

Impact of COVID-19 and Lockdown on Agricultural Markets: Evaluating the Role of Market Policies

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SUMMARY

The spread of COVID-19 and the lockdown spiked all prices of agricultural commodities initially in April but they recovered relatively fast with emphasizing the importance of time duration for analysis. The study shows the resilience in agricultural markets in case of dealing with the COVID-19 shock, buffered by adequate policy support.

INTRODUCTION

There is no increase in saying the way that notwithstanding its effect on general wellbeing, COVID-19 and the lockdown that was embraced starting in March 2020 trying to contain its spread have had a significant financial effect that has influenced all areas of the economy. The agricultural area and agricultural markets sectors are no special case. In contrast to numerous different nations, the agricultural area in India represents 60% of all rural business and is subsequently the single largest source of livelihoods. Despite the way that food goes under the boundary of essential commodities that on a fundamental level are excluded from movement restrictions, India's food markets have been essentially affected by the spread of the novel Covid (and COVID-19 infection). The effect has showed itself as interest just as gracefully stuns. The work and pay stuns that converted into a no matter how you look at it request pressure have been additionally exasperated by the closure of hotels, restaurants, and institutions. Additionally, shoppers' purchasing behavior has changed, with greater online transactions and home-delivery services displacing in person purchases and restaurant meals. Produce cultivators and merchants are being compelled to move supplies from food administration sources to retail channels. On the supply side, the whole way across the value chain, there are labour and logistical constraints. Every one of these elements have suggestions in the amounts of products that show up at the discount showcases that feed retail sources, and the costs at which trade occurs. While these impacts of the COVID-19 emergency are not special to India (see for instance, Chetty *et al.* 2020), they are likely amplified. This is on the grounds that rural business sectors in India, dissimilar to in more created nations, are vigorously subject to cash transactions. Also, cash flow constraints are more salient in agricultural markets than in other sectors of the Indian economy. Partly as a consequence, throughout the value chain, growers, traders, and retailers, accustomed to traditional methods of stocking and choosing suitable inventory management mechanisms, do not have built-in systems to deal with such disruption. Indeed, with COVID-19, they face shocks in both supply and demand of an order of magnitude never seen before in Indian markets. Of particular concern is the primary commodity end of the value chain. It is conceivable that the pandemic would affect availability of labour for harvest, even though the return of urban migrants to their rural homes may have eased this constraint. COVID-19 and lockdowns could also affect the transport of grain and, as a consequence, prices that farmers receive. Although the government responded with urgency in opening trade in agricultural commodities (these were the first set of exemptions to lockdown measures), this alone may not have been enough to provide sufficient cash in the system for agricultural markets to function. The impacts may be viewed as net consequences of behavioural responses from consumers, wholesalers, and retailers through to farmers. Farm incomes are by their very nature seasonal, and prices and quantities traded of commodities whose harvest times begin from late March are a key determinant of the liquidity of farmers, and how their livelihoods are being affected by the pandemic.

COVID-19 Incidence

Mandi regime changes in relation to COVID-19 can be mapped into the different phases of lockdown that started from the end of March 2020. It is the relative variation between "high" and "low" caseloads that the empirical strategy exploits. Also, the relaxation of regulations governing movement and economic activity were based largely on the total number of confirmed COVID-19 cases. In fact, the government classified districts as green, yellow, and red zones based on recorded positive cases. Table 1 presents the lockdown and unlock timelines

along with delineation of various associated measures. The first period consists of phases 1 and 2 of the lockdown, from 1st April to 3rd May. Phase 1 consisted of the strictest measures that would have affected activities related to the agricultural sector as well. From phase 2 onwards, there were different levels of relaxations, with exemptions for the agricultural sector being first granted. The second period covers phases 3 and 4 of the lockdown from 4th May to 31st May. In phase 3, further activities were allowed in green districts, with phase 4 allowing for decentralized decision making based on colour-coded zones. The final period was from 1st to 30th June, labelled unlock-1, with an emphasis on re-starting economic activities. This categorization into periods is important in assessing market dynamics following the COVID-19 shock. If one were to take a short window corresponding to phase 1 of the lockdown, when several markets were indeed closed, the picture would seem to be one of market collapse and sharp price spike, as the studies cited above find. But depending on the scale and stringency of the measures implemented subsequently, agricultural markets did rebound relatively quickly. The speed and extent to which this recovery took place is a function of the type of commodity, COVID-19 caseload and level of market reforms undertaken by state governments.

Lockdown	Duration	Activities Allowed
Phase-1 lockdown	25th March to 14th April 2020	Nearly all activities were suspended
Phase-2 lockdown	15th April to 3rd May 2020	Allowed agricultural activities starting 20th April 2020
Phase-3 lockdown	4th May to 17th May 2020	Districts were classified into 3 zones: red zones (130 districts), orange zones (284 districts) and green zones (319 districts). Districts in green zones have additional relaxations
Phase-4 lockdown	18th May to 31st May 2020	Movement allowed with some conditions across districts and states. States given a larger say in the demarcation of green, orange, and red zones and the implementation roadmap
Unlock 1	1st June to 30th June	Reopening phase with an economic focus. Lockdown restrictions imposed only in containment zones; activities permitted in other zones in a phased manner

Source: Ministry of Home Affairs, Government of India

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State	Provisions adopted
Uttar Pradesh	Single point levy of market fee, single unified trading licence, E-trading, direct marketing, private markets, administrative reforms, declaring warehouse/cold storages as deemed market
Madhya Pradesh	Single point levy of market fee, Single unified trading licence, E-trading, direct marketing, deregulation of marketing of fruits and vegetables
Rajasthan	Single point levy of market fee, single unified trading licence, E-trading, direct marketing, private market, administrative reforms, deregulation of marketing of fruits and vegetables
Punjab	Single point levy of market fee, single unified trading licence, E-trading, direct marketing, private markets
Haryana	Single point levy of market fee, Single unified trading licence, E-trading, direct marketing, deregulation of marketing of fruits and vegetables

Source: Niti Aayog (courtesy Professor Ramesh Chand)

Trends in Market Arrivals and Prices

COVID-19 is of course one among many factors leading to differential outcomes in terms of prices and quantities in agricultural markets. There are several confounders such as weather differences, market infrastructure and policy changes. The study shows that the first two phases of the lockdown saw a significant decrease in quantities of farm products arriving at the mandis as compared to the previous year (2019). The gap is particularly high during phase 2 which coincided with the peak harvest. During phases 3 and 4 of the lockdown, market arrivals recovered. Possibly due to pent up demand or because farmers who could store wheat stocks could now unload them, unlock-1 saw marginally higher quantities of arrivals as compared to the previous year.

CONCLUSION

The pandemic is still unfolding all across the country, and its economic consequences are still to be fully apprehended. In general, if the tenure of market price and quantity changes, it can be said that agricultural markets in India have been quite supple in face of the COVID-19 shock. In comparison, all the market arrival impact magnitudes were positive and significant. The magnitudes of differentials in market arrivals were much higher than those in prices is suggestive (but not conclusive) evidence that supply constraints began easing beginning in May. The results suggest that while there were undoubtedly short-term disruptions in agricultural markets, they were also relatively resilient, in the sense that market arrivals were quick to recover after the initial month, and that possible distress sales did not result in a disproportionate fall in prices. The second fundamental way in which policies play a mitigating role relates to agricultural markets. States where markets are less restricted did better in managing price volatility; where the distinction for perishables was based simply on whether fruits and vegetables were deregulated and delisted. Market reforms that expand options for both buyers and sellers are certainly needed, as these enable the better absorption of shocks such as COVID-19.

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