

Banking Inclusion of dairy farmers in India; A critical analysis of pre and post demonetisation scenario

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Abstract - The economic status of people in India has improved a lot on account of the initiatives of Financial Inclusion Plans by the Government. India won the credit of World Bank as their reports revealed that about 55 percent of the total bank accounts newly opened in the world were attributable to India. Thus, the overall access to banking services by people in India shows a good sign. But if we analyse India, sector wise, especially in the case of a sector of vulnerable groups, the gaps of inaccess to formal banking services can be identified and addressed. Dairy industry in India is one such sector covering a large number of farmers who lack access to banking facilities. The sector heavily depends on cash transactions. The problem should be further analysed in the context of demonetisation which was an ample opportunity to bring more number of unbanked dairy farmers into the banking network. This paper reviews the present scenario of accessibility to banking services by dairy farmers in India and also analyses the effect of demonetisation in their banking access.

Keywords - Banking accessibility, Dairy farmers, Demonetisation, Economic status, Financial Inclusion, Vulnerability.

I. INTRODUCTION

The smooth flow of money in the economy is an indication of a healthy financial system. If money gets accumulated at certain points in the economic cycle, it creates obstacles and blurs up the transparency in the entire financial system of a country. This effects financial exclusion. The strategy of financial inclusion finds its origin years back when the United Nations pointed out to take initiative to provide finance to the bankable households. Our country has taken several initiatives to achieve the strategy of financial inclusion. These initiatives were successful on one hand and somewhere on the other hand, it failed to achieve the aimed economic changes. Financial Inclusion is defined according to Reserve Bank of India as “the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost” (The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan) [1]. Thus it is to be noted that financial inclusion is not merely the access to banking products and services, but also access to other financial products and services which includes insurance, financial advisory services, mutual fund services etc. Even though the root of financial inclusion lies in access to banking services. Banks play an important role in the development of the economy. Banks develop a habit of savings among individuals and route these savings into productive investment avenues. Thus they enrich the economy with

capital formation. The role played by banks in effecting a balanced regional development in the economy by setting priority in lending into the weaker sections is quite remarkable. The strategy of Financial Inclusion has necessitated banks to cover the unbanked population under their network. Dairy industry in India render a significant contribution to the economic development of the country by giving an economically feasible means of living to a large number of poor farmers. The industry heavily depends on cash transactions as it deals with small value commodity (unprocessed milk sold by different dairy farmers) and frequency in number of transactions. The success of financial inclusion can be measured by studying individual sectors of the economy especially those which are vulnerable to informal sources of financing. Dairy is one such sector which gives a true representation of rural masses of the country.

STATEMENT OF THE PROBLEM

The strategy of Financial Inclusion shows progress since its formulation in the country, but in a manner not effective to the desired output. According to reports from Reserve Bank of India, the number of branches of Scheduled Commercial Banks have increased from 68,681 in 2006 to 1, 02,343 in 2013. It also showed an increase from 30,572 in 2006 to 37,953 in 2013 in respect of rural areas. But a rapid increase was seen in semi-urban areas than rural areas. Basic Savings Bank Accounts marked an

increase from 73.45 million in 2010 to 182.06 million in 2013. The CRISIL Inclusix showed that India enjoys an overall improvement in implementing this strategy. As per the 59th Round survey conducted by NSSO, about 51.4 percent of farmer households are not having access to both formal and informal sources of finance. Only 27 percent of the total farmer households access formal financing sources with one third in it access informal means also [2]. The initiatives under financial inclusion strategy helped to improve this situation to a considerable extent. Dairy in India is an industry that has strong potential to contribute significantly to the GDP of the country and is one of the leading industry in the global scenario. It provides a means of livelihood to large number of poor farmers in terms of both main source of income and additional source of income. With a wider coverage of rural masses, this sector should be given due attention in addressing the problem of financial exclusion. Though the industry is enriched with a number of transactions by the rural farmers, the extent to which these take place through banking network is to be examined. As a prime step, the present study review the accessibility of dairy farmers to banking products and services.

OBJECTIVES OF THE STUDY

The present study is carried out with the following main objectives:

1. To review the situation prevailing in the accessibility of dairy farmers towards the formal banking service in India.
2. To analyse the influence of demonetisation in the accessibility of banking of dairy farmers.

SCOPE OF THE STUDY

The present study is limited to examine the accessibility of dairy farmers in banking services in India and also compare the pre-demonetisation and post-demonetisation scenario of banking access of the farmers. The study covers farmers who are members in co-operatives and also those who deal with private dairies. The variable 'Banking Access' in this study determines whether the dairy farmers possess bank accounts and the amount of transactions they undergo through their accounts. The study reflects upon the news reported by different e-news providers regarding the banking of dairy farmers in our country. It gives an overview of the banking accessibility of farmers belonging to leading dairies and co-operatives in both private and public sector.

METHODOLOGY OF THE STUDY

The research design of the study is descriptive in nature. It describes about the situation prevailing in the country regarding access to formal banking services by dairy farmers. It also portrays the scenario of banking access of dairy farmers during the pre-demonetisation period and

that during the post-demonetisation period. The study compares the number of farmers having bank accounts and also the amount of transactions which took place through bank accounts during pre-demonetisation and post-demonetisation. The study is based purely on secondary data which have been collected from books, journal articles, newspapers, theses, websites etc. Further, statistical data were collected from reports of Press Information Bureau, Ministry of Agriculture & Farmers Welfare, Government of India which was available online and the official Dairy Knowledge Portal of National Dairy Development Board (<http://www.dairyknowledge.in>).

The study includes data reviewed from Web of science (www.webofknowledge.com), Science direct (www.sciencedirect.com), Google Scholar (<https://scholar.google.co.in/>), ResearchGate (<https://www.researchgate.net>), e-news providers like The Financial Express, The New Indian Express, The Economic Times and The Telegraph. The search keywords used for collecting secondary data were 'banking of dairy farmers', 'payment to dairy farmers' and 'demonetisation on dairy industry'. Discussion with experts in the respective field and officials of the co-operatives and private dairies helped in a better analysis of the data collected under this study. Descriptive and tabular analysis were carried under the study. The references in the study are given in IEEE format (Institute of Electrical and Electronics Engineers style) and arranged in the order in which they appear in the text.

II. REVIEW OF LITERATURE

An overview of the existing literature related to banking access of dairy farmers and effects of Demonetisation are given below:

J Bisen et al. (2017) [3] analysed the effect of demonetisation on agriculture, particularly on farmers, traders and consumers. Demonetisation brought unfavourable circumstances for the small and marginal farmers and those who deal with perishable products. The vulnerable sectors found were grain markets in the wholesale sector and fruits and vegetable markets in the retail sector. Consumers who relied only on cash payments also suffered in the scenario.

K Dennis (2010) [4] explained that farmers did not keep proper records in their farm and were not willing to do so. Reallocation of inputs with its current market price unchanged seemed to increase the profitability of farmers. The price share occupied by institutional buyers, other middlemen and price of local buyers influence the profitability of dairy farmers. Higher the debt compared to asset disable the credit availing capacity of farmers and thus deprives their access to credit.

A. M Kulkarni and P. V Naikwade (2018) [5] reported from their study conducted in Maharashtra, that demonetisation adversely affected people who were not having banking access especially in rural areas. Farmers faced delay in their payments. As most of them were illiterate and unaware of banking system, many of them relied on indigenous money lenders to meet their financial requirements. Due to non-availability of cash, many of the small holder farmers remained jobless for days and months.

A. P Patil et al. (2009) [6] examined the constraints faced by dairy farmers in Nagpur district and stated that the payment mechanism for milk procured suffered from much delay. Farmers reported their issue of high cost of inputs and non-availability of adequate financial support.

R Rani et al. (2015) [7] identified the problems that inhibit dairy farmers from easy access to bank credit and that involved in the repayment of these credit in Punjab. The constraints significantly found include unaffordable interest rates, procedural delays and complexities, dissatisfying attitude of the bank staff, requirements of guarantee for loan repayment, unnecessary intermediation in availing loan, poor return from farming, high cost of inputs and exploitation by traders.

V. G Sumathy and T Savitha (2017) [8] informed that most of the farmers have their savings in the form of liquid cash and that they prefer cash mode of payments. Farmers have daily cash requirements and this become not possible if they invest in banks as there is withdrawal limits in banks. Bank deposits often led them idle without any work because of inability to pay daily labourers.

The Hindu BusinessLine (2016) [9] reported that demonetisation would create favourable situation for the farmers in the long run as they reduce their dependence on cash and increase the use of digital financial services. The Indian Farmers Fertiliser Co-operative Ltd (IFFCO) suggested farmers to minimize cash mode of transactions and thus avoid the presence of middlemen in their transactions. Further, IFFCO recommended for removing mandis and commission agents and expected a favourable impact of Goods and Services Tax in the scenario.

R. M Jadhao (2017) [10] examined the impact made by demonetisation on the farming community. It was identified that farmers were directly affected by the fiscal initiative in money circulation. Majority of the farmers depended on cash transactions which was made impossible for some months soon after demonetisation owing to non-availability of cash. This rendered farmers unable to effect sales, make payment to labourers, purchase fertilisers and seeds and thus also affected production. Among the farmers, those who dealt with perishable commodities

were the most affected ones. Government and financial institutions ignored in providing assistance to farmers to recover from this situation.

A. Y Shah (2017) [11] studied the impact of demonetisation in rural areas, which include common people and farmers in particular and the economy as a whole. Farmers found reduction in demand for their produce in wholesale markets due to lack of cash effected by demonetisation. Another major problem was the lack of bank branches and Automated Teller Machines in the rural areas which hindered the banking accessibility of the farmers. Also the limit in terms of both number and amount of withdrawals that can be made through ATMs added to the payment problems of farmers.

A Sinha and D Rai (2016) [12] analysed the implications of demonetisation on the rural population. It was described that low penetration of banks in rural areas made people including farmers idle without any transactions for several days. They had to wait in long queues for getting their currency exchanged with new one. Farmers left aside their farm activities because of inability to purchase seeds and unable to pay for workers.

An analysis of the existing literature revealed that no systematic study was carried out in analysing the impact of demonetisation in the accessibility of dairy farmers towards the banking services in India and hence the present study gains significance compared to the prior studies.

III. DATA ANALYSIS

India stands highest in terms of production of milk in the entire globe. India is popular as 'oyster' of the global dairy industry by creating a good avenue for undertaking entrepreneurship in the industry across the globe. The industry could flourish since liberalisation. Dairy farming has been regarded as an effective tool for socio-economic development. Milk production in the country is attributable to millions of small dairy farmers who live in the depth and roots of rural areas. As against the seasonal nature of crop production, dairy farming provides a stable income to the farmers with affordable requirements of infrastructure. It act as both main and subsidiary income sources. Our country has become the largest producer of milk in the world with a gross output of 84.6 million tons in 2001. The success of this industry is credited to the professionally organised co-operative tie up of dairy farmers, which covers the illiterate and smallholder farmers. Farmers started receiving fair return on their production of milk since the emergence of Co-operative societies, particularly the Anand pattern societies [13]. These formal institutional structure covers millions of poor farmers under their network, as depicted in table 1.

Table 1 Progress of producer membership in Dairy cooperatives[@] ('000)

Region/States/UT	1980-81	1990-91	2000-01	2012-13	2013-14 [§]
NORTH					
Haryana	39	184	185	310	297
Himachal Pradesh	*	17	20	34	35
Jammu & Kashmir	*	2	**	**	**
Punjab	26	304	370	402	411
Rajasthan [^]	80	340	436	701	703
Uttar Pradesh	18	392	649	967	955
Regional Total	163	1,239	1,660	2,414	2,401
EAST					
Assam	*	2	1	7	9
Bihar	3	100	184	736	873
Jharkhand	*	*	*	1	1
Nagaland	*	1	3	2	2
Odisha	*	46	111	260	267
Sikkim	*	4	5	10	10
Tripura	*	4	4	6	6
West Bengal	20	66	114	221	227
Regional Total	23	223	422	1,243	1,395
SOUTH					
Andhra Pradesh	33	561	702	857	869
Karnataka	195	1,013	1,528	2,274	2,297
Kerala	*	225	637	876	898
Tamil Nadu	481	1,590	1,957	2,238	2,212
Puducherry		17	27	38	38
Regional Total	709	3,406	4,851	6,283	6,314
WEST					
Chhattisgarh	*	*	*	37	40
Goa	*	12	18	19	19
Gujarat	741	1,612	2,147	3,041	3,234
Madhya Pradesh	24	150	242	280	283
Maharashtra	87	840	1,398	1,798	1,800
Regional Total	852	2,614	3,805	5,175	5,376
Grand Total	1,747	7,482	10,738	15,115	15,486

Source: Dairy Knowledge Portal, National Dairy Development Board [14]

@ Organised (cumulative), includes conventional societies and Taluka unions formed earlier

[^] DCS includes registered and collection centres proposed for registration and their membership since 2009-10 onwards.

** Not reported

[§] Provisional

*Figures not available

Table 1 shows that the number of farmers joining the cooperatives exhibits an overall increasing trend. The number of producer members joining the cooperatives have raised from 1.747 million in the year 1980-81 to 15.486 million for the year 2013-14. The region wise analysis reveal that all the regions show an increase in the number of members compared to the previous years except for the Northern region. The number of farmers maintaining membership in cooperatives in the Northern region indicates a decrease from 24, 14,000 in the year 2012-13 to 24, 01,000 for the year 2013-14. However, the

overall progress put forward a good opportunity for the successful implementation of financial inclusion strategy in association with the cooperatives.

The Union Government issued instructions to open bank accounts by all of Indian dairy farmers since the sector is dumped heavily with cash transactions. The National Dairy Development Board and the State dairy co-operative federations have been entrusted with the task of ensuring payment to dairy farmers for the milk collected through bank accounts. Rural areas suffered due to the issue of lack of access to banking facilities. Demonetisation paved way

for better understanding of the benefits of banking among the dairy farmers. The co-operative banks were unable to make payment to the co-operative societies due to non-availability of cash. An issue to be addressed in this regard is the inconvenience of the farmers in accessing a bank by travelling a long distance especially in remote areas [15].

The Gujarat Co-operative Milk Marketing Federation-AMUL has been directed by the Central Government that all the milk producers with whom they transact must have bank accounts before 30th December 2016, as reported by The Financial Express. Demonetisation had an unpredicted effect on the transactions of the dairy industry. It was directed by the authorities that the rural areas should be provided with adequate mechanisms for smooth financing. The entire payment system including both at the procurement stage and at the stage of sales to final consumers was suggested to be made cashless [16].

Another report of The Financial express stated that about 60 to 70 percent of the dairy farmers who are members in the co-operatives possess bank accounts. About 28 lakh bank accounts were opened for dairy farmers under the Jan Dhan Scheme. Demonetisation paved way to take this initiative a step further. The Gujarat Co-operative Milk Marketing Federation was successful in effecting direct payment to about 60 to 70 percent of its member farmers through bank accounts for the milk procured. This method of payment took about one week for the farmers to get this payment after sale of milk to co-operatives. But it reduces the transaction costs to a significant extent. Karnataka Milk Federation and Maharashtra State Milk Producers Association also initiated to follow Gujarat Co-operative Milk Marketing Federation by assisting their member farmers in having bank accounts [17].

The New Indian Express reported that the dairy farmers of Odisha's popular private dairy, Milk Mantra started to receive payments directly through their bank accounts. The firm aimed at empowering rural farmers by creating a digital financing environment and thus exploring ways to improve farmers' income. Another advantage of the firm regarding this strategy is savings in transaction costs. The firm mainly focus on women dairy farmers as the key beneficiaries who were excluded from the formal financial system [18].

Under YES Kisan Dairy Plus, a portfolio of financial services offered by YES bank to dairy farmers, instant payment is made through bank accounts once the milk is procured. The delay in payment is then limited to the process of testing milk. The bank is also providing Basic Saving Account (BSA) offering seven percent interest, ATM cum Debit card, free unlimited withdrawals on any bank's ATM, lean season Over-draft (LSOD) facility etc. [19].

A recent report from The Economic Times informs that the process of disbursing subsidies amounted to Rs. 225 crores got delay in Maharashtra owing to the absence of bank accounts for the dairy farmers. The Government tried to credit the subsidy amount directly to the farmers' account transparently instead of sanctioning it to the co-operatives. But there exists an unfavourable situation because of the unbanked masses and the applications given by the co-operative societies got stuck at the administrative level [20].

In Kerala, only a few primary co-operative societies make payments to dairy farmers directly through bank accounts. It can be highlighted that the Malabar Regional Co-operative Milk Producers' Union Ltd. (MRCMPU) stands high in making payment to dairy farmers directly through bank accounts when compared to that made by the Trivandrum Regional Co-operative Milk Producers' Union Ltd. (TRCMPU) and Ernakulam Regional Co-operative Milk Producers' Union Ltd. (ERCMPU).

Post Demonetisation Scenario: A Nutshell

India banned the existed Rs. 500 and Rs. 1000 currency notes as on 8th November 2016. The process called demonetisation happened in our country for the third time. Demonetisation affected each and every industry one way or the other, but particularly had adverse effect on those industries which heavily depends on cash transactions like the dairy industry.

Demonetisation affected co-operative banks by making them unable to provide cash for the co-operatives so as to disburse the price for milk procured from dairy farmers. Soon after reporting of these issues by the co-operatives, the Government reviewed regularly to overcome the situation. The Government considered Demonetisation to be an opportunity to reach and cover the unbanked farmers under the formal banking system. Instructions have been issued by the Government to the National Dairy Development Board and all the state co-operative federations to direct member farmers in opening bank accounts. Banking technology not only saves transaction costs but also brings transparency in dealings which are beneficial to both co-operatives and the member farmers. A good amount of subsidies are being sanctioned to the dairy sector by the Government. But whether the beneficiaries receive them in the right proportion is a question behind. Another issue is that the demand should come first before the supply is made. Majority of the dairy farmers are not aware of the schemes and grants declared for them. Only if they take the initiative, the co-operatives direct them towards the proper channel of finance. Use of banking facilities helps the farmers to a significant extent in becoming aware of these grants. Moreover, bank accounts act as eye openers for them and safeguard them from any exploitation. The following tables give an overall

view of the effect of demonetisation in the banking access of dairy farmers.

Table 2 Effect of demonetisation on bank access by dairy farmers (in number)

Participating agencies i.e NDDDB Dairy Services and 23 State Milk Federations	No of Farmers (Numbers in Lakh)			
	Total	With bank account	Without bank account	Percentage of farmers having bank Accounts
Pre- Demonetization (1- 8th Nov 2016)	31.64	15.59	16.05	49.27 %
Post-Demonetization (9th Nov 2016 to 18 Jan 2017)	88.99	56.43	32.56	63.42 %

Source: Press Information Bureau, Ministry of Agriculture & Farmers Welfare, Government of India [21]

Table 2 describe the pre-demonetisation scenario and post-demonetisation scenario of the number of dairy farmers having bank accounts and those who do not have. The data includes those from the National Dairy Development Board, and the twenty three State Milk Federations of the country. It is clear that there were only 15.59 lakhs of farmers having bank accounts in the period prior to demonetisation. The number of farmers having bank accounts increased to 56.43 lakhs during the post demonetisation period. It shows that the percentage of farmers possessing bank accounts have increased from 49.27 percent during the pre-demonetisation period to 63.42 percent in the post demonetisation period. Thus it can be inferred that demonetisation made a favourable though not significant change in the banking access of dairy farmers.

Table 3 Effect of demonetisation on bank access by dairy farmers (in amount)

Participating agencies i.e NDDDB Dairy Services and 23 State Milk Federations	Details of payment done (amount Rs in Crore)			
	Total	Through Bank accounts	Through Cash	Percentage of cashless Transaction
Pre- Demonetization (1- 8th Nov 2016)	215.23	51.28	153.77	23.82 %
Post-Demonetization (9th Nov 2016 to 18 Jan 2017)	1,146.60	828.39	318.21	72.25 %

Source: Press Information Bureau, Ministry of Agriculture & Farmers Welfare, Government of India [21]

Table 3 gives information on the amount of transactions taken place through bank accounts and through cash mode with the dairy farmers during the pre-demonetisation and post-demonetisation period. It is identified that transactions amounting to 51.28 crores had occurred through bank accounts whereas 153.77 crores were distributed in cash during the pre-demonetisation period. In the post- demonetisation period, transactions valuing 828.39 crores were made through banks and 318.21 crores paid by cash. The favour created through demonetisation was that the percentage of cashless transactions had improved from 23.82 percent in pre-demonetisation period to 72.25 percent after demonetisation took place.

In short, demonetisation though a fiscal initiative for removing black money being circulated in the economy, contributed positive effects in the banking access of dairy farmers. Although this change was not predicted, it was necessary for the country in achieving its target of Financial Inclusion plan. The amount of bank transactions exhibited a higher improvement than the number of bank transactions of the dairy farmers in comparing the pre-demonetisation and post-demonetisation period.

IV. RESULTS AND DISCUSSIONS

FINDINGS:

The major findings of the study are as follows:

1. The Jan Dhan Scheme paved way for opening of bank accounts for about 28 lakhs of dairy farmers.
2. The percentage of dairy farmers having bank accounts had increased from 49.27 percent during the pre-demonetisation period to 63.42 percent in the post demonetisation period.
3. About 15.59 lakhs of farmers had bank accounts and 16.05 lakhs of farmers were not having bank accounts during the pre-demonetisation period.
4. In the period after demonetisation, there were about 56.43 lakhs of farmers with bank account and 32.56 lakhs without a bank account.
5. The amount of transactions by dairy farmers through bank accounts was about 51.28 crores prior to demonetisation out of the total transaction value of Rs. 215.23 crores. The figure had raised to Rs. 828.39 crores out of the total value of Rs. 1146.60 crores for the months after demonetisation.
6. The cash transactions of dairy farmers stood at Rs. 153.77 crores out of the total transaction value of Rs. 215.23 crores. However demonetisation effected a percentage decrease in the cash transactions, where the respective value stood at Rs. 318.21 crores out of the total value of Rs. 1146.60 crores.
7. The percentage of cashless transactions was about 23.82 percent prior to demonetisation and the figure raised to 72.25 percent a few months after demonetisation.

SUGGESTIONS:

The study puts forward the following valuable suggestions:

1. Institutional authorities including co-operatives must take initiatives in making the dairy farmers literate of the basic banking services and aware regarding the potential benefits of having a bank account.
2. It must be ensured that the government grants and subsidies provided through banking network reach the ultimate beneficiary in its right quantum so that the farmers' trust in banks could be enhanced.
3. Changing a group in common is easier than changing a single individual. Hence it is suggested to make utmost use of policy initiatives like demonetisation in bringing the desired shift in the economy.

V. CONCLUSION

The present study analysed the data available on the official records of the Government and highlights the positive and negative effects of demonetisation among

dairy farmers in India. Demonetisation had reduced the dependence of farmers on cash transactions and also promoted their access to formal banking services. The amount of transactions through bank channels increased which effect a formal account of what the farmers are actually paid by the co-operatives and private dairies. Thus it can be rightly said that though the initial implications of demonetisation created inconvenience, financial and social loss to the farmers, in the long run, it will ensure transparency and better financial position to them.

The number of farmers who still do not possess bank accounts gives an alert to the authorities that the policy initiatives are far to be better monitored and executed. Demonetisation was an ample opportunity to cover the unbanked under the banking network. Dairy industry had used this opportunity and made a shift in its function. But still there are unbanked farmers especially the small holder ones. A report of Reserve Bank of India states that out of the total bank credit provided, a largest share of about 44 percent is availed by farmers with landholdings above 5 acres [22]. Financial inclusion should be executed as what it exactly means. Bank credit must be available to those who are really deprived of it and not those who can access it with limited efforts.

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