International Research Journal of Engineering and Technology (IRJET)

www.irjet.net

Review: Impact of Covid-19 on the Agricultural Sector of India

Tanisha Bansal 1

¹Final Year Student, Lakshmipat Singhania Academy, Kolkata, West Bengal, India

Abstract - The Covid-19 pandemic has heavily affected the world economy. The agricultural sector in India holds a majority share in the economy of the country - and is one of the worst-hit victims of the pandemic. The restrictions imposed by the Government of India in order to curb the number of rising cases in the country has immensely impacted the agricultural sector.

Volume: 07 Issue: 12 | Dec 2020

As part of this research on the impact of Covid-19 on the agricultural industry in India, it was perceived and inferred that excess milk production, the livestock sector, feed and concentrate availability were the primary hit areas.

Harvesting of food crops was performed, however, in some parts, it was affected as the farmers faced a shortage of labourers. Additionally, harvesting of major fruit crops was also affected because of the pandemic.

Key Words: Covid-19, Agriculture, Farming, Restrictions, Milk, Livestock, Shortage, Pandemic

1. INTRODUCTION

Statistically, India has the second-largest arable land area in the world. The country has a coastline spanning over 7,500 kilometres.

India is the largest producer in the world of the following crops:

- Milk
- Pulses
- Spices
- Tea
- Jute

The country is the second-largest producer in the world of the following crops:

- Fruits and Vegetables
- Poultry
- · Rice and Wheat
- Fish
- Cotton

Agriculture is the primary livelihood source of about 58% of India's vast population. 44% of India's workforce is employed in the agricultural sector.

e-ISSN: 2395-0056

p-ISSN: 2395-0072

1.1 Migrant Labour Issues

When the India Government announced a nationwide lockdown in the month of March 2020 - an instant reaction that followed was the mass emigration of workers back to their villages or hometowns. In India, the harvesting season typically commences towards the end of the month of Apriland this was thrown into a frenzy due to the extreme shortage of farmland workers. The entire issue resulted in a massive supply shortage of crops. According to research reports, the crop season of the month of June was the worst hit of all.

It is also noteworthy that the shortage of labour resulted in storage and infrastructure obstacles. Storage units and warehouses were heavily understaffed, resulting in distorted operations from a supply-chain perspective.

The irrigation manufacturing system in the country operated at 30% capacity for the most part of the lockdown period - severely impacting operations.

2. Market Data and Statistics

All data used in this research was sourced from the Government of India's agricultural portal. India has a total of 979 mandis spread out across 182 districts in 5 states. The data sample contains 5 average mandis per district.

3. Market Trends (April-June: 2019 v/s 2020)

The crop considered for the purpose of this research was Wheat. **Fig - 1** shows the quantity gap of arrivals at the Mandis (Wholesale markets) in 2020 as compared to 2019.

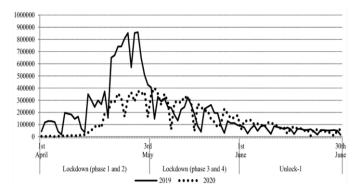


Fig - 1: Wheat Arrival in Tones

same. It has also been observed that 38% households in the country experienced increased prices of grains and pulses in

e-ISSN: 2395-0056

p-ISSN: 2395-0072

The supply gap was extremely high during phase 2 as this time was coincidental with the peak harvest season in the country. The market was in recovery mode during phase 3 and 4 of the nationwide lockdown.

Complimenting the market arrival collapse, wheat prices as shown in **Fig - 2** were considerably higher in phase 1 when compared to that of 2019.

Prices tended to be much lower in the next three phases but were anchored around the MSP. As the Government of India announced unlock 1 in June 2020, prices started trending below MSP - a showcase of compression in demand.

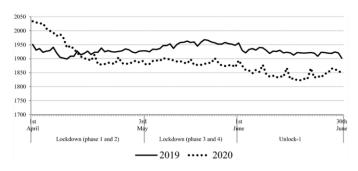


Fig - 2: Wheat Price Trends (In Rupees per quintal)

To strengthen the numbers, Tomato crops followed a similar trend when 2019 and 2020 statics were compared. This has been illustrated in Fig - 3 and Fig - 4.

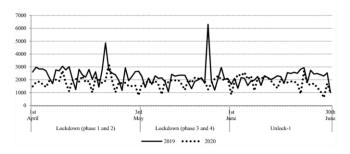


Fig - 3: Tomato Arrivals in Tones

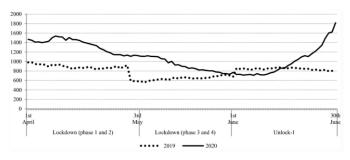


Fig - 4: Tomato Price Trends (In Rupees per quintal)

4. Conclusion

The pandemic is still unfolding all across the country, and its economic consequences are still to be fully comprehended. This research paper estimates the impacts of the covid-19 pandemic on food prices, and supply-chain pertaining to the

In all, these results suggest that even after some disruptions in agricultural markets due to the onset of the pandemic, they were quick to turn around and recover after a few initial months. The distress in the system was unable to disproportionately drop or increase prices, which shows good signs of the system's strength.

5. References

May 2020.

- [1] Mahajan, K., & Tomar, S. (2020). Here today, gone tomorrow: COVID-19 and supply chain disruption. Working Paper No. 28, Ashoka University, Department of Economics
- [2] Reardon, T., Mishra, A., Nuthalapati, C. S., Bellemare, M. F., & Zilberman, D. (2020). COVID-19's disruption of India's transformed food supply chains. Economic and Political Weekly, 55(18), 18–22.
- [3] Narayanan, S., & Saha, S. (2020). Urban food markets and the lockdown in India. Working Paper No. 2020-017, Indira Gandhi Institute of Development Research
- [4] Mishra, P. & Tilton, A. (2019). Indian food price inflation: Low for long. Goldman Sachs Economics Research
- [5] Inoue, H., & Todo, Y. (2020). The propagation of the economic impact through supply chains: The case of a mega-city lockdown against the spread of COVID-19. Available at SSRN 3564898
- [6] Kahn-Lang, A., & Lang, K. (2020). The promise and pitfalls of differences-in-differences: Reflections on 16 and pregnant and other applications. Journal of Business and Economic Statistics, 38(3), 613–620.
- [7] Varshney, D., Kumar, A., & Joshi, P. K. (2020). Situation assessment of the rural economy amid COVID-19 crisis: Evidence from India. IFPRI South Asia July 23.