



DBT IMPLEMENTATION FOR PDS PUDUCHERRY UT : TECHNOLOGICAL CONVERGENCE, ISSUES AND ITS IMPLEMENTATION - A CASE STUDY

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ABSTRACT The Direct benefit Transfer (DBT) system launched by Government of India to ensure that benefits go to individuals' bank accounts electronically, minimizing multiple layers involved in fund flow thereby reducing delay in payment, ensuring accurate targeting of the beneficiary and curbing pilferage and duplication. In Public Distribution System, the system has been implemented to beneficiaries identified under National Food Security Act, 2013 in Union Territories of Government of India for providing Food security. Puducherry UT, with 1.64 lakhs families has been operational since September 2015. Although the small size of the U.T., the geographical locations of the four regions among the three Southern States of Tamil Nadu, Kerala and Andhra Pradesh in India with three different spoken languages poses a real challenge for planners. Particularly, in Public distribution system, there are many challenges due to various issues in storage and transshipment points of these regions like theft en route, multiple handling, poor quality of gunny bags as well as the loss of moisture, insect-pest and disease infestation, spillage of grain from gunny bags etc. On the other hand, the banking industry has shown tremendous growth in volume and complexity during the last few decades. Particularly, the Government of India has an ambitious scheme called, Direct Benefit Transfer(DBT) by which transfer of crores of subsidies to the major population through electronic transfer of funds. The objective of this paper is to study the implementation of DBT scheme in Puducherry UT Public distribution System with the technological convergence. The issues and its implementation are also included in the paper. The report is the author's view and not the organization's view.

KEYWORDS : Direct Benefit Transfer, Public Distribution System, Puducherry, PFMS, NFSA, beneficiaries, Financial Inclusion, Aadhaar, Aadhaar Payment Bridge System.

Introduction:

The financial inclusion is emerging as the new paradigm of economic growth. It is the delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups. All efforts are made by the Government of India to plug gaps and leaks in public subsidies and welfare programmes as considerable sum of money meant for the poorest of poor does not actually reach them. Its main focus in India is to promote sustainable development and generating employment in rural areas for the rural population. One of the typical reasons for poverty is being financially excluded. Though there is considerable population in urban and semi-urban areas who are enjoying all kinds of services from savings to net banking, but still in our country considerable population lack access to even basic financial services like savings.

On the other side, the banking industry has shown tremendous growth in volume and complexity during the last few decades. Despite making significant improvements in all the area relating to financial viability, profitability and competitiveness, there are concerns that banks have not been able to include vast segment of the population, especially the underprivileged sections of the society, into the fold of basic banking services. The social conditions like culture, financial literacy, gender, income and assets, proof of identity, remoteness of residence, and so on are also attributing to access to formal banking system in any country. The Government of India(GoI) is intensively promoting the two digital initiatives called Jan Dhan Yojana, and an equally, if not more, massive initiative to digitize government flows to people, called Direct Benefit Transfer(DBT). The Government has an ambitious scheme of transferring of crores of subsidies to the major population through electronic transfer of funds. This paper mainly focuses a case study of Direct Benefit Transfer for PDS in Puducherry UT, on how the bank account opening, like for the most part of the country is doable, but it is account usage that is tough to achieve.

The Public Distribution System(PDS) for grains is one of the main schemes through which Government of India delivers 'food security' to people of this country, especially addressing the economically weaker sections. The Government is relooking the existing supply chain management to avoid pilferages and losses during the transit of food grains. The main factors responsible for transit loss in food grains were pilferage and theft en route, multiple handling, poor quality of gunny bags, use of hooks on bags by labourers, spillage through wagon holes, and spillage at transshipment points, which had led to increase in food subsidy. In addition, loss of moisture, insect-pest and disease

infestation, quality of deterioration of stocks, rodents, spillage of grain from gunny bags etc also accounts to losses in storage point. The National Food Security Act 2013 has notified to provide food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity. The Act provides for coverage of up to 75% of the rural population and up to 50% of the urban population for receiving subsidized food grains under Targeted Public Distribution System (TPDS), thus covering about two-thirds of the population.

The Government of India has sent necessary guidelines for the implementation of National Food Security Act (NFSA) to identify the targeted Public Distribution System wherein two options are given to the States adopting delivery of food grains across FP Shops and Direct Benefit transfer of subsidy directly to the account of Beneficiaries.

DBT in Public Distribution System: The Department of Food and Public distribution has released a notification on 21st August 2015, about the new rule called 'the Cash Transfer of Food Subsidy Rules, 2015 [2] under the National Food Security Act, 2013, the Government of India, after consultation with the State Governments. The rule has explained the modalities of implementing the cash transfer of food subsidy to State Governments wherein the digitized beneficiary database are to be seeded with bank account details and Aadhaar number, if available, keeping in view the total coverage for the State or Union territory determined under the Act for receiving subsidized food grains. The details are required to be shared on the portal of the Public Financial Management System (PFMS) for scrutiny, verification and validation of Aadhaar number and bank account details. The State Government shall address the issues raised in the findings of the Public Financial Management System and place the final digitized beneficiary database for the identified area, seeded with bank account details and Aadhaar number, if available, on the Public Financial Management System portal. On the basis of final digitized beneficiary database, the entitled quantity of food grains and formula for computation of cash food subsidy under rule 5, the State Government shall also prepare and place a summary proposal, on the Public Financial Management System portal, as per the pro forma annexed to these Rules, for transfer of due cash subsidy by the Government of India into the bank account of the State Agency. The Government of India shall transfer, on monthly basis, the total cash subsidy for the final digitized beneficiary database of the State or Union territory, computed in accordance with the provisions of rule 5, into the bank account of the State agency.

The amount of State subsidy in cash for each of such entitled households and credit the total amount of State subsidy into the bank account of State Agency. The State agency shall credit the consolidated amount of entitled cash subsidy comprising of Central subsidy in accordance with the provisions of rule 5 and State subsidy as per the provisions of sub-rule (7), if applicable, into the individual bank accounts of entitled households in the digitized beneficiary database, on monthly basis, through the Public Financial Management System by following procedure specified by Controller General of Accounts, Ministry of Finance, Government of India, from time to time. All these activities specified shall be made online and freeze for every month. The State Governments are instructed to undertake regular online updation of digitized beneficiary database, to ensure that cash transfer is being made only in the bank accounts of entitled households and perform account deletions or cancellation of ration cards, before sending summary proposal for subsequent months. The State Government shall endeavour to ensure food grains entitlement of targeted beneficiaries specified in the Act, through cash transfer under the Scheme.

The Gazette also mention about the time lines to share the final digitized beneficiary database on the Public Financial Management System portal by 10th day of the preceding month, placing a summary proposal by 10th day of the preceding month, for monthly transfer of cash subsidy by the Government of India into the bank account of State Agency. The Government of India after due scrutiny of the proposal of the State Government, credit the total due cash subsidy on monthly basis into the bank account of the State Agency by 15th day of the preceding month. The State Agency shall transfer the cash subsidy on monthly basis into the bank accounts of entitled households by last week of the previous month.

In order to evaluate the implementation, the State Government shall get the effectiveness of the Scheme, in ensuring food security of the targeted beneficiaries, evaluate concurrently and submit the first report to the Government of India at the end of six months of implementation of the Scheme. The State Government shall submit second report to the Government of India at the end of one year of implementation of the Scheme. A specific proforma is also provided to the State Government for submitting the utilization certificate to the Government of India, in accordance with provisions of the General Financial Rules, 2005. A proforma is also circulated to all State Governments to furnish the details of entitled households, food grains requirements, and monthly cash transfer amount.

Implementation of DBT in Puducherry UT – A Case study:

The Government of Puducherry UT, has sent the willingness to Government of India on 16/3/2015, to implement cash for food grains, for NFSA beneficiaries, under the option of cash transfer of the food subsidy to the bank account of beneficiaries every month. The Secretary(Civil Supplies) to Government of Puducherry has sent a communication in this regard on the identification of households, preparation of digitized beneficiaries, seeding of Aadhaar and Bank account for the transfer of benefit to the beneficiary bank account.

A Common Architecture Broker(CAB) structure has been created by National Informatics Centre(NIC),Delhi for adopting the data standards prescribed in the national model. The details of the structure required for the standards and the modalities has been sent on 24/3/2015 by Jt.Secy(Food),GoI to all State Government.

Based on the guidelines provided by NIC,Delhi, the beneficiary data has been extracted from the live ration card database and prepared in the suitable format prescribed by CAB. After uploading the data, the data has been verified for the validity of various details including Aadhaar number, Date of Birth, Bank account, Member details of the family for syncing with national structure. During this stage, the duplication of aadhaar number, card without Head of Family, invalid date of birth were brought to the notice of the department for suitable action. Once the data goes through this pass successfully, the data has been sent to PFMS for approval. The PFMS verifies the Aadhaar number, Bank Account number and send back the final approved list with the rejected beneficiary details to the department.

For the approved list, a calculation sheet will be prepared based on the beneficiary category where Andhyodhaya Anna yojana cards will get cash transfer for 35 Kg of rice @ Rs.23.125 irrespective of member count in the accepted AAY cards. For BPL card holders, each member

above 14 years is eligible for 5 kg of rice @ Rs.23.125. Based on the calculation sheet and the beneficiary list provided by NIC, the PFMS uploads the details in PFMS portal for department verification. The department login the PFMS portal with the digital signature and verifies the beneficiary list and send the proposal for release of funds to GoI. Once the fund is released, the department requests PFMS again to release the stopper for cash transfer to the bank accounts of the beneficiaries.

The department follows the above procedure since September 2015 for providing the cash transfer to NFSA beneficiaries. , 100 % of total NFSA beneficiaries of the UT are benefitted by DBT and instead of 3441 MTs of Rice, the off-take of grain is replaced by the cash transferred to the respective bank account every month. It is represented in Figure 1.

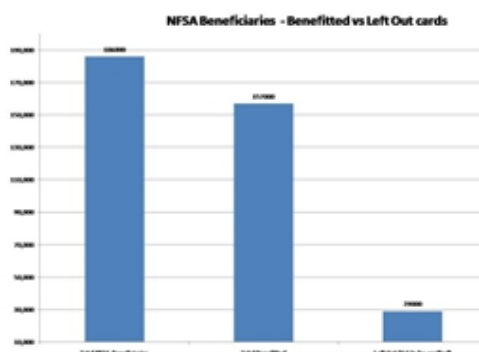


Figure 1

Technological Innovation:

The financial inclusion initiative primarily aims to deliver financial services to all the people in a fair, transparent and equitable manner at an affordable cost, making latest technologies available in these areas is also one of the prerequisites for overall development of our country. There are many areas where our country has introduced transforming technology initiatives, policy support for financially sustainable developmental financial inclusion intermediations. Leveraging the advance technology and telecommunication infrastructure available, an electronic payment system mechanism to reach out everyone intended is no longer a distant dream. There has emerged a strong and compelling case to automate the entire government payment mechanism that will provide government sponsored financial disbursement to the poor and achieve the aim of financial inclusion in a more effective manner

The PFMS is one of the most important ICT initiatives of GoI to simplify and efficiently manage the cash transfer to the beneficiaries. It has established a common transaction-based on-line fund management and payment system and MIS for the Plan Schemes of Government of India. The platform has now been extended to State Governments for effecting payments of plan funds received directly at the State Treasuries.

The PFMS, has operationalized an active interface with 90 banks (26 Public Sector Banks, 59 Regional Rural Banks and 5 major Private Sector Banks) to provide immediate validation of bank accounts, prompt electronic credit to the beneficiary's bank account and bank reconciled expenditure statements to the implementing agencies.

With 139 Centrally Sponsored Schemes (CSS) and more than 800 Central Sector Schemes (CS), along with State Plans and Additional Central Assistance (ACA), the PFMS is managing funds in excess of Rs.3,00,000 crore annually. The system is geared for fund management and e-payments for Plan/non-Plan Schemes of the Government of India and report utilization under these schemes at different levels of implementation on a real time basis.

The Aadhaar Payment Bridge System(APBS) facility of payment has been provided by PFMS to ensure that the alternatives emerging for payment intermediaries are fully utilized and their mode specific advantage are used effectively. PFMS uses NPCI mapper for effecting the Aadhaar based payment system. NPCI mapper is a repository of Aadhaar numbers maintained by the APB System and used for the purpose of routing the APB transactions to the destination banks. The

NPCI mapper contains Aadhaar number along with Institution Identification Number(IIN) of the bank to which the customer has seeded his/her Aadhaar number. Banks need to upload Aadhaar number in NPCI mapper in a specified file format through NACH portal. NPCI mapper acts as a repository of the Aadhaar numbers along with the IIN to which the Aadhaar number is mapped. The APB System routes the transaction to the bank against whose IIN the Aadhaar number is mapped.

The Government of Puducherry has decided to utilize the APBS facility of PFMS as Puducherry UT claims more than 92% of its population are enrolled with Aadhaar. In a separate exercise during enrolment, the Aadhaar has been seeded to the ration cards. The public are also encouraged to enter the Aadhaar number for the ration cards through OTP arrangement. Further, a separate drive was conducted to capture Aadhaar number and Bank Account of all beneficiaries during identification of priority households. The beneficiaries are also advised to seed the Bank Account in their existing bank account or bank account created through Jan Dhan Yojana scheme.

The major advantages of ABPS through PFMS are

- Credit disbursements based on UID number,
- To sub-serve the goal of Government of India and Reserve Bank of India (RBI) in furthering Financial Inclusion by way of processing government disbursement using Aadhaar number,
- Eliminates inordinate delays, multiple channels & paper-work involved in the existing system.
- Transfers benefits & subsidies in a seamless & timely manner and directly into the Aadhaar
- Enabled Bank Account.
- In case of change in bank account, customer is not required to convey the bank account details
- or change in bank details to the Government Department or Agency.
- Customer not required to open multiple bank accounts for receiving benefits and subsidies of various social welfare schemes – Customer just need to open one account and seed his/her Aadhaar number in the bank account to start receiving benefits and subsidies directly into his/her Aadhaar Enabled Bank Account.

Issues in the implementation: There are many stakeholders involved before a beneficiary gets the cash benefit instead of food grains through DBT. But, the stake holders are working in individual systems with each working on separate formats. The DCSCA, NIC, PFMS, NPCI are the various agencies working on the beneficiary list where each working on different formats for the same data. The coordination among them requires manual intervention at every stage recursively till the sequence of action reaches the last mile. Due to this, the enquiries of the beneficiaries may not be handled well by the department.

For example, if a beneficiary fails to get the amount in spite of Aadhaar seeded in ration cards and Bank account, the department could not answer the reason for failure. It is because, APB System participating banks after receiving the Aadhaar number from the customer seeds the same into the bank account details of the customer maintained in the Core Banking System and subsequently uploads such Aadhaar numbers' into the NPCI mapper on a regular basis but not online. But, this process is not transparent and online either to PFMS or the department or to the beneficiary. The system fails to eliminate the need for connectivity to the central server.

It is empirical that the Aadhaar is given for an individual whereas ration card is given for an entire family. In the existing paper card /smart card system, ration card assures food security even if a member is deleted or bifurcated to another family. Whereas, the deletion of a member or bifurcated member will have a serious impact on DBT, as the chain is broken. Likewise, if Aadhaar and bank account chain is broken, it will have an impact in Aadhaar linked Ration card. The Aadhaar Payment Bridge, Banks, NPCI are payment related infrastructure but not connected for Direct Benefit Transfer. Mere seeding of Aadhaar in bank as well as in Ration cards, cannot assure that the money will be credited in the UIDAI verified bank. Complexity increases if Aadhaar is seeded in multiple bank accounts of beneficiaries. There are several cases like money transferred to account holders died few years back, money could not get transferred due to closure of accounts which are issues to be resolved with NPCI and banks.

To avoid the above issue, a proposed architecture is given below:

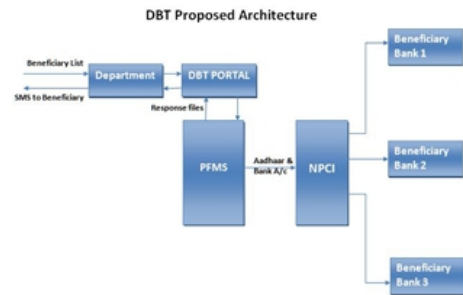


Figure 2

In the above diagram(Figure 2), it is represented that PFMS and NPCI mapper should have an online interface to know if a particular Aadhaar or Bank Account is verified and mapped.

The department requires response file from PFMS to send the cash transfer details to beneficiary through SMS. Also, the response file gives the reason for rejection, if any action, to be taken by Bank. Normally, Banks do not send SMS to account holder for amount less than Rs.1000/-

There is no online portal to update the addition, deletion, change of family member details which will have impact on the amount. Every month, CAS also requires complete list to be updated instead of only changes.

There is no work flow based system with timelines for submission of proposal, verification of beneficiary list, release of funds, crediting of food subsidy due to which the left out beneficiaries are not included in subsequent months.

The digital certificate certificate (DSC) is mandatory part of data authentication. As the DSC is issued on name, the DSC have to get applied and activated before uploading the data. Also, the related activities like cancelling previous DSC and activating the current DSC process have to be part of DBT mechanism. To institutionalize the DBT arrangement, the DSC usage policy has to be made.

Some of the cards having the old card numbers are given a new card number due to conversion / bifurcation / reinduction through Service window operation. Therefore, the department has to verify this detail with the before submission of the beneficiary list.

DBT Portal

In an effort to streamline the activities and organize the arrays of processes and also provide a single window solution for the sequence of processes by various stakeholders, a DBT portal for Puducherry PDS has been developed to track the submission of proposal, verification of beneficiary list, preparation of calculation sheet, payment files and release of funds. Necessary check points are provided at each stage to ensure that the stakeholders complete their part in releasing the DBT to the beneficiaries. The system has the ability to integrate the payment and response files to ensure that failure cases as well as reasons can be generated for redressal of account related issues.

Some of the immediate benefits seen are:

- It helps to identify the beneficiary as well as the bank through which the benefit gets the cash benefit for food grains.
- The portal helps to monitor the activities of all the stakeholders DCSCA, PFMS and NPCI working as individual systems in separate formats and identify the discrepancies for handling enquiries of the beneficiaries.
- The response files are integrated into the system which helps the department to know the reason for rejection, action taken or to be taken by bank. SMS service is integrated with the portal.
- The portal helps to provide check points during verification for ensuring maximum accuracy.
- The system has replaced the CAB layer and directly prepares the monthly payment files for uploading to PFMS server.

Conclusion:

By reducing the number of government departments involved in the distribution process, opportunities for leakage are curtailed. For example, FCI, DCSCA, PAPSCO, PFECS, and Fair Price shops are earlier involved in PDS. Now, with the help of DBT, the beneficiaries list is uploaded, approved for payments through PFMS portal of GoI and the subsidy is transferred to the beneficiaries.

The DBT pilot experience reveals that the first part, getting the credits into the bank account, is easy, and depends on mapping the beneficiary's Aadhaar number to the ration cards and the nominated bank account, an exercise that has been substantially completed. It may be fine tuned with the centralized operations of release of funds, updating beneficiary list and seeding of Aadhaar which is achieved by DBT portal.

It is the latter part, of cash withdrawals or conducting digital transactions (remittances, utility payments etc.), that presents challenges. This necessitates a functional national network of retail payment outlets, duly enabled with technology, connectivity, and training, to assist beneficiaries in their transactions.

A centralized online arrangement is required for Aadhaar –Bank related issues to the department for resolving any of the above issues through Help Desk or Transparency portal. Otherwise, the department cannot address the failure of transfer of funds to various issues arise in NPCI mapper or Aadhaar payment bridge.

Finally, DBT is a techno enabled, transformational effort to fix the delivery system where the common opinion that the “service delivery system is broken”, and the government is just sending more money down the same “leaky pipes”. In fact, DBT is here also to prove as the probably the world's largest anti-corruption programme.

References:

1. National Committee on Direct Cash Transfers, 1st meeting on 26/9/2012, Introduction to Cash transfers –A back ground note.
2. Gazette notification on National Food Security Act 2013 dated 10/9/2013 by Ministry of Law and Justice, Government of India.
3. Gazette notification on Cash Transfer of Food Subsidy Rules, 2015 dated 21/8/2015 by Ministry of Food and Public Distribution, Government of India.
4. Communications between Ministry of Food and Public Distribution, GoI and States on NFSA implementation.
5. Public Finance Management System – portal – pfms.nic.in
6. DBT through PFMS portal. – pfms.nic.in
7. FAQ on PFMS portal – pfms.nic.in
8. National Payment corporation of India www.npci.org
9. Frequently Asked Questions (FAQs) on Aadhaar Payment Bridge (APB) System www.npci.org
10. Website of Department of Civil Supplies and Consumer Affairs – desca. puducherry.gov.in
11. PDS portal of India – pdsportal.nic.in
12. Ministry of Food and Public Distribution and Consumer Affairs - fcamin.nic.in