Has demonetization triggered farmers to move towards cashless transactions?

Sant Kumar*, Rajni Jain, Abimanyu Jhajhria, S.V. Bangaraju and S.J. Balaji

ICAR-National Institute of Agricultural Economics and Policy Research, New Delhi-110 012, India.

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ABSTRACT

This paper has documented the difficulties faced by farmers due to demonetization, facilities existing for making digital payments and farmers’ opinion about it. The study has used primary data collected through farm survey done in October 2017, almost a year after demonetization. The survey was made in three adopted villages under MGMG (Mera Gaon Mera Gaurav) scheme in Pulwali district of Haryana. Results have shown that due to demonetization farmers faced numerous difficulties (both crop production and family related activities). They could not use quality inputs (particularly seeds of wheat) in desired quantity, got delayed payment of their crop produce and faced problems in drawing money from bank. Family and societal needs were also affected. Payment in cash was the main mode of transactions (and even now) for food and non-food articles. Analysis revealed that large number of farmers have bank account and are availing facilities of debit cum ATM card, but their functional literacy and infrastructure are inadequate. Farmers’ expressed both merits and demerits about digital payments. Nevertheless, without removing fear of farmers and other rural people and bringing change in their attitude, moving towards digital mode of transactions will not trigger desired results.

Key words: Agriculture, Demonetization, Digital transaction, Farmer, Infrastructure.

INTRODUCTION

Demonetization of high-value currency notes by the Government of India in November 2016 embodied several policy reforms and other indirect benefits. One of the main motives behind the move was limiting generation of black money in the economy thereby curbing terrorism, drug trafficking, counterfeit currency, corruption etc. As part of policy reforms, the Finance Minister of the Government of India in the general budget for 2017-18 announced an upper limit of ₹ 3 lakh (eased to ₹ 2 lakh thereafter) for cash transactions from April 1, 2017. It was specified that the transaction over ₹ 2 lakh would involve 100 per cent penalty and the amount above will be treated as illegal. This shows government intention to move towards cashless economy. The demonetization of currency notes (₹ 500 and ₹ 1000) from November 9, 2016 could be viewed as a step towards cashless society. Though moving towards cashless transaction depends on several factors like better education, attitude towards digital payments and basic infrastructure.

The Reserve Bank of India too in its document “Payments and Settlement Systems in India: Vision 2018” has indicated rolling out a plan to encourage digital payments enabling India towards a less cash economy in medium and long run (RBI 2016).

However demonetization severely affected the public life and economic activities in the country. People in rural areas were more affected due to short supply of banknotes. Agriculture and social activities in rural areas affected severely and prices of perishables like fruits, vegetables, flowers declined significantly and incurred huge loss to farming community Kumar et al. (2017). Although, the situation improved after January 2017, when the Government paid special attention to supply lower denomination banknotes in rural areas as compared to November/ December 2016. Despite all these efforts, banking system faced difficulty in disbursing prescribed withdrawal limit till March 2017. As the society is moving towards lesser cash economy, farming community including people in rural areas (making two-thirds of total population of India) is bound to follow the path. The present study attempts to assess the problems faced by farmers due to demonetization, infrastructure availability, their readiness towards cashless society and participate in development process of the country.

Status of cashless transactions in India: India is primarily a cash economy. Majority of the country’s population lives in rural areas (about 70%) and use cash for transactions. The cashless transaction before demonetization was about 2 per cent (ET 2016) which increased to 22% of all transactions in India (IAMP 2017). There could be many reasons for lackadaisical attitude towards cashless payment viz., lack of basic education, erratic power supply, poor internet penetration, etc. leading to poor financial inclusion in India as compared to other countries like USA (Banerjee 2016).

A cashless economy is one in which all payments are done using cards or digital means. In digital payment,

*Corresponding author’s e-mail: sant.kumar@icar.gov.in
payer and payee both use digital mode to send and receive money. It is also called electronic payment. No hard cash is involved in digital payment. All transactions in digital payments are completed online. It is an instant and convenient way to make payment. There are many advantages of cashless transaction which include limiting of back money, reducing of transaction cost, get rid of soiled and damaged notes, avoidance of theft, etc. However, people in India use cash for transactions, and the ratio of cash to gross domestic product was 12.4% in 2014, one of the highest in the world as compared to 9.5% in China and 4% in Brazil (Bhattacharya 2016). The increased use of digital payment is expected to bring openness in transaction. In spite of many benefits, cashless payments in India are at low level and needs concerted efforts. Simultaneously, there are high transaction costs and fear of cybercrime, money loss, internet connectivity problems; the benefits of cashless transaction are far more than cash transactions.

Survey Design: Since the motive behind demonetization was to move towards digital transaction, a field survey of farmers was done to document the existing status. During survey an attempt was made to know how farmers are making transactions for agriculture and societal needs and the status of infrastructure required for moving towards digital transactions. The survey was done in adopted villages under Mera Gaon Mera Gaurav (My Village My Pride) scheme of the Ministry of Agriculture and Farmers Welfare, Government of India. The NIAP (National Institute of Agricultural Economics and Policy Research), New Delhi, has adopted 5 villages under the above scheme in Palwal district (Hathin and Palwal Blocks) of Haryana. The institute is in close contact with farmers, providing knowledge and information and trying to resolve issues related to crop production and skill development. A total of 54 Farmers (18 farmers each) from three villages were contacted during field survey done in October 2017. The specifically designed pre-tested schedule was used to record the response of farmers and tabular analysis was done to present findings.

RESULTS AND DISCUSSION

Features of area and farmers: Agriculture is the main activity of farm families in Palwal district. More than three-fourth of population of the district lives in villages and majority of them belong to small category (less than 2 ha), and so is the case with surveyed farmers. Besides crop production, farmers rear milch animals (buffaloes and cows). Soils of the area are light to medium in texture with pH 7.6 to 10.0. Sandy loam, loam and salt-affected soils are prevalent in the area. The issues of salinity, impeding drainage, water logging and low soil fertility are major ones. About 85% of net sown area of district is irrigated and cotton–wheat rotation is the dominant cropping pattern. Although the farmers have irrigation, the water is saline. They reiterated the problem of non-availability of good quality irrigation water. Actually, surveyed farmers are compelled to use saline water for irrigation, as there is no other way of getting quality water. The mean age of sample farms was 48 years and had schooling upto 9th standard. On an average each sample farm had seven members in the family and their main source of income was crop production as told by 86% of farmers, followed by services (7.3%). The average cultivated landholding with each farm was 5.3 acre. Cotton was the main crop in kharif season, and wheat was sown as main crop in rabi season and covered 90% of cultivated area. All respondents’ were males, implying that decisions related to agricultural activities are taken mainly by the males.

Difficulties faced after demonetization: The sudden move of demonetization affected both domestic and commercial activities of the country. Farmers and rural population were hit badly due to short supply of currency notes and their crop production and social activities of farmers were affected severely. About 38 per cent of sample farms told that due to short of cash they could not use quality inputs in desired quantity, particularly of seeds for wheat sowing during rabi season 2016-17 (Table 1). The other difficulties faced by farmers include delayed payment of crop produce, inadequacy of cash due to limits imposed by banks and long queue at banks (29%, each). All these discouraged farmers not to wait and sow wheat crop without basal dose of fertilizers. Nearly 27% farmers told that delayed payment of labour wage compelled them to delay farm operations. Delay in wage payments was also reported in Mahatma Gandhi National Rural Employment Guarantee scheme throughout the country (Shahare 2017). Other problems faced by farmers include payment through cheque (24%) and purchase of inputs on credit from input dealers (16%). Delay in clearance of cheque and payment in old notes was also reported by farmers (9%, each). Non-payment of prescribed limit of money by banks and reduction in labour work were also reported. Shahare (2017) reported that cash withdrawal limit was a huge problem for many people, mainly because of marriage, health and other issues. Many people faced depression and lost their lives.

### Table 1: Difficulties faced regarding crop production activities.

| Difficulties faced                                      | Response, % |
|--------------------------------------------------------|-------------|
| Could not buy desired quantity and quality of inputs   | 38.2        |
| Long que in drawing money from bank                    | 29.1        |
| Delayed payment of crop produce                        | 29.1        |
| Inadequate cash availability                           | 29.1        |
| Delayed payment of labour wage                        | 27.3        |
| Payment in cheque                                      | 23.6        |
| Purchased inputs on credit from input dealers          | 16.4        |
| Payment in old notes                                   | 9.0         |
| Delay in cheque clearance                              | 9.0         |
| Non-payment of prescribed money from bank              | 7.2         |
| Labour work declined                                   | 5.4         |
The shortage of cash not only affected crop production activities, but it also affected family and societal needs of farmers. Nearly 38% of farms told that due to short supply of cash they could not meet societal needs in time (Table 2). The less cash also halted payment to important activities like education fees, loan/ debt borrowed, etc. Findings revealed that farmers postponed activities and faced difficulty in borrowing money from neighbors (about 22%, each). Nearly 14% farmers told that due to less cash they could not visit relatives/ friends during social functions. Problems in repayment of loans and care of dairy animals were also reported by the farms.

**Mode of transaction being adopted by farmers:** Like other consumers, farmers also make transaction for fulfilling farming and family needs. The mode of transaction followed by the farmers is presented in this section. Payment in cash was the main mode of buying food (vegetables, fruits, milk, and tea) and non-food (clothes, medicines) articles as reported by 76% and 80% farmers, respectively (Table 3). Nearly 73% farmers bought farm inputs (fertilizers and pesticides) on cash payment. Payment towards education fee and stationeries was made both in cash and non-cash. About 56% of farmers paid education fees in cash and 14% through cheque. Farmers received payment for crop produce in both cash and cheque.

**Towards a less cash society:** India is the large cash-based economy and to become a less cash society, country will require the basic facilities for moving towards digital transaction. This section describes existing facilities and farmers’ attitude of moving towards less cash transaction.

Opening of bank accounts and their operationalization are essential to move towards less cash society including other facilities. Survey findings have revealed that 80% farmers had bank accounts (in Regional Rural Banks and Commercial Banks). Having bank accounts by large number of farmers could be credited to both personal effort and the government direction to banks to open bank accounts under Pradhan Mantri Jan-Dhan Yojana. Analysis shows that 64% farmers’ operated bank accounts themselves and the remaining through their nominees (Table 4).

About 60% farmers had debit-cum ATM card. Use of cheque which could play a major role in making digital transaction was obtained by 29% farmers. Opening of bank account alone is not sufficient for moving towards cashless society, its regular operation is also necessary. Data show that payment through cheque was not made frequently and hardly one-tenth of farmers used cheque twice after demonetization in last one year. Farmers reported that they use ATM mainly for withdrawing cash and not for making online transactions. Rather, 92% of ATM cards are used for cash withdrawals. Payment via smart phones was nil, though about 10% farmers had smartphones compatible for digital payments. Most of smartphone with farmers are not connected with internet which is necessary for mobile based digital transactions. Mobile internet penetration and connectivity remains weak in rural areas and is a major issue. Farmers told that internet connectivity even in bank branches is poor and sometime they had to wait for hours to make transactions. Farmers expressed their resentment over high service charges for payment through cheque and delay in its clearance.

**Access to infrastructure facility:** For a successful penetration of digital payment requires basic infrastructure to be in place. Since moving towards digital transaction is a new experience for general public, knowledge of existing basic infrastructure is necessary. This section provides access to basic facilities by farmers in the area. On an average, villagers travel about 6 km to reach arterial metallic road for availing services of key public facilities like development office, agricultural markets and agri-input shops (Table 5). Banking and postal services are gateways to accelerate digital mode of payment, as people have to open bank accounts in these institutions. These facilities were within the reach of 4-5 km. Farmers wish to sell crop produce in nearest wholesale market to receive better price, and development office play vital role in providing information on new programmes and policies of the government. These facilities existed at a distance of 14 km from villages. Animal health care facility was within the reach of 4 km.

| Articles/inputs being transacted | Response, % |
|---------------------------------|-------------|
| Daily food articles (vegetables, milk, etc.) | 76.4 | 3.6 |
| Non-food articles (clothes, medicine etc.) | 80.0 | 0.0 |
| Agri-inputs (fertilizers, pesticides etc.) | 72.7 | 0.0 |
| Education (fees, stationery etc.) | 56.4 | 14.5 |
| Receipt of farm produce | 30.9 | 32.7 |

**Table 2:** Difficulties faced regarding family and social aspects.

| Difficulties faced | Response, % |
|--------------------|-------------|
| Difficulty in timely completion of important activities | 38.1 |
| Delayed or deferred payment | 34.2 |
| Postponement of activities | 21.8 |
| Difficulty in borrowing loan | 21.8 |
| Could not visit friends/ relative for social activities | 14.5 |
| Could not repay loan/ debt | 12.7 |
| Animal care affected | 9.1 |

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Farmers' readiness towards less cash transaction:

| Difficulties faced                          | Response, % |
|--------------------------------------------|-------------|
| Having bank account                        | 80.0        |
| Operate bank account oneself                | 63.6        |
| Have debit cum ATM card                    | 60.0        |
| Have cheque book                           | 28.9        |
| Made payment through cheque                 | 25.5        |
| Frequency of payment through cheque         |             |
| (i) One time                               | 20.0        |
| (ii) Two times                             | 9.1         |
| Have smart phone compatible to digital payment | 9.9        |

Farmers' opinion about digital payment: The surprise move of demonetization pushed millions of new users onto the country's digital economic grid by virtual fiat. Up until this move, India was substantially cash-centric economy. Cash accounted for above 95% of all transactions, 90% of vendors did not have card readers or other means of accepting electronic payments, 85% workers were paid in cash, and almost half of the population didn’t even have bank accounts.

For moving towards digital transaction, farmers’ opinion on benefits of digital payment is presented in Table 6. About 56% farmers told that digital payment is safe and free from fake currency, and 51% told that medium is safe from loss of money. Cashless payment would get rid of soiled and damaged notes and is time saving was told by nearly 40% farmers (each). About 29% farmers told digital payment could be a perfectly recorded medium of payment, and nearly 16% stated that physical carriage of cash can be avoided. Apart from obvious impact, demonetization brought more money with banks which led to increase in government savings. Having increased money with the banks, more money came into the financial market which can reduce interest rates and boost investment in the economy. Increase in investment leads to the growth in employment hence income of people will increase.

Besides benefits, farmers were also asked to give opinion about problems regarding digital payments. About 55% farmers (each) expressed fear of money loss due to fraud and more skill is required in digital payment, as it involves usage of mobile or desktop (Table 7). Farmers told that they were not aware of security features involved in digital payments. Although, there are nearly 25-30 crore users of smartphones in India, but hardly 10% of them transact online in spite of being convenient and effective. Fear of cheque bounce due to overwriting, mismatch of signature and inadequate balance amount in bank was told by 33% farms. About payments through cheques after demonetization in November and December 2016, farmers resented over high service charges deducted for transactions; also about 15% farmers told delay in clearing of cheques. Nearly one-fourth farmers informed that due to insufficient amount of money in bank account, they feel difficulty in making digital payment. Farmers explained that due to poor economic status and no regular earnings, they are not able to maintain sufficient balance in bank accounts. Problems due to overwriting on cheques and necessity of PAN number for over certain limit were reported by 4% farmers, each.

CONCLUSION AND SUGGESTIONS

Demonetization is one of the steps which help in fight against financial corruption. The move of demonetization was hasty and preparation for execution was inadequate. The note ban impacted all sectors of economy including agriculture. However, this move had terrible impact on common public particularly in rural areas. In spite of hardships faced by farmers due to demonetization, there is a positive attitude among farmers to cope up from the handicaps and join hands with the new policy decision of the Government. Study revealed that majority of farmers are having bank accounts and are using for getting loans, receiving subsidy and other direct benefits transfer. This shows that when enabling facilities are provided at right time, farmers would use it without hesitation. Opening of bank account alone is not going to help in achieving cashless transactions, unless farmers’ attitude change and problems like financial illiteracy, poor internet connectivity and basic infrastructure facilities are solved. Apart from facilities, role
of functionaries of line departments are crucial. The self-help groups (SHGs) can be of great help to the rural people in the promotion of cashless society. For this more and more SHGs can be associated with Bank Mitras (friend) to extend help for spread of digital payments. Other line department functionaries such as school teachers, health workers, village development officers, etc. can be involved to educate people about purpose and importance of cashless payments. The Gram Sabhas in Panchayati Raj Institutions should take up the issue of cashless society at the village level. To promote financial literacy among public particularly in rural areas, government must ensure basic facilities and other infrastructure for cashless economy.

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REFERENCES

Banerjee, Abhijit (2016) Bad economics can bite back. *The Hindustan Times*, New Delhi, December 21.
Bhattacharya, Arundhati (2016) Push for cashless: Charge levy on big-ticket cash transactions. *The Indian Express*, Mumbai, December 19.
Economic Times (2016) What government plans to do with old ‘500 and 1000 Notes. *The Economic Times*, New Delhi, November, 23.
IAMP (2017) Payments industry in India: Q4 2016. IMAP India.
Kumar, Sant., Jain, R., Jhajhria, A., Narayan, P. (2017). Demonetization: the impact on agricultural activities, National Institute of Agricultural Economics and Policy Research, New Delhi. Mimeo.
RBI (2016) Payment and settlement systems in India: Vision -2018. Department of Payment and Settlement System, *Reserve Bank of India*, Bombay.
Shahare, V.B. (2017) Assessing the impact of demonetization on rural economy, *Jharkhand Journal of Development and Management Studies, 15*(2):7311-7324