



EFFECT OF DEMONETIZATION ON INDIAN AGRICULTURE SECTOR

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Introduction:

Demonetization refers to the process where a government renders certain currency notes or coins invalid as legal tender. This is typically done to combat illegal activities like black money, corruption and terrorism financing or to encourage the adoption of digital transactions. It often involves replacing old currency with new notes or introducing entirely new denominations of currency. At midnight on November 8, 2016, suddenly the Indian government declared the demonetization, which is the 4th time in the country's history that the central bank has taken such a measure.

S No	Year	Demonetisation Notes	Under the Govt. of
1.	1946	Rs.500, Rs.1000, Rs.10000	Jawaharlal Nehru
2.	1978	Rs.1000, Rs.5000, 10000	Morarji Desai
3.	2014	Withdrawal of all notes issued before 2005	Manmohan Singh
4.	2016	Rs.500, Rs.1000	Narendra Modi
5.	2023	Withdrawal of Rs.2000 notes from circulation	Narendra Modi

The government decided to demonetise all 500 Rs. and 1,000 Rs. currency notes¹. The primary reasons cited were to combat corruption, black money, counterfeit currency, terrorism financing, to curtail the shadow economy and crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism. The sudden announcement led to a nationwide scramble as people rushed to exchange their old notes for new ones. The move aimed to promote digital transactions and bring unaccounted wealth into the formal economy. This scheme has a great impact on the businesses, common people, and financial institutions along with multi-diverse industrial background of India. The lasting effects are subject to ongoing debate, with some suggesting it drove the adoption of digital methods and the formalization of the economy. The poor and the lower middle classes used to depend on cash for their everyday needs, so they were the main ones who suffered. The common man used to struggle to buy food, medicine, cloth and tickets for buses and trains among other things.

Effect on farming sector and small business holders:

Demonetization had heightened negative effects on critical sectors like

agriculture and small businesses. These sectors, traditionally reliant on cash transactions, encountered profound disruptions in various aspects of their operations. The demonetization of currency notes had a severe impact on farmers, who are regarded as the backbone of the economy of India. The 263 million farmers in India are accustomed to relying on transactions for cash in the economy⁴. Firstly, the shortage of cash flow hindered farmers' ability to procure essential agricultural inputs such as seeds, fertilizers and equipment, impeding production processes. Moreover, the credit crunch resulting from limited access to cash severely constrained the ability of both farmers and small businesses to invest in their operations, leading to stagnation and decreased productivity. Furthermore, the abrupt withdrawal of currency notes disrupted local markets, causing distress sales by farmers unable to find buyers with sufficient cash on hand. This, in turn, led to plummeting prices for agricultural produce, exacerbating the financial strain on farmers. Additionally, more farmers struggled to adapt to digital payment methods due to limited infrastructure and technological literacy, further hindering economic activities. Consequently, job losses were out of hand, affecting both rural and urban areas, as daily wage laborers and employees of small businesses faced unemployment and income crisis. Furthermore, the disruptions in the operations of small businesses reverberated throughout supply chains, impacting larger industries and exacerbating economic slowdowns. The informal financial sector, which used to handle 40% of India's total lending, mainly in rural areas, has almost completely collapsed.

Demonetization caused a liquidity shock, disrupting economic activities¹. A liquidity shock occurs when people can't access enough of the commonly used currency denominations, particularly the Rs 500 note. A farmer may take a day visit to the bank to withdraw the necessary funds, but they are not aware of the day-to-day use of these cashless transactions because they are not familiar with smart phones, the internet, swiping machines, plastic cards⁴. The majority of farmers who use cooperative banks seeking loans have not enough cash on hand to repay them⁴. Repayment and borrowing of loans are crucial for farmers who rely on seasonal loans from money lenders and banks for agriculture⁴. Due to demonetization, farmers couldn't get money for their agricultural activities. If farmers fail to repay loans on time, financial institutions will face recycling fund issues⁴. This situation leads to a shortage of cash, hindering consumption, investment, production, employment and other economic functions¹.

Consumption ↓ → Production ↓ → Employment ↓ → Growth ↓ → Tax revenue ↓

Four aspects of agriculture could have been directly impacted by demonetization: markets, productivity, crop patterns, and sown areas³.

Effect on Productivity and Prices:

Cash was utilized by farmers to employ workers and purchase machinery and high-quality seeds, fertilizers, chemicals, and diesel. While this may not have a massive impact since most rabi crops are self-pollinating and farmers reuse their own saved seeds (over 70% of seed requirement), the real hit on productivity is expected from reduced use of fertilizers and other purchased inputs. Over

70% of the seeds used in Rabi crops were grown on-site; the remaining seeds were acquired from private, public, and research institutions. There may have been a little effect on output this year due to reports that public institutions sold far fewer seeds than usual. According to the Agriculture Ministry's Fertilizer Monitoring System, Till December 21, 2016, the amount of fertilizer offtake during the rabi season was 7.47 percent lower than it was during the same times in 2014-15 and 2015-16, respectively³. Studies show that a 1% drop in fertilizer use can lead to a 0.1% decline in agricultural GDP and a 0.14% drop in crop output. While maize and soybean prices declined in December, paddy prices increased over the preceding two months and over the prior year³. At the time of demonetization, wheat, which makes up 47% of the total area under reported Rabi crops, had a area deficit of 41% significantly³. Following demonetization, most marketplaces and states saw a decline in the arrival and prices of perishables, vegetables, and fruits. In Maharashtra, daily tomato arrivals at local mandis (agricultural markets) were 48% higher in December 2016 and 51% higher in November 2016 compared to the same months in 2015. Interestingly, data from Agmarknet shows that in Madhya Pradesh, December 2016 tomato arrivals at mandis were a staggering 54% higher than the previous month, November 2016. This indicates an abnormally abundant tomato crop, resulting in a glut that likely impacted farmer prices adversely during this period. In November, the wholesale prices of bananas, apples, tomatoes, and cabbages at the nation's APMC mandis decreased by 3.80, 3.86, 8.47, and 5.6%, respectively, compared to October³. These alterations showed that the November

price decline negatively impacted the earnings of producers of perishable goods. The cash crunch has put farmers in a spot, directly impacting their ability to invest in inputs critical for ensuring good harvests.

Effect on marketing channels:

Demonetization caused over a 13% displacement of daily agricultural trade value on average in the very short-run, with the impacts tapering off gradually but persisting even 8 months later². While non-perishable crops like cotton and soybean saw larger supply-side shocks with steep declines in arrivals, perishable vegetables experienced more demand-side shocks with significantly lower prices but steadier arrivals as farmers had to sell even at depressed rates². The cash shortage also adversely affected the operations of commission agents and traders, who play a crucial role in facilitating the sale and purchase of agricultural commodities. With limited liquidity, these intermediaries faced difficulties in making payments to farmers, leading to a breakdown in the established supply chain dynamics. The effects of demonetization allowed middlemen to take undue advantage of farmers⁴. According to a study by the Reserve Bank of India, arrivals of agricultural produce at regulated markets across India declined by 12.9% in the first two weeks after demonetization compared to the corresponding period in 2015. A survey by the National Bank for Agriculture and Rural Development (NABARD) revealed that in November-December 2016, 35% of agricultural households faced difficulties in selling their harvest due to cash shortages. A study in Uttar Pradesh by the Giri Institute of Development Studies reported a 45-50% drop in arrivals of vegetables and fruits at mandis immediately after demonetization.

Effect on Intercultural operations carried out:

Intercultural operations like weeding, thinning, fertilizer application etc. are very labour-intensive processes, especially in Indian agriculture which relies heavily on human workforce. These operations typically require hiring of agricultural labourers who are paid daily wages, often in cash. Small and marginal farmers, who have limited financial resources, were likely the most impacted as they did not have the means to hire labourers through other payment methods like cheques or digital transfers. The acute cash shortage in rural areas made it extremely difficult for large scale farmers to have ready access to cash to pay labourers. This cash crunch potentially led to delays or disruptions in carrying out timely intercultural operations. The impact was possibly more severe for labour intensive crops like vegetables, fruits, oilseeds especially cotton, sugarcane etc. where intercultural operations are more frequent and critical for yield optimization. It's important to note that the degree of impact can vary across different regions, cropping patterns, and farmer resource capacities. But in general, the temporary cash crunch posed challenges in ensuring timely intercultural operations through hired farm labour in the weeks immediately following demonetization.

Conclusion:

In essence, demonetization exacerbated pre-existing challenges for agriculture and small businesses, underscoring the critical need for policymakers to carefully consider the broader economic implications of such policy measures. Among the general populations, especially farmers

whose income and investments were in the form of cash have experienced significant discomfort as a result of the Indian government's catastrophic action to demonetize high-value currencies in an effort to combat social and economic issues. Farmer's short-term economic activity was impacted by demonetization. But post demonetization, farmers began utilizing cashless transactions that could indicate an optimistic move toward agriculture's digitalization. Therefore, the skills and abilities of farmers must be reinforced in order to meet the unforeseen difficulties brought on by governmental policies. It's important to note that while the immediate aftermath of demonetization posed challenges for the agricultural sector, the long-term impact remains debated, with some arguing that it fostered greater transparency and formalization of the rural economy, ultimately benefiting farmers and the agricultural supply chain.

Further studies:

The degree of impact on agricultural operations, marketing channels, and farmer incomes is likely to have varied across different regions of India. Focused regional studies could provide more granular insights into the factors that influenced the extent of disruption in specific agricultural belts. Further research is needed to understand the factors influencing the adoption of digital payment methods, e-trading platforms, and other technological solutions by farmers and agricultural stakeholders. This could inform targeted initiatives to bridge the digital divide and enhance the resilience of the agricultural sector. Longitudinal studies tracking various economic indicators over an extended period

could provide valuable insights into the sustained effects of the policy on the agricultural sector and the broader rural economy. In-depth analysis of the effectiveness of various policy interventions and support measures implemented by the government and financial institutions to mitigate the impact of demonetization on farmers could inform future strategies to better safeguard the agricultural sector during such economic shocks. By conducting further research in these areas, policymakers, agricultural stakeholders, and researchers can gain a more comprehensive understanding of the multifaceted effects of demonetization and develop robust strategies to enhance the resilience and sustainability of Indian agriculture.

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