Title: The impact of Covid-19 on smallholder farmers in India and the way forward Author: Kumar Das and Bijeta Mohanty

In August 2020, the International Growth Centre, in collaboration with the Asian Development Research Institute (ADRI) organised a webinar on 'The impact of Covid-19 on smallholder farmers in India and the way forward'. The panel comprised J. V. Meenakshi (Delhi School of Economics), S. Mahendra Dev (Indira Gandhi Institute of Development Research), and N. Saravana Kumar (Secretary, Agriculture Department, Government of Bihar). The discussion was moderated by Anjani Kumar (International Food Policy Research Institute).

The ongoing Covid-19 pandemic as a health catastrophe has affected all ways of life. In this pandemic, protecting people's lives as well as the frontline facilities is now the current priority for both the state governments and the central government. Both governments have rolled up their sleeves for getting into actions to tackle this health disaster which also led to imposing a nation-wide lockdown to limit virus transmission. In this context, to deliberate the issue, IGC India organised a webinar on "The impact of Covid-19 on smallholder farmers in India and the way forward" to explore how smallholder farmers respond to this crisis and how do government measures affect millions of farm households across the country?, and present a way forward for policymakers in terms of improving outreach and delivery of the schemes.

Anjani Kumar initiated the discussion by presenting a few stylistic facts – Indian agriculture is dominated by small and marginal farmers who comprise nearly 90% of Indian farmers and are more vulnerable, making it important to understand the implications of Covid-19 and the related lockdown on their socioeconomic well-being. The economy – particularly the manufacturing and service sectors – has been adversely affected by the pandemic. Agriculture which is relatively at macro-level has been affected less, but within agriculture, perishable products have incurred severe losses as compared to non-perishables.

Covid-19 and agriculture markets: J. V. Meenakshi stated that in addition to Covid-19 and its impact on public health, the nationwide lockdown implemented in March 2020 has had a major impact on all sectors of the economy – including agricultural markets. The agricultural sector is both a source of resilience as well as in some ways more vulnerable as it had to rapidly adapt to different supply chain mechanisms such as online transactions and home deliveries. Foods come under the ambit of essential commodities and in principle, are exempt from movement restrictions but with the nationwide lockdown due to the pandemic, the country's food markets have been affected severely due to demand and supply shocks. Employment and income shocks that translated into compressed demand across-the-board have been further exacerbated by the closure of hotels, restaurants, and institutions. At the same time, consumers' buying behaviour has also changed, with greater online transactions and home-delivery services displacing inperson purchases and restaurant meals. Producers and distributors are being forced to shift supplies from food service outlets to retail channels. On the supply side, across the value chain, there are labour and logistical constraints. These factors have implications for the quantities of goods that arrive at the wholesale markets – that feed retail outlets – and the prices at which trade occurs. Meenakshi presented her research – focussing on the states of Haryana, Madhya Pradesh, Punjab, Rajasthan, and Uttar Pradesh which can be accessed by visiting; https://econpapers.repec.org. Her research examined the differential impact on staple food crops and perishable products. This research also assessed if states that had undertaken a greater degree of market reforms were better able to protect farmers from disruptions.

She emphasised that the current analysis extends the period of post-lockdown coverage till the end of June, and the distinction between the immediate (within a month) versus short-term (over 3 months) was important for the analysis. She considered wider geography of nearly 1000 markets across five states with daily price observations for 91 days across 2019 and 2020. As part of the study she also considered data on the impact of the spread of Covid-19 in each district on wholesale prices and quantities traded in agricultural markets. She also examined the role of government policy – specifically, procurement and agricultural market reforms – in mitigating any adverse impacts in terms of holding the markets.

Meenakshi stated that the results of her research showed that initially there was a spike in prices in April and then the prices fell subsequently, suggesting that markets responded relatively quickly. Wheat, in the staple food category, was anchored at the minimum support price (MSP) irrespective of which period was looked at across 2019 and 2020 although there was a fall in the price in June. However, the states of Haryana and Uttar Pradesh had announced measures to extend procurement operations through the end of June and offered bonuses for late arrivals which helped to address the decline in price. Among perishable commodities studied (tomato and onion), increased market arrivals were associated with a depression in price particularly for tomato and not so much for onion. In contrast, market arrivals, especially of the two perishable goods, were significantly higher in districts with high caseloads, consistent with the evidence of sales conducted to generate cash. The results also show that the adoption of market reforms matters much more for the perishables than for staples because for wheat the MSP acts as a price anchor. The results suggest that states that delisted fruits and vegetables were able to prevent a decrease in prices by over 10 percentage points. Market arrivals affect price effects, and it was seen that perishables saw relatively more sales where markets were deregulated. This highlights the importance of the government's role both in procurement and market reforms.

Meenakshi stated that considering the pandemic is still unfolding across the country, and the data only considered up to 30 June 2020, the long-term and short-term effects are still to be analysed. The study shows that Covid-19 and its associated disruptions had a differential impact – both across commodities and over time with market arrival impact magnitudes being positive and significant. The study further concludes that market arrivals quickly recovered after the initial month of the lockdown, and irrespective of possible distress sales there was no disproportionate fall in prices. The result suggests that states which adopted more market reforms saw a 11% higher difference in tomato prices. Thus, for these commodities, reforms do seem to have shielded farmers from a higher extent of a price collapse. The findings indicate a major role for government intervention in two fundamental ways – first, for cereals where the government is a major buyer through procurement at MSP it played an important role in keeping the supply chain intact and helped mitigate price risk; second, relates to agriculture market reforms, where markets were less restricted, states managed price volatility better.

Supply chain disruptions and key takeaways: N Saravana Kumar echoed the same thought that the Covid-19-related lockdown proved that small and marginal farmers are vulnerable, and the pandemic exacerbated their situation.

The pandemic and the initial nationwide lockdown affected both agricultural inputs and outputs and caused disruptions in the supply chain. Initially, nobody understood the impact a lockdown would have on essential commodities and agriculture. This lack of awareness was a result of the scale and pace of spread of the pandemic. The lockdown also affected the harvesting season (*rabi*¹) and posed a serious problem for farmers in Bihar as it restricted their movement and led to a shortage of labourers to harvest their *rabi* crops. Farmers also faced the crisis of finding operators for combined harvesters that speed up the process of harvesting and threshing of crops. The situation did not improve despite the government lifting the ban in the movement of farm workers and hence 650 drivers has to be mobilised from Punjab, Haryana and some parts of western Uttar Pradesh to come to Bihar. However, due to quarantine regulations which required 14 days of isolation upon interstate travel, as a result of reverse migration, laborers returned to the villages and assisted with harvesting.

Kumar outlined the issue of demand compression which resulted from the nationwide lockdown as people were not able to go outdoors and dine at restaurants. With markets, restaurants and hotels being close, bulk demands reduced and prices went down which affected the small and marginal farmers who grow perishables, especially fruits, vegetables, and animal produce. With developed and structured markets, states like Tamil Nadu acted as a buffer and collected the produce from the smallholding farmers and ensured MSP. Unfortunately, the Government of Bihar (GOB) was not able provide such a buffer and hence, is now trying to develop a proper marketing mechanism for small and marginal farmers. As temples were

¹ Rabi crops are cultivated and harvested in the dry months.

closed and social ceremonies were not being held, the horticulture sector was considerably affected and the demand for flowers reduced significantly. To addressing this, the GOB amended the current scheme and increased the subsidy from 50% to 70% for compensating for the loss. Bihar is the highest producer of maize in India, and even with good productivity the price went down this year due to a lack of demand during the pandemic. Farmers were forced to sell maize for a maximum of Rs. 1,200 per quintal compared to Rs 2,200 per quintal which was the price last year.

Highlighting the role of the government in alleviating the issues, Kumar listed the measures taken by the Government of India (GOI) and GOB to tackle the effects of demand compression. For improving farmers income, the GOI started making a payment of Rs. 6,000 under the Pradhan Mantri Kisan Samman Nidhi (PM Kishan) scheme to every farmer. The GOI made advance payments and the GOB approved seven new schemes which included payment of agriculture, input subsidy to farmers for the *rabi* cropping season, assistance to farmers engaged in organic vegetable farming and disbursed Rs. 6.5 billion in a one and half month period.

Kumar emphasised the numerous efforts made by the government to strengthen the agriculture supply chain. Milk producers were among the worst hit due to the lockdown as their clients were not operational because of the pandemic. The GOB made considerable efforts to ensure proper supply. The poultry industry was affected because people had stopped eating eggs and to address the issue, the GOB initiated awareness camps. Along with the difficulties caused by the pandemic, climate change and the locust attack created further challenges for the farmers. To address the former, the GOB recently a programme called 'Climate Resilient Agriculture Programme'. For ensuring proper backward and forward linkages in the supply chain, the GOB is promoting farmer producer organisations (FPOs). Kumar also stressed the need for integration of technology in service delivery.

Economic impact of Covid-19 and the role of safety nets: Discussing the impact of Covid-19 and associated lockdowns on agriculture using available data, Mahendra Dev stated that smallholder farmers are not homogeneous but rather a diverse set of households with varying farm and household characteristics. Smallholder farm systems are also not permanent, and some are subsistence oriented. Smallholder farmers' practises are dynamic and vary according to the constraints they face and the stage of economic transformation. The income of small farmers is very little – almost $1/10^{th}$ of large farmers. The economic impact of Covid-19 on rural areas is much lower than the urban areas. Early evidence suggested that the rural economy is reviving, and the performance of agriculture will be much better than manufacturing and services. As per the prediction the growth rate in the agriculture sector will be 2.3 - 3% - 1 India is likely to have a bumper crop this year. However, early evidence suggested that during Covid-19 lockdown, perishable agri-products have incurred severe losses as compared to the non-perishables. As per data collected by Azim Premji University, 37% of the farmers were unable to harvest, 37% of the harvest was sold at reduced prices, and 77% of the households surveyed consumed less food during the nationwide lockdown.

Dev also shared that as per the CMIE Data, the rural unemployment is 22%. He added that even the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) declined which means that farmers are not getting the benefit of the higher prices being paid by consumers. Agricultural economists and other stakeholders have been advocating agricultural market reforms for decades. Reforms are important but with the new agriculture reforms – the Essential Commodities Act and the two other ordinances, there are concerns and it remains unclear how small and marginal farmers will compete with large corporate enterprises in bargaining. He also highlighted issues with MSP – the benefits of MSP do not reach all states and are concentrated on few products and states. He opines that the government should increase investment in rural infrastructure, storage and warehouses. The lockdown reiterates how social protection schemes such as the cash transfers, take-home rations and Integrated Child Development Services (ICDS) are imperative to help the poor during the pandemic. Many surveys also showed that undernutrition and malnutrition, during this period, increased because of the lack of a diversified diet, as the rural poor could not spend much on the micronutrients and pulses. Nutrition programmes should continue to work as essential services and provide rations and meals to recipients at home.

In the post-Covid-19 period, the government should implement schemes to provide a minimum income for the poor and vulnerable groups. He also emphasised the issue of access to credit during the pandemic. As the Covid-19 situation worsened, farmers faced a cash crunch due to the lockdown and closure of microfinance institutions and AMPC Act. He also added that the network of illegal moneylenders spread across the eastern states of India has become more active, and the dependence on moneylenders increased during the lockdown.

Concluding remarks: In conclusion, Anjani Kumar stated that the Covid-19 crisis has exposed the vulnerability of India's agriculture and with the nationwide lockdown, the country's food markets have been affected severely. The impact has manifested itself in the forms of demand and supply shocks and emphasised the need for agricultural market reforms and digital solutions to connect farmers to markets, to create safety nets and ensure reasonable working conditions, and to decentralise food systems to make them more resilient. The vulnerabilities in agricultural supply chains and depleted workforces caused by the Covid-19 crisis have hurt farming of all scales and forms in India. Most affected have been dairy farming, floriculture, fruit production, fisheries, and poultry farming. Apart from this the government should strengthen social protection schemes. Going forward some of the key steps would include encouraging farmers to join FPOs – and providing them easy access to credit – and the government should invest on building their capacity and providing guidance on digital and direct marketing solutions. Encouraging agritech start-ups to work with FPOs and smallholders and ensuring transparent rules of the game could help improve both input and output supply chains.