

Demonetization and its Impact on Agriculture

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Abstract: *Agriculture is the backbone of Indian Economy. This sector contributes about 15% to the Indian GDP and employs about 60% of the total workforce. Further, rural economy in India has been playing significant role towards the overall economic development of India. The farmers struggled a lot at the time of demonetization because the saving habits as well the payment mode of farmers were only on cash. Farmers used to handle liquid cash as it is essential for their day to day transactions. Daily wage earners in agriculture were earning small amount per day. When the withdrawals from banks were limited the farmers were unable to draw cash to pay their labors which result on postponing their works and get the labors jobless for days or months. Cash is the primary mode of transaction in agriculture sector. The farmers who own limited acres will not have bank accounts, which had a large impact on the farmers at the time of demonetization. Not only agriculture sector but also other industries which depend on agriculture were also affected. These impacts make the farmers to depend on illegal money lenders and black marketers to cater their transaction needs. Demonetization has affected every Indian, but it has hit the agricultural sector to the core. The government should try to reach out to the farmers of rural areas also to come out from the above issues*

Introduction

Demonetization is the act of “stripping a currency unit of its status as legal tender” i.e. withdrawal of some denominations as the official mode of payment, in other words, the demonetized currency could no more perform any of the function of money as a medium of exchange, the standard of payment, storage value etc. On 8th November 2016, the Prime Minister of India Sri Naredra Modi announced that the five hundred and one thousand rupee notes will no longer be legal tender. Demonetization is necessary whenever there is a change of national currency. The old unit of currency must be retired and replaced with a new currency unit.

□ The demonetization of 500 and 1000 rupee notes to crush back economy has come at a wrong time for farmers.

□ Millions of farmers are unable to get enough cash to buy seeds and fertilizers for their winter crops.

□ Production of essential commodities is under threat hurting farmers who are just recovering from the two-year drought.

□ India's 263 million farmers live mostly in the cash economy.

□ Agriculture is truly dependent upon cash transactions via cash is direct burden to the farmers markets because they should purchase all their agriculture inputs even bigger landholders may face problems such as paying daily wages to the farmers and purchasing agricultural needs for growing crops...on other hand harvested produce while selling may face the problem.

□ Problems in purchasing seeds at the right time for sowing at upcoming season

□ Many farmers live in the under economy Delayed sowing may affect the crops Already wheat outcome was decreased in northern India

Short Term Impact and Long Term Impact

Short term impact

The farmers are classified on the aspect of demonetization:

- Farmers with KCC/Agri Loan account
- Farmers with no KCC/Agri Loan account

Farmers with KCC/Agricultural Loan Account

The government allowed farmers to withdraw up to Rs.25, 000 per week against their crop loans to ensure sowing of winter crops is done properly. These farmers have at least a basic knowledge on how banking works and they could be able to sustain the impact of demonetization.

Unless they have huge amount of money hoarded, they shall feel relaxed about the current situation. Since it is a winter crop harvesting period, they shall feel relaxed.

The problem would be with the cash realized from previous sales which were not deposited into KCC account and not with buying the new seeds. If they do have large hectares of land, they can pay easily making a simple bank transfer. Further as of now, farmers can use old Rs.500 notes to buy seeds.

Farmers with no KCC/Agricultural Loan account

They will be largely affected as they do not have the facilities of withdrawing 25000 in cash. As it is generally seen that such farmers do not keep lump sum in bank accounts largely due to fact of low income or sometimes, lack of awareness.

They will have to stand in line and suffer. So, is the case with people in general. Credit transactions may increase in agricultural sector due to these farmers. Further as of now, farmers can use old Rs.500 notes to buy seeds.

Now coming to the different perspective, the farmers based in rural areas with no banks would be largely affected. They will face too much

difficulty because of the demonetization. The cash crunch will hit them hard. Unless they have good connection with the suppliers, they are bound to suffer most. **Long term Impact** Agricultural sector is still lacking behind in terms of innovation and irrigation. It is often seen that innocent farmers are exploited by the intermediaries. It is to be seen in future what Modi's government has in place for farmers in the future. Some of the impacts on presumptions would be:

With recovery of black money likely to be in billions, the government can invest in the agricultural infrastructure.

The rates of interest on loans are likely to fall. It will depend on how much the government does make recovery.

Out of the money, the irrigation project can be financed.

Experience of demonetization

Demonetization is not a new phenomenon for either the world or India. There are several pieces of evidence of demonetization in the world and some of them in India. It can be rolled out in the economy to address several socio-economic problems present in the country like black money, counterfeiting, inflation, corruption and so on. However, the recent incidence of demonetization in India has added a new dimension to the arena of problem for which demonetization can be used as a tool i.e. terrorism.

Global experience

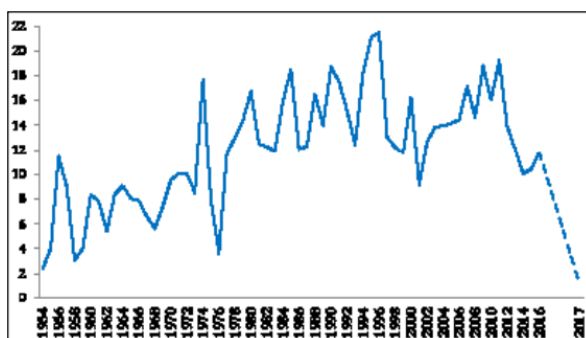
The evidence on nature of demonetization in the world revealed that it can be rolled out either suddenly or gradually in the economy based on the problems to be addressed. The demonetization experiment had been conducted across many countries in the world with the objectives of – controlling inflation; curbing black money and black marketing; fight against organized crime;

preventing counterfeiting; fighting corruption; managing fiscal and banking crisis; financing fiscal deficit and so on.

Indian experience

India's demonetization is unprecedented in international economic history, in that it combined secrecy and suddenness amidst normal economic and political conditions. All other sudden demonetizations have occurred in the context of hyperinflation, wars, political upheavals, or other extreme circumstances. But the Indian economy had been growing at the fastest clip in the world on the back of stable macroeconomics and an impressive set of reforms. However, India's action is not unprecedented in its own economic history: there were two previous instances of demonetization, in 1946 and 1978, the latter not having any significant effect on cash as shown in following Figure. But the recent action had large, albeit temporary, currency consequences. The following Figure shows the changes of annual percentage in currency since 1953.

Figure 1: Growth in average currency with public (%)



Source: Economic Survey, 2016-17.

In both, the earlier cases of demonetizations in India some high denomination currency (Rs. 500, 1000 & 10000 in 1946 and Rs. 1000, 5000 & 10000 in 1978) were demonetized with the major objective of curbing black money and black transactions. However, both these attempt to curb black money were failed in achieving its objective of curbing black money. In the instance of demonetization of 1946, out of a total issue of Rs. 143.97 crores of the high denomination notes, notes of the value of Rs. 134.9 crores were exchanged by the end of 1947. Thus, notes worth only Rs. 9.07 crores were probably demonetized. Similarly, in 1977-78 out of Rs. 9170.1 crore in circulation only Rs. 73.1 crore of high denomination currencies has been demonetized.[2].The other interesting feature of both of the earlier incidences is that in both of these cases high denomination currencies were barely used by the common public. In 1977-78, high denomination constituted only 0.8 per cent of the total currency in circulation. There are both parallels and differences with 2016 episode.

- Similarities are all three were aimed at curbing black money. Though this time security is an added challenge.
- In the earlier editions, RBI was mostly against the exercise and was proven right. This time it seems RBI has welcomed the idea (Though there could be initial differences which will emerge only later).
- The big difference obviously is the size this time. Previous ones barely impacted common people but this one is huge with 86% of currency out of the system.
- The first demonetization was a case of conversion, second was the case of accumulation and the third was projected as a demon but was more of a conversion.

Agriculture is primarily a cash based sector with large capital input. This sector contributes about 15% to the Indian GDP and employs about 50% of the total workforce. The real growth rate of the sector is reported to be 1.4% [3]. This low growth rate is usually attributed to the droughts experienced in the past two years.

In India, November marks the harvesting of the Kharif crop and sowing of the Rabi crop. Rabi crops (wheat, barley, mustard, sesame and peas) account for half of the total crop output, that is, 112 metric tons. Around 263 million of India's farmers are dependent on cash transactions for buying seeds, fertilizers, and fuel. Since rabi seeds are usually self-pollinated, farmers need not buy seeds every year. However, they are recommended to buy new High Yield Variety (HYV) seeds for better harvest, but due to the current cash crunch, the few willing farmers may refrain from doing so. The area under cultivation, sowing pattern, productivity, and markets has directly been affected. As on November 2016, 79 lakh hectares^[4] of land is under rabi cultivation (an increase of 8.8% since the year 2015) and only 20%^[4] of the sowing have been completed in crop producing states like Maharashtra, Punjab, Gujarat, Tamil Nadu and Karnataka. The move to demonetize and the subsequent cash crunch has created an inability to secure financing to the much-unorganized agriculture sector for both harvesting and sowing the subsequent crop cycle. Perishables, vegetables and fruits, in most markets exhibited a drop in market arrival as well as a fall in prices post demonetization as much as around 4% to 5%.

Demonetization and Indian Agriculture

Prime Minister Narendra Modi came with scheme of demonetization of existing Rs 500 and Rs 1000 currency notes to eradicate the parallel economy and black money. This parallel economy consists the corruption, black money, illegal trading, terrorism, narcotics, and other anti-social and criminal activities. This is a very good step for the country in short term and long term. In short term, it will break down the existing chain of parallel economy immediately and in long term size of Indian economy will grow.

Indian agriculture is facing the problem of speculations and illegal trading due to black economy. From farmers to exporters every honest stake holder of Indian agriculture is facing problem of parallel economy and black money. They don't know what will be next move in their business. In the morning prices goes up sharply and in the evening prices goes down drastically. A lot of black money has invested in trading, stocking of Agriculture commodities. These greedy traders/stockist/ exporters gives the movement

Crop-wise Impact

The progress in area sown remained uneven across regions and crops. Wheat, which accounts for 47 per cent of total area under reported rabi crops, showed a big shortfall of 41 per cent in area at the time of demonetization. The gap declined to less than 1 per cent by mid December, 2016 and crossed normal area by 2.12 per cent by the end of December. Compared to the corresponding period last year wheat is sown on 7.7 per cent higher area. Area under pulses and oilseeds is higher than normal for the corresponding period by 11.2 and 1.7 per cent respectively. The shortfall in area is reported for rabi rice and coarse cereals. This

shortfall is much smaller (6.6 lakh hectare) compared to the gain in area under wheat, pulses and oilseeds (22.3 lakh hectare) resulting in net increase in area under rabi by 15.7 lakh hectare over normal area and 37.4 lakh hectare over last year.

Among major rabi crops growing states, overall shortfall in sown area is about 20 per cent in Tamil Nadu and Karnataka and 8 per cent in Gujarat and Andhra Pradesh. Similarly, J&K and Himachal Pradesh also show major deficit in rabi sowing. Largest shortfall is seen in Kerala. All other major states indicate small to large increase in crop sown area this year over normal area. Even Uttar Pradesh, which was persistently showing shortfall in area, has reached higher than normal figure.

Impact on Productivity

Farmers use cash to buy quality seed, fertilizers, chemicals and diesel and to hire labour and machinery. As rabi season crops are mainly self pollinated, farmers need not buy fresh seed in rabi season every year. More than 70 per cent seed used in rabi crops is self produced and rest is purchased from public sector agencies, research institutes and private sources. Sale of seed this year by public institutions is reported to be much lower than normal sales. This can have small impact on productivity.

The major impact on productivity is going to happen due to change in use of fertilizer. Representative data on fertilizer use/consumption by farmers comes with a time gap. However, Ministry of Agriculture maintains Fertiliser Monitoring System which indicate first point sale of fertilizer. According to this source, fertilizer off take during the current rabi season (till 21 December 2016) was lower than the fertilizer off take in the corresponding period during 2014-15 and 2015-16 by 7.47 per cent and 7.0 per cent.

These are very raw statistics and subject to correction as per the sale figures reported by various fertilizer companies. Also, as on date, fertilizer takeoff statistics are not inconsistent with the area statistics.

If fertilizer use at farm level faces the similar shortfall as reported in fertilizer sales at first point, it will affect productivity. According to a study by Ramesh Chand a 1 per cent increase/decrease in fertilizer use result in 0.1 per cent increase/decrease in GDP agriculture and about 0.14 per cent increase/decrease in crop output. Based on this, it is estimated that current shortfall in fertilizer consumption if it persist till the end of rabi season, which constitutes half of annual agricultural output, can result in 1.05 per cent decline in crop output and 0.75 per cent decline in agricultural output.

Farmer's access to inputs

The government of India has announced the provision of using high denomination demonetized currencies for the procurement of the agricultural inputs (seeds, fertilizers and agrochemical) to farmers from the government agencies. However even then only 70 percent farmers in our sample were aware of using this provision. It was also found that out of 70 percent aware farmers, only 43 percent could utilise it. The major reason for lesser utilization was – uneven and distant location of government agro-input agencies. Contrary to this, Chand and Singh (2017) has reported that as the most of the Rabi crops are self-pollinated, farmers need not buy fresh seeds every year and due to which the sale of seed this year by public institutions is reported to be much lower than normal sales.

According to Fertilizer Monitoring System (FMS) in Department of Fertilizers under Ministry of Chemicals, Petrochemicals and Fertilizer,

fertilizer sale during the current Rabi season was lower than the fertilizer sale in the corresponding period during 2014-15 and 2015-16 by 7.47 per cent and 7.0 per cent. It was also found in the survey that the unavailability of new denomination currencies in rural areas, non-acceptance of old high denomination currency by private input dealers, distant location of government agro-input agencies were some of the hindrances which farmers have faced in the procurement of inputs. However, use of own seeds and stock of fertilizers, borrowing from the fellow farmers, purchasing on credit from the private traders, purchase of inputs on credit from cooperatives, & credit from the traders for purchase of inputs were some of the commonly followed strategies that helped farmers to manage farming activities in the cash crunch situation. Inability of farmers to use cell phones as a medium of connecting in to the market was one of the major impediment to facilitate farmers.

Sale of agricultural produce

The present study has compiled the data from agmarknet website on arrival and price of cereals (Paddy), vegetables (cauliflower) and fruits (apple and oranges) in APMC Narela & Azadpur, New Delhi to analyse the effect on the trading activities of farmers and traders in the major markets of Delhi. The result shows that there was no effect of demonetization on the price of paddy. The price of paddy has followed an increasing trend even after the demonetization. The similar results were also reported in their study. However, the arrival in the market has slumped down after the second week of November i.e. with the announcement of demonetization in the country Figure 3. However, the perishables like fruits and vegetables price and arrival have dropped post demonetization. The wholesale price of vegetable (cauliflower) and fruits (apple & oranges) has declined is shown in Figure 4, 5 & 6 resulted in the loss of income to the

cultivators. But the demonetization alone can't be blamed for declining prices of the perishables as the good monsoon this year has pushed up supply this year which is also an important reason for declining price. It is difficult to ascertain how much fall in prices of perishables during the month of November & December 2016 was due to a glut in arrival and how much could be due to any disruption due to demonetization.

CONCLUSION

The main objective of surgical demonetization was to capture black money hoarded in cash. However due to flaws in execution, it has resulted in a lot of difficulties for millions of citizens. Thus along with curative, proactive measures are inevitable for ensuring that menace of black money enrooted from the economy at its best.

The action of the Indian government to eradicate the four social problems- black money, corruption, counterfeiting and terrorist funding was a very bold move but it definitely affected the many parts of the economy and in particular the agriculture. Among the farmers, small farmers were worst hit by this big bang experiment while in grain markets wholesalers and in fruits and vegetable markets retailers were most affected categories. The low-income strata of society and those who did not use any online purchase options were most affected by demonetization. Despite the fact that the demonetization has affected almost all economic agent in one or other way but they feel that the situation is returning to normal now. However, the government has provided support to the farmers to use the old denomination currency for purchase of agricultural inputs so that their operation may not get affected but inadequate spread and small network of government input agencies and insufficient penetration of formal credit institutions and inadequacy of cash in most

of the rural bank branches were some of the pitfalls of the government that has affected the agriculture.

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