and the general log jam underway caused work misfortune. These inventory impacts were additionally compounded because of the demand-based activities confronting issues like reduced cash-flows, reduced investments, and expanded vulnerabilities. During the pandemic, a few economies comprehended that broadening is a critical component in mitigating associated risks as many players relocated their organizations to other business centers. The Indian Government gave alleviation measures in the form of logistical help and support, under the Essential Commodities Act, and Covid-19 passes aided in facilitating the everyday tasks of numerous stakeholders. The circumstance improved over time and certainty towards the business viewpoint for production increased gradually and rose as a staged returning of the economy. An uplifting perspective was seen in the manufacturing sector post normalization of the 1<sup>st</sup> wave due to ease of norms from COVID-19 limitations and the continuing of regular employment in manufacturing plants. The global economical scenario led to a few organizations seeking alternative measures of supply (by the market giants like the Apple, Samsung, LG, Kia, Hyundai, Zoom, Hasbro, etc.) They held back to see the effect of the new advances taken by the Indian Government on the performance of the short, medium, and long-term manufacturing sectors. Nonetheless, with this recuperation and resulting steady returning of the economy, the nation surrendered to a second influx of the infection.

**The 2<sup>nd</sup> Wave:** A 2<sup>nd</sup> wave witnessed towards the end of the 2020 fiscal. The country's hopeful recuperation was pushed into additional vulnerability as cases expanded undeniably more quickly than the 1<sup>st</sup> wave. The casualty rate among people increased as few states implemented curbs and curfews to relieve the death toll in the subsequent wave. Medical services in the nation confronted a complete breakdown as residents ran helter-skelter looking for beds, oxygen chambers, and other health related devices and medicines to endure the subsequent wave. This inescapable annihilation further ingrained dread among the residents as new variations ended up being more strong prompting a mass breakout in the Tier I urban areas and a surge in the Tier II and Tier III regions, prompting people being restricted to their homes, more out of decision and dread. The quantity of individuals working during the subsequent wave was a lot more modest when contrasted with those working during the 1<sup>st</sup> wave, which meant more slow recovery of the economic situations. With lockdowns gradually being reimposed, States permitted specific relaxations and consents to downplay the financial effect.

Retailers and small businesses endured the worst part of the underlying effect of the 2<sup>nd</sup> wave as they confronted liquidity crunches and extended working capital. It was expected that post the 2<sup>nd</sup> wave balances out, organizations will witness 70% of pre-Coronavirus income levels. Medical infrastructure was the most affected as fundamental issues prompted a failure to oblige the remarkable ascent in cases in the 2<sup>nd</sup> wave, prompted fortifying of emergency clinic networks across the nation and a unique spotlight on computerized wellbeing through the National Health Mission and National Digital Health Blueprint, bringing about incorporation of medical care administrations to even the most inaccessible areas of the country.

While the 2<sup>nd</sup> wave relied upon to disturb financial development, the general effect relied upon to be moderate as organizations and states changed their businesses and business-cycle to the COVID circumstance pervasive. The manufacturing PMI stayed unaltered in April 2021 contrasted with March levels of 55.4. Nonetheless, eight month lows were seen in manufacturing orders through April and May. Fuel demand instability added to it, and Petrol declined by 6.3%, while demand for diesel declined by 1.7%. A couple of auto OEMs recorded a business decline of almost 9% in April in contrast with March. As the sector witnessed a moderate effect, economic sector recovery

was expected to be normal, and not V-shaped. Manufacturing sector is relied upon to get movement in the 2<sup>nd</sup> quarter after the core area creation starts to arrive at the degrees of early-March 2020.

A significant immunization drive with mass creation and organization is in progress in India with majority of the populace totally vaccinated by 1<sup>st</sup> dose and second dose and the government focusing on immunization of the below 18 years age-group to be vaccinated. Besides, the financial impetus given to the vaccine makers guarantee a splendid future as far as a completely inoculated populace, which will altogether add to more significant levels of usefulness. Chances to redesign wellbeing foundation from the government and the private players have been reliably ready to go alongside quickly scaling framework for clinical benefits in inaccessible segments. A financial boost bundle is normal from the national bank to give help to private companies and backing administrations. Manufacturing sector relied upon to get in action in the 2<sup>nd</sup> quarter after the core segment production and arrive at the early-March 2020 levels. Organizations that have consolidated their business and coordinated their stockpile chains/processes are probably going to have expanded open doors after the nation recuperates from the 2<sup>nd</sup> wave and it is anticipated that enough of a chance should emerge for those substances expecting and arranging their business endeavors in accordance with the governments' arrangements for a solid economic recovery.

India enjoys an unmistakable benefit as far as its labor force, strategy, and framework. In any case, to assemble certainty among firms globally, the nation should conquer specific obstacles that would be needed to address the short and long-term, particularly rebuilding business endeavors post the 2<sup>nd</sup> wave. The 2<sup>nd</sup> wave had turned into the favouring India restructure for some economies as an manufacturing hub over China, with many State explicit motivations for migration of such organizations because of the underlying phases of the pandemic. Be that as it may, the continuous 2<sup>nd</sup> wave has brought about a log jam of these open doors and put Indian resurgence on the back foot. Numerous plans across different areas have been briefly suspended also. With India currently zeroing in on complete recovery, there are probably going to be a few potential open doors for few players to use the worthwhile Indian market before very long, as the nation runs after a full economy recovery. Immunization and liquidity are at the very front of the Indian battle against the 2<sup>nd</sup> wave, which are basic to assimilate the current situation. The country is preparing for the broad dispersal of the COVID-19 inoculation for its staff of medical services, sanitation, and the municipal and focus gradually on the below 18 age-group. The quicker the immunization is completed to all labor force, the higher the likelihood that the labor force will continue their standard working style, prompting financial and business recovery in India. India likewise needs to work on its present framework to help potential firms wanting to move their manufacturing sector bas to the country. Creating framework, incorporating to further development of the road infrastructure, parkways as well as the arrangement of a steady power supply and utilities, is quintessential to work with a climate of world-class manufacturing standards.

- In the Union Budget, FY 2020-21, the Indian government apportioned USD 3 billion for reforms in the power, renewable-energy, and the infrastructure sectors.
- The Indian Government is proposing to provide around USD 9.6 billion to rebuild debt repayment for the power area as an additional aid. USD 23.4 billion was apportioned for the transport sector, that included investments in building of roads, highways, railroads, transportation, ports, and aviation.

The Indian manufacturing sector overcame all difficulties presented of the pandemic by its digitalization of most of the operations to the possible extent, and attained government regards with respect to its long-term woes and by embracing and developing innovations in stages other than prudently using the available assets. Thus, a speedier bounce back from the eventual outcomes of the pandemic, the nation's manufacturing PMI extended for a fourth successive month, ascending to 55.9 in October with administrations PMI leaping to 58.4 as against 55.2 in September, the quickest ascend in 10 years, as per IHS Markit Survey. It is anticipated that the manufacturing sector should work in full stream in the approaching quarters. The nation has set an aggressive objective of \$ 400 billion product trades in 2021-2022, feasible only when the government and the companies work together. The turnover of the capital goods industry is relied upon to stretch around USD 115 billion by 2025, as per projections of the government. With an aim to support the manufacturing sector, the Government relaxed excise duties on factory-gateway tax, capital goods, consumer-durables and the automobile segments.

India's manufacturing sector over time changed into one of the great development regions with critical worth change through domestic penetration, grabbing export opportunities of the global players. The manufacturing

sector's GVA at current prices assessed to be USD 348.53 billion according to the second advanced estimates of the FY21. Several organizations globally, have either set up or are currently setting up assembling units in India, pulled in by the wide range of available resources and the market possibilities. Indian Government has approved Production Linked Incentive (PLI plans) across different industrial sectors like the hardware, drugs, telecom, automobile and ancillary, advance chemistry, textiles, etc. to make national manufacturing champions and create large scale employment, pushing ahead and create requirement for making impetus drivers to support the upcoming era of development in manufacturing segment, bringing in the manufacturing sector's incited development to the economy and by and large the existing situation is positive and northward.

India's job in the post-COVID-19 period, especially in the modern industrial era, is a subject of incredible interest, trust, and theory to the world. Numerous specialists globally, unequivocally accept that India will arise as one of the most favoured places for the manufacturing activities. To make that conviction a reality, the most reasonable technique for India is to upgrade its national-value-chain. Notwithstanding in the continuous 2<sup>nd</sup> wave of the pandemic, The nation exhibited innovation in pretty much every field inferable from the concentrated endeavors of the Government of India, organizations, and numerous other stakeholders. It is critical that the nation develops this to make a steady and feasible ecosystem, as well as an organized component for additional interests in the assembling business to return the economy on target as a USD 5 trillion superpower.

### **Manufacturing Sector Technological Trends:**

1. To stay competitive, manufacturers to serve customers with increased agility and act swiftly and more flexibly apart from recruiting the right skilled people,
2. Hybrid models of working conquered the traditional system of working models,
3. Digitalization gained ground with the entire ecosystem of manufacturing involving parts tracking, inventory management, logistics management, customer support – remote installation, monitoring, diagnostics and service being accepted and growing,
4. Operation, external and internal communication, shopfloor operation, machine maintenance tracking, meetings, discussions, training (anytime, anywhere, cost effective),
5. Usage of virtual conferences, webinars and related social media increased substantially and found acceptance for meetings, discussions, holding seminars, exhibitions and conferences, for both internal and external communication,
6. From the latter half of 2020 companies made swift moves towards Industry 4.0 and automation of traditional manufacturing and industrial practices,
7. Shopfloor automation is gaining traction in terms of sensor devices, capturing, monitoring and analysing data for enhanced productivity,
8. Sensors and data capturing is being deployed, early warning of machine failures for need based maintenance instead of periodic maintenance,
9. Robotics, with various applications for enhancing productivity, safety and quality is being considered seriously by industries,
10. Thrust on data capturing and data mining for taking data centric management decision is transforming industries,
11. Companies also look to create a comprehensive and workable IT ecosystem to be flexible, scalable and adaptable to all its relevant requirements. Firms already tuned towards operating effectively with use of AI from product to plant to end user. Human-centred AI gaining popularity and moreover witnessing an increased investment in industrial Internet of Things (IIoT) to help companies become more competitive in the global manufacturing landscape.

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