

Covid Pandemic as a Black Swan Event and Its Impact on World Economies with Special Reference to India

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ABSTRACT

An event that is not predicted to occur or unexpected events are called Black Swans. Such incidents leave an important impression on the economic, political and social sectors. All these events are mainly included under the event of Black Swan such as both World Wars, the fall of the Soviet Union, the rise of Islamic fundamentalists, 9/11, the impact of the spread of the Internet, and the 1987 and 2008 financial crises and Russia Ukraine war so on and so forth. Covid Pandemic, which came in 2020, is also included under the phenomenon of Black Swan, about which no one had ever thought. Due to this pandemic, all the economic activities of the world had come to a complete halt for some time. Lock down was imposed all over the world; people were locked in the four walls of their homes like a prisoner. All the modes of transport and fairies were fixed in their places, roads, airports and railway stations became deserted. Educational institutions and all factories were locked. Due to this pandemic, the condition of the poor became worse and still continuing the same; the rate of unemployment also increased significantly in formal and in informal sectors. The people status declined significantly. Nations also faced economic crisis. This paper is an attempt to undertake an in- depth analysis of Covid pandemic and its worldwide socio-economic effects on different categories of people and different nations. The impact on employment conditions, small- and large-scale production activities, supply chain disruptions, international trade, health and human welfare, social security issues will also be looked into. It will also try to analyze remedial steps taken by different countries and their impact on their respective economies as whole.

Keywords: Pandemic, BlackSwan, Economic activities, Lockdown, Covid.

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INTRODUCTION

Generally swans are white in colour. But in 1697 a Dutch explorer saw a black swan in Australia. After which the belief among the people that the color of swan is only white ended. That is, unexpected events can also be possible, about which no one has ever thought or imagined. Recently, the great mathematician and trader Professor Nassim Nicholas Taleb has titled his book published in 2007 as "the Black Swan". In which he has mentioned the unexpected or occasionally happening events in the society, the impact of which leaves an indelible mark on the society. There are many examples of Black Swan which include World War I, The Great Depression, 1929, World War II, the Stock-market crash of 1987, the fall of the Berlin Wall on November 9, 1989, the rise of the Internet, the personal computer, the dissolution of the Soviet Union in 1991, and the September 11, 2001 attacks, and the 2008 financial crisis. The Covid-2019 pandemic is also considered as a

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black swan event. This incident was also an unexpected event for the world community. No one had ever heard of such an incident nor had anyone ever thought of it (Leonard,2023) .

The first case of corona virus was detected on 31 December 2019, when China informed the World Health Organization that pneumonia of unknown aetiology had been found in the city of Wuhan.

In our country the first case of Corona was found in

Kerala in January 2020. Gradually the outbreak of Corona virus spread all over the world. Seeing its severity, the world health organization declared it a pandemic on March 11, 2020. Now the question arises here that why WHO declared Covid-19 as a pandemic and not an epidemic.

Epidemic means an incident whose effect remains limited to a limited area, whereas the effect of pandemic is not limited to one area only but its spread is quite wide.

According to the Worldometers Organization, 69,85,951 people have died due to Covid-19 till December 11, 2023. The death toll in our country alone is 5,33,306 (Coronavirus Death Toll and Trends - Worldometer, n.d.) (Figures 1 and 2).

Impact of Covid-19

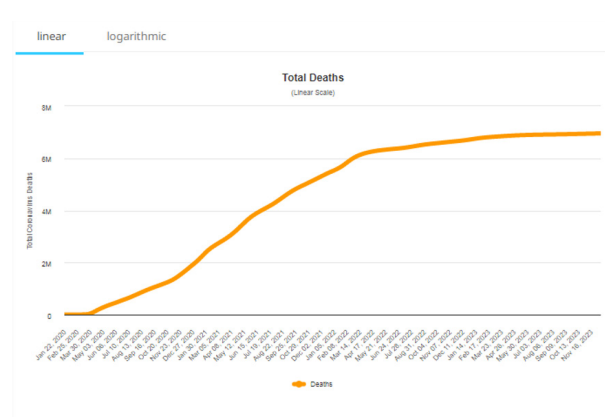
Complete information about the affects of Corona-19 may not be available yet. It is impossible to know everything about a pandemic in just 2 years. It will take time to get complete information about this. But a brief discussion has been presented about the information available so far on which Corona-19 has affected directly or indirectly.

Agriculture Sector

The role of agriculture sector holds an important place in the development of the economy. During the pandemic, when the lockdown was announced and many protocols were imposed. Initially, when all the hotels and restaurants were closed, the prices of agricultural products dropped significantly. According to the economic theory, goods related to agriculture come in the category of perishable goods which are relatively inelastic.

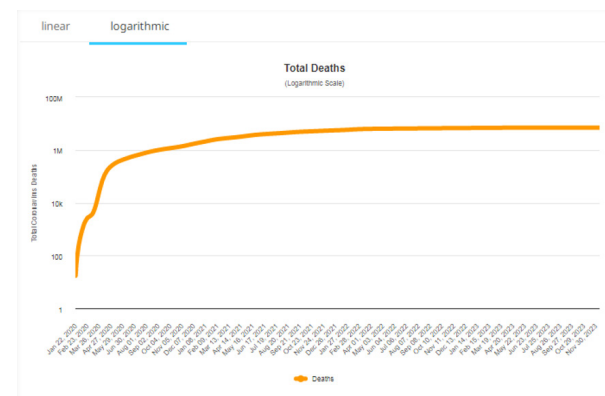
The movement of people was banned that affected the labor supply. In our country, agricultural work is mainly done through labor-intensive methods and the farmers were also facing high costs due to lack of skilled labor. There were some people who, in view of the horrors of Corona, purchased more than required which also increased the prices of goods. And later the prices of agricultural products increased significantly which also affected the standard of living of the people.

During the Corona, schools were closed and mid-day programs were closed, which had an adverse effect on the children of agricultural workers in the initial phase and they became victims of malnutrition. Later the government of India started planning "One Nation One Ration". Under this scheme, free food grains were started to be given to all the citizens, which is still being continued.



Source : Coronavirus Death Toll and Trends - Worldometer, n.d

Figure 1: Linear death trend during covid-19



Source : Coronavirus death toll and trends - Worldometer, n.d.

Figure 2: Logarithmic death trend during covid-19

Pandemic had also affected other agriculture related works including fisheries, poultry, milk production etc.

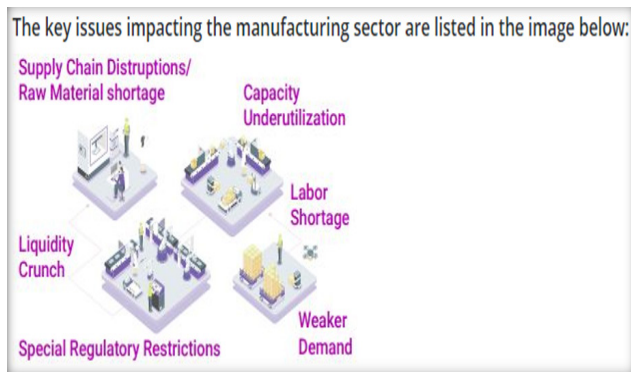
During lockdown, all modes of transportation were stopped and trade was blocked not only at the domestic level but also at the international level. The affect of which was also seen on export and import.

This situation was not only in India but in the whole world. Especially in European countries and the American continent, the condition was even more critical (Haque *et al.*, 2022).

Industrial Sector

Covid not only harmed the agriculture sector but also caused a lot of damage to the industry. In the agriculture sector too, there was a decline in production at the beginning of Covid but it improved later. And it was only the agriculture sector which had a positive growth rate, while the growth rate of all other sectors was negative.

As far as the industry sector is concerned, this sector



Source : (Impact of Covid-19 on the Manufacturing Sector in India - Operational Impacts and Strategy - India, 2021)

Figure 3: Listing of key issues in manufacturing



Source : (Impact of Covid-19 on the manufacturing sector in India - Operational Impacts and Strategy - India, 2021)

Figure 4: Index for industrial production (FY2018-2021)

suffered the biggest loss during the Corona period. Most of the industries are either in the city or else around the city. And the population of the city is dense. Therefore, the protocols of Corona were implemented more strictly in cities than in rural areas.

As a result of strict rules and regulations being implemented, the first wave of Corona did not cause much harm to the country, but its second wave caused a lot of damage to the country.

After the first wave of Corona ended, governments started relaxing the protocols. Due to which economic activities started again. And it seemed that the economies would once again come back to their pace. But the tragedy of the second wave ruined all the estimates.

Industrial work is mainly done through labor intensive methods in developing economies and capital-intensive methods in developed economies. But one thing is certain that both methods require labor. That is why it is said that "Labor makes other factors of production active".

In the industrial sector, there are some sectors which will not be able to function without labor, which include manufacturing, real estate, construction, and infrastructure etc.

This is the reason why the industrial sector had to face many types of situations during the Corona period. As the data shows, the contribution of industrial sector to the economy is about 16-17%. And this sector provides employment to 20% of the working people. When the lockdown was announced in the first wave of Corona, it greatly affected the supply chain. That is, the manufacturing sector had stopped its production. The result of which was that the turnover finally became negative (Impact of Covid-19 on the Manufacturing Sector in India - Operational Impacts and Strategy - India, 2021). This fact can be cleared through Figures 3-5.

To reduce the impact of Corona, many firms shifted their business hubs to other places where the population density was less. Also, at the time of Corona, one more thing became clear that the economy should be diversified.

At the end of 2020, Corona once again started raising its head in what is known as the second wave of Corona. The speed of Corona in this second wave was higher than the first wave. The death rate in this wave was also higher than the first wave. Orders were again given to implement curfew and all Corona protocols immediately in all the states. In the second wave, so many people were affected by Corona that all the health facilities of the government started failing.

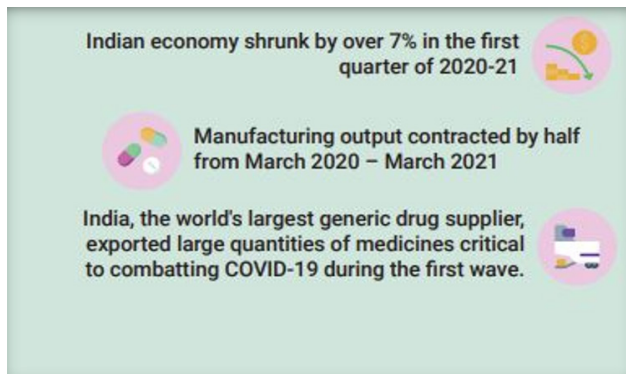
The severity of the second wave was more than the first wave. The virus in this second wave was more powerful than the first wave. During the first wave, many social workers were available in large numbers, but in the second wave, there was a shortage of workers.

The second wave broke the back of the economy. Especially the conditions of small businesses became even worse. On the one hand, they had to face liquidity crunch and on the other hand, they also had to face the problem of working capital.

The second wave made one thing clear that the government should also improve the health facilities. Keeping this in mind, the government started the National Health Mission. Due to which many people benefited during Corona.

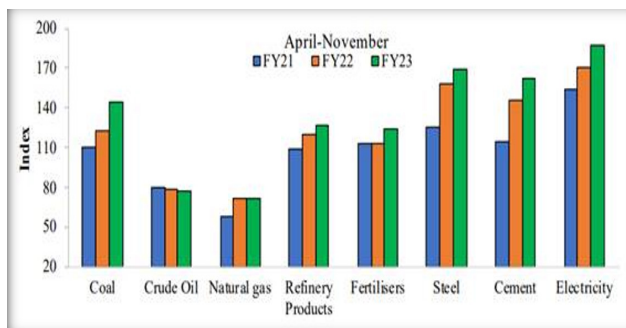
During the time of Corona, there were many restrictions on traffic due to many protocols which also reduced the demand for petrol and diesel. One of the biggest problems with the manufacturing sector was that even the solution of work from home was not working in it.





Source : (Impact of Covid-19 on the manufacturing sector in India - Operational impacts and strategy - India, 2021)

Figure 5: Trends on Indian economy during Covid (2020-2021)



Source : Industrial sector gross value added (Gva) Rose by 3.7% in first half of FY23, 2023

Figure 6: Trends on recovery of Indian economy during FY21,FY22 and FY 23

The fatality rate being very high in the second wave, despite the decline in this wave, the economy was not able to recover the “V” shape which was visible at the end of the first wave.

When the Government of India started vaccination on January 16, 2021, as people became vaccinated, the government started giving relaxations in its protocols and restrictions. After that the economy gradually picked up its pace again which is clear from the given Figure 6.

Service Sectors

Corona had caused the most damage to the service sector. In today’s communication era, Global Village is talked about; it means that in today’s time distance has no meaning no matter how far away it is. Technology has made today’s life very easy.

Information technology played a very important role during the time of Corona, that is, during the pandemic, information technology and social media acted as a shield. The responsibility of making all the protocols

given by the government available to the public was entrusted to this department. During the pandemic, when all the schools and educational institutions were closed, online classes became popular. At that time the importance of information technology was understood. Also the government used the Department of Communication and Technology not only for education but also for entertainment of the people. The government decided that Ramayana and Mahabharata will be telecast again. Due to which people will not only be entertained but will also be able to purify their thoughts from Ramayana and Mahabharata. During the time of Corona, everything seemed dark to the people. At that time, Ramayana and Mahabharata infused a power in the minds of people. So that negative feelings can be reduced in the minds of people and positive feelings can be developed.

Corona also affected the cinema world a lot. At that time all the work in the film world had come to a standstill. Due to which there was a significant decline in the income from the cinema industry, all the multiplexes were closed, which had an adverse effect on the revenue of the government.

As far as transport facilities are concerned, this might have been the first incident when all modes of transport were closed. Railways, stations, airports, ports and bus stands were all deserted.

Talking about social services, the trend of online trading and online payment has increased a lot during the time of Corona and even after that. The culture of work from home also came into practice during the time of Corona which is still going on in some sectors. During the time of Corona, the health sector worked day and night. Doctors and nurses risked their lives to treat patients. Corona infection was very dangerous in which many doctors and nurses lost their lives, yet they served the public by risking their lives. One thing that came to light during the time of Corona is that our health facilities are still not strong enough. Therefore, the government should promote investment in the health sector by both private and government sectors. So that any pandemic that may occur in the future can be faced easily.

The tourism industry suffered the biggest blow during the Corona period. Due to the sealing of the borders of the countries and the imposition of lockdown at the domestic level, the movement of national and international tourists had almost stopped. This is shown in Figure 7:

The government definitely gets direct revenue from tourism. Apart from this, other people also get benefit from it, especially the people working in the



Source : India, 2024

Figure 7: Trends on International tourism receipts

unorganized sector. The hotel industry was badly affected due to the closure of tourism. People had taken loans from banks for the construction of hotels, the interest on which they were unable to pay on time. It is true that the government had stopped interest payments at the time of Corona. But still it had an adverse impact on their income and standard of living (Xiang *et al.*, 2021).

Research Objectives

- To explore the dimensions of Black Swan Event like Covid-19.
- To analyze the covid pandemic as a black swan event and its impact on world economies with special reference to India.

RESEARCH METHOD

Exploratory cum descriptive design has been adopted. Data base like Google scholar, Web of Science, Dimension AI etc. has been extracted to formulate study backgrounds and general findings. This paper is based on conceptual linkages of variables dominating the world economies during Covid-19.

FINDINGS AND DISCUSSION

The study highlights that how as a crisis covid affected the various sectors of world economies like agriculture, service and industrial sectors. The new coronavirus (Covid-19) has been a significant worldwide public health crisis that has caused immense sadness in numerous lives. The global ramifications of its impact are still being revealed. There is currently a significant deceleration in the global economy (Antipova, 2020). This study articulates the sequential happenings during the covid-19 pandemic. In agriculture sector,

Global trade was halted, posing a significant risk to the majority of countries that rely on farm exports. Despite government initiatives, the farm trade remained stagnant throughout the lockdown period. Export and import limitations on agri-commodity were observed in major economies. Only a limited number of economies implemented import restrictions as a measure to contain the spread of the virus (Ranjan *et al.*, 2022). In terms of industrial performance, in a study, it has been projected that the Indian economy would see a growth of 0.4% in the current calendar year of 2020 under the most realistic circumstances. However, in the worst-case scenario, with 50% overutilization of public sector and defence services (PAD), the economy may face a negative growth of almost 3%. These data show the intensity and effect of crisis on sectoral performance in India during and post covid interventions (Sahoo & Ashwani, 2020). In this study, Indian service sector and global service industry has been elaborated properly Industries such as education, health care, gym and tourism have experienced a significant impact due to limited or complete closure of services to the public. The government-imposed restrictions on e-commerce platforms, allowing them to operate with numerous limitations, only providing essential goods. In response, service providers have improved their offerings by implementing contactless deliveries to customers' homes. These changes have led to a substantial increase in e-payments, reaching billions of dollars in the months following the initial lockdowns (Bharathi *et al.*, 2021). In this way, it has been rightly attempted to explore the factors inherited to core sectors of economies in the world by rooting it to rapid growth and development of a particular economies with special attention to Covid-19 people.

CONCLUSION

Covid-19 shook every sector of the economy. People are afraid to even remember that time. There was so much fear among the people that even their family members were afraid of coming from outside. Due to Covid, the growth rates of agriculture, industry, social services all had become negative. Information technology helped the economy a lot during the time of Covid. While Covid caused great damage to the economy, this pandemic also provided an important lesson to the people. During the time of Covid, people were being advised to remain clean and not to go out unnecessarily. Since people not going out unnecessarily and transportation were being stopped, environmental pollution had reduced for some time. That is, Covid has once again proved that "God resides in cleanliness."



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