

*Review Article*

# Facing the challenges of food crisis and livelihood security in India under the threat of COVID-19

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The novel corona virus was first identified at the end of 2019 and it is a respiratory illness, which had affected to at least 240 countries on the globe. Corona virus has rapidly spread its wings across the world, devastating lives and livelihoods in almost all the corners of the world. Although the impact of corona virus on agriculture and food security is difficult to predict as of late March, the impact of the virus on food security and agriculture is not yet known, nor will it likely be known for coming months as the spread of virus is continuously increasing at different rate on different continents and country. The only thing which is very certain and clear to each and every country is that it will have or it is better to say it is already having a strong negative effects on agriculture including food security and livelihood of the poor and vulnerable people of the society. Looking in the past some unseen risk factors can be identified and lesson from the previous pandemics (e.g. Ebola virus disease in West Africa in 2014) or Global food crisis of 2008 indicated that effects on agriculture and food security will rapid and more gigantic proportion. Though India has taken early action to limit the spread of COVID-19 by implementing phase wise lockdown for almost 54 days for all economic. Still the virus has travelled a long and had affected large number of lives. However, as Corona cases are increasing fast, there is urgent need to have consciousness about the disease pandemic spread and its impact on agriculture and food security. These steps has been taken by almost all the governing body of each and every country of the world and definitely helping in limiting the health crisis, but as in other countries the complete shutdown of all economic and social activities except essential services has created an economic crisis and misery for the poor, with massive job losses and rising food insecurity. The latest figures from International Labour Organization on massive job loss in four sectors that have experienced the most “drastic” effects of the disease and falling production are: food and accommodation (144 million workers), retail and wholesale (482 million); business services and administration (157 million); and manufacturing (463 million).

**Keywords:** COVID-19, agriculture, food supply chain, risk factor, labor economic, social activity.

## INTRODUCTION

The present health crisis around the world has affected all the corners of life. It became the priority of every government is to protecting lives of people suffering from this disease as well as frontline health workers of their nation. Governments have swung into actions since the Corona virus attack created an unpredicted situation. India declared a three-week nation-wide lockdown till mid-April in the initial phase, which has subsequently been extended till May 3 and again it has been extended up to May 17 for achieving satisfactory containment of the virus spread. During this challenging environment, how does Indian economy respond to the crisis and how do government measures affect the households across the country. To mitigate the impact of COVID-19.

government is imposing economic shutdown all over the country. All the business and social activities has been stopped, factories are shuttered down resulting workers to migrate to their home places, which would further going to interrupt the demand-supply scenario of labour in the country. During this imposition of lockdown several millions of people lost their jobs specially people who are engaged in agriculture and food sector. The rise in unemployment, the closing of restaurants, food parks, schools and markets have triggered the demand reductions for certain commodities, while the demand for food and agricultural products had increased and this has created the rising concern livelihood security and food crisis in forthcoming months in India. Country has to think on that is there any food crisis elucidating in near future. If the current situation is that much stony, the future scenario might not be sympathetic either The novel coronavirus was first identified at the end of 2019 and it is

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a respiratory illness, which had affected to at least 240 countries on the globe. Corona virus has rapidly spread its wings across the world, devastating lives and livelihoods in almost all the corners of the world. Although the impact of corona virus on agriculture and food security is difficult to predict as of late March, the impact of the virus on food security and agriculture is not yet known, nor will it likely be known for coming months as the spread of virus is continuously increasing at different rate on different continents and country. The only thing which is very certain and clear to each and every country is that it will have or it is better to say it is already having a strong negative effects on agriculture including food security and livelihood of the poor and vulnerable people of the society. Looking in to the past some unseen risk factors can be identified and lesson from the previous pandemics(e.g. Ebola virus disease in West Africa in 2014) or Global food crisis of 2008 indicated that effects on agriculture and food security will rapid and more gigantic proportion [1].

Though India has taken early action to limit the spread of COVID-19 by implementing phase wise lockdown for all economic and social activity, social distancing, testing has been expanded significantly, different schools, buildings, government hostels, guesthouses has been converted into quarantine centers. More than 6000 railway coaches have been converted in to isolation ward and ICU for COVID-19 positive cases. Still the virus has travelled a long and had affected large number of lives. However, as Corona cases are increasing fast, there is urgent need to have consciousness about the disease pandemic spread and its impact on agriculture and food security.

These steps has been taken by almost all the governing body of each and every country of the world and definitely helping in limiting the health crisis, but as in other countries the complete shutdown of all economic and social activities except essential services has created an economic crisis and misery for the poor, with massive job losses and rising food insecurity. The latest figures from International Labour Organization on massive job loss in four sectors that have experienced the most “drastic” effects of the disease and falling production are: food and accommodation (144 million workers), retail and wholesale (482 million); business services and administration (157 million); and manufacturing (463 million). Together, they sum up to 37.5 per cent of global employment and this is where the “sharp end” of the impact of the pandemic is being felt now, the ILO chief added. Talking about the super economic power country USA, the latest data shows that Over 20 million Americans have now applied for unemployment benefit.

India has to be prepared for the worst economic shock till now, as there are two reasons why the economic crisis will be more severe in India. First, pre-COVID-19, the economy was bit slowing down with existing problems of unemployment, agriculture migration, low agriculture incomes, livelihood security, malnutrition, and widespread inequality in terms availability of resources. Second, India’s large informal sector is particularly vulnerable. Out of the national total 465 million workers, around 91% (422 million) were informal workers in 2017-18. Lacking regular salaries or incomes, these agriculture, migrant, and other informal workers would be more vulnerable and severely-hit during the lockdown period. Here, I focus on the likely impacts on agriculture, supply chains, food crisis and livelihood security.

## **Agriculture yetto have sever effects**

Although the economic impact has not yet been felt in agriculture, which is one of the largest livelihood earning sector in India, risks of food insecurity are now emerging. This is owing to containment measures, including border closures. Workers in this sector may be increasingly impacted, particularly if the virus spreads further into rural areas. Due to nationwide lockdown in the country, some activities in agriculture have been affected severely. It was reported that harvesting of wheat and pulses in northern part of India have been stopped and late harvesting was notices in almost all the crops and again arising the quality issue of the harvested produce. Preliminary reports shows that due to migration of labor to their home town after the lockdown of all the business and agricultural activities, non-availability of migrant labor is interrupting some harvesting activities, particularly in Punjab, Haryana and Uttar Pradesh. Disruption in supply chain of agricultural produce was also noticed during to complete shuttered down of inter-state and intra-state movement of all the transportation means and other related issues. Prices have decline for wheat, vegetables, fruits and other consumable agricultural crops from the producer’s side, yet consumers are often paying high prices. To earn their livelihood and fulfill the family consumption need, farmers would like to sell their produce at any price and this might be going to create the situation of distress sale among the farmers. Poor storage capacity is also one of the strongest reasons behind distress sale in India [2].

## **Food supply chain and food prices**

Restrictions on the movement due to havoc of COVID-19 pandemic could severely affect the agricultural input supply chain at critical time in the season of agricultural operations. It will going to reduce the informal labourers access to farmlands and therefore both their wages and the area of land cultivated is going to reduce drastically. This disruption in agricultural activities, input supply, food supply chain and shutter down of all the industries not only affected the producer side but also had created the problem of food crisis and livelihood insecurity for the people of BPL, agricultural laborers, daily wage earners, contractual workers and migrant laborers. This section of society is likely to be more prone to suffer from food crisis and livelihood insecurity under the pandemic situation of COVID-19. Instability generated by an outbreak of COVID-19 and associated behavioral changes could result in temporary food shortage, price hick and disruption in market as well as discontinuity of food supply. This is likely to have adverse effects in particular on the most vulnerable section, such as informal laborers, urban population, migrant laborers and others that rely heavily on the market to meet their food need. Restriction on the movement or export/import may create problems in transporting key food items to different geographical locations and access market unit, affecting both producers and consumers side. This may result in reduced farmers income and instability of food prices thus creating hue and cry kind of situation for both producers and consumers. Moreover, if food supply chains and movement of key agricultural commodities becomes interrupted and livelihood unsustainable, vulnerable population are more likely to move in search of food and livelihood –specially in those areas, which are densely populated with existing food crisis and livelihood insecurity problems where movement restrictions may be much more difficult to control.

## Labour migration and food security

Informal workers, whether wage worker or self-employed, are among the groups most at high risk of losing their jobs and incomes. The pandemic spread of COVID-19 is expected to have a significant impact on informal workers, landless labourers, daily wage earners and farm labourers. Recent study by ILO, shows that the nationwide lockdown and restriction on the physical movement of people is going to foster the non-essential business with negative outcomes on labour markets worldwide, particularly in the informal sector. As the COVID-19 spread across the nations with large informal economies, it is therefore expected that more informal workers will lose their jobs and face extreme poverty and food crisis. Informal workers engaged in agriculture and food supply chain would be at risk of losing their jobs, whereas they are considered as the most important factor of production that should remain operational. Agricultural operations are highly subjected to seasonality so it is influencing the demand for labour in agriculture and the most labour intensive work of planting and harvesting would overlap with lockdown with restricted movement of people [3]. So the opportunity to supplement their household income for the agricultural labourers would be lost. Restriction on movement in severely affected cities will hamper the agricultural worker from moving to urban areas in the search of job opportunities. This will negatively affect the farmer's livelihoods by abiding their ability to work for wage, leading to a greater risk of food insecurity.

Without alternative sources of earning livelihood in cognizance, informal workers may continue to work without adequate preventive measures or appropriate protection, thus exposing themselves and their families to health and safety risk. Lockdown is also affecting the seasonal migrant workers and daily wage earners and forced to work in worst conditions, which will make them more prone to health and safety risk. In Further, when experiencing income losses, they may follow the negative strategies to cope up the income loss and they will follow distress sale of crop produce and farm assets. And this would be going to create catastrophic consequences for their life and livelihood [4].

So far COVID-19 has devastated each and every sector of the economy and it is important to note that the combination of the above discussed impacts could have conceivable rate of high risk on the acutely food insecure population and threaten the developmental gains in food crisis context [5]. Furthermore, the food crisis impact on vulnerable households will have lasting effects on their lives and livelihood in addition to reduced number of meals, increased school drop-out rates, reduced means to have health expenditure, gender based violence, selling of productive assets, etc.

## RECOMMENDATIONS

To cope up with the current pandemic havoc of COVID-19, there are some policy issues and recommendations that need to consider the existing situation of migration, food insecurity and agriculture income. Ensuring to stabilize the incomes and access to food as well as securing livelihood and food production assistance for the most acutely food insecure population. Make sure for the continuity of the critical food supply chain for the most vulnerable populations, including between rural, urban and peri-urban areas through support to the fair price shops, local

food market and different NGOs. Safeguarding the farmers through fair and remunerative prices for their farm produce to overcome the situation of distress sale and black marketing of the essential agriculture commodities. Making arrangements of online platform for the sale of agricultural produce through the help of IT industries so that farm community does not have to visit market yard again and again. This kind of online E-marketing platform is really going to help the farmers to minimize the risk for the exposure of the virus. Farm populations must be protected from the transmission of COVID-19 to the extent possible by testing and practicing social distancing. Ensuring the safety net for the agricultural laborers as they are at high risk for the transmission of COVID-19, while performing the agricultural operation at the farm. Mobilizing different communities and raising COVID-19 awareness through farmer's field, livestock centers and animal health clinics with the help of local community leader.

## CONCLUSION

Safeguarding the interest of consumers also through providing E-marketing platform for fruits, vegetables, wheat, rice, pulses and other essential commodities and make sure that the supply should be door to door so that social distancing and lockdown policy of the government can be maintain. Ensuring people who are involved in the food supply chain are not at risk of COVID-19 transmission by creating awareness about food safety and health regulations, including rights, roles and responsibilities of the workers. Small poultry and dairy farmers need more targeted help, as their pandemic-related input supply and market-access problems are urgent. Farmers, agricultural workers, land less laborers and daily wage earners should be included in the government's assistance package and social protection programs addressing the crisis. Priority should be given to that area which are already facing food crisis due to the evolution of pandemic, which may result in vulnerable to the impact of new shock. Conducting sensitization training and awareness campaign with frontlines workers along the food supply chain on best practices to mitigate the risk of infection. The government has correctly issued lockdown guidelines but implementation problems leading to labor migration, shortages of key agricultural items in the market and falling prices should be rectified.

## REFERENCES

1. Abdelhedi IT, Zouari, SZ (2020). Agriculture and Food Security in North Africa: a Theoretical and Empirical Approach. *J Knowl Econ*. 11: 193-210.
2. Bermejo A. (2004). HIV/AIDS in Africa: International responses to the pandemic. *New Economy* 11: 164-169.
3. Chen S, Brahma S, Mackay J, Cao C (2020). The role of smart packaging system in food supply chain. *J Food Sci* 85: 517- 525.
4. Torero M (2020). Without food, there can be no exit from the pandemic. Countries must join forces to avert a global food crisis from COVID-19. *Nature* 580: 588-589.
5. Arndt C, Lewis JD. (2001). The HIV/AIDS pandemic in South Africa: Sectoral impacts and unemployment. *J Int Dev*. 13:427-449.