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Impact of the COVID-19 Pandemic on Indian Agriculture

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Abstract

The largest employment in India, agriculture and related sectors, remained to be spared the worst effects of the COVID-19 epidemic and is expected to rise by 3.9% in 2021–2022 as opposed to 3.6 per cent in 2020–21. There is a long-term trend for the sector's share of the economy's total GVA to be approximately 18 percent. However, the agriculture and related sector percentage of the overall GVA increased to 20.2 per cent in 2020–21 and 18.8 per cent in 2021–22. The current fiscal year, which ends in March 2022, is predicted to see growth in the Indian agriculture sector of 3.5 per cent. This industry was one of the few to remain resilient during the pandemic storms.

Keywords: GVA, COVID-19, Supply Chain, Pandemic, Indian Agriculture, Minimum Support Prices

Introduction

Attempts to restrict the unusual virus in Wuhan, China, where it initially surfaced during an outbreak in December 2019, proved unsuccessful, allowing it to spread globally. On January 30, 2020, the World Health Organisation (WHO) issued a Public Health Emergency of International Concern, and on March 11, 2020, it declared a pandemic. By March 20, 2022, there have been 6.07 million deaths and over 469 million cases from the pandemic. The corona virus illness 2019 (COVID-19) is the official name for the COVID-19 pandemic, commonly referred to as the corona virus pandemic. The largest employer in India, agriculture and its related industries, continued to be spared the worst effects of the COVID-19 pandemic and is expected to increase by 3.9 per cent in 2021–2022, as opposed to 3.6 per cent in 2020–2021, according to the Economic Survey published on January 31, 2022. There is a long-term trend for the sector's share of the economy's total GVA to be approximately 18 per cent. However, the agriculture and related sector's percentage of the overall GVA increased to 20 percent in 2020-21 and 18 percent in 2021-22.

Both in terms of economic activity and human casualties, the corona virus epidemic has had a significant negative impact on India. With a few noteworthy exceptions where strong growth was seen, almost every sector has suffered as a result of the dramatic decline in exports and domestic demand. An analysis of the implications and potential remedies for a few important industries is attempted.

As the backbone of the nation and a component of the vital category declared by the government, the impact on primary agricultural production and agricultural input usage is probably going to be minimal.

The administrations of some states have permitted the unrestricted flow of milk, vegetables, fruits, etc. Amidst a range of economic setbacks, the government has increased the cost of buying quintals of agricultural produce in the context of the COVID-19 epidemic. For cotton, jute, and wheat, the minimum support price has been raised to Rs. 275 and Rs. 50, respectively.

Statement of the Problem

With its countless nodes and intricate supply chains, our global food system poses a significant risk that has been brought to light by the COVID-19 pandemic. This serves as another proof of how a varied local agriculture network may support metropolitan regions in building a more resilient food supply for their citizens. It is still unclear how much the COVID-19 lockdown has affected farmers' daily pay, livestock revenue, agricultural output, and experience with food insecurity.

Yet "indirect impact" on agricultural households more serious than impact, caused by reverse migration.

- Farm households lost a significant portion of their income between 65 and 74 percent—from the non-agricultural sector.
- Returned to their farming family, laid off workers in the non-agricultural sector need to make ends meet on 26–35 percent of their income from agriculture.
- A lot of agricultural households, especially the impoverished ones, are now extremely susceptible.

Impact of Covid-19 on Agricultural and Supply Chain

- COVID-19 is interfering with agricultural operations.
- Some harvesting operations are being disrupted due to the lack of migrant labour.
- Transportation-related concerns and other challenges cause supply chain disruptions.
- Farmers suffered huge losses as exports stalled.
- Farmers faced more problems in purchasing agricultural inputs.

Results and Discussion

Table 1 Agriculture Sector-Key indicators (per cent at 2021-22 prices)

Sl.No	Item	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Growth in GDP in Agriculture & allied Sectors	-	6.8	6.6	2.6	4.3	3.6	3.9
2	Share of Agriculture & allied Sectors in total	17.7	18.0	18.3	17.6	18.4	20.2	18.8
3	Crops	10.6	10.6	10.5	9.7	10.7	NA	
4	Livestock	4.6	4.8	5.1	5.1	5.1		
5	Forestry and logging	1.5	1.5	1.4	1.5	1.3		
6	Fishing	1.1	1.1	1.2	1.2	1.2		

Source: Economic Survey 2021-22

Table 1 demonstrates that the agriculture and related industries, which employ the majority of people in India, continued to be spared the worst effects of the COVID-19 pandemic and will expand by 3.9% in 2021–2022, as opposed to 3.6% in 2020-21. There is a long-term trend for the sector's share of the economy's total GVA to be approximately

18%. However, the agriculture and related sector's percentage of the overall GVA increased to 20.2% in 2020–21 and 18.8% in 2021–22. Increased expansion in allied industries relative to the crop sector has clear consequences for the former's growing share of the total agricultural GVA in comparison to the latter. It is evident that over this time, the percentage of livestock and fishing and aquaculture in total

agricultural GVA has improved. A targeted policy with a corresponding support structure has been advocated by the Committee on Doubling Farmers' Income (DFI), which acknowledges the growing

significance of related sectors and views dairying, cattle, poultry, fisheries, and horticulture as engines of high growth.

Table 2 All-India Crop Situation Rabi (2020-21 to 2021-22) as on 28.01.2022

Crop	Whole Rabi Season	2021-22	% of Normal for whole season	2020-21	Absolute Change
Wheat	303.06	341.37	113.1	345.88	-3.49
Rice	42.51	28.17	66.1	34.88	-6.76
Jowar	31.75	24.42	76.9	27.33	-3.00
Maize	18.15	18.36	101.4	17.01	1.34
Barley	6.14	6.78	110.5	6.83	-0.08
Total Cereals	401.62	420.67	104.7	432.74	-12.07
Peas	7.98	10.14	127	10.36	-0.22
Kulthi (Horse Gram)	2	3.68	183.6	3.86	-0.18
Urad	9.07	7.61	83.9	7.95	-0.18
Moong	9.98	4.77	47.8	6.61	-1.84
Total Pulses	146.67	166.43	113.5	164.85	1.58
Total Foodgrains	548.29	587.10	107.1	597.58	-10.48
Groundnut	7.05	4.89	69.3	4.81	008
Total Oilseeds	73.91	102.04	138.1	83.19	18.85

Table (2) illustrates all India crop cultivation. The pandemic and its concomitant lockdowns have disrupted livelihoods and agricultural and marketing in rural and urban areas. Of this, the area under

crop cultivation was in 2021-22 was lower than in 2020-21. Similarly, all-India crop cultivation from 2020-21 to 2021-22 has increased in maize, pulses, groundnut and oil seeds, as compared to other crops.

Table 3 Minimum Support Prices 2016-17 to 2020-21 (Rs. Per quintal)

Sl.No	Commodity	2016-17	2017-18	2018-19	2019-20	2020-21	Increase in MSP 2020-21 over 2020-21
Kharif Crops							
1	Paddy	1470	1550	1750	1815	1869	54 (2.9)
2	Jowar	1625	1700	2429	2551	2621	70 (2.8)
3	Bajra	1331	1426	1949	2001	2151	150 (7.4)
4	Ragi	1726	1901	2896	3151	3296	145 (4.5)
5	Maize	1366	1426	1700	1760	1850	90 (5.1)
6	Moong	5225	5575	6975	7050	7196	146 (2.1)
7	Cotton	4160	4320	5450	5550	5825	275 (5.0)
8	Groundnut	4220	4450	4890	5090	5275	185 (3.6)
Rabi Crops							
	Wheat	1626	1736	1839	1926	1974	50 (2.7)
9	Barley	1326	1411	1439	1526	1601	75 (4.8)
10	Gram	4001	4401	4619	4876	5101	225 (4.7)
11	Jute	3200	3500	3700	3950	4225	275 (7.0)

Source: Ministry of Agriculture & Farmers Welfare 2020-21

Table (3) clearly reveals that the minimum support price has been increased to Rs.275 for cotton and Jute and for the Rs.50 for Wheat. Otherwise, the minimum support price has been fixed at over Rs 200 for upper cotton, gram and jute, above Rs.100 for crops like bajra, moong and ragi and below Rs 100 for paddy, jowar, berley, maize and wheat below Rs 100.

Conclusion

The lifting of the lockdown-related restrictions presents an opportunity to assess the effects of COVID-19 on various economic sectors. Although reports indicate that other sectors are experiencing considerable strain, it is crucial to assess the effects on agriculture and related sectors, which employ the majority of India's population.

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References

- Cariappa, A. Adeeth, et al. "Impact of COVID-19 on the Indian Agricultural System: A 10-Point Strategy for Post-Pandemic Recovery." *Outlook on Agriculture*, vol. 50, no. 1, 2021.
- Das, Kumar, and Bijeta Mohanty. "The Impact of COVID-19 on Smallholder Farmers in India and the Way Forward." *International Growth Centre*, 2021.
- Dutta, Sudharsan. "A Glimpse at how the Covid-19 Pandemic has Impacted the Agriculture Sector." *Times of India*, 2022.
- Haile, Gebremeskal, and Asfaw Kebede Kasa. "Irrigation in Ethiopia: A Review." *Academia Journal of Agricultural Research*, vol. 3, no. 10, 2015, pp. 264-69.
- Jaacks, Lindsay M., et al. "Impact of the COVID-19 Pandemic on Agricultural Production, Livelihoods, and Food Security in India: Baseline Results of a Phone Survey." *Food Security*, vol. 13, no. 5, 2021.
- Munoth, Priyamitra, et al. "Sensor based Irrigation System: A Review." *International Journal of Engineering Research & Technology*, vol. 4, no. 23, 2016.
- Pandya, Niharika, et al. "Economic Impact of the 2020 COVID-19 Lockdown on Indian Farmers." *Economic & Political Weekly*, vol. 56, no. 50, 2021.
- Upadhyay, Alex. "Impact of Covid-19 on Indian Economy." *Times of India*, 2021.

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