



## Impact of Covid -19 on Indian Agricultural Exports

Divya Reddy Bakka

Supriya Bathini

University of Delhi  
BA (Hons) Economics

### Abstract

The Covid-19 crisis shocked the world economies. The first case of Covid-19 was reported in December 2019 in Wuhan, China, which is known as a major transportation hub of China. Many countries have banned the import and exports of the country. As the pandemic started its spread, many experts feared that the global food supplies may run short in near future. Especially if the supply side is disrupted. The pandemic also adds uncertainty to the business operations. Therefore it's important to understand how the pandemic affected the food supply and market given a special reference to India. In the study, we look over the impact of the Covid-19 on the agricultural exports in India. We found that although on average farm businesses experienced a decline in exports at the initial stages, exports of some agriculture-based products especially grains and oils held strong and even grew, leaving the essential demand for the staple food constant. It's quite surprising that exports of medicinal herbs also saw a huge rise over the pandemic. Although, exports of less essential food sector involving mushrooms, other fungal and horticultural produce saw a drastic decline in the demand.

**Keywords:** Covid -19, World economy, Supply Side, Pandemic, Agricultural exports, Business operations, Medicinal Herbs, Horticulture.

Received 15 Oct., 2022; Revised 28 Oct., 2022; Accepted 31 Oct., 2022 © The author(s) 2022.

Published with open access at [www.questjournals.org](http://www.questjournals.org)

### I. Introduction:

The outbreak of Covid -19 has created a global health crisis that has a great impact on the day-to-day affairs of our life. Amid our chaotic lives, the pandemic affected us in such a way that every individual was bound to their couches, giving healthcare the utmost priority in life. The World Health Organisation (WHO) has declared CoronaVirus as a Global Pandemic on 11th March 2020. With every Country imposing lockdown individually, there has been an immediate halt in the production of commodities which lead to a decrease in the supply chain, which indeed directly resulted in unemployment. After the rise of the pandemic, many countries all over the world made sure that they shut down their seaports and airports. All the import and export activities have been terminated, posing an end to trade logistics between nations.

India being a developing country, has seen a humongous rise in cases of Covid that has been reported and has imposed a complete lockdown for a few months resulting in the major social, economic and cultural living of the country. With the Agricultural sector being the one-fifth share of the Country's GDP. It had a great effect on the Indian Economy as well.

The Food and Agriculture Organization of the United Nations (UNFAO) quoted that among many third-world countries that are already under-nutrition, fragile, and vulnerable to healthcare, a 'crisis within a crisis' may develop, in which the current health problem will be soon outpaced by a hunger crisis. Like a vicious cycle, this virus curated the people from weaker sections weaker and vulnerable to food crises. The ongoing pandemic has affected all walks of life protecting the citizens of the nation, who are suffering from the disease and on the other side securing the lives of front-line workers has been the priority of the country. A significant 85% of agricultural households are landless, small, and marginal farmers. While these challenges, the measures of government affected 140 million households of farmers all over the nation and therefore impacting the economy of a very prime country of a developing world.

## **II. Background**

With the rise in Pandemic, there was a slowdown in the global economy, accompanied by a rise in unemployment and increased inequality. Unemployment leads to debts and makes the economy fragile. Many activities came to halt, gave rise to so many uncertainties not only concerning the economy and its growth but also to the livelihoods of people and the very future of every dreaming capitalist individual.

A continuous expansion of nationwide lockdown gave rise to a crisis in banking and finances. The extending factors that are dependent on exports are posed to a sharp decline in its demand and prices. Here sectors depend on imports of the raw material and its production consequently stopped. Allowances and remittances had seen a decline indeed making foreign exchange reserves decrease simultaneously this way the crisis about health evolved into an economic issue of global importance.

Many immediate challenges have been posed to the agricultural sector and suggested mitigation measures to enhance sustainable agro-based production in the post-pandemic period. Right after the country-wide lockdown was declared the finance minister of India declared 1700000 million worth of financial benefits with a prime focus of protecting the weaker sections (including farmers) from the obstacles they may face due to the pandemic. An increase in the wage rate under NREGS, a special scheme to provide grain allotments, cash and food assistance to beneficiaries are few schemes announced by the government.

Despite all the precautions, the continuous restrictions on the movement of people, and logistics, concerns have been raised concerning the negative side of Covid on the farm economy. That duration of lockdown was a busy Rabi season in countries like India, which grows major food crops like Rice, wheat, and various other cereals which were at a stage reaching maturity. This time is also when the farm produce comes to the market for the purchase, sale operations on behalf of government authorities.

Any small interruption to the supply chain of perishable fruits, dairy, fish, and vegetables has to meet the peak demand from a common man from both urban and rural living. The movement of migrant workers from parts of the country to their hometowns also leads to a huge burden, as a lot of crucial muscular force is required in this stage of operations of produce.

India's overall exports (merchandise and services combined) from April to February 2021 are estimated to be USD 449.64 billion, showing negative growth of 10.14 percent over the same period last year.

Exports in February 2021 were USD 27.93 Billion, as compared to USD 27.74 Billion in February 2020, exhibiting a positive growth of 0.67 percent. In Rupee terms, exports were Rs. 2,03,201.56 Crore in February 2021, as compared to Rs. 1,98,328.86 Crore in February 2020, registering a positive growth of 2.46 percent.

The commodities/commodity groups which have recorded positive growth during February 2021 vis-à-vis February 2020 are Other cereals (546.5%), Oil meals (245.45%), Iron ore (167.79%), Jute mfg. including floor covering (45.53%), Rice (30.78%), Meat, dairy & poultry products (26.43%), Cereal preparations & miscellaneous processed items (25.3%), Carpet (19.46%), Spices (18.61%). The commodities /commodity groups which have recorded negative growth during February 2021 vis-à-vis February 2020 are Oilseeds (-25.19%),Cashew (-18.62%),Fruits & vegetables (-3.33%).Cumulative value of exports for the period April-February 2020-21 was USD 256.18 Billion (Rs. 18,99,568.63 Crore) as against USD 291.87 Billion (Rs. 20,60,069.56 Crore) during the period April-February 2019-20, registering a negative growth of (-) 12.23 percent in Dollar terms (negative growth of (-) 7.79 percent in Rupee terms).

India's agricultural exports have been booming post-pandemic, while many sectors of the economy suffered because of the disturbance caused by the Covid-19 pandemic. As of October 2020, the Export of essential agricultural commodities in the first six months of the current fiscal rose by 43.4% from Rs 37,397.3 crore to Rs 53,626.6 crore in the same period last year.

"The economic impact of the COVID-19 pandemic is much lower on exports of agricultural goods as compared to other sectors. This can be seen from the fact that during June, almost 11 agriculture products have shown positive growth out of 14 key agriculture export products."

Currently, around half a million tonnes of Indian rice is locked up in the supply chains, while perishable crops are not being transported at all for fear of deterioration in delayed transit.

So many transport and logistics problems are faced during global exports with more complicated customs, duties, lack of container and shipping vessels. With more than four thousand crores being impacted in this situation.

A total of 292 million tons is the produced output of India's food grains in the year 2019-20, which is 2.4 percent higher than the previous year. As of March 1, 2020, a total of 77.6 million tons of rice and wheat is stocked up, wherein 21.4 million tons was required as of April 1. Under the scheme of Price Support the inflow of Rabi, Pulses from 2009-10 and 2013-14 were introduced into markets to ease the situation.

In wholesome countries, the world has enough stocks of farm produce, any restriction on exports is likely in reduction of the same availability for countries importing them. In India, the situation was far beyond comfortable with the acceptance of poultry farmers and other animal producers or growers.

On a contrary, there is a fall in both the demand and supply side which with every fall in demand automatically led to further fall in supply facing so many forward and backward loops in these factors.

In the early stages (Early April 2020) the World trade organization predicted that the manufacturing trade across the globe will see a drastic fall by 13 to 32 percent in 2020. According to CTAD there was a 3 percent fall in the first quarter of 2020 and expected a shrink in the economy by 26 percent within a quarter on quarter criteria. The barometer of WTO's goods, an index based on World goods trade and its extent, saw a fall from 95.5 in February to 87.6 in March 2020. This is a steeper fall. With the lockdown coming into effect this trade declined even sharply. Baltic Dry Index, one of the indicators which help in assessing the movement of raw material by water, has seen a sharp fall in grains and oilseeds as of April 2020. Out of many reasons stated this decline was identified by international organizations in the "The sliding prices of the bunker and small carriers facing low demand."

Ports being major hubs for movement of goods, the poor availability of workers for loading and unloading, poor availability of containers affected the trade adversely. During February and March 2020 many ships were piled up at the Chinese coast from where important goods like electronics will be exported causing a bottleneck for the trade movement. The complexity in the logistic chains of Indian exports is an unrevealed dimension in the case of transit and logistics of goods.

Exports of Merchandise goods in India fell sharply during March and April 2020, with RBI stating it as the worst slump in the past 3 decades. By April 2020 the exports of Indian goods have seen a drastic decline of 60.3 percent. The data about the extent to which the decline of agricultural exports from India faced may not be accessed. However many reports claim that the quantum of exports in this period was considered to be minimal. Many certificates of Phytosanitary (9700) were issued.

Major exports included sugar to Indonesia, Basmati rice to various Asian and African consumers, 50 thousand tons of wheat to Afghanistan, 40 thousand tons of grains in Lebanon under the government to government (g2g) arrangement. According to Tweets and Publications of various concerned government authorities, there was an export of 223.4 tons of mango, banana, onion, muskmelon, grapes, vegetables, 6000 tons of banana to the western Asia region. These numbers are precisely considered to be small relative to every other year.

According to Nikita Kwatra (March 15, 2020) reported that Indian rise in trade tariffs walls and lack of integration in the global production chains is the prime cause of India's share in the world economy merchandise exports being largely stagnant in around 1.6 to 1.7 percent ranging since 2011. This stagnation came into notice after a drop in China's share in manufacturing export over the past few years with a gap to be filled by other Asian countries.

According to Arun Singh, Chief Economist at Dun and Brand street India (DnB) that the performances of manufacturing and logistics sectors are quite interdependent "If there is a halt in manufacturing activity, what is there to transport?" he states. India having its own set of peculiar problems the pandemic made it further amplified.

Indian Logistics being an unorganized sector is a severely hit sector as players from this industry don't have any backup plan, recovery plan, or intermittent operation plan. This sector still is in lack of technological upliftment, modernized tools, and equipment. The supply chain of farm, health care sectors is a need of the hour, many additional developments in the deployment of customs personnel, faster clearances at airport courier and cargo terminals need to be more efficient. Stressing to the fact that India is a consumption-based economy most of the Indian manufacturing primarily feeds internal consumption.

### **III. Literature Review :**

Ben-xi-LEN(2020) examined the impact of Covid 19 pandemic on China's Agricultural Exports using firm level survey data. The objective of their study was to provide useful guidance and implications for Agricultural Business and policy makers on their Covid 19 mitigation efforts to navigate the pandemic. The study signifies the firm level survey conducted by the authors in China's one of the largest agricultural exporting provinces. The authors surveyed the firm's attitudes and strategies towards the pandemic. This study resulted in a guidance to business in steering away from economic recession and providing imperiations for the policy makers to drive towards the economic recovery, also helped in businesses and governments understanding the fluctuating market situations, identifying bottlenecks in global trade networks in response to changes in demand (Baldwin and Evenett 2020; Fiorini et al. 2020). The author used Kruskal-Wallis test, Ordered logit model and Bootstrapped quantile regression methods. In order to understand COVID-19's impact on different countries/regions exported, he used Kruskal-Wallis test comparing companies with products exported to one country/region to companies without products exported to that country/region. From their survey responses, they

further found that the most needed government assistance or support programs by the exporting companies were tax reduced. It may be important for future research to spot the feasible assistance that government or industry associations could offer to agricultural export companies. M.Kesavan (2020) studied the stagnation of Exports and Imports in India during Covid-19. He suggested that in India we should build capabilities of regional logistics companies to change with the change in demand at the short notice of time. The authors further state that the government should consider industrial productions and growth to encourage exports from India and the government needs to allocate funds for faster adoption of technology to digitize trade operations, implement new foreign trade policies. Sheikh Tanveer Hossain(2020) examined Impact of Covid 19 on the Agri-food Sector: Food Security Policies of Asian Productivity Organization Members. He highlighted the potential risks faced by agri-food in APO member countries due to Covid 19 pandemic outlining the immediate responses and policy actions each member country had taken at the time of writing to deal with threats to food security and prevent hunger through his report. The study concludes that the longer Covid 19 containment measures stay in place the more challenging the recovery process will be for ensuring smooth food production , accessibility to stable food and nutrition and trade among countries. Shruthi Agarwal, Anbesh Jamwal and Sumit Gupta(2020) examined the Effect of Covid -19 on Indian Economy and Supply Chain . This study reported about how Covid affected Global Manufacturing firms and their supply chain affecting day-to-day operations and forced thousands of industries to throttle down their assembly lines temporarily in the US and Europe and other developing nations like India. The author was in consultation with exports a total of 18 critical barriers were identified in which supply chain of the local level of India with multi criteria decision making approach. R.Ramakumar(2020) examined the Agriculture and Covid-19 pandemic: An analysis with special reference to India. This study reviews the global situation, the author placed special emphasis on developments in India while looking at four specific teams: production and stock of food, supply chains, prices and migrant work. He also highlighted the importance of self reliance in food production and pitfalls of free trade regimes. The perils of corporate-led, profit minded, large scale and multi national agri businesses have been highlighted as products of unbridled capitalist expansion in agriculture, which needs reform. Maryla Maliszewska, Aaditya Mattoo and Dominique van der Mensbrugge(2020) studied the potential impact of Covid 19 on GDP and trade. The quantitative findings of this paper are based on simulations using a version of Envisage Model. They started by considering the effects of Covid -19 on World Supply Capacity, Trade Cost, International tourism and demand switching under the “ Amplified Global pandemic” Scenario. The study also concludes that the global crisis requires a worldwide response and there may be a need for global collaboration not just on health, but also on trade, finance and macro economic policies.

#### **IV. Methodology :**

For this study, the quantitative research method was utilized. We studied different research papers, newspaper articles, interviews on how the Covid 19 pandemic has impacted the exports of agricultural commodities in India. Content analysis was done to infer the patterns of Agricultural Exports. We also collected data from the Ministry of Commerce website which showed the data related to exports of essential agricultural commodities and we have compared the percentage of exports of two fiscal years to show the change in growth of exports of agricultural commodities.

#### **V. Results and Discussions :**

The pandemic has interrupted some activities in agriculture and its supply chain in our nation. Due to less accessibility of migrant labor, harvesting activities have been majorly interrupted particularly in the north-western parts of the country. The prices of farm produce have declined due to the shutdown of restaurants and hotels. Meanwhile, poultry farmers have been badly affected due to the false information especially on the social platforms that hens being the carrier of the virus. The lockdown has affected farming activities and supply networks through input circulation procurement, harvesting, transportation, and processing of agro-based produce. Sowing, harvesting, and marketing of manufacturing crops were in crisis.

Especially considering India, disruption in the procurement of food grain by public-handling agencies, Shortage of truck drivers, shortage of workers in helping the harvest of Rabi crops, discrepancies in the collection of the harvest of farms by traders, complete lockdown in the retail sector, limited operations of AP, MC mandis, Difficulty in the transport of the commodities. Due to a shortage of fertilizers, pesticides, and other important inputs, the agricultural sector had been affected.

The prices received by the farmers went down due to disruption in supply and falling demand. To help us understand how our food supply chain works, how the pandemic affects it and how it may change in the future, we turned to two experts with NC State's Department of Agricultural and Resource Economics. Heidi Schweizer is an assistant professor and extension specialist who studies commodities markets, supply chain management and transportation. Kelly Zering, a professor and extension specialist. According to them there is a huge decline in demand for certain food grains such as meat, eggs, fruits, vegetables, and many other perishable

commodities. The trend in prices of retail commodities was differently marked for crops when compared to wholesale prices of the nation. At the same time prices alone do not provide information on the significance of supply shock and demand shock. The vulnerable section of the population found their access to food very difficult due to the rise in prices. The increase in the prices of food could imply a higher cost to the food of consumers but it need not necessarily mean that the farmers are being paid better prices.

Migrant farmworkers due to poor working and living conditions and denied access to social security systems that would benefit them have faced an oppressive system of labor control. Ports, logistic systems also suffered due to the lack of migrant workers for their immediate help.

The nationwide lockdown especially highlighted the gaps in the agricultural policy that has been followed over many decades. It indeed brought back the significance of self-reliance and food production.

According to an article from Hindustan Times, Agriculture and activities related to farming have now been included in the list of essential activities exempt from the lockdown, a senior official said, requesting anonymity. "The government has added one more amendment to its original notification for a nationwide notification. Agricultural activities are now exempt because it has been included under essential services now," an official said. Thus, Agricultural field workers, Agricultural operations, and farming agencies involved in the production of agricultural projects under the agricultural produce market committees, Inter and Intrastate movement of machinery involved in agriculture and manufacturing and packaging fertilizers and seeds are also not involved or excluded from the restrictions of lockdown.

The Government of India did direct both public and private sector seed producing companies to provide good-qualitative seeds for all the peasants for the further upcoming plantation season. An extra-Grain subsidy to eligible beneficiaries over 90 days. Liquid cash and Food resources have also been on a list to every other non-agro-based, temporarily employed laborers allocated under Many of those PM-based cares ( Prime Minister Citizen Assistance and Relief in Emergency Situations) reserved budget.

The Bureaucratic leaders make sure of continuous monitoring over the supply side and emphasize whether all these working would meet up the required demands of majorly low income and no income sections of people. The initiatives also include the unrestricted movement of vegetables, fruits, and other perishable goods, and rural level weekly and monthly markets will be following the idea of the sale of these goods. Many Government schemes like Mid-day meals. Anganwadi centers and other essential activities are extended not only to children but also to the household family of students. The government has transferred rupees per month to the bank accounts of 200 million women via the Jan Dhan financial inclusion program.

## **VI. Conclusion :**

The Covid-19 pandemic has pushed the many great economies of the world into recession. The direct or indirect impacts of the pandemic will be staying with us for many years along us. This report is an attempt to describe an analysis of the impact of covid'19 on the agricultural exports of the Indian economy.

This research brings out some important insights about the impact of the covid'19 pandemic on agriculture-based exports. On average, Farming businesses have experienced relatively lower exports during the pandemic, The oil and grain exports were still strong and even seen a slight increase, Showing the demand for essential commodities. Though, exports of medicinal herbs have seen an increase during the pandemic and after. Whereas the demand for products of horticulture and edible fungus-like mushroom has decreased significantly or sharply as these commodities were less essential to a common man.

Hence, Businesses dealing with these commodities as prime have faced more challenges during this period. We also found that small businesses had a great share of a negative or severe impact than the already established larger firms. So these small businesses needed the government's involvement for their upliftment the most than any other. The government of India has provided great assistance through many programs supporting exports with a reduction in taxes.

Overall, our study can offer very significant implications in accompanying many businesses and policymakers in guiding their respective problems where it can be a recession, and drive towards a more focused and empowering economy. From the following discussions and conclusions from the authors both the imports and exports have been stagnated during the Covid scenario. There are numerous problems faced by both central and state governments of India socially, economically, politically, and institutionally but common people are unaware of the effects of these exports if revealed to them there will be a huge ruckus. The basic needs that are not met by the government will bring into doubt the capabilities of the Indian government in the global arena. Hence the government should consider that these factors are essential to the survival and needs of the economy.

### References

- [1]. Agrawal, S., Jamwal, A., & Gupta, S. (2020). Effect of COVID-19 on the Indian Economy and Supply Chain. Preprints, 1. <https://doi.org/10.20944/preprints202005.0148.v1>
- [2]. Dhinakaran, D & Kesavan, N.. (2020). Exports and Imports Stagnation in India During Covid-19-A Review. GIS-Business. 15. 1158-1177.
- [3]. Ford, D. (2020). Q&A: Food Supply Chain, Disrupted. College of Agriculture and Life Sciences. <https://cals.ncsu.edu/news/qa-food-supply-chain-disrupted/>
- [4]. Haq, Z. (2020, March 28). Farmers can work, says govt amid nationwide lockdown over Covid-19 pandemic. Hindustan Times. <https://www.hindustantimes.com/india-news/govt-allows-farmers-to-carry-out-operations-amid-nationwide-lockdown-over-coronavirus-pandemic/story-GsFqQ2KOJCmu5490mo7CkN.html>
- [5]. Hossain, S. T. (2020). Impacts of COVID-19 on the Agri-food Sector: Food Security Policies of Asian Productivity Organization Members. *Journal of Agricultural Sciences – Sri Lanka*, 15(2), 116. <https://doi.org/10.4038/jas.v15i2.8794>
- [6]. INDIA'S FOREIGN TRADE: February 2021. (2020). Ministry of Commerce. <https://commerce.gov.in/wp-content/uploads/2021/03/HINDI-PRESS-RELEASE-DECEMBER-2020-2.pdf>
- [7]. LIN, B. X., & ZHANG, Y. Y. (2020). Impact of the COVID-19 pandemic on agricultural exports. *Journal of Integrative Agriculture*, 19(12), 2937–2945. [https://doi.org/10.1016/s2095-3119\(20\)63430-x](https://doi.org/10.1016/s2095-3119(20)63430-x)
- [8]. Maliszewska, M., & Mattoo, A. (2020). The Potential Impact of COVID-19 on GDP and Trade. World Bank Group, 9211. <https://poseidon01.ssrn.com/delivery.php?ID=198103020022120079088108011079079122010048077048056085078115114096046108024010041013065121010070082091007075012100075065126025121071082091072101068115001110125004110095071101101010088096078&EXT=pdf&INDEX=TRUE>
- [9]. O. (2020, July 16). Impact of COVID-19 pandemic less on exports of agricultural goods: IOPEPC. <https://www.outlookindia.com/newsscroll/impact-of-covid19-pandemic-less-on-exports-of-agricultural-goods-iopepc/1896782>
- [10]. Ramakumar R.(2020). Agriculture and the Covid-19 pandemic: An analysis with special reference to India.<http://ras.org.in/ccfd3c4b30052ab3be432d1faf5706e1>
- [11]. Tiwari, R. (2020, October 10). India's agricultural exports jump in Covid times. *The Economic Times*. <https://economictimes.indiatimes.com/news/economy/agriculture/indias-agricultural-exports-jump-in-covid-times/articleshow/78590796.cms>