

Impact Assessment of COVID-19 on Indian Agriculture

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ABSTRACT

The economic ramifications of COVID-19 propelled agriculture into the mainstream of conversation. The impact of the labourers' reverse migration to India's hinterlands varies by location. While the well-off regions' agricultural operations are about to suffer, the hinterlands will have a surplus of labourers, creating new difficulties and opportunities. To shed light on the strategies the sector will need to adapt to recover more effectively in this setting, it is useful to revisit the role of agriculture in economic development. The effects of the lockdown on agriculture are discussed in this article. There is also a discussion of how the economic downturn may affect agriculture.

Keywords: Agricultural, development, labourers, slowdown, COVID-19.

INTRODUCTION

Any economy is built on agriculture. The primary sector is what creates jobs, ensuring that the entire economic cycle continues. Most people are limited to this sector when we discuss the Indian economy. The coronavirus outbreak and ensuing lockdowns have had a significant negative impact on the Indian economy. The International Monetary Fund anticipates a 4.9 per cent decline in worldwide output and a 4.5 per cent decline in India's GDP in 2020. However, according to the department of economic affairs' July monthly economic report, the agriculture industry will be the bright spot in 2020–21. This year's monsoon is expected to be 102% of the long-term average. An average monsoon bodes

good for India because a substantial portion of the rural workforce works in the agricultural industry. While the Covid-19-induced lockdown in April and May 2020 halted the majority of economic activity, farming activities were spared from the state-wide lockdown to allow for continuous Rabi crop harvesting and Kharif crop sowing. The piece noted that this was a key aspect in ensuring the seamless flow of agricultural supplies throughout the lockdown period and in both rural and urban areas. Indian agriculture has done reasonably well in recent years. During the last five years, a 3.5 to 5% yearly growth was widespread in terms of production and geographical areas.

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The agricultural output forecasts for 2019–20 are optimistic, and the growth will probably exceed 3.5%. According to the second advance projection, food grain production would most certainly total 292 million metric tonnes (2.4 per cent more than in 2018–19). Similarly, it is anticipated that horticulture production in 2019–20 will increase by 0.84% from 2018–19. The one thing to keep in mind is that any deviation from the usual may cause these projections to be off, especially when it comes to the effects of late rains and hailstorms on Rabi crops. Additionally, according to the FCI, as of March 2020, the operational buffer-cum-strategic stock of 21.04 million tonnes has more than doubled to 58.49 million metric tonnes for both wheat and rice in the central pool. All of this suggests that the nation's food supply is insufficient.

The shutdown that followed COVID-19 severely affected supply chains and economic activity. Globally, COVID-19 has infected millions of individuals, and the death toll is rising quickly. It is anticipated that the lockdown will shortly flatten the infection curve and establish vital business operations and services. Fortunately, timely government efforts have kept infection rates in check in India, although COVID-19's effects coincide with the country's slowing economy. The shutdown is expected to further slow economic development by at least 10%. It is likely that this will affect the demand for agricultural goods, the movement of the labour force, and the disruption of supply chains. These developments will impact the government's social safety net initiatives.

The livelihoods of all farmers and the general public participating in this industry are in grave danger due to the ongoing pandemic. While COVID-19 has vanished in some countries, it is reappearing in others. The pandemic's brief duration will have a lasting impact on the agricultural industry. Yes, the pandemic will eventually end, but we need to know when, and we have no idea how much of a drag it will have on the economy. Leading authors and experts have warned that if action is not taken quickly to preserve the most

vulnerable food supply systems, there may be a food catastrophe.

Global Economic Impact on Agriculture

The Food and Agriculture Organization (FAO) anticipates changes in the supply and demand for nutrients on a global scale. If states do not safeguard vulnerable people from hunger and malnutrition and unclog food supply networks, it forewarns a global "food crisis." Similarly, the UN has cautioned that the Covid-19 situation may result in "food shortages" globally. The Covid-19 problem "threatens to affect millions of people already made susceptible by food poverty and malnutrition," according to the World Food Program (WFP). Hunger and malnutrition have increased as a result of the Ebola outbreak in Sierra Leone (2014–2016). If small and marginal farmers are unable to cultivate their land, generate profitable product prices, and acquire access to marketplaces for purchase or sale, they will also suffer greatly. For the third week of March 2020, there are indications that global agriculture prices may increase. For wheat and rice, the increases are noticeable.

This increase has been attributed, in part, to home stockpiling of grains like rice and wheat as well as international trade restrictions. For instance, the third-largest rice exporter in the world, Vietnam, has halted exporting, which could reduce rice shipments worldwide by 15%. Rice prices may climb quickly around the world if Thailand and India impose export bans. It is anticipated that Russia, the largest exporter of wheat in the world and a major supplier of wheat to North Africa, will limit its exports. One of the world's biggest producers of wheat flour, Kazakhstan, has already outlawed its exports. Other crops have also seen similar tendencies. For example, Serbia has stopped exporting its sunflower oil. The type of trade flows that have existed since the 1990s has been questioned by commentators as to whether these policies portend the beginning of a "wave of food nationalism."

India's Economic Impact on Agriculture

Let's start by talking about the price issue. It is important to note that the Indian economy was

already experiencing a spike in food prices prior to the Covid-19 outbreak. By the middle of 2019, the cost of food had started to soar, and by January 2020, it had reached levels last seen in 2013–14. According to the wholesale price indices (WPI) for specific crop groups, which are only available until February 2020, the increase in the WPI for food products starting in August 2019 was primarily due to an increase in vegetable prices, which were led by the price of onions, followed by potatoes and tomatoes. Even in February 2020, vegetable prices were still high, even if onion prices had decreased.

"As regards inflation, the prints for January and February 2020 indicate that actual outcomes for the quarter are running 30 bps over expectations, indicating the onion price shock," the RBI's bimonthly monetary policy statement dated March 27, 2020, states. However, the RBI believes that because the Covid-19 problem is anticipated to impair aggregate demand, food inflation pressures would decline. Similar trends of an increase after August 2019, with some easing in January and February 2020, are also seen in consumer pricing indices (CPI) for food.

A) Peak harvest without procurement:

This is the height of the Rabi season in India, and crops like wheat, gramme, lentil, mustard, etc. (including paddy in irrigated tracts) were at or nearing harvestable stages, as well as the time when farm harvests are brought to the attention of designated government agencies for procurement operations.

B) Lack of labour owing to reverse migration:

This has negatively impacted business in numerous areas.

- As a result, the cost of hiring migrant labour has increased significantly, pushing up the daily rate for harvesting crops.
- Since they frequently do not have to rely on a lot of physical labour, some agricultural sectors, including paddy and wheat, have the luxury of using technology for harvesting relatively more isolated.

C) Decline in prices

The loss of market access, including the suspension of transportation and the closing of borders, has caused a collapse in agricultural prices. Farmers are facing enormous losses due to the growth in labour costs and the lack of access; therefore, letting crops decay in the fields serves as a better "stop-loss" strategy.

D) Scarcity of public goods

The biggest difficulty is ensuring that customers in rural and urban areas can access food grains, fruits, and vegetables, among other necessities.

- The first impact on rail and road transportation of public distribution system PDS commodities to last-mile delivery agents has been significant.

E) Sales Limits

Farmers and labourers and harvesting and related farm machinery were subject to self-imposed restrictions on the interstate and intrastate travel.

F) Supply-chain disruptions

The flow of migrant harvest labour and agricultural machinery is significantly impacted by the lack of transportation infrastructure combined with vigilant road obstruction. Also, "agricultural machinery" does not include tractors and trucks.

Objectives

- 1) Researching Covid-19's agricultural challenges
- 2) To evaluate Covid-19's effects on Indian agriculture.
- 3) To draw attention to the Indian government's response.

Methodology

The majority of this research is descriptive in character. This study used secondary data sources, which were gathered from various published sources, including books, journals, newspapers, magazines, and websites.

Challenges facing the agriculture sector during Pandemic Period

- Despite all of this, concerns about the COVID-19 pandemic's detrimental effects on the farm economy have been brought up. In India, rabi season is at its height right now, and a variety of crops,

including paddy in irrigated tracts, are either ready for harvest or are close there. Additionally, this is the time of year when farm harvests are sent to market yards in preparation for government agencies' procurement procedures. Furthermore, any significant interruption to the supply of perishable goods like dairy products, fish, and other foods that have been mobilized to meet the rising demand from both urban and rural consumers as well as a bulging middle class, may cause irreparable harm to all actors in the supply chain.

- Since they are crucial for both harvesting operations and post-harvest handling of produce in storage and marketing centres, the movement of employees from more places to their native places has also set off alarm buttons.
- In a significant move, the Union Home Ministry has announced that the movement of farmers, farm workers, and harvesting and sowing-related machinery will not be subject to the lockdown.
- The most important problem facing the government machinery during the lockdown is making food grains, fruits, and vegetables, as well as other basic products, available to consumers in both rural and urban areas.
- It is crucial that the supply chain runs smoothly and includes suitable safety precautions for all parties. Several government entities must make sure that goods from the public distribution system (PDS) are transported by rail and road to last-mile delivery agents. It is important to efficiently manage the delivery of goods to a vulnerable population while adhering to established rules and protocols, particularly regarding social distance. Farmers all around the nation rely on the government to ensure uninterrupted crop harvesting and efficient procurement processes because the prolonged lockdown coincides with the Rabi harvesting season.

A positive step has been made with the Union Home Ministry's circular eliminating limitations on the inter- and intra-State

mobility of farmers and labourers, as well as harvesting and related farm machinery. The government mechanisms must prioritize protecting workers' safety (against potential COVID infection) and wellbeing while assuring their availability for crucial farm activities. The sale of dairy goods, fish, poultry, and other products has also suffered during the lockdown since organized industry participants' uptake has been hampered by a lack of labour and transportation problems. Harvested crops must also be shielded from such dangers because the weather has been extremely unpredictable over the previous few months in many areas.

Prevention Techniques

In any crisis or pandemic event, the lowest segments of society are always severely hit. With landless farm labourers making up a substantial portion of the population and small and marginal farmers making up about 85% of farm households in India, genuine welfare measures to limit the effects of COVID will undoubtedly benefit them. Therefore, the protection of each citizen's spirit must be the government's main priority. However, until the economy recovers, people who depend on agriculture and related activities, primarily those who are losing their income from unofficial work during this lockdown period, must be given alternate options. It is necessary to increase expenditures in vital logistics if the demand for agricultural goods is to remain steady. Additionally, start-up e-commerce and delivery businesses need to be supported with the right policies and incentives. In order to prevent the collapse of the rural economy, small and medium-sized businesses, whether they use raw materials from the husbandry and the related industry or not, also require special attention. Policies must make machines readily available through state agencies, Farmer Producer Organizations (FPOs), or custom hiring centres (CHCs) with appropriate incentives to alleviate immediate concerns about a lack of agricultural labour. Additionally, it is advised to look into using NREGS funding to pay for certain farm labour in order to ease the financial strain on the

farmer and to guarantee wage employment for the landless labourers and workers.

Our government's response

Three policy changes have been made as the Indian government's response in the area of agriculture.

- 1) It has stated that the majority of agricultural operations will be on the list of necessities. Farm workers in the fields, farming operations by farmers, agencies involved in the procurement of agricultural products, including MSPs, Mondays announced by the State Governments, interstate and intrastate movement of harvesting and sowing-related machines and fabrication, Packaging units of plant foods, pesticides, and seeds, among others, are exempt from the law.
- 2) It has stated that farmers will receive the first instalment of the PM-Kisan payment, or Rs. 2000, in full. Additionally, it has been predicted that the MGNREGS wage will increase from Rs. 182 to Rs. 202 per day.
- 3) For a period of three months, the Reserve Bank of India (RBI) has imposed a ban on agricultural term loans (including crop loans). These interventions seem minor compared to how many governments worldwide have responded. The upfront payment from the PM-Kisan scheme to farmers does not even deserve a package name because this money was already scheduled to be distributed to the farmers between April and June.

Suggestions, conclusion, and recommendations

- Due to reverse migration brought on by COVID-19, the only short-term solution is to take advantage of farming's potential in order to place the repatriated labourers in meaningful employment.
- To better address intra-household food insecurity, it is better to raise awareness and target women and minors who are currently not enrolled in Anganwadi.
- Labour must compensate for the possible reduced input application in agriculture to help sustain the production level. This will

lead to an increased factor share of labour in the agricultural sector. Income transfer policies are also quite effective in boosting rural demand. In this context, supporting initiatives under the Mahatma Gandhi National Rural Employment Guarantee Act is important.

- Long-term plans should be fundamentally distinct and concentrate more on other industries. However, Agra-based businesses and activities would be a key component. Enhancing labour and land productivity would be an important tactic.
- The Kharif season in India would affect the ongoing agricultural activity at the county level. For this season, India needs to have 250 lakh Quintiles of seed, however due to different impediments that have emerged, this has not yet been acquired. Not just the impact has ended at this point. It marks the beginning. In order to prevent the largest sector of the economy from failing during these difficult times, the government must act quickly.
- The pandemic has most severely affected the food supply chain, which also causes a lack of food security for the most vulnerable demographic group. In addition, if we dig a little deeper, we will see that the migrant labour or problem directly impacts employment in the agriculture industry. As a result of the numerous labourers who have been made unemployed, there will be less demand for food at their terminal.
- They would survive on less expensive sources of food if they lacked the money to sustain themselves. The issues won't go away after the lockdown ends. However, it is more likely that they will be combined at the start of the new agricultural sowing season. The need for government assistance in the form of assistance for other agricultural inputs is larger. The agricultural problem will only get worse if there is no relief. The current imperative is to make the most of agriculture's potential,

which has proven to be useful and resilient under difficult circumstances.

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