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**Impact of Covid- 19 on the Agriculture Industry**

1-Raul Villamarin Rodriguez  
2-Pokala Pranay Kumar

1-Professor in Artificial Intelligence and Cognitive Neuroscience  
Dean- School of Business, Woxsen University, Hyderabad, India  
2-MBA(BA.AI.ML) – School of Business, Woxsen University, India

**Corresponding Author:** Raul Villamarin Rodriguez

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Covid-19 pandemic enhances different opportunities in different sectors. This pandemic also affected many sectors which reduced the growth. Mainly, we are focusing on the agriculture sector which is the main sector that affects on nation's economy. Covid-19 used to have a major impact on agriculture and agro-industries. The harvest for agricultural products was accomplished, yet farmers were hampered in certain areas leading to a shortage of workers. In this research paper, we are going to discuss the impacts on the agriculture industry. Whereas the disease outbreak poses several immediate challenges again for the agriculture industry. This also provides the opportunity to accelerate reforms inside the food and agriculture sectors in order to further increase their adaptability in face of a variety of challenges, namely changes in the environment. However, there is sufficient evidence to conclude where the Covid-19 disease seems to have a significant influence on the farming and agriculture industry.

**Keywords:** Agriculture, Covid-19, Farming, Production, Supply Chain, Food Security, Labour

Covid-19, nowadays this is a notable name to everybody in view of the activities it played

on society. This illness has made an interruption to the economy, which

diminished the nation's GDP (El-Chaarani, 2021 and El-Chaarani et al., 2021). This is the significant reason for the restrictions in human movements and employment in any country (Beckman and Countryman, 2021). As a developing nation, India got a serious effect because of this hazardous infection. The first case on the planet was found in China (Siche, 2020). In India, the first case registered on Jan 27 in Kerala (Andrews et al., 2020). Many surveys resulted that this pandemic raised a huge loss to the economy as well as on working people. Many people lost their jobs in this pandemic and different sector companies lost their net income. Due to this, many startups shut down and affected their families. Regarding different sectors, Agriculture will be the first place which is affected in this pandemic.

The agriculture industry is the heart of the nation where the major amount of revenue generated from this industry. The pandemic showed a major impact in a way that restrictions on human movements result in a loss in farming and food production. With this impact, the connected industries like food and transport, hotels and restaurant industries, etc. are affected extensively. After the spread of the Covid-19 virus in India, Government has decided the complete

lockdown where the impact started. Due to the lockdown, many farmers are not able to come out and do farming work which is life to them. This impacted crop production and crops are not well farmed due to many reasons like lack of water, pesticides and insects, transportation has been stopped, etc. Huge loss to farmers and their families, this loss seriously impacted some families when their loved ones went to death due to the loss in farming. The national lockdown arrived at an inconvenient time for farmers, as the rabi crop was about to be harvested. The shutdown resulted in a labour and machinery shortage; temporary workers in India typically relocate to rural regions throughout harvesting, whereas small - scale farmers frequently lease farming machinery instead of buying it. This year, farmers were unable to cultivate their bumper grain and oilseed crops. Farms have indeed been decided to abandon in certain areas, whereas harvests are arriving and over a bit late in the others, to fewer as well as increasingly expensive labour (Maggo, 2020). Many surveys found out that lack of labour is also one of the reasons behind the impacts on agriculture. Even though the storage areas also unstaffed which leads to an effect on the selling and transportation of crops. Cross-border travel has become severely limited, preventing the

travel with goods and, as a result, the sale. When you add in a shortage of repair service technicians as well as other service workers, you also have business in difficulty (Thornton, 2020). The Kharif season<sup>1</sup> is the most affected season crop in the pandemic according to this author (Varshney et al., 2021). For two reasons, India's economic catastrophe would most probably be even further serious. First, the country had been losing momentum prior to Covid-19, exacerbating underlying issues such as unemployment, low wages, rural poverty, malnutrition, and growing inequalities. Second, India's vast informal sector becomes clearly unsustainable (Mahendra Dev. 2020).

## **Impact of Covid- 19 in different sectors in Agriculture**

### **1. Farming**

Farmers are ready to harvest their crop in the Kharif season which is in may after the rabi season<sup>2</sup> completed in April. Due to Covid-19, there is a lot of interruptions that showed impact as reduced crop production to farmers which leads to an increase in the market price value for the goods. For this reason, small

farmers are not able to get the required equipment and the required grains to do farming. Coming to large landholder farmers are in unstable condition because due to the impacts and lack of labour. The water supply and the current supply went well, even though due to the human restrictions farmers are not allowed to do farming which is unacceptable. The disease showed its dangerous behaviour on farmers even government supported them by providing money, provisional items like rice, daal, sugar, oil, etc. which have been saved some of the farmers (Maggo, 2020).

### **2. Food security**

The Covid-19 pandemic fears the safety of the food where there is no proper evidence if the virus could spread through food. But many people are feared that it will pass through food. This also reduces production because when people won't buy the products, the retailers will not buy those products which are again a huge loss to the farmers and the farming industry. There will be a food shortage if farmers are not able to cultivate. And thus, it will impact the economy as well as people's hungry. The latest technology

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<sup>1</sup> Season starts from June to September which also differs in country. There are many crops are cultivated in this season. For example, rice, soybean, cotton, etc.

<sup>2</sup>Season starts in winter (October to March). The common rabi crops are barley, wheat, mustard, gram, etc.

helping the farmers as well as retailers like using drone technology. The farmers are able to sprinkle the water and pesticides to the plants which are contactless techniques. In the same way sanitization machines used by retailers when they get the goods, they are sanitizing with these machines and scan the quality of the food products (Priyanka Sethupathy, 2021).

### **3. Food supply chain**

The food chain framework connects the agricultural sector with consumers who handle processing, combining, transportation, including efficiency. Like some other pathogens such as bird flu, E. coli, mouth disease, and Listeria, the Covid-19 disease outbreak had a little direct impact on food processing. Owing to limits, farmers are forced to burn food supplies mostly on the plantation. Each day, for instance, milk producers spill several litters of milk due to the clogged production process. Tea crops are harmed as just a result of technical difficulties. Throughout the event of a global economic crisis, maintaining supply chain consistency is indeed a critical component of the food sector. The impact of disease outbreaks on agricultural environments is usually affected by the characteristics as well as the strength of farm production but varies

depending upon the product shipped (Barman et al., 2021).

### **4. Lack of labour availability**

There is a shortage of employees due to the covid pandemic which interrupted the work of all industries which includes farming, harvesting, production, planting, etc. Due to a lack of farm workers, farm production reduced as well as loss in agribusiness. Slowly, this will impact the food transportation and cultivation information have caused problems in providing incessantly food production for economic sectors (Barman et al., 2021).

### **Conclusion**

Due to this pandemic, many issues raised in the agriculture sector which showed a major impact on the growth of the country. Today, there was the chance to somehow adapt successfully towards the present situation. To minimise deleterious, ineffective, and increasingly unsustainable funding, allocating investment resources towards developments towards the increasingly profitable, safe, and robust food supply chain capable of meeting future issues.

Covid-19's unexpected impact highlights anything like a transition towards "standard

operating procedure" strategies. That is towards an increasingly forward-looking strategy framework that investments inside the world food platform's growth, stability, and sustainability.

This seems to be the urgent necessity to raise a concern about Covid-19 as well as its misinformation. Multiple policy decisions must be used to assist the farmers with compelling procedure and implementation. The optimistic mentality becomes a powerful tool towards such kind of intangible adversary and can help farmers throughout the initiatives to maintain the nation's food production.

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