Article: RT0206



Highway or Byway: Corona Virus Effect in Agriculture

Subhajeet Behura¹ and Deepali Dash^{2*}

¹Faculty of Agriculture, Sri Sri University, Godi Sahi, Cuttack, Vidhayadharpur, Odisha (754 006), India
²Dept. of Plant Physiology, Odisha University of Agriculture & Technology (OUAT), Surya Nagar, Bhubaneswar, Odisha (751 003), India



Corresponding Author

Deepali Dash e-mail: dash.deepali1@gmail.com

Keywords

Agriculture, COVID-19, Impact, Pandemic

Article History Received in 01st July 2020 Received in revised form 05th July 2020 Accepted in final form 06th July 2020

E-mail: bioticapublications@gmail.com



525.

Abstract

How to cite this article?

Behura and Dash, 2020. Highway or Byway: Corona Virus Effect in Agriculture. Research Today 2(7): 523-

The prevalence of COVID19 health crisis has contrived all steps of life so the priority of the government is to provide proper health care and protecting the lives with maintenance of economic balance. It came to vision that if the Covid-19 pandemic lasts for longer, it will shut down large parts of the world economy. The developing countries will suffer more as they are not yet fully self-sufficient and basically take Agriculture as a pillar of economy. India is an agrarian country where agriculture is the backbone of Indian Economy. But the combat against pandemic has vastly affected this major economic sector. Disturbances in farming activity, national and international supply chain are the setback which will plunge the country's food safety and human development. Thus COVID-19 is an unprecedented challenge which is needed to be addressed quickly.

Introduction

ndia is a global agricultural powerhouse, ranked second worldwide in farm outputs. For the product like rice, milk, pulse and spices it took the first position in production and in production of wheat, cotton, vegetables and tea its position is 2nd. Agriculture is the main source of livelihood in rural India. This sector not only provide 18% share in total GDP but also employment to 60-70% of India's workforce. Therefore it will be more challenging for the Government of India to manage the effect of Covid-19 pandemic on agriculture sector. Therefore a proper assessment should be done in the ground level to know how does Indian Agriculture respond to the crisis and what are the post impact of this agricultural crises on the Indian economy.

Current Scenario

urrently more than 200 countries in the world are being affected by Corona virus or COVID-19. The large family of virus spread its severity on both human and animal. The first confirmed case of COVID-19 was detected in Wuhan city of China in December 2019. Due to novelty of virus strain it spread globally and declared as global pandemic by WHO on 11th March, 2020.

In India the first laboratory confirmed case was detected on 30th January, 2020 in Kerala but later on the gradual rise in number of cases forced the governance to put the country under a complete lockdown with the sole slogan of 'Social Distancing'. This not only affects the life of people, but it affects the livelihood as well. It has affected every sector of livelihood starting from a big industrial estate to a small vending zone. Nationwide extended lockdown has affected the country's economy which standstill at this point of time. India was for sure to be affected not only because of its domestic slowdown, but also because of its international recession,

523

reduced demand, sudden shutdown in production activities, fall in export and import, price decrease of commodities affect the economy chart. In the present date there is a clear acquired knowledge by consumers regarding essential and non-essential items. As a result of which the non-essential producing units or firms are severely affected, and this may cost in the reduction of workforce in future.

Corona Virus and Agriculture

n this specification of essential and non-essential; Agriculture and allied sector being one of the essential commodities whose use and production are at a steady rate. Sudden announcement of lockdown has affected different farm activities. As Rabi crop harvest season coincides with the corona virus pandemic, the ready to be harvested crops unabatedly stands in the field. Migrant labourer or daily wage labourer had set off to their homes due to the lockdown. As a result there is shortage of labourer which affects harvesting and post-harvesting operation. In absence or unavailability of both the process, harvesting operation is taking a longer period which negatively affects farm economy. In order to reinforce a zero hurdle in the harvest season, the government has allowed the movement of tractor, trucks and other farm machinery but due to the late onset of harvesting process, it tune-up with the land-preparation and sowing of Kharif crop makes difficult in tractor availability. Apart from all there is also a shortage of agricultural inputs for the farmers as the major agricultural input exporting country is affected due to lockdown.

Specific Impact

he first visible impact of COVID-19 was on Agriculture supply chain (Hobbs, 2020). Nationwide lockdown restricted the movement of people as well as vehicles between states, districts and even in local area. Globally, the Food and Agriculture Organization (FAO) expects shifts in the supply of and demand for food. It warns of a world "food crisis" if countries do not protect vulnerable people from hunger and malnourishment, and de-clog food supply chains. World agricultural prices show signs of a rise from the third week of March 2020. Stock-piling of rice and wheat by households may be one of the reasons for rising of price, and in addition to it restrictions imposed on food exports by different countries also contribute towards price hike. For instance, Vietnam, the world's third largest rice exporter, has stopped exports, which may reduce the global rice exports by 15 percent. Farmers face a great difficulty in transportation of harvested crop to Mandis by paying double price then also greeted with lack of demand in Mandis. And those who were unable to pay the amount for transportation suffer by selling their product at marginal rate in local market due to lack of storage facility. For example, in Maharashtra, Tomato growers sell their tomatoes even in Rs.

2 per Kg., Grape growers' bears a loss of Rs. 1,000 crores due to crisis, and because of less demand Wheat prices are fallen from Rs. 2,200/Q to about Rs. 1,600/Q in Madhya Pradesh by 25th March, 2020. For many crops, these prices are also below the Minimum Support Prices announced. In Punjab, vegetables that were sold at Rs. 15/kg are reportedly being sold at a price of Re. 1/kg. International trades are also affected as the result products can't be transported from India and are wasted. This not only affect agriculture but also horticulture, Farmers involved in vegetable and fruit cultivation, were forced to sell their produce at low price or throw it on road or not harvested because there were less buyers, no bigretailers, restaurants, hotels. For example, banana prices in Andhra Pradesh have seen a sharp fall from Rs. 15 per Kg to Rs. 6 per Kg in the last March and the same scenario was followed by mango (Golan et al., 2020). At the same time, loss of income and remittances is reducing people's ability to buy food and compensate farmers for their production. As per United Nations World Food Programme by the end of 2020, an estimated 265 million people could face acute food insecurity. According to Global Report on Food Crises 2020, in the consequence of chiefly of conflict, the effects of climate change, and economic crises around 135 million people in 55 countries currently face acute hunger (Lee & Morling, 2020). All are closed down and household demand dipped drastically because many fear that vegetables are handled by too-many people. Along with this hording of store grain products by rich people to escape the fear of future deficiency, created an artificial shortage of store grain availability in market. In all the cases daily laborers are suffered the most. Although there was least impact on fodder production and animal health but milk supply chain was interrupted and closure of milk processing company compelled dairy farmers to dump milk or convert it into by-products. Poultry farmers have been badly hit due to misinformation in social media and fish farmers due to lack of feed.

Solutions to Overcome These Problems

s we know every problem has a solution. To overcome the current problematic situation related to coronavirus pandemic, people should strictly follow the government given guidelines. People need to take care of themselves as well as their food crops by maintaining social distancing during field work. Use of machinery in agricultural field will help to avoid the gathering of workers and make the process easier. To maintain stability in market price, unnecessary hording and panic buying of agricultural commodities should be avoided. Along with all these good awareness and proper understanding about the current



situation is required to overcome the corona virus pandemic.

Conclusion

Thus we concluded that food and Agriculture are not outside the impact of COVID-19. Falling price, less demand and Labour shortage - these are the problems which should be rectified as it is enforcing to setup crops in-fire or using it as an animal fodder. It has affected all the process which connects farm production to final consumer mostly due to lockdown restriction. But keeping the supply chain functioning well is crucial to food security because if food insecurity arises then the death toll due to this will be high. Informed decision should be taken, so that COVID-19 doesn't evolve to threaten our agriculture and food supply. Thus to endorse food safety and economy, Agriculture will be the key in the post COVID-19 phase.

References

- Hobbs, J.E., 2020. Food supply chains during the COVID-19 pandemic. *Canadian Journal of Agricultural Economics/ Revue canadienned'agroeconomie*.
- Lee, A.C., Morling, J., 2020. Coronavirus disease 2019: emerging lessons from the pandemic. *Public Health*.
- Golan, M.S., Jernegan, L.H., Linkov, I., (2020). Trends and applications of resilience analytics in supply chain modeling: systematic literature review in the context of the COVID-19 pandemic. *Environment Systems & Decisions*, 1.

