Key Points:

- *India has moved fast to transfer social benefit delivery programmes to digital platform. Lessons from India's DBT journey can be used to design beneficiary centric programmes.*

- *The seven steps of designing a DBT programme include deciding mode of benefit transfer, beneficiary identification and enrolment, delivery channel, programme communication, pilot roll out, testing and scale-up, and grievance redressal mechanism.*

- *These steps provide a road-map for all governments preparing to digitise payments and ensure smooth implementation and reduce teething problems.*

In the previous Policy Brief of this series, we discussed India's direct benefit transfer (DBT) journey with initiatives such as *Aadhaar*, Socio Economic Caste Census (SECC), and payment ecosystem, which shaped the pre-requisites for a digital platform and the resultant cost savings accrued from these initiatives.

In this Brief we detail out the "Seven Steps of DBT Programme Design" for a robust and beneficiary-centric programme.

Seven Steps of DBT Programme Design
Figure 1, provides an overview of the seven key steps for generic DBT programme design. These steps are discussed in detail in the section below.

Figure 1: Essential Steps of a DBT Programme Design
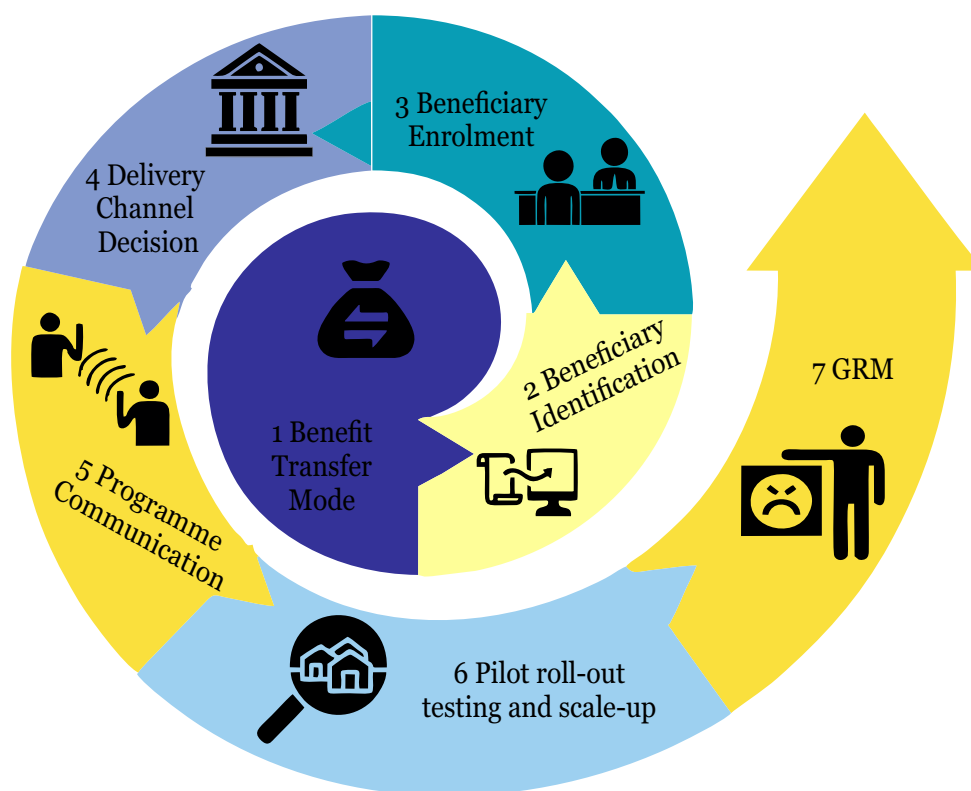
1. Define Mode of Benefit Transfer – Cash or Kind?
To understand how governments can decide on the type of benefit transfer to be adopted, we can refer to the framework available in the Economic Survey 2016.[i] This framework is illustrative, and not exhaustive, in nature. It takes into consideration different parameters and divides them into:
- First-mile (beneficiary identification, enrolment, and database),
- Middle-mile (supply-side stakeholders), and
- Last-mile (beneficiary) categories.

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i The framework can help policy-makers decide whether—and how—to pursue cash or in-kind transfer. The framework is meant to be illustrative rather than exhaustive - http://indiabudget.nic.in/es2015-16/echapter-vol1.pdf

Furthermore, each of these parameters have certain indicators, based on which policy makers can decide whether they should be using cash or in-kind transfer.

Table 1: Framework to Decide Mode of Transfer

Parameters	Indicators	Cash transfer preferred when …	Example 1: Direct Benefit Transfer for LPG (DBTL) (preferred for cash transfer)	Example 2: Public Distribution System (better left in-kind)
First-mile	Eligibility	Household	Household	Household
	Targeting	Universal	Universal	Targeted (Below Poverty Line)
Middle-mile	Layers of intermediaries	Minimum number of ministries/ departments involved	Ministry of Petroleum and Natural Gas with Oil Marketing Companies (OMCs)	Central government, State Governments, Food Corporation of India
	Supply chain interest group's skin in the game	High	LPG distributors – High	FPS owner – Low
Last-mile	Beneficiary vulnerability	Low	Low	High
	Beneficiary financial inclusion	High percentage in target group	High	Low
Recommended mode of transfer			Cash transfer	In-kind transfer through Biometric Authentication Physical Uptake (BAPU)[ii]

The categorisation of these parameters along with their respective indicators can help the government in making this crucial decision.

Additional Resources

1. *MicroSave* India Focus Note#126: Let There Be Light – Direct Benefit Transfer in Kerosene
2. *MicroSave India Focus Note#127: Behavioural Biases Affecting Buying Behaviour of Kerosene Consumers for Alternate Fuels*
3. *MicroSave* Blog: Low Preference for Cash Transfer in TPDS – What Affects Beneficiary Behaviour?

2. Identify the Beneficiaries

Identification, cleaning, and maintenance of target beneficiary databases are fraught with different challenges, and so, we shall look at them separately. First, we shall consider the problems in identification of target beneficiaries for a new programme, which primarily covers inclusion and exclusion errors. An inclusion error is one where undeserving/ghost

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ii Under Biometrically Authenticated Physical Uptake (BAPU) model, beneficiaries authenticate their identity through scanning their thumbprint on a POS machine while buying the subsidised product – say kerosene/ ration at the PDS shop.

beneficiaries are wrongly included in the programme; and exclusion errors occur when genuine beneficiaries are left out of the database and thus precluded from receiving benefits. Inclusion errors and, to some extent, exclusion errors can be tackled with the help of a reliable dynamic database such as the SECC-2011 of India. The advantages of SECC enjoyed over other databases is the level of detailing, digital data collection (for the first time in India), and mandatory disclosure of information.

Two contrasting examples that we shall consider are the PDS and the Pradhan Mantri Ujjwala Yojana (PMUY)*

The PDS has, for a long time, suffered from targeting issues. There have been countless instances of undeserving people availing subsidised food grains, and then using these as animal fodder or reselling them on the open market; and of genuinely deserving people being left out for unfair reasons. Among the many reasons for this was that the PDS system relied on the debatable poverty line for inclusion/exclusion of beneficiaries. For example poverty indicators based on per capita per month expenditure is subjective and often determined with political interference. Furthermore, the certification of being eligible/ineligible was provided by the local authorities making it more susceptible to both corruption and political bias.

By contrast, the targeting of the PMUY has arguably been far superior to any other targeted benefits transfer programme in the country. PMUY has used the SECC-2011 database to identify beneficiaries. Although UJJWALA is still in the roll-out phase and one cannot say with certainty if the same accuracy of targeting will be maintained during the scale-up, *MicroSave*'s assessment on the targeting under this programme certainly paints a promising picture.

Second, in addition to inclusion and exclusion errors, existing databases often have issues of duplicate beneficiaries. Correction of these databases depends on the digitisation of the database and "seeding", or linking, of each beneficiary on the database with his/her unique identity (in the case of India, with *Aadhaar*). This sort of one-to-one linking of the beneficiary with a unique identifier helps to eliminate these duplicate beneficiaries from the system.

PDS in India, especially in Andhra Pradesh is an excellent example of correction of beneficiary database for an existing programme. The Government of India claims to have eliminated 1.60 crore (16 million) bogus ration cards and saved INR 10,000 crore (US$ 1,470 million) through digitisation, and seeding and de-duplication of the beneficiary database with *Aadhaar*. *Aadhaar*'s unique number with biometric identification, has largely eliminated instances of beneficiaries collecting from multiple FPSs, diversion in the name of ghost beneficiaries, etc.

Additional Resources

1. CGAP Blog: India's Unique ID Could Generate Big Boost in Financial Access
2. *MicroSave* India Focus Note #104 Can UIDAI be a Saviour of Financial Inclusion?
3. *MicroSave* India Focus Note # 106: Don't Throw The Baby Out With Bathwater! Is *Aadhaar* The Reason For Failure Of Direct Benefit Transfer Pilots?

3. Enrol Beneficiaries and Collect any Data Required

Beneficiary enrolment is a step that can be a pre-requisite or post-requisite in a DBT programme, depending on the readiness of beneficiary database:

• For an existing or a new programme, where a dynamic and digitised database does not exist, beneficiary enrolment is a pre-requisite for preparation of the beneficiary database. This may require collection of beneficiary's personal and demographic details to prepare a new database, or collection of additional information, such as bank/postal account details or/and unique identity for seeding, and de-duplication to eliminate ghost beneficiaries.

• For an existing or a new programme where some sort of dynamic or digitised database is already available, beneficiary enrolment is a post-requisite for the completion of beneficiary database. It may require collection of additional information, such as bank/postal account details and/or collection of unique identities to seed and de-duplicate the existing database. Other information that may be required would depend on the programme design.

A detailed, step-by-step plan of the enrolment process should be prepared, keeping in mind the fact that most beneficiaries are from the lowest strata of society and have neither the capacity to go through a complex enrolment process, nor the luxury to spend many days doing it. Thus, the process has the dual challenge of ensuring that beneficiaries are not inconvenienced while correctly identifying members and ascertaining that they are genuinely eligible.

For example, the enrolment process in the PMUY was seamless and there were hardly any complaints of multiple visits to get the connection by any of the beneficiaries interviewed by *MicroSave*. This was largely due to the fact that much of the data is available with OMC from the SECC database.

Additional Resources

1. *MicroSave* Blog: e-KYC and the India Stack – A Transformative Blueprint for Emerging Markets
2. CGAP Blog: From Cash to Digital Transfers in India - The Story So Far
3. *MicroSave* Blog: Harnessing the Potential of *Aadhaar* via Digitisation
4. *MicroSave* Blog: Are the $2 Billion Annual Savings Arising from PAHAL Real?
5. *MicroSave* Blog: How Many Accounts Does A Man Have To Open To Be Financially Included?

4. Define the Channel to be Used for Benefit Delivery

The success (or otherwise) of a DBT programme is largely decided by its delivery channel. While designing this channel, policy-makers should take in to consideration that:
- The benefit only reaches the intended beneficiaries,
- Is available to them immediately,
- They are able to access the benefits with minimum inconvenience, and
- The delivery channel is adequately compensated.

The last point is of particular importance because, in recent years, with more efficient, digitised distribution channels, in the absence of rent-seeking, distribution is much less attractive. Therefore, it is imperative that policy-makers consider compensation structure of delivery points as a part of the design and not as a separate problem to be dealt with later.

In general, delivery channel problems can be broadly classified as front-end problems and back-end problems. At the front-end, and as can be seen from the DBT in PDS pilot example, the major design questions pertain to the availability of infrastructure.

The Ministry of Food and Civil Supplies, Government of India, wanted to test the feasibility of DBT in PDS through pilot-testing. Three Union Territories (Chandigarh, Dadra and Nagar Haveli, and Puducherry) were chosen to be the pilot areas. But, soon after starting the pilot, Dadra and Nagar Haveli stopped the pilot in rural areas due to low presence of its banking and market infrastructure. If Dadra and Nagar Haveli had continued with the pilot, the beneficiaries would not have access to banks to withdraw cash or market to buy food grains.

At the back-end, the only major design consideration is to try and keep the number of coordinating departments to a minimum. As departments increase, the inter-departmental coordination takes time and results in delays to benefits reaching beneficiaries.

5. Communicating the Programme

Once the design part (i.e., mode of transfer, enrolment process, and delivery channel) is complete, the government should focus on disseminating the programme information to the beneficiaries through a mix of Above the Line (ATL) and Below the Line (BTL) communications.

Communication is required for every aspect of the programme including eligibility, pre-requisites, benefits, delivery channel, and grievance redressal mechanisms. Any issues around communication need to be sorted out expeditiously to speed up implementation of the programme. Many communication initiatives have succeeded in enhancing public awareness, but have failed to go beyond awareness and stimulate positive changes in attitudes and/or behaviour. Communication needs to be strategic, based on evidence from research, and result-oriented.

Figure 2: Communication Strategy
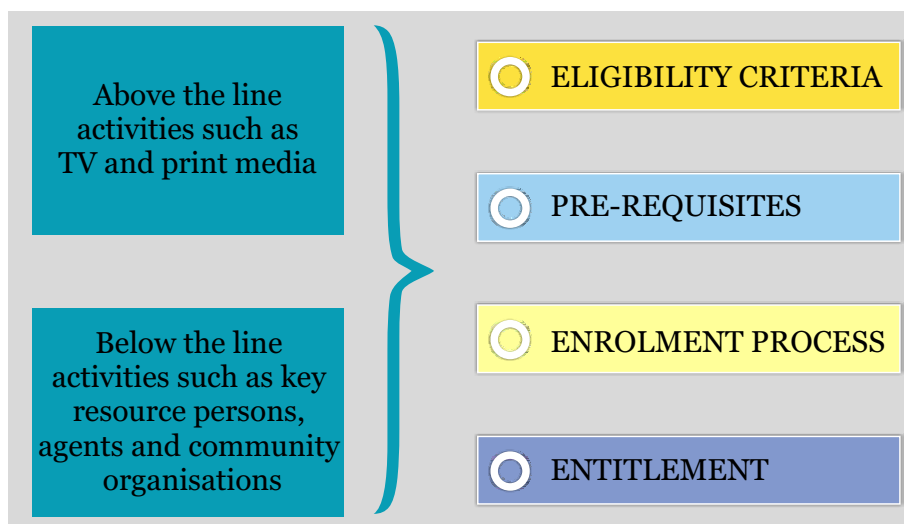
Meticulously planned and phased communication is essential for any DBT programme to achieve first awareness, and then action. Figure 8 shows the important information that must be at the heart of any programme's communication strategy. The following pointers provide a check-list for a successful communication campaign:

5.1 Early Communication About Eligibility Criteria

A phase-wise approach to build awareness is essential, as too much information delivered at one time creates unwanted confusion. The very first module of the communication strategy should be to disseminate information about the eligibility criteria. The information on eligibility criteria for any programme should be made salient enough to ensure that all deserving beneficiaries seek to enrol in the programme. An example of this can be taken from PMUY, where a strong communication campaign has led to only the identified beneficiaries applying for the programme, resulting in a lower exclusion and improved efficiency.

5.2 Communication About Pre-Requisites

Many a times, benefit delivery is delayed because of incorrect document submission and errors in the application. Usually there is no direct information available about pre-requisites and most people resort to word-of mouth information, which leads to confusion and delays. Thus, a communication module that informs people about the pre-requisites to avail benefits, and refutes any myths associated with the programme, is key.

5.3 Enrolment Process

Another module of communication design, should clarify the enrolment process as a whole. A beneficiary needs to be informed about:

- Where to submit their enrolment application;
- The acknowledgement slip given at the time of document submission;
- The waiting period while the application is assessed;
- The message sent at the time of acceptance/rejection; and
- The procedures, if some corrections are required on the application.

Beneficiaries, in general, end up submitting documents more than once when there is poor communication from the supply side. For example, for DBT of PDS (in Chandigarh, Puducherry, and Dadra and Nagar Haveli), many beneficiaries submitted application forms more than once as they were unaware of the acceptation/rejection status of their previous application(s).

5.4 Entitlement

Beneficiaries are often unaware of their entitlements, as most advertisements and promotions do not provide specific details about entitlements/features. This can lead to miscommunication, manipulation, and diversion of some or all of the benefits to which they are entitled. For example, in case of DBT in PDS, beneficiaries had very little information about the rationale for the calculation of the cash subsidy given in lieu of grains. As a result, they complained that they are not given sufficient cash to meet their ration needs. Moreover, they did not remember or consider the amount they contributed every time they purchased ration from FPS before drawing any comparison between the cash and in-kind systems. Another recent example is PMUY, where beneficiaries were not adequately informed about the entitlements under the programme. So they did not understand that they had to pay for the stove and first LPG refill either in cash or by taking a loan. Clear information about entitlements allows beneficiaries to take informed decisions.

Additional Resources

1. *MicroSave* Blog: Communication – The Achilles Heel of Direct Benefit Transfers – Part I Pilot Testing
2. *MicroSave* Blog: Communication – The Achilles Heel of Direct Benefit Transfers – Part II
3. *MicroSave* Video: Know more about the PMJDY account from 'Chavvani' - Our financially literate parrot!

6. Measure Impact

After finalisation of the programme design, the government should conduct a pilot to test it. The pilot-test measures the effectiveness and impact of the programme, and allows analysis of secondary/knock-on effects as well. The results of the pilot-test guide policy-makers' decisions on the need for adjustments, prior to the broader roll-out of the programme, thus reducing the risk of errors on a large scale, as the programme is rolled out.

The Department of Food and Consumer Protection (DoFCP), Government of Bihar wanted to revamp the existing coupon based system of Targeted Public Distribution System (TPDS)* in the state. The National Food Security Act (NFSA) ** suggests two models for PDS: i.e. Fair Price Shop (FPS) automation and DBT. To identify the most suitable model for the state, DoFCP decided to conduct two pilots, one each for FPS automation and DBT in two different geographies. DoFCP decided to conduct the pilots at Block level with the following selection parameters:

1. Blocks that have low populations, which were purposely selected to limit the number of beneficiaries requiring a bank account and *Aadhaar* ID, and thus allow a rapid pilot-test.
2. Blocks with a higher percentage of existing bank accounts and *Aadhaar* saturation, so that data digitisation, and bank account-*Aadhaar* seeding could be achieved quickly.

Pilot blocks with better pre-requisites, such as higher saturation of *Aadhaar* (i.e., unique identity) and bank accounts (i.e., payment ecosystem) for FPS automation and DBT in PDS were also selected to increase the chances of successful pilots. Based on the analysis and learnings from the pilots, the department planned to implement either of the models or both in different geographies – but the pilot was seen as key to making this decision.

The importance of piloting programmes has been highlighted repeatedly throughout *MicroSave*'s work with the Government of India. For example, based on *MicroSave*'s assessment of DBT pilots in three Union Territories (UTs), i.e., Chandigarh, Puducherry, and Dadra & Nagar Haveli in India, the government of Dadra and Nagar Haveli decided to drop the pilot in rural areas, but continue it in urban areas with better banking and market infrastructure. However, the governments of Chandigarh and Puducherry, which had better banking and market infrastructure, decided to continue DBT in PDS.

* PDS, till 1992, was a general entitlement programme for all consumers without any specific target. In June 1997, the Government of India re-launched the TPDS with focus on the poor - http://dfpd.nic.in/public-distribution.htm
** As passed by the Parliament, Government has notified the National Food Security Act, 2013 on 10th September, 2013 with the objective of providing for food and nutritional security, by ensuring access to adequate quantity of quality food at affordable prices, to allow 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 to receive subsidised food grains under Targeted Public Distribution System (TPDS), thus covering about two-thirds of the population - http://dfpd.nic.in/nfsa-act.htm

The pilot-testing process used by *MicroSave* for the development financial services/products, has ten distinct steps, which are equally essential for the testing of a DBT programme:
1. Composing the pilot-test team,
2. Defining the objectives,
3. Developing the testing protocol (which defines the core parameters and indicators),
4. Preparing all systems,
5. Modelling the financial projections,
6. Documenting the product definitions and procedures,
7. Training the relevant staff,
8. Marketing/communication,
9. Commencing the product test, and
10. Evaluating the test.

The pilot-testing protocol for a DBT programme should include:
• Geography for the pilot;
• The number of beneficiaries;
• The duration of the test;
• Reporting dates and timelines;
• Data to be captured and analysed; and
• Specific parameters, based on which the pilot's success or failure can be determined.

Additional Resources

1. *MicroSave* India Focus Note #128: Baseline Assessment for DBT in TPDS: Will This Small Step Become a Giant Leap?
2. *MicroSave* India Focus Note #132: Endline Assessment of DBT Pilots in TPDS: Some Success and Few Issues
3. *MicroSave* India Focus Note #120: PAHAL - from "Discard" to Cherished Success
4. *MicroSave* Briefing Note # 24 Lessons from Pilot Testing Financial Services – The Experience of *MicroSave*
5. *MicroSave* Briefing Note # 159 The Safaricom M-PESA Pilot Test

7. Address Grievances

Grievance redressal mechanisms (GRM) provide a system to obtain feedback, as well as measure the efficiency and effectiveness of any organisation or programme. No programme can claim to be accountable, responsive, and user-friendly unless it has established an efficient and effective GRM. A robust GRM is also a channel through which the programme can be continuously improved and brings participative inputs to the programme design. An efficient and effective GRM must have the following:

- **Accessible:** It is important to create a direct channel that is easy and cost-free for beneficiaries to access and to register a complaint when they need to.
- **Grievance trail:** Beneficiaries should get a service request number for each and every complaint lodged. The service request number can be used by the beneficiaries to track the status of their complaint. Automation of the service can facilitate accountability and quick acknowledgement of the query.
- **Escalation matrix with Turn Around Time (TAT):** The grievance should automatically escalate to a higher level, if it remains unresolved at a particular level for a predefined time. A time period should be defined for analysis of and resolution or response to complaints.
- **Well-advertised:** The grievance redressal mechanism should be marketed to enhance and build credibility of the programme amongst beneficiaries. The GRM, and the communication for it, should be designed to allow it to occupy equal beneficiary "mind-space" as other features of the programme such as entitlements, eligibility, etc.

For example:
1. The GRM should have a well-advertised, toll-free number to register complaints.
2. When a beneficiary calls, the toll-free number he/she should receive pre-recorded information/menus. The Interactive Voice Recording (IVR) system should guide the caller to relevant information/menus through the mobile keypad.
3. If the grievance or the information sought by the beneficiary is addressed by the pre-recorded message, the beneficiary receives the desired information, confirms by pressing a specific menu option that the desired information is received, and the grievance is marked resolved in the system. The beneficiary should then receive a Short Message Service (SMS) confirming the resolution of the grievance.
4. If the grievance or the information sought by the beneficiary is not addressed by the pre-recorded message and the grievance remains unresolved, the call should be forwarded to an attendant in the GRM cell. The attendant registers the grievance in the system. The system should generate a service request number and send an SMS to the beneficiary. (Thereafter, a beneficiary should be able to call on a toll-free number and check the status of the grievance using the service request number.)
5. Then the system should forward the grievance to the concerned stakeholder, based on an escalation matrix.
6. If the stakeholder resolves the grievance within the decided TAT, the system should mark the grievance as resolved and send an SMS to the beneficiary confirming this.
7. If the stakeholder does not resolve the grievance within the decided TAT, the system should forward the grievance to the next level up, based on the escalation matrix until the grievance is resolved, whereupon the system should mark the grievance as resolved and send an SMS to the beneficiary.

The GRM system can also have following features:
1. The same interface can also be provided through a website, i.e., beneficiary can register grievance though an online portal.
2. Escalation matrix and TAT for grievance resolution should be available on the website.
3. The beneficiary should receive the status of the grievance through SMS at each step of the escalation matrix. Beneficiary should also be able to view the status on the website.

Even after the scale-up, a well-designed GRM will provide continuous feedback to feed into the programmes' systems to make them more efficient and responsive.

Additionally, the supply-side stakeholders should deploy a monitoring and evaluation system in place to monitor the progress in pilot and roll-out phase. The monitoring and evaluation system should provide relevant measures to improve the programme, to allow the government to adapt and promote continuous improvement and evidence-based decision making, rather than a heuristic-based approach.

Conclusion

The Indian DBT journey started with a pilot in the state of Andhra Pradesh through smart card based bank accounts for Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) wage payments in the year 2008-09. The Government of India started *Aadhaar* enrolments in the year 2009. At the same time, the Indian banks were piloting different agent-based models to provide banking services in rural areas. Later, in February 2011, the Government of India launched its ambitious financial inclusion *"Swabhimaan"* programme,[iii] aimed at providing banking services to the excluded rural masses, by appointing Business Correspondents (BCs, i.e., bank agents or bank mitrs) – an agent-based banking model. With the convergence of MGNREGS payments with *Aadhaar*, India began to realise the potential of a DBT programme comprising:

- *Aadhaar* for unique identity,
- A digitised and dynamic MGNREGS database,
- A network of bank agents, and
- A payment ecosystem.

In this case, beneficiary details in the MGNREGS database were linked with *Aadhaar* to transfer wages into beneficiary accounts and bank agents were used to make the payments to the beneficiaries. The lessons from these DBT payments for MGNREGS then helped to inform moves to increase the purview of DBT to include other cash transfer programmes, and later to in-kind subsidy transfer programmes.

After 2013, despite a short hiatus around the general elections, India has moved fast to begin to transfer all social benefit delivery programmes to digital platforms. The journey has not always been smooth; however, savings and other efficiencies associated with the DBT programmes have ensured that the government's efforts and momentum are maintained. *MicroSave* was involved in this journey from the very beginning, providing research, advice and technical assistance giving us a ring-side view of the DBT programmes, right from their inception stages.

While supporting a wide range of government departments and benefit delivery programmes, *MicroSave* has seen the importance of a well-designed programme and the significance of each distinct step. In this Note, we highlight the pre-requisites and present those in the form of a framework. This framework will help and guide governments across the globe to design and implement effective, beneficiary-centric DBT programmes. It is important to note that the DBT programme's pre-requisites and the seven steps, were not followed in the Indian context as precisely as they are discussed in the text.

Each of the seven steps requires lot of preparatory work. In some cases, governments may want to skip one or the other step, or develop alternative approaches. This is, of course, their prerogative – these steps are suggestive in nature. Governments can think of alternatives better suited to their context. But these alternatives will need to address the underlying issues and challenges.

It is extremely important that more thought and planning goes into programme design to ensure smooth implementation and reduce teething problems. India's experience looks daunting, particularly given the huge numbers (of programmes as well as beneficiaries). However, it can provide important lessons, and even a road-map for all governments that are preparing to digitise payments.

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iii '*Swabhimaan*' – a financial security programme launched by the central government to ensure the availability of banking facilities in all villages with a population in excess of 2000, by March 2012 –
http://pib.nic.in/newsite/efeatures.aspx?relid=84236