

VIKSIT BHARAT

@ 2 0 4 7

GOVERNANCE TRANSFORMED



C.K. MATHEW, SURENDRA NATH TRIPATHI
C. SHEELA REDDY & A.P. SINGH

Viksit Bharat @2047

Governance Transformed

C. K. MATHEW, SURENDRA NATH TRIPATHI, C. SHEELA
REDDY, A. P. SINGH, EDITORS

Mathew, C.K., Tripathi, Surendra Nath, Reddy, C. Sheela, and Singh, A.P. (2025), *Viksit Bharat @ 2047: Governance Transformed*, IIAS Public Governance Series (Vol. 7, 2nd ed.), Brussels: IIAS-IISA, 717+xvi p.

© Mathew, C.K., Reddy, C. Sheela, Tripathi, Surendra Nath, Singh, A.P., and the authors of the individual chapters, 2025. The views expressed in this book are those of the authors, and do not necessarily reflect those of the institutions they were or are associated with.

Published under a CC BY licence agreement by
The International Institute of Administrative Sciences, Brussels,
2025, <http://www.iias-iisa.org/>



IIAS Public Governance Series
Vol. 7, 2nd Edition
Series Editor: Steve Troupin
(IIAS)

ISBN: 9798306547237; DOI: <https://doi.org/10.46996/pgs.v7e2>

Chapter 3. Improving Public Service Delivery: An Indian Experience—*DBT Dilli Se Beneficiary Tak*

Dr. R. S. Sharma¹

Introduction

Direct Benefit Transfer (DBT) represents a transformative approach in India's welfare distribution landscape, designed to enhance efficiency, transparency, and inclusivity. Launched as part of a broader strategy to modernise and digitise government services, DBT aims to directly transfer subsidies, financial aid, and welfare benefits into the bank accounts of intended beneficiaries, thereby reducing leakages and improving delivery. This article provides a comprehensive analysis of DBT's implementation, impact, and challenges, examining its role in reshaping social security mechanisms in India.

According to the Mission Statement provided on the DBT portal (<https://dbtbharat.gov.in/>), it seeks to establish a “governance regime which ensures a simple and user-friendly Government to People (G2P) interface and directly delivers entitlements to eligible individuals and households in a fair, transparent, efficient and reliable manner.”

¹ Dr. Ram Sewak Sharma is the Former Chairman of the Telecom Regulatory Authority of India

The story of how India transformed the delivery of benefits to its people using technology to achieve this mission objective is a fascinating one. This article attempts to describe this journey since its inception.

In order to fully understand the evolution of DBT in India, it is important to briefly study the chronology of its development over the last 15 years or so.

Problems of Benefit Delivery Systems

India has a tradition of distributing welfare benefits and subsidies to its poor and marginalised populations, a practice that dates back several decades. Following independence, the government embraced the philosophy of Community Development (CD). This approach was founded on the belief that by fostering development in entire communities or areas, the benefits would naturally extend to all their inhabitants. This model was prevalent throughout the 1950s and 1960s. However, it soon became evident that this broad-based approach was inadequate when it came to addressing the needs of the poorest and most marginalised individuals.

As a result, the focus shifted towards a more direct method of delivering benefits and subsidies. This led to the development of programmes specifically designed to assist the identified poor directly. Such programmes included subsidised food grains and sugar distributed through the Public Distribution System (PDS), discounted Liquefied Petroleum Gas (LPG) cylinders, and various rural employment and social safety net initiatives.

To ensure that these benefits reached the intended recipients, efforts were made to identify eligible beneficiaries through various databases. The concept of Below Poverty Line (BPL) families emerged, with these databases becoming a cornerstone of many individual schemes. Village-level functionaries and Panchayati Raj institutions were tasked with identifying BPL families and maintaining these databases.

However, this approach was fraught with challenges. Issues such as wrongful inclusions, exclusions, and the presence of duplicates and ghost entries started plaguing the system. Some individuals exploited these lists for fraudulent gains, leading to significant leakages in the distribution of benefits. Corruption further undermined the system's efficiency. One Prime Minister famously highlighted the problem, stating that out of every rupee allocated for the poor, only 17 paise (17%) effectively reached them.

The Solution: Unique Identity for Everyone

To address the persistent issues of duplicate and ghost entries, the creation of unique IDs for each Below Poverty Line (BPL) family emerged as a potential solution. By implementing unique identities for every family, the system could effectively eliminate duplicates and ghost entries, thereby enhancing the efficiency and transparency of the benefit delivery process.

In 2006, an Empowered Group of Ministers (eGOM) was established, chaired by the then External Affairs Minister, late Shri Pranab Mukherjee, who later became the President of India. The eGOM was tasked with the mandate of developing a system to provide unique identities for BPL families across the country.

The eGOM conducted several meetings between 2006 and 2008, exploring various alternatives for creating a comprehensive database of BPL families. Ultimately, the committee decided to establish a new authority—the Unique Identification Authority of India (UIDAI). The UIDAI was assigned the responsibility of generating unique identities for all residents of India. This approach recognised the dynamic nature of families and poverty. Families evolve due to events such as marriages, deaths, and births, while poverty levels can fluctuate due to unforeseen circumstances. By providing unique

IDs (later christened as Aadhaar) to every individual, the UIDAI aimed to resolve the issues of duplicates and ghost entries, ensuring a clean and reliable database for all purposes. The uniqueness of Aadhaar IDs would prevent individuals from obtaining multiple IDs and eliminate the creation of fake IDs.

This initiative laid the groundwork for India's Unique ID project, which was officially launched in 2009. Despite encountering numerous challenges, the programme ultimately succeeded and has become a central element of India's digital infrastructure and public service delivery.

Aadhaar, a 12-digit random number, is issued to each individual and is immutable, meaning it is never reused even after a person's death. This number serves as a universal identifier for individuals. It also provides an authentication service which enables any individual to authenticate his/her identity anytime, anywhere. To date, Aadhaar has facilitated over 118 billion authentications, with approximately 70 million authentications occurring daily across various service delivery contexts (https://uidai.gov.in/aadhaar_dashboard/).

Several digital products have emerged from the Aadhaar framework, including electronic KYC (eKYC), Digital Locker (DigiLocker), digital signatures on demand (eSign), and digital consent artefact. eKYC simplifies the process of subscribing to services using digital identification, with 14 billion eKYCs issued thus far. eSign allows for digital signatures without the need for physical tokens or dongles, while digital consent artefact enables the issuance of consent tokens for data sharing and other transactions. These innovations have significantly enhanced the efficiency of financial transactions and benefit distribution.

The creators of Aadhaar were keenly aware of its potential for financial inclusion. They envisioned Aadhaar as a universal financial address, simplifying and securing financial transactions. Prior to Aadhaar, transferring money required complex bank account numbers and IFSC codes, which were prone to errors and misuse. With Aadhaar as a financial

identifier, the process of money transfer was streamlined, reducing the risk of errors and fraud. This transformation has greatly improved the efficiency and reliability of benefit distribution systems, making Aadhaar a cornerstone of India's digital ecosystem.

DBT in LPG Cylinder Distribution: PAHAL

DBT was first initiated with the subsidy transfer of Liquefied Petroleum Gas (LPG) in 2013. Previously, LPG cylinders in India were sold at subsidised rates to household consumers, with the Government of India paying subsidy amounts to Oil Marketing Companies (OMCs) in bulk. The OMCs, in turn, distributed these cylinders at reduced prices through their distributor network to eligible consumers. However, this system led to significant leakages and black-marketing. Subsidised cylinders were frequently diverted to hotels and restaurants, and LPG distributors engaged in black-marketing, depriving eligible beneficiaries of their rightful cylinders.

To address these issues, the government introduced PAHAL, an acronym for **Pratyaksha Hastaantarit Laabh** (Direct Benefit Transfer). This initiative aimed to streamline the subsidy process by directly transferring the subsidy amount into the beneficiaries' Aadhaar-linked bank accounts.

Under PAHAL, when an eligible consumer purchased a cylinder at the full (non-subsidised) price, the subsidy amount was instantly credited to the beneficiary's bank account linked with Aadhaar. The programme was initially launched in select states and was gradually expanded nationwide.

PAHAL marked the introduction of the first Direct Benefit Transfer (DBT) scheme in India. It effectively curtailed leakages in the LPG distribution system by removing intermediaries from the pricing process. Under this scheme, intermediaries no

longer had the opportunity to profit from dual pricing. Consumers paid the full price for cylinders, and the subsidy was directly transferred to their bank accounts. If a consumer was ineligible for the subsidy, they paid the full price without any reduction.

The scheme also enhanced transparency by providing a clear trail of the subsidy reaching the final beneficiary. Additionally, PAHAL incentivised the opening of bank accounts for beneficiaries and their linkage with Aadhaar.

Despite its success, the implementation of PAHAL faced several challenges. Accurate seeding of Aadhaar numbers into bank accounts was a significant issue. Connectivity problems in rural areas further complicated the rollout. Recognising these challenges, the government acknowledged the need to expand bank account access on a massive scale to support the DBT system in other sectors and areas.

Enablers of Direct Benefit Transfer (DBT)

For the successful implementation of Direct Benefit Transfer (DBT) programmes, several foundational elements must be established. These enablers ensure the system's efficiency, transparency, and reach. Let's explore these key prerequisites and how they have been systematically addressed in India.

Clean Database of Beneficiaries

A clean and accurate database of beneficiaries is essential for effective DBT. This database must be free from duplicates and “ghost” entries—non-existent individuals who might otherwise receive benefits fraudulently. Ensuring the accuracy of such a database prevents wrongful denial of benefits and unauthorised access to resources.

The Aadhaar system, introduced in 2009, was pivotal in addressing these issues. Aadhaar assigns a unique 12-digit number to each resident of India, which serves as a primary identifier. By incorporating Aadhaar numbers into beneficiary databases, the system effectively eliminates duplicates, as each number is unique to an individual. This integration guarantees that every entry is valid and traceable, preventing the creation of fraudulent or fictitious entries. The uniqueness of Aadhaar numbers ensures that no individual appears more than once in any database, thus enhancing the accuracy and reliability of beneficiary data. Since Aadhaar is given only to living persons and only living persons can open a bank account (using Aadhaar eKYC), it ensures that there are no ghost entries.

Bank Account for Each Beneficiary

Another crucial requirement for DBT is the establishment of a bank account for each beneficiary. Benefits must be deposited into a financial account that is accessible to the recipient. This account can be with a bank or a post office. Additionally, there must be a mechanism to inform beneficiaries about deposits and transactions.

The Pradhan Mantri Jan Dhan Yojana (PMJDY), launched in August 2014, was instrumental in addressing this requirement. PMJDY aimed to open bank accounts on a massive scale using the JAM (Jan-Dhan, Aadhaar, and Mobile) framework. It facilitated the creation of zero-balance accounts, ensuring that even individuals with no prior banking history could access financial services.

Aadhaar-based electronic KYC (eKYC) has simplified the account-opening process. eKYC allows for electronic verification of identity, eliminating cumbersome paperwork and reducing costs associated with traditional KYC processes. Before eKYC, the cost of KYC was around ₹50, making it challenging to open accounts for individuals with no initial

deposits. With eKYC, banks can efficiently open accounts without incurring additional costs, making it economically viable to include a broader population.

Mobile technology also plays a crucial role in enhancing the effectiveness of DBT. Mobile phones provide a means for beneficiaries to receive notifications about transactions and account balances. This real-time communication ensures that beneficiaries are promptly informed when funds are deposited into their accounts. Mobile phones also enable two-factor authentication, adding an extra layer of security to financial transactions.

Accessible Banking

Ensuring that beneficiaries have easy access to their funds is the third critical requirement. Beneficiaries should be able to withdraw money conveniently without travelling long distances to a bank branch. This challenge is particularly significant in rural and remote areas.

The introduction of Business Correspondents (BCs) has helped address this issue effectively. BCs are local agents who provide basic banking services such as deposits, withdrawals, balance enquiries, and peer-to-peer transfers using mobile devices known as micro-ATMs. These micro-ATMs operate using Aadhaar authentication, forming the basis of the Aadhaar-enabled Payment System (AePS).

By leveraging biometric authentication, BCs can offer secure and reliable services even in areas with limited infrastructure. This approach has significantly improved financial inclusion by extending banking services to underserved and remote regions.

System Integration

The integration of these elements—Aadhaar, mobile technology, and accessible banking—creates a robust

framework for DBT. The Government of India's JAM initiative, launched in August 2014, was instrumental in uniting these components. JAM aimed to leverage Jan-Dhan accounts, Aadhaar numbers, and mobile technology to achieve comprehensive financial inclusion.

Under the PMJDY initiative, around 430 million bank accounts were opened across India. This massive effort brought millions of previously unbanked individuals into the formal banking system, significantly increasing financial inclusion. Today, 82% of adult Indians have at least one bank account, a figure comparable to that of many developed countries.

Mobile technology has also advanced significantly. With 1.18 billion mobile connections and a tele-density exceeding 95%, mobile phones have become crucial for financial transactions and communication. The affordability of mobile data and widespread 4G/5G connectivity have further facilitated digital services. With over 800 million internet users and more than 650 million smartphones, mobile technology is deeply integrated into everyday life in India.

Aadhaar penetration is nearly universal, with 1.4 billion Aadhaar numbers issued. This widespread adoption reinforces the reliability of the DBT system.

The Reserve Bank of India (RBI) supported this ecosystem by liberalising bank licencing policies and introducing a differential licencing system for payment banks. These banks handle only payment transactions, which streamlines operations and focuses on financial inclusion. Additionally, BCs, using micro-ATMs, have made banking services more accessible.

In summary, the successful implementation of DBT in India relies on the effective integration of Aadhaar, mobile technology, and accessible banking. With these enablers in place, DBT can be executed on a large scale, ensuring that benefits reach intended recipients efficiently and transparently.

The DBT Architecture

The architecture of the Direct Benefit Transfer (DBT) system in India is designed to ensure that financial benefits reach the correct recipients efficiently and accurately. While Aadhaar numbers provide a unique identifier for individuals, the challenge of ensuring that funds are routed to the correct bank account requires a robust solution. Addressing issues such as account changes and multiple bank accounts necessitates a well-structured system. Here's how these challenges have been systematically addressed.

Ensuring Accurate Fund Transfer

The core principle behind the DBT system is to use Aadhaar numbers as the routing address or financial address for transferring benefits. This approach eliminates ambiguity by linking the Aadhaar number directly to a bank account. However, to ensure the accuracy of fund transfers, additional mechanisms are necessary.

Firstly, each beneficiary's Aadhaar number needs to be linked to their bank account. This linkage ensures that when a benefit is transferred using an Aadhaar number, the funds are routed to the correct bank account. To manage situations where a beneficiary may have multiple bank accounts, the system allows individuals to specify which account should receive the subsidy. This selection process ensures that benefits are directed to the appropriate account.

The Role of the National Payments Corporation of India (NPCI)

The National Payments Corporation of India (NPCI) plays a crucial role in the DBT architecture. Established in 2008 as a

non-profit organisation under the guidance of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA), NPCI was tasked with creating a robust payment and settlement infrastructure for the country.

NPCI serves as the central hub and clearing system for DBT transactions. Its primary responsibility is to manage the National Payment Switch, which facilitates the routing of funds from the government to beneficiaries through their bank accounts. NPCI maintains an essential component of this system known as the Aadhaar Mapper.

Aadhaar Mapper

The Aadhaar mapper is a two-column table maintained by NPCI. It includes two key pieces of information: the Aadhaar number and the corresponding bank where the beneficiary's account is held. This mapping is crucial for ensuring that subsidies and other benefits are directed to the correct financial institution.

In cases where a beneficiary has multiple bank accounts, they must choose one account for receiving subsidies. This choice is recorded in the Aadhaar mapper, ensuring that all future fund transfers are routed to the selected account. The National Payments Switch then uses this information to route the transfer instructions to the appropriate bank.

System Operation

Here's a step-by-step overview of how the DBT system operates:

- **Aadhaar Number as Financial Address:** When a benefit is to be transferred, the Aadhaar number of the beneficiary is used as the routing address. This number is linked to the beneficiary's bank account through the Aadhaar mapper.
- **Routing to the Bank:** The National Payments Switch

processes the transfer request by referring to the Aadhaar mapper to determine the correct bank. It then routes the payment instructions to that bank.

- **Beneficiary Choice:** If a beneficiary has multiple bank accounts, they must declare their preferred account for receiving subsidies. This selection is updated in the Aadhaar mapper to ensure accurate fund transfers.
- **Fund Transfer:** Once the bank receives the payment instruction, it credits the beneficiary's account. The beneficiary is then notified of the deposit, ensuring transparency and confirmation of receipt.

Addressing Common Issues

The DBT architecture also addresses several common issues:

- **Account Changes:** If a beneficiary changes their bank account and this account is to be designated as the recipient for the subsidy and this bank is different from the previous bank, then the new bank need to inform the NPCI/Aadhaar Mapper that the bank ID column in the mapper need to be updated. This update ensures that future payments are directed to the new account without any disruption.
- **Fraud Prevention:** Using Aadhaar numbers as unique financial addresses helps prevent fraud by ensuring that funds are routed to valid accounts. The system's reliance on biometric verification and secure databases further enhances its integrity.

In summary, the DBT architecture, anchored by NPCI and supported by the Aadhaar mapper, ensures that financial benefits are accurately and efficiently transferred to the correct bank accounts. By using Aadhaar numbers as routing addresses and maintaining a clear mapping of accounts, the system addresses challenges related to account changes and multiple

bank accounts, thereby enhancing the reliability and effectiveness of DBT programmes in India.

The Process of DBT at a High Level

The Direct Benefit Transfer (DBT) process is designed to ensure that financial benefits are efficiently and accurately credited to beneficiaries. Here's an overview of how this process works at a high level.

Initiating the Transfer:

- **Data Submission:** When an entity (such as a government department or agency) needs to execute a DBT, it starts by preparing an encrypted file. This file contains critical details, including the Aadhaar numbers of the beneficiaries and the corresponding amounts to be credited to their bank accounts.
- **Transmission to Bank:** The encrypted file is sent to the entity's bank, where the entity holds its account. The bank is responsible for processing this file and managing the distribution of funds.

Processing by the Bank:

- **Beneficiary Verification:** Upon receiving the file, the bank verifies which beneficiaries hold accounts with this bank. It identifies and extracts entries related to its own account holders from the file.
- **Fund Disbursement:** The bank deposits the specified amounts into the accounts of these beneficiaries. After completing the disbursements, the bank prepares a balance file that reflects the transactions processed.
- **File Transmission to NPCI:** The balance file is sent to the National Payments Corporation of India (NPCI) for further processing. This file includes information on the transactions that the bank has executed.

NPCI's Role

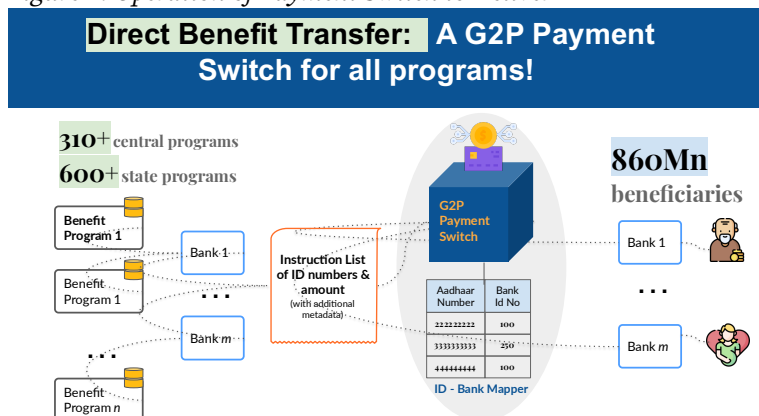
- Segregation and Routing: NPCI receives the balance file and uses its Aadhaar mapper to segregate the Aadhaar numbers by bank. The Aadhaar mapper matches each Aadhaar number with the appropriate bank account based on the previously established mappings.
- Distribution to Banks: NPCI sends the segregated files to the concerned banks. Each bank receives a file containing Aadhaar numbers and the corresponding amounts that need to be credited to the accounts it holds.

Final Processing

- Account Credit: The banks, having received the segregated files, process the transactions by crediting the funds to the accounts linked to the provided Aadhaar numbers. Since each account is linked to an Aadhaar number, the bank can accurately credit the amount to the correct account.
- Error Handling: During this process, any errors—such as accounts being closed or incorrect details—are identified. The system generates error lists to address these issues. Banks and entities then reconcile the accounts to correct any discrepancies and ensure that the transactions are accurately reflected.

In summary, the DBT process involves several key steps: initiating the transfer with an encrypted file, processing transactions at the bank level, and utilising NPCI to route and segregate the data. This systematic approach ensures that benefits are transferred efficiently and accurately to the correct bank accounts, with mechanisms in place to handle errors and discrepancies. Figure 1 shows the operation of this payment switch.

Figure 1: Operation of Payment Switch to Deliver DBT



The Challenges in Implementing DBT

Implementing a massive and complex system like Direct Benefit Transfer (DBT) is fraught with challenges, both technological and logistical. Addressing these challenges is critical to ensuring the effectiveness and reliability of the DBT system. Here are some of the key challenges encountered.

Seeding Aadhaar Numbers

A primary challenge in DBT implementation is the accurate seeding of Aadhaar numbers into beneficiary databases. Aadhaar serves as the main identifier linking the beneficiary databases with bank accounts. For the DBT architecture to function correctly, both the beneficiary databases and bank accounts must be accurately linked with Aadhaar numbers. This ensures that subsidies are transferred to the correct accounts.

The accuracy of Aadhaar seeding is crucial. Any error in entering Aadhaar numbers into either the beneficiary database or the bank accounts can result in subsidies being credited to

incorrect accounts. This not only affects the intended recipients but also undermines the reliability of the entire system.

To mitigate these risks, Aadhaar provides demographic authentication, which is used by both subsidy-disbursing entities and banks to detect and correct seeding errors. Despite this, errors cannot be entirely eliminated through authentication alone. Continuous monitoring and grievance redressal mechanisms are essential to improve seeding accuracy and address any discrepancies that arise.

Database Synchronisation

Database synchronisation between the National Payments Corporation of India (NPCI) and banks presents another significant challenge. NPCI acts as a central hub for DBT transactions, requiring accurate and timely updates from various banks. Given that beneficiary lists are frequently updated and modified, it is imperative that Aadhaar seeding is consistently maintained and synchronised.

Beneficiary lists in various programmes are dynamic and subject to frequent changes due to new inclusions, updates, and removals. Ensuring that these changes are reflected accurately in the Aadhaar-linked databases and synchronised with NPCI's records is a complex and ongoing task.

Connectivity Issues

Connectivity, particularly in rural and remote areas, poses a challenge for the effective operation of the Business Correspondent (BC) system. Although connectivity has significantly improved over time, it remains a constraint in some regions. Reliable and stable connectivity is essential for the smooth functioning of micro-ATMs and other digital banking services used by BCs.

Grievance Redressal and Monitoring

Effective grievance redressal mechanisms are crucial for addressing issues that beneficiaries encounter during the DBT process. Continuous monitoring is needed to identify and resolve problems related to Aadhaar seeding, transaction errors, and other system discrepancies.

Establishing efficient grievance redressal systems and maintaining rigorous monitoring processes are necessary to handle complaints and rectify errors swiftly. This helps in maintaining trust in the DBT system and ensures that beneficiaries receive the intended benefits without undue delays.

In summary, while the DBT system has significantly improved the efficiency and transparency of benefit transfers, it needs to address challenges on a continuous basis. Addressing issues related to Aadhaar seeding accuracy, database synchronisation, connectivity in rural areas, and effective grievance redressal is crucial for the ongoing success and reliability of the DBT framework. Continued efforts to overcome these challenges will help in refining the system and ensuring that it delivers on its promise of efficient and equitable benefit distribution.

Organisational Structure for Overseeing DBT

The Direct Benefit Transfer (DBT) initiative was first established in 2013 within the Planning Commission. By September 2015, it was moved to the Department of Expenditure, where it continued until the central government's substantial success with the PAHAL scheme. Recognising the need for a systematic approach to extend DBT to various schemes, the mission was transferred to the Cabinet Secretariat. This shift aimed to ensure

better coordination between central and state governments and the development of standardised operating procedures.

The initial phase of DBT was launched in 43 districts and later expanded to 78 more districts, covering 27 schemes related to scholarships, women's welfare, child development, and labour welfare. On December 12, 2014, DBT was further broadened to 300 districts with higher Aadhaar enrolment, including seven new scholarship schemes and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

In February 2015, the Electronic Payment Framework was established, outlining protocols for all ministries, departments, and their associated institutions. This framework applies to all Central Sector (CS) and Centrally Sponsored Schemes (CSS), as well as schemes involving cash transfers to beneficiaries. While Aadhaar is not mandatory for DBT schemes, it is encouraged due to its role in uniquely identifying beneficiaries and improving targeting.

Currently, nearly all ministries and departments involved in subsidy distribution use DBT for this purpose. There are approximately 315 schemes across 53 ministries utilising DBT. For a comprehensive list of schemes and departments, visit DBT Bharat.

At the state level, all Indian states employ DBT for transferring subsidies in their schemes. To foster a competitive spirit, the Government of India regularly publishes performance rankings of states and Union Territories.

To manage a programme as extensive as DBT, scalability is crucial. This involves not only a scalable technology architecture but also adaptable processes across various domains. Given that different departments have varying functional roles and technological capabilities, a standardised framework and operating procedures are essential. By templating processes, from digitising beneficiary databases to transferring funds, DBT ensures a scalable and efficient model.

Understanding the DBT framework involves examining the procedures that enable diverse stakeholders to collaborate effectively and deliver the benefits efficiently.

DBT Framework: Formalising the Process

The Direct Benefit Transfer (DBT) framework relies on a multi-stakeholder architecture designed to leverage the strengths of various departments and institutions to deliver benefits efficiently and effectively. The framework encompasses four key categories of stakeholders:

- **Ministries and Departments:** These entities are primarily responsible for implementing DBT within their respective schemes. Each Ministry or Department is required to establish a DBT Cell tasked with overseeing the DBT operations. This Cell identifies suitable schemes for DBT, maintains and updates beneficiary lists, and ensures these lists are linked with Aadhaar numbers. The DBT Cell, supported by the Ministry's or Department's IT team, digitises beneficiary databases and prepares disbursement files for the beneficiaries.
- **Banks:** Banks, including post offices, are responsible for opening and linking beneficiaries' bank accounts with Aadhaar. They handle tasks such as updating beneficiary data, executing payments within prescribed timelines, and notifying beneficiaries through SMS alerts about fund transfers.
- **National Payments Corporation of India (NPCI):** NPCI manages the Aadhaar mapper and facilitates the routing of DBT files to various banks, ensuring smooth financial transactions.
- **Unique Identification Authority of India (UIDAI):** UIDAI provides essential Aadhaar services, including eKYC for opening bank accounts and authentication services to verify

Aadhaar seeding in accounts. This helps minimise distribution errors and facilitates cash withdrawals through Aadhaar Enabled Payment Systems (AEPS).

DBT schemes are generally categorised into three types:

- Cash Transfers: Direct payments to beneficiaries, such as LPG subsidies, MGNREGA wages, and National Social Assistance Pensions (NSAP).
- In-Kind Benefits: Transfers of goods, such as subsidised grains at public distribution shops.
- Payments to Government Workers: Payments are made to village-level workers like ASHA and Anganwadi workers. Each department must assess which of their schemes are suitable for DBT implementation.

The entire workflow is standardised, with each stakeholder assigned clear roles and responsibilities. Ministries and their IT cells are responsible for digitising beneficiary databases and preparing disbursement files. For central government schemes, the Public Financial Management System (PFMS) serves as an additional stakeholder, handling information related to fund transfers. Ministries and departments must register their schemes with PFMS.

While DBT utilises a unified channel for fund transfers, individual schemes must implement their own monitoring mechanisms to ensure secure and accurate fund transfers. For example, software like NREGA-SOFT supports the Rural Development Department in monitoring and managing MGNREGA scheme workflows.

Capacity building and grievance management are critical components of DBT. Given that DBT primarily serves rural populations, it must address a wide range of grievances effectively. Errors in Aadhaar seeding can result in benefits being misdirected, while incorrect mobile numbers can prevent beneficiaries from receiving timely updates about their payments. A robust, technology-driven system is essential for

resolving these issues and updating databases accurately as beneficiary information changes.

Benefits of DBT to Stakeholders

Direct Benefit Transfer has been a transformational system which has empowered all stakeholders, in addition to reducing leakages and increasing transparency and visibility in fund flows.

The system has been quite beneficial to the government. It ensures subsidy distributions to millions of people without any intermediaries. This has resulted in a reduction in leakages, as there are no intermediaries who could divert subsidies and were responsible for a lot of corruption. It also eliminates distribution costs. It increases transparency as the government has clear visibility into the money trail. The government is quite responsive to the feedback it receives and takes immediate action to improve the system.

It is highly beneficial to the recipients of subsidies. Firstly, when the subsidy is credited to their bank account, they are immediately notified on their phones linked to their bank accounts. They can then withdraw money either by going to the bank branch or by using the Aadhaar Enabled Payment System (AePS), where they can authenticate their identity using Aadhaar and the business correspondent can distribute the money.

It also promotes financial inclusion as people open bank accounts to receive the subsidies. It ensures that there is no diversion of subsidies and that only those who are entitled can receive them. It is highly convenient, as they do not have to go to government offices to get the subsidy amount. Though it is difficult to quantify the benefits accruing from DBT, programmes do make attempts to estimate the savings.

As an example, in the LPG DBT (PAHAL) scheme alone, 33.4 million duplicate, fake, or inactive consumers were weeded out;

148.5 million new consumers were registered; and the total subsidy transferred under PAHAL (from January 1, 2015, to December 2020) was ₹287 billion. The implementation of DBT and Aadhaar seeding has resulted in estimated savings of ₹146.72 billion during 2014–2015. Estimated savings from LPG consumers who have given up the subsidy amount to about ₹31 billion, with average savings of approximately ₹178 billion per annum.

COVID-19 and DBT

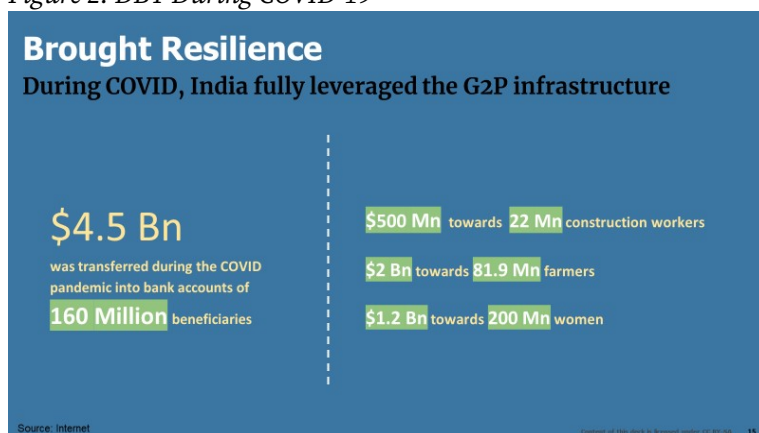
In March 2020, COVID-19 struck the world. The entire health-care system of the country faced huge challenges, and the nation experienced lockdowns and widespread distress. The lockdowns and restrictions imposed during COVID-19 led to a significant economic downturn. The World Bank estimated that the Indian economy contracted by 7.3% in 2020. This had a severe impact on daily wage workers, informal sector employees, and low-income households. India's response to COVID-19 involved a range of measures, with Direct Benefit Transfer (DBT) being a significant component aimed at supporting the poor and marginalised populations.

To address the economic impact of the pandemic, the Indian government expanded its DBT schemes to include a wider array of beneficiaries. Announced in March 2020, the Pradhan Mantri Garib Kalyan Yojana (PMGKY) included direct cash transfers to the poor and vulnerable, free food grains, and cash transfers to women and senior citizens. Under the PMGKY, approximately ₹31,000 crore was allocated for cash transfers. This included ₹500 per month for women holding Jan Dhan accounts, ₹1,000 for senior citizens, and ₹2,000 for farmers.

By mid-2020, the PMGKY scheme had reached around 20 crore (200 million) individuals with cash transfers and other forms of financial aid. The scheme continues to be implemented even now. The DBT model demonstrated

scalability and adaptability, which could be useful for future welfare programmes and emergencies. The success of DBT during the pandemic has led to discussions on improving and expanding the system for broader social security purposes.

Figure 2: DBT During COVID-19



Overall Transfers Under DBT in the Country

By mid-2024, the Indian government has transferred over ₹19.9 lakh crore (₹19.9 trillion) through various DBT schemes since their inception. This includes various forms of financial aid, subsidies, and welfare benefits.

As of today, there are a large number of ministries and departments, both at the centre and the state levels, which are using DBT for various schemes. According to the DBT portal, there are 316 schemes from 53 central ministries which are using DBT for benefit transfer to their target groups. The entire list of central ministries can be found at DBT portal (<https://dbtbharat.gov.in/central-scheme/list>). Major users of DBT include ministries and departments such as Agriculture, Rural Development, Human Resource Development (HRD),

Social Justice and Empowerment, Women and Child Development, Labour and Employment, Health, and Minority Affairs.

At the state level, many more schemes are using DBT as the G2P transfers at the state level are utilised in numerous programmes.

Success Stories

The DBT portal provides good documentation of success stories from across the country in the implementation of DBT. A summary of two of these stories, one from a central ministry and the other from a state, is given below.

Pradhan Mantri Matru Vandana Yojana (PMMVY)

This scheme is implemented by the Ministry of Women and Child Development and addresses the nutrition issues of women, especially pregnant women. Under-nutrition remains a critical issue for women in India, with one in three undernourished and half anaemic. This problem contributes to low birth weight and affects both maternal recovery and the ability to breastfeed. In response, the Indian government introduced the Pradhan Mantri Matru Vandana Yojana (PMMVY) on January 1, 2017, as part of the National Food Security Act. The PMMVY aims to provide financial support to pregnant women and lactating mothers, specifically targeting those who are not employed by the government or receiving similar benefits. The programme offers a total cash incentive of ₹5,000 in three instalments: ₹1,000 for early pregnancy registration, ₹2,000 after six months with at least one antenatal check-up, and ₹2,000 post-birth once the child has received basic vaccinations.

The scheme uses Direct Benefit Transfer (DBT) to streamline payments, reducing delays and administrative bottlenecks. It leverages Aadhaar for unique beneficiary identification and real-time monitoring, enhancing efficiency and accountability. The PMMVY-CAS system enables better tracking and grievance redressal, aiming to provide timely and adequate support to improve maternal and infant health outcomes across the country.

Pension Disbursement Through DBT in Andhra Pradesh

The JAM-based pension disbursement system in Krishna District, Andhra Pradesh, aims to provide timely social security to vulnerable populations, including the elderly, widows, disabled individuals, weavers, and toddy tappers. With approximately 4.3 million pensioners across the state, the programme involves a monthly expenditure of ₹4.60 billion and an annual cost of ₹50 billion. In Krishna District, which has 333,000 pensioners, 84% (279,000) are included in the new system. Disbursements amount to about ₹0.30 billion monthly.

The system uses biometric authentication through fingerprint and potentially iris scanning, with Business Correspondents (BCs) equipped with Micro ATMs for transactions. Out of 1,269 planned locations, BCs are active in 1,243. Currently, 13 banks participate, with 24 identified for potential involvement. Initial pilot tests in 2015, covering six locations, have expanded significantly to cover 1,243 locations and 279,000 pensioners.

The system allows pensions to be received at beneficiaries' doorsteps, enhancing convenience and fostering savings habits. Pensioners with PMJDY accounts benefit from additional insurance and overdraft facilities. The initiative has garnered attention from various national and international organisations, including the World Bank and the Bill and Melinda Gates Foundation, highlighting its success and innovative approach.

Conclusion

Direct Benefit Transfer (DBT) represents a significant reform in the delivery of welfare services in India, offering a model for efficiency, transparency, and inclusivity. By directly transferring benefits to beneficiaries' bank accounts and leveraging digital technologies, DBT has addressed many of the inefficiencies and corruption issues associated with traditional welfare systems. The scheme's impact on reducing leakages, fostering financial inclusion, and improving accountability highlights its potential as a transformative tool for social security. However, for DBT to reach its full potential, ongoing efforts are needed to address challenges related to digital access, infrastructure, and data security. As the scheme continues to evolve and expand, it holds promise for further enhancing the effectiveness of welfare programmes and contributing to broader socio-economic development goals.