



## Impact of Covid-19 on Agriculture sector in India

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### **Abstract**

*The agricultural value chain in India has been adversely suffering from the Covid-19 crisis and therefore the resultant lockdown. Agriculture remains a central pillar of the Indian economy. The sector serves the food consumption needs of the entire country, while also placing among the highest exporters of agricultural produce within the world. The sector has been facing its share of challenges in recent years, but few are as severe because the domestic and international travel restrictions during Covid-19.*

**Key Words:** *shackled, pandemic, triggered, vulnerable.*

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## **1. INTRODUCTION**

Agriculture is the backbone of any economy. It is the first sector that generates employment so that the economic- circulation properly function. When we talk about the Indian economy, the majority of the people depend on this sector. When India's nation-wide lockdown was announced in March, the knee-jerk reaction was a mass exodus of migrant labor back to rural hometowns, as workers moved to wait out the lockdown while at home. The harvesting process, which usually starts in mid-April, was entirely thrown off balance, resulting in significant liquidity issues. The June crop is among those that have been particularly hard hit, according to Grant Thornton. The researcher also means that labor scarcity has also affected India's agriculture sector's supporting infrastructure. For example, storage units and milk processing plants are understaffed. Shackled operations in the manufacturing industry have influenced the development of irrigation equipment in India, with the irrigation-related manufacturing industry currently operating at 30% of its potential capacity.

Movement across the state borders has been heavily restricted, which has blocked crops' campaign and, consequently, their sale. Add to this a scarcity of machine repairs mechanics and other such support staff, and one gets the image of a sector in trouble. With the continued pandemic, all the farmers' livelihoods and the indulging people in this sector are at high risk. In some countries, COVID-19 has disappeared, while in some countries, it is coming back. A brief span of the pandemic will leave a lasting effect on the agricultural sector. The pandemic will indeed getaway, but we don't know when and that we don't see the negative impact quantum. Leading economists have said that there could be a food crisis unless measures are taken fast to guard the significantly vulnerable food supply chains alive.

It is essential to recollect that 2-3 million deaths happened within the Bengal Famine of 1943. Thanks to food supply chain disruption, there was no food supply, but the supply chain was disrupted. The Government of India announced the relief package, which incorporates cash transfers and food transfers. Several state governments have also announced their customized packages. Indian farmers have continuously criticized that the Government is only spending 0.85% of India's GDP on the agriculture sector, which is insufficient for this vast sector. It will cause food and nutrition security, the farmers' empowerment, and the boost of our country's this sector.

By closing out the borders, quarantine measures and the market supply chain have been broken alongside trade disruptions that restrict people's access to nutritious food sources. For example, in India, farmers weren't ready to harvest their crops because their laborers returned to their villages by foot. The crops of farmers were left wilting away on the farm, and because of this pandemic, the fertile nature of the land is no more available. It led to tons of loss for these farmers, dependent upon their farm produce as their income source.

Challenges have come up with logistics involving the movement of goods from one place to the other. Various restrictions were imposed within the lockdown's early months, and transport vehicles weren't allowed to enter other states. For all the agricultural produce that features a short period, the availability chain's obstructive nature is called tons of loss. However, the closure of restaurants and street food outlets removes the market ingredients for these agriculturists. After this, sanitation also plays a significant role.

After the nation-wide lockdown was announced immediately, the Indian Finance Minister declared a Rs 1.7 trillion package to help poor farmers, and mostly to protect the vulnerable sections (including farmers) from any adverse impacts of the Covid-19 pandemic. Among a slew of benefits, the announcement contained an advance release of INR 2000 to farmers' bank accounts as income support under the PM's Kissan Scheme. India's Government also raised the wage rate for workers engaged under the NREGS, the world's largest wage guarantee scheme. Under the particular system to take care of the vulnerable population, Pradhan Mantri Garib Kalyan Yojana (Prime Minister's plan for the poor's welfare) has been given. Other grain allotments to registered beneficiaries were also announced for the subsequent three months. The Cash and food assistance to persons engaged in the informal sector, mostly migrant laborers, have also been reported. The Government of India has created PM-CARES fund (Prime Minister Citizen Assistance and Relief in Emergency Situations). The Indian Council of Agricultural Research (ICAR) has brought state-wise guidelines for farmers, which are to be followed during the lockdown period. The advisory mentioned specific practices during harvest and threshing of varied rabi (winter-sown) also crops as post-harvest, storage, and marketing of the farm produce. The RBI has also declared specific measures that address the "burden of debt servicing" thanks to the COVID19 pandemic. Banking institutions have granted agricultural term and crop loans a moratorium of three months (till May 31) with a 3 percent concession on crop loans' interest rate up to INR 300,000 for borrowers with good repayment behavior.

## **2. IMMEDIATE CHALLENGES**

Despite these measures and insight of continuous restrictions on individuals and vehicle traffic movements, concerns are raised regarding the negative implications of the COVID19 pandemic on the farm economy. It is the height of the rabi season in India, and crops like wheat, mustard, gram, lentil, etc. (including paddy in irrigated tracts) are at the harvestable stage or almost reaching maturity. When the farm harvests go the mandis (market yards) for assured procurement operations by designated government agencies, moreover, any severe disruption to the availability of perishable fruits and vegetables, dairy products, fish, etc. having mobilized to satisfy the increasing demand from a bulging bourgeoisie also as urban and rural consumers, may create irreparable damages to all or any activity within the supply-chain. The migration of workers from different parts to their native places has also triggered panic buttons. They are crucial for both harvesting operations and post-harvest handling of produce in storage and marketing centers. During a very significant move, the Union Home Ministry has notified the movement of farmers, farm laborers, and harvesting and sewing-related machines from the purview of lockdown.

Making available the food grains, fruits, and vegetables, and other essential items to consumers, both in rural and urban areas, is the most important challenge for Government machinery during the lockdown period. The smooth functioning of the availability chain, with adequate safety measures for the people involved, is of paramount importance. Transportation of public distribution system items to last-mile delivery agents must be ensured by respective Government agencies by both rail and road. Distribution of the commodities to vulnerable populations while maintaining prescribed guidelines and protocol, particularly social distancing, must be effectively monitored.

Since the ongoing lockdown coincides with the rabi harvesting season, farmers worldwide search to the govt to ensure uninterrupted harvesting of the crops and uninterrupted procurement operations. The Union Home Ministry's circular waiving restrictions on the inter-and intra-State movements of farmers/laborers, also as harvesting and related farm machines, is indeed a step in the right direction. To ensure laborers' availability for farm operations, their safety from any COVID infection, and welfare must be prioritized by the Government systems. The sale of dairy products, fish, poultry, etc., has also been hit in the lockdown period as the organized industry players' uptake has been affected due to shortage of workforce and transport issues. As weather condition has been very erratic over the past some months in various parts, harvested produce must also be protected from such risks.

### **3. MITIGATION MEASURES**

The poor people of society are always the toughest hit in any natural disaster / pandemic situation. About 85% of Indian farm households are small and marginal farmers. A big part of the population is landless farm laborers; welfare measures to protect from any damage of COVID will assist them with sincere implementation. Government focus has to protect the lives of country's citizen. People depending upon agriculture and allied activities, mostly those losing their income from informal employment at this lockdown period, have been provided with alternative assistance i.e., cash transfers till the economy bounces back (when this health crisis is successfully overcome).

For sustaining the demand of agricultural commodities, investments in critical logistics must be enhanced. Moreover, e-commerce and delivery companies and start-ups got to be motivated through appropriate incentives.

The small and medium businessmen, running with raw materials from the agriculture and allied sectors or otherwise, also need special attention to ensure that the agricultural economy doesn't collapse.

In order to obviate the immediate concerns of the scarcity of farm labor, policies must facilitate easy machinery availability through state entities, Farmer Producer Organizations (FPOs), or custom hiring centers (CHCs) with appropriate incentives. It is suggested to explore leveraging NREGS funds to pay a part of the farm labour (with farmers paying the balance wage amount) to reduce the farmer's monetary burden while ensuring wage employment to the landless laborers and workers.

To answer queries relating to the Government's announced measures and address farmers' grievances, besides providing advisories on-farm operations, availability of agri-inputs, dedicated toll-free helplines /call centers (in local/vernacular languages) must be established by the Government.

Agriculture in India may be a State subject, and as has been observed in past years, policies and programs vary from one state to the opposite. However, agricultural activities interconnected in neighboring regions, agri-sops, or benefits must not distort the market scenario. Studies suggest that waivers of farm loans haven't fully benefitted the bulk of small and marginal farmers. Instead, it affects the borrowers' longer-term credit behavior and negatively impacts the agricultural credit culture altogether. Since the Kharif season is fast approaching, institutional lending of crop loans should be expanded and facilitated for fast (and sufficient) flow of credit to

borrowing farmers. Agri-inputs - seeds, fertilizers, agro-chemicals, etc. - have to be pre-positioned for easy availability. The private sector must play a significant role with necessary policy support.

Agricultural Produce Market Committees (APMCs) should make relaxation norms to allow farmers to sell their products beyond the designated mandis to ease farmers' burdens. State Governments must fix their machinery for smooth procurement operations of farmers' marketable surpluses at MSP (minimum support price) or other subsidy schemes.

Under the COVID19 pandemic, being a health crisis of unprecedented proportions, the leading share of future Budget allocations obviously (and logically so) would be apportioned for the health sector. However, investments shouldn't be crowded out of the first sector to stop irreversible damage to the farm economy. The manufacturing and services sectors may be severely hit in the short run until the economy bounces back. Thus, it will be very appropriate to focus on the agriculture sector as a growth engine and bring resilience to food (and nutrition) security. At this critical stage, where global climate change is already adversely impacting the agriculture sector, productive investments, including research and innovation, would be very purposeful. Structural reforms like land leasing, contract farming, personal agricultural markets, etc., have long been suggested to bring enhanced investments into the agriculture sector and push its growth. But, there has not been the uniform implementation of these legislations by the State Government. The industry's full potency is unrealized. These current reforms need significant political will. Concerns of a slowdown in the zeal of States, post-COVID scenario, could be tackled with the Federal Government's suitable incentive mechanisms.

With a rising population, there is a corresponding rise in food demand in India. However, the negative externality of the revolution, particularly the environmental trade-offs and staple cereals fundamentalism, have since been realized. Thus, it is desirable to modify over to an appropriate model with a far stronger nutrition focus where diets are more diverse. Post-COVID situation offers unique opportunity to repurpose the prevailing food and agriculture policies for a healthier population.

There are global concerns, rather speculations, on the restriction of agricultural commodities' exports by a couple of international players. India, through trade-surplus on things such as rice, meat, milk products, tea, honey, horticultural products, etc., may seize the opportunities by exporting that products which are having a stable agri-exports policy. India's agricultural exports are valued at 38 billion US Dollars in 2018-19 and may get up further with conducive policies. Development of export-supportive infrastructure and logistics would wish investments and support of the private sector, which can be within farmers' future interests for boosting their income.

Different climate models predict a favorable monsoon in the 2020 season, however, the El-Nino weather phenomenon that disrupts rainfall in India is not evident. This is indeed good news in the COVID scenario, assuming agriculture can practice mostly unscathed.

**Here are some measures are required to keep the agricultural sector and supply chains working smoothly:**

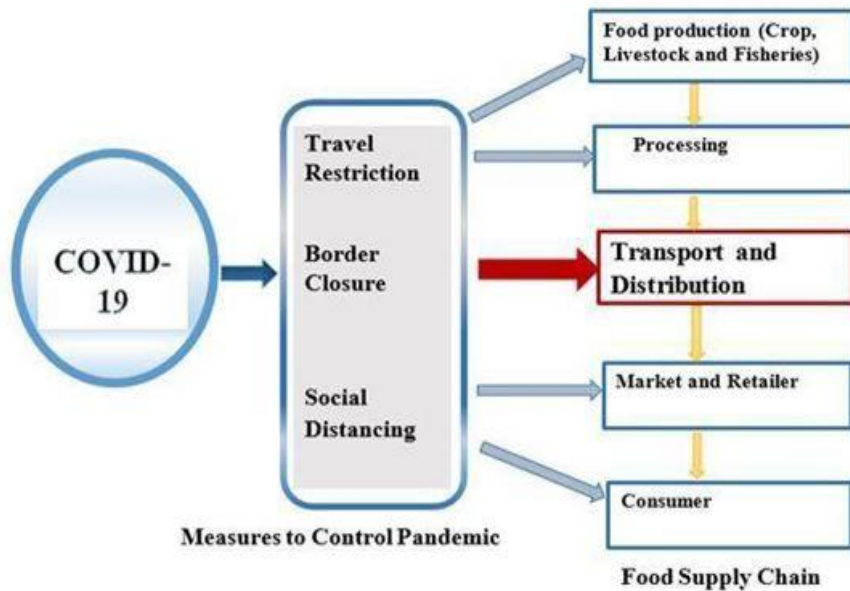
1. The govt has correctly issued lockdown guidelines that exempt farm operations and provide chains. But implementation problems resulting in labor shortages and falling prices should be rectified.

2. Keeping supply chains functioning well is crucial to food security. It should be noted that 2 to 3 million deaths within the Bengal famine of 1943 were thanks to food supply disruptions-not a scarcity of food availability.
3. Farm populations must be shielded from the Corona Virus to the extent possible by testing and practicing social distancing.
4. Farmers must have continued access to markets. This will be a mixture of personal needs and Government procurement.
5. Small poultry and dairy farmers need more targeted help as their pandemic related input supply, and market access problems are urgent.
6. Farmers and agricultural workers should be included within the Government's assistance package and any social protection programs addressing the crisis.
7. As lockdown measures have increased. Demand has risen for home delivery of groceries and E-Commerce. This trend should be encouraged and promoted.
8. The Government should promote trade by avoiding export bans and import restrictions.

#### 4. IMPACT ON GLOBAL AGRICULTURE

Given below are the impacts of global agriculture:

- i) On Crop production and availability of seeds:
  - For crop production, the essential part of the seeding process will be almost unaffected between now and, therefore, the summer too.
  - So there would be no impact intrinsically on seeds availability for now.
  - But if an equivalent scenario continues till year-end, then indeed seed availability is often a problem.



Source: [www.civildaily.com](http://www.civildaily.com)



- ii) **On Fertilizers:**
- Due to global trade disturbance, farmers face a shortage of agricultural inputs like fertilizer and pesticides.
  - In a shorter span, there's little shortage to be expected.
  - In the long run, fertilizer delivery via international markets may become a drag since many assembly plants in China are pack up.
- iii) **On food production and distribution:**
- Most countries have taken measures like home confinement, travel bans, and business closure to regulate infection speed.
  - Agriculture usually produce perishable, so farmers are compelled to carry their unsold produce for an extended period of their time.
  - This has led to a discount in food quality and a rise in the cost of production.
- iv) **On livestock:**
- Different agricultural sectors like livestock and fishery are hit hard by the pandemic.
  - In India, COVID-19 has caused a better impact on livestock farming thanks to limited access to animal feed and a shortage of labor.
  - For instance, the travel ban has too much affected the delivery of breeding stock of poultry.
- v) **On workers availability:**
- Agricultural workers in low and middle-income countries lack proper health services and social protection thanks to little saving or no saving.
  - Many informal workers in agriculture are obligate to figure for their sustenance despite the self-isolation protocol during the COVID-19 pandemic.
- vi) **On food demand and food security:**
- The demand for food has been affected thanks to the reduction in income and buying capacity.
  - Panicked Consumers are stockpiling the foods, which successively has affected the food availability and price.
  - Due to the decline in international trade, disturbance in the food supply chain, and food production, food insecurity may arise.

## **5. INDIAN RESPONSE TO COVID**

### **(i) Reforms in e-NAM**

- The new features of the National Agriculture Market platform were introduced as a welcoming move to decongest mandis.
- They aim to strengthen agriculture marketing by reducing farmers' necessity to physically access the wholesale man for selling their harvested produce.

**(ii) Technological support**

- Kisan Sabha App developed by CSIR to attach farmers to provide chain and freight transportation management system was recently launched to support farmers during the lockdown.
- The app aims to supply the foremost economic and timely logistics support to the farmers and increase their profit margins by minimizing middlemen's interference and directly connecting with the institutional buyers.
- Kisan Rath app was also launched to facilitate farmers & traders in checking out transport vehicles for Agriculture & Horticulture produce.

**(iii) Boost to Contract farming**

- Various states have promoted innovative models, allowing investors and farmers to agree with contract farming insight into the pandemic's continuing uncertainties.
- For example, the Consumer-Farmer Compact in Telangana has ensured food availability and access in COVID-19 times.
- In this technique, the consumers support farmers with their agricultural needs; reciprocally, farmers ensure consumers are ready to access food in a hassle-free manner.

**(iv) Allocations for direct transfers**

- To increase the allocations for DBT to farmers through PM KISAN and including everyone who is actively undertaken during the lockdown.
- DBT has helped most farming families be partially compensated for the losses seen in March and April months.
- DBT has provided them with some cushion against the deflationary effect seen on farm-prices thanks to the prolonged lockdown.

**6. FUTURE SCOPE OF REFORMS**

**[a] Focusing towards Alternative Market Channels.**

- The alternative market channel works on the canon of decentralization and direct-to-home delivery.
- The idea is to make smaller, less crowded markets in urban areas with the participation of farmers' groups and Farmer Producer Companies (FPCs) for having direct access to consumers.
- It may provide a valuable option against the lockdown when efforts to avoid crowding within the wholesale markets are likely to continue.

**[b] Reforming APMC.**

- With these reforms, the govt has also set in motion plans to dismantle the decades-old monopolies of state-run APMCs, which were often blamed for unfair trading and had become a barrier for farmers to urge a fair price on their produce.
- There is an urgent need to abolish or reframe the APMC Act and encourage direct buying of agri-produce from farmers/farmer producer organizations (FPOs).



- The companies, processors, organized retailers, exporters, consumer groups that buy directly from FPOs needn't pay any market fee as they are not availing APMC yards' facilities.
- [c] Designating warehouses as markets.**
- The warehouse receipt system is often scaled up.
  - The private sector should be boost up to open mandis with modern infrastructure, capping commissions.
- [d] Making Logistics transformation.**
- For sustaining the demand for agricultural commodities, investments in critical logistics must be enhanced.
  - Moreover, e-commerce, delivery companies, and start-ups were encouraged with suitable policies and incentives.
  - The small and medium undertakings, running with raw materials from the agriculture and allied sector or otherwise, also need special attention so that the agricultural economy doesn't collapse.
- [e] Institutionalizing farm labour.**
- For obviating the immediate concerns of the scarcity of farm workers, policies must facilitate easy availability of machinery through state entities, Farmer Producer Organizations, or Custom Hiring Centers (CHCs) with appropriate boost up.
  - It is also suggested to explore leveraging NREGS funds to pay a part of the farm labor (with farmers paying the balance wage amount) to reduce the farmer's monetary burden while ensuring wage employment to the landless laborer's workers
- [f] Expanding institutional lending.**
- As the Kharif (rainy/wet) season is fast approaching, institutional lending of crop loans should be expanded and facilitated for a smooth (and sufficient) flow of credit to borrowing farmers.
  - Agri-inputs - seeds, fertilizers, agro-chemicals, etc. - need to be pre-positioned for straightforward availability. The private sector must play a significant role in necessary policy support.

## **7. CONCLUSION:**

The entire concept of lockdown with no prior notice has been witnessed in a very challenging way by this sector. The Government must provide for all the wrongs in the present industry due to the virus. If privatizations are often the source of revamping of the world, the govt can also choose that with many policies so that the farmers are not in danger.

Covid-19 is an unprecedented challenge for India; its large population and therefore the economy's dependence on informal labour make lockdowns and other social distancing measures hugely disruptive. Both the central and state governments have understood the challenge and responded aggressively – but this response should be just the start. India must be fully prepared in order to scale it up as events unfold, easing the economic impacts through even greater public program support and policies that keep markets functioning.

It is a matter of satisfaction that India's Government has now increased its nutrition specialization besides food security and raising farmers' income (rather than enhancing farm productivity). Changing the buyer behavior with suitable programs and incentives is already within the plan. For four of these to happen, the prevailing landscape of policy incentives that favor the two big staples of wheat and rice has got to change. By making agricultural policies, post-COVID19 scenario, must include these imperatives for a food systems transformation in India.

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