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# **Assessing the Impact of the MGNREGS-Aadhaar Pilot in Jharkhand**

*Integrating the Pilot in Other States in India*





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This study is a joint initiative of UNDP and the Ministry of Rural Development, Government of India. Core purpose of this study is to assess the impact of MGNREGS-Aadhaar integration Pilot in Jharkhand as well as the feasibility and readiness for the same in the states of Karnataka, Tripura, Gujarat and Andhra Pradesh, in order to enable swifter scale-up of the integration programme. UNDP had engaged a global management consulting firm, M/s Accenture to conduct this study.

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## EXECUTIVE SUMMARY

The MGNREGA programme was envisaged to provide 100 days each of employment to all rural households in the country and has been a powerful instrument in enhancing livelihood and driving inclusive growth. With an objective of facilitating rural livelihood security, MGNREGS has evolved from generating 90.5 Crore person days of employment in 200 districts of the country with labour wages disbursement of Rs. 5,842 Crore in 2006-07; to generating 209.3 Crore person days of employment covering the whole country with over Rs. 24,864 Crore disbursed as labour wages in 2011-12.

One of the key challenges in the scheme has been to ensure accurate identification of beneficiaries and that wages reach the intended beneficiaries. The government has constituted various transparency and accountability measures, such as issuance of job cards, maintenance of muster rolls, monitoring and implementation systems and regular social audits. While the mandated payment of wages through post office accounts/ bank accounts of the beneficiaries has reduced leakages that are inherent in cash disbursement, but, have not succeeded in completely plugging them as studies still indicate significant gaps.

The Aadhaar program, aimed at linking the identity of each citizen to a 12 digit number, secured with biometric data, attempts to address some of the above mentioned challenges by arresting leakages due to identification and authentication errors i.e. the existence of duplicates and ghost beneficiaries. It not only provides a unique 12 digit identity number to each resident, which allows for easy identification, but also creates an interface for effective government service delivery. The key features which aid the same are, instantaneous authentication; mobility-enablement; Aadhaar enabled Payment Systems, to name a few. With the above considerations, the integration of Aadhaar with MGNREGS intends to achieve the following objectives:

1. Ensuring payment of wages to intended beneficiaries through its Aadhaar enabled bank account
2. Reducing leakages due to better matching of work availability and allocation, and
3. Enabling mobility to beneficiaries

As a part of the 'Proof of Concept' of the technology and to demonstrate process efficiency and service delivery mechanism, the Unique Identification Authority of India had initiated a pilot on Aadhaar integration with MGNREGS across four districts in Jharkhand. This study was conducted to evaluate the pilot in Jharkhand across set-up and operational stages with a focus on stakeholder's experience, processes and Policies etc. The study was further aimed at assessing the readiness and feasibility of MGNREGS Aadhaar integration across other selected States i.e. Tripura, Gujarat, Andhra Pradesh and Karnataka.

The year-long (December 2011-February 2012) Jharkhand pilot covered 6 blocks across 4 districts. It was launched in Ranchi district in December 2011 followed by Hazaribagh district in the same month. Subsequently, it was launched in Saraikela-Kharsawan district in January 2012 and finally in Ramgarh district in February 2012. Till date the MGNREGS-Aadhaar pilot project has only been operational in these four districts. While there was no targeted official date for closing the pilot, the payment using Aadhaar enabled bank account has been substantially reduced from March 2012 onwards.

As a part of the pilot, payment of social welfare schemes including MGNREGS wages were being made



to the beneficiaries through Aadhaar enabled bank account using Business Correspondents (BCs) and Aadhaar-based Micro ATMs as the delivery mechanism till Panchayat level. Since it was a PoC, UIDAI was the driving force in coordination with state Rural Department. Aadhaar enrolment, seeding of MGNREGS job card with Aadhaar and opening of Aadhaar enabled bank accounts was part of the UIDAI campaign during the pilot.

Utilizing a camp based approach (where a large number of beneficiaries are mapped in one go, using a camp set-up); beneficiaries with Aadhaar number were mapped with their job card number and the same was then linked with their new bank account number under select participating banks. Despite beneficiaries having post office accounts for disbursement of MGNREGS wages, they were asked to open new bank accounts for enabling payments of wages using the Aadhaar enabled payment system (AEPS) as post office was yet to be a part of the AEPS, neither had it implemented the core banking solution (CBS). However, there was flexibility accorded to the beneficiaries as well as officials to opt for payment of wages either to the newly opened Aadhaar enabled bank account or to the old post office account.

As the pilot was limited in coverage and was designed to be a Proof of Concept (PoC), therefore it is not replicable as a successful model for scaling up. There was no change in work flow process except the mentioning of Aadhaar number in the payment advice. The remainder process has not been altered in any way with similar time being taken to credit wages and other such activities as before. However the pilot has proven to have impacted substantially the process of payment of wages to beneficiaries. It has eased the process of wage payment to beneficiaries to a great extent as it enables wage payments to the beneficiaries' doorstep through Aadhaar-enabled Micro-ATM thus saving resources. It reduced the time taken to withdraw wages from 30-60 minutes (in the case of withdrawal through bank or post office) to a mere 5-15 minutes (in the case of using an Aadhaar-enabled Micro-ATM).

Further involvement of Common Service Centre (CSC) as BC has helped in creating a synergy between both the activities and acted to the advantage of the pilot. It was observed that the beneficiaries had found a high level of trust in the mode of payment and the BC. None of the beneficiaries surveyed were wanted to go back to earlier mode of payment using Post office and Banks.

Though the pilot had its share of start-up initial hiccoughs such as the malfunctioning of devices; with an improvement in the Aadhaar based Micro ATM infrastructure, the process of withdrawal of wages improved substantially. However, there remain a few reasons for transaction failures such as incorrect mapping of job card with Aadhaar, poor quality of biometrics, authentication failure, network failure etc. These need to be addressed in order to further improve the process.

Key learning from the Jharkhand pilot was with regard to enabling infrastructure requirement for effective integration as well as operational excellence and challenges in implementation. As the pilot was limited in coverage; therefore operational excellence could not be demonstrated or achieved; however, high levels of beneficiary satisfaction were reported achieved. The pilot highlighted the key enabling requirements, as well as the challenges to be addressed, in order to achieve a successful Aadhaar-MGNREGS integration. Some of these are as below:

1. Effort and Quality of Seeding
2. Appropriate seeding approach and detailed guidelines
3. Technology readiness requirement viz. SRDH, RASF, quality digitized MGNREGS beneficiary data etc.

4. An effective monitoring mechanism
5. Proactive participation of State Administration and Banks
6. Enabling Ecosystem

The prime reason for studying the readiness of the selected States was to assess the states on the enabling requirements and capabilities to build on the learnings from the Jharkhand pilot. However, it is observed that these states were either in line as per the implementation readiness in pilot districts of Jharkhand or were moving towards the same with advanced levels of technology readiness. These states have already initiated pilot projects pertaining to Aadhaar MGNREGS integration and disbursement of wages.

For example: A pilot for Aadhaar-MGNREGS integration is already underway in Andhra Pradesh and Karnataka, whereas Gujarat and Tripura are presently under the process of setting up the required support infrastructure.

The states varied on parameters such as infrastructure availability, bank readiness, seeding readiness etc., however, one of the key factors which has helped a few states to launch Aadhaar based payment of wages has been the proactive participation of state administration and effective coordination between state Rural Department and Nodal UID department.

The study has observed that though the coverage and Aadhaar delivery is fairly high, yet the status of seeding MGNREGS with Aadhaar across these states is abysmally low (around 2-3% of the beneficiaries). Some of the states which have made progress in terms of seeding and bank readiness are greatly driven by the DCT (Direct Cash Transfer) initiatives in the state; whereas some have established infrastructure for effective seeding. However each state has initiated seeding with support from the enabling environment in its own unique way, using its own approach.

Considering the fact that the seeding process needs to be of high quality and accuracy, as well as is resource and time intensive; it is imperative that the activities undertaken by each state be streamlined with a targeted, project oriented approach. A detailed manual with step by step guidelines would not only make the seeding process systematic and time bound but also help in building an effective MIS. There is no doubt to that fact that seeding by the respective states need to be done in a coordinated manner, in order to achieve the integration in a time bound fashion, with the proactive participation of all relevant stakeholders. It is concluded by the study that a focused seeding drive and a centrally monitored team would be the keystone to driving the integration process with a targeted and project oriented approach.

The launch of Direct Cash Transfer (DCT) by the Government of India has created an enabling ecosystem for Aadhaar integration in all schemes. Though MGNREGS is not one of the key schemes selected for Aadhaar enablement as part of DCT in phase-I, yet state Rural Departments are considering the corresponding DCT pilot districts for MGNREGS integration due to inherent complementarity of the two. For example, East Godavari District (which is also a pilot district for DCT) in AP has launched pilot of MGNREGS Aadhaar integration.



Considering DCT as an ecosystem enabler, MoRD should initiate focus seeding drive in few select districts of study states which are identifiable with the following parameters:

1. DCT identified districts
2. Coverage of Aadhaar
3. Extent of NREGASoft seeded with Aadhaar

Usage of UIDAI tools, supplementary solutions over and above NREGA Soft with capabilities of Aadhaar enabled monitoring of the scheme ought to be enabled. Adoption of best practices from states like Maharashtra, Andhra Pradesh and Karnataka would help in the overall process of integration. Further, after successful integration, engagement of the post office network along with the existing BC network would significantly enhance the coverage for Aadhaar based service delivery and Payment mechanism for MGNREGS.

There is no second opinion that Aadhaar integration with MGNREGS, specifically payment of wages through Aadhaar enabled bank account and withdrawal through Aadhaar based Micro ATM, would bring in process efficiency as well as direct savings to the exchequer. However, there are anticipated post seeding challenges, tackling of which is an imperative for the MoRD, in order to ensure that no beneficiary is disadvantaged due to implementation flaws in technology enablement. A nationwide scale up plan focused on end to end integration of Aadhaar with MGNREGS should be devised in order to improve the efficiency of the scheme. This scale up is expected to be significantly propelled by the success of focused seeding and integration drive across select districts.



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## ABBREVIATIONS

Abbreviation	Detail
<b>AEA</b>	Aadhaar Enabled Bank Account
<b>AEPS</b>	Aadhaar Enabled Payment System
<b>AESD</b>	Aadhaar Enabled Service Delivery
<b>APB</b>	Aadhaar Payment Bridge
<b>ASA</b>	Authentication Service Agency
<b>AUA</b>	Authentication User Agency
<b>BC</b>	Business Correspondent
<b>BCA</b>	Business Correspondent Agency
<b>BDO</b>	Block Development Officer
<b>BFD</b>	Best Finger Detection
<b>BO</b>	Block Officer
<b>BPO</b>	Block Programme Officer
<b>CBS</b>	Centralized Banking System
<b>CIDR</b>	Centralized Identity Repository
<b>CPMO</b>	Centralized Project Management Office
<b>CSC</b>	Common Service Centre
<b>CSP</b>	Customer Service Provider
<b>DC</b>	District Collector
<b>DCT</b>	Direct Cash Transfer
<b>FI</b>	Financial Inclusion
<b>GSDP</b>	Gross State Domestic Product
<b>IEC</b>	Information Education and Communication
<b>KRDH</b>	Karnataka Resident Data Hub
<b>KYC</b>	Know Your Customer
<b>KYR</b>	Know Your Resident
<b>MGNREGS</b>	Mahatma Gandhi National Rural Employment Guarantee Scheme
<b>MoF</b>	Ministry of Finance
<b>MoRD</b>	Ministry of Rural Development
<b>MSP</b>	Manager State Projects
<b>NPCI</b>	National Payment Corporation of India
<b>NSAP</b>	National Social Assistance Programme





# INTRODUCTION

# 1 INTRODUCTION

The Ministry of Rural Development (MoRD), Government of India, intends to achieve sustainable and inclusive growth of rural India by increasing opportunities for livelihood generation and improving the quality of life for the rural inhabitants in India.

On 7<sup>th</sup> September 2005, the Government of India notified the 'National Rural Employment Guarantee Act' (NREGA) that subsequently came into existence on 2<sup>nd</sup> February 2006; thereafter it was renamed and amended as the 'Mahatma Gandhi National Rural Employment Guarantee Scheme' (MGNREGS) on 2<sup>nd</sup> October 2009, on the occasion of the 140th birth anniversary of Mahatma Gandhi. The primary objective of MGNREGS is to provide livelihood security to all adult members of a rural household who volunteer to perform unskilled work, by providing them 100 days of guaranteed wage employment in a financial year. The disbursement of payment of wages is being done primarily either through post office Accounts or bank accounts of the beneficiaries. In case of unavailability of supporting banking and post infrastructure, cash disbursement is being done in some of the areas.

The government of India has budgeted a total of Rs 73,175 Crores to MoRD for the current financial year (FY 2012- 2013) out of which the department has allocated Rs 33,000 Crores for MGNREGS scheme. This allocation of almost 45% of its total budget, is indicative of the importance given to this scheme and its objectives. The highlights of this scheme during the last year are given in the table below:

TABLE 1: ACHIEVEMENTS OF THE SCHEME DURING THE LAST YEAR (2011-2012)<sup>1</sup>

SN	Particulars	Status
1	Coverage of the Scheme-	<b>632 Districts</b>
2	Total Post Offices Accounts under MGNREGS	<b>4.7 Crores</b>
4	Total Bank Accounts Under MGNREGS	<b>3.8 Crores</b>
3	Wages Disbursed Through Bank and Post Office	<b>INR 17,54,936 Lakhs</b>
5	Wages Disbursed Through Bank	<b>INR 9,18,120 Lakhs</b>
6	Wages Disbursed through Post Office	<b>INR 8,36,816 Lakhs</b>
7	Wages Disbursed in Cash <sup>2</sup>	<b>INR 6,77,194 Lakhs</b>
8	Total Expenditure on Wages	<b>INR 24,86,423 Lakhs</b>

During the first year of the scheme (FY 2006-07), 2.10 Crore households were provided employment whereas during 2010-11, 5.49 Crore<sup>3</sup> households were provided employment. Besides, at a national level, the average wage payment has increased from Rs 65 in 2006-07 to Rs 100 in 2010-11 surpassing the minimum mandatory requirement. This signifies the extent of reach of the scheme and livelihoods it affects.

<sup>1</sup>Source: NREGASoft 2011-12

<sup>2</sup>The wages disbursed in cash have been calculated as the difference between total expenditure on wages and the wages disbursed through banks and post offices. Wages due but not paid in 2011-12 have also been deducted from the total wage expenditure to arrive at this figure. All figures used to arrive at this calculation are taken from the NREGA website

<sup>3</sup>Source: Report : MGNREGS-A Prevailing Instrument for Inclusive Growth of Rural India, Tenth AIMS International Conference on Management)

The Unique Identification Authority of India (UIDAI) aims to provide an identity infrastructure called Aadhaar for delivery of various social welfare programs of the Government. The UIDAI platform provides a digital and verifiable unique identity service to citizens of India through which it intends to address the challenges faced in the payment disbursement of Government welfare schemes. Aadhaar combined with a bank account/post office account act as the foundation pillars of Aadhaar enabled service delivery (AESD) which can be leveraged by MGNREGS for Aadhaar linked wage payments to the beneficiaries.

#### **Key Challenges of MGNREGS**

- Delay in Payment of Wages
- Payment to right and intended beneficiaries
- High Access costs for beneficiaries
- Mobility of the beneficiaries
- Dependency on Middlemen

UIDAI, in collaboration with National Payments Corporation of India (NPCI) has designed and developed Aadhaar enabled payment system (AEPS), based on the Aadhaar Payment Bridge (APB), to facilitate participating banks to transfer payments into Aadhaar enabled bank accounts (AEBA). The Aadhaar Enabled Payment System (AEPS) aims at authenticated disbursement of payments based on Aadhaar numbers and bringing banking services to the beneficiaries' doorstep through Aadhaar enabled Micro ATM. Thus, Aadhaar creates an able interface for ensuring effective Government service delivery with its key features of instantaneous and robust authentication, mobility, Aadhaar enabled Payment System etc.

Apart from facilitating secure payments through AESD, the integration of Aadhaar with MGNREGS has the potential of improving the operational performance of MGNREGS with the following key benefits:

- Beneficiary authentication at various stages of the scheme
- Ensuring payment of wages to intended beneficiaries through AEBA
- Reducing leakages due to better matching of work availability and allocation
- Enabling mobility to beneficiaries

In view of the above, as well as to improve the process efficiency and service delivery mechanism, UIDAI in collaboration with Government of Jharkhand launched the pilot for MGNREGS wage payments integrated with Aadhaar Enabled Payment System using Aadhaar enabled micro ATMs across four districts in Jharkhand.







## **STUDY OBJECTIVE AND METHODOLOGY**

## 2 STUDY OBJECTIVE AND METHODOLOGY

The UIDAI had initiated a pilot of Aadhaar integration with MGNREGS across four districts in Jharkhand. An assessment study was commissioned by the United Nations Development Program (UNDP) in collaboration with the Ministry of Rural Development (MoRD), Government of India to evaluate this pilot in Jharkhand across the Set-up and Operational Stage with a focus on the stakeholders' experience, Process and Policies etc. as well as to assess the readiness and feasibility of MGNREGS Aadhaar integration across other states i.e. Tripura, Gujarat, Andhra Pradesh and Karnataka in order to enable scaling up of Aadhaar integration. The study was also aimed at identifying the challenges encountered during implementation as well as the best practices and process improvements from the pilot.

### **Key Objectives of the study were**

- Evaluate the pilot in Jharkhand and highlight key learnings and challenges
- Assess the readiness of other selected states i.e. Tripura, Gujarat, Andhra Pradesh and Karnataka based on requirement assessed in Jharkhand
- Provide recommendations on up-scaling of Aadhaar integration

### **Approach**

In view of the above stated objectives and after discussions with MoRD and UNDP representatives, the approach to the study was designed to incorporate both secondary assessment and primary survey of the stakeholders.

To conduct an assessment of the pilot in Jharkhand, Beneficiaries Survey and One-to-One Meetings with key stakeholders was planned. The Beneficiaries Survey was conducted through Focus Group Discussions with the local community; furthermore, one to one meetings were held with key stakeholders, including UIDAI and MGNREGS officials in the state, Banks, BCs, BCA, Mates, NPCI and other stakeholders.

The Jharkhand study brought forward the key enabling infrastructure requirements and operational challenges, based on which the other selected states for the study were assessed on account of parameters required for Aadhaar integration. In addition, initiatives taken up by Government of Maharashtra towards Aadhaar integration were also studied to identify best practices.

Based on the assessment, key challenges and recommendations were identified for effective and successful scale up of Aadhaar MGNREGS integration.

### **Sampling Methodology**

Of the four Districts of Jharkhand where the pilot project is operational, two districts viz. Ranchi and Ramgarh were identified for a focused study and survey. Extensive interactions with multiple stakeholders as well as with the MGNREGS beneficiaries participating in the pilot project were conducted. The analyses presented later in this report, are based on the performance of the pilot so far in these districts.

Assessing user satisfaction was the major objective of the study. For this purpose, two panchayats were chosen for the end beneficiary survey, one in each of the selected districts. Of the two selected panchayats, one was selected from the pilot area and the second from the non-pilot area. In each of these panchayats, a total of 75 beneficiaries each were interacted with. Therefore, a total of 150 MGNREGS beneficiaries were interacted with by the field survey team to capture their experiences and satisfaction with the pilot project; as per the initial plan. These interactions were held through multiple field visits to

Jharkhand by the study team, during which they interacted with not only the identified 150 beneficiaries, but with several more, which gave the team a deep understanding of the status and challenges of the pilot, as well as the beneficiaries' viewpoint on the same.

In addition to that, beneficiaries in pilot areas were also surveyed to verify the findings that came out of the initial survey; which in turn helped in establishing that the outcomes of the analyses were in line with the realities on the ground.

FIGURE 1: SAMPLING METHODOLOGY

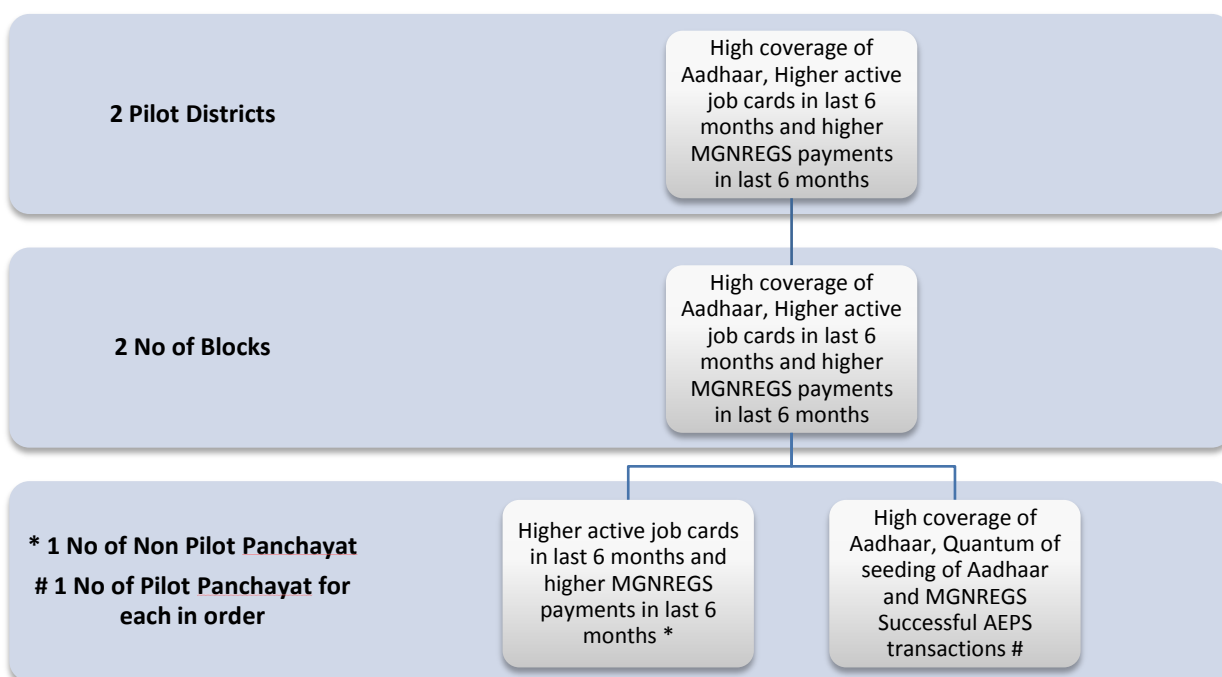


TABLE 2: SAMPLE SIZE OF THE MGNREGS BENEFICIARIES COVERED IN THE SURVEY

District	Block	Panchayat Name	Area	Sample Size Covered
Ranchi	Ratu	Tigra	Pilot	24
		Tarup	Pilot	15
		Ratu South	Non Pilot	40
Ramgarh	Ramgarh Sadar	Dohakatu	Pilot	53
		Kaitha	Non Pilot	35

The MGNREGS-Aadhaar pilot project was implemented through close coordination between UIDAI, GoI, various state government departments as well as other agencies. These departments and agencies were engaged at different stages of the project to provide specific services and solutions. In order to understand the challenges faced in the development and implementation of corresponding policies and technologies, multiple interactions were held with various stakeholders across the project spectrum. To assess the readiness of the selected study states, one-to-one interactions and meetings with secondary stakeholders in the departments were conducted.

The field visits and the interaction with the key stakeholders and departments helped the study team understand the scale of the pilot project, challenges and people involved at different levels. Their responses were collected through a structured questionnaire as well as focused group discussions. A list of the stakeholders with whom the study team interacted is placed at Annexure-1. A snapshot of the same is given below:

TABLE 3: SECONDARY STAKEHOLDER'S CONSULTATIONS

Sr. No	Secondary Stakeholders (Interacted Entities)	Total Number
1.	State officials	31
2.	District Development Office - Jharkhand	4
3.	Block Development Offices - Jharkhand	5
4.	UIDAI Office	3
5.	Banks (District Level, Block Level)	7
6.	Business Correspondent Agencies	6
7.	Business Correspondents	9
8.	Beneficiaries	167
9.	Mate	2

## Study Tools

Multiple tools tailored to meet the data and information gathering requirement of the study were utilized. They are placed in Annexure 2, 3 and 4 for reference. An overview of the tools and methodologies adopted in the study is given below:

TABLE 4: STUDY TOOLS USED WITH DIFFERENT STAKEHOLDERS

Category	Method	Study Tool
<b>State government officials</b>	One to one discussion	Structured Question set
<b>District and block officials</b>	One to one discussion	Structured Question set
<b>UIDAI</b>	One to one discussion	Structured Question set
<b>Bank officials</b>	One to one discussion	Structured Question set
<b>BCs/BCAs</b>	Survey Focus group discussion	Structured Questionnaires Focus group discussion checklist
<b>Beneficiaries</b>	Survey Focus group discussion	Structured Questionnaires Focus group discussion checklist
<b>Mates</b>	One to one discussion	Structured Question set
<b>Secondary data analysis</b>	-	Data collection sheets





# **JHARKHAND AADHAAR MGNREGS PILOT**

### 3 JHARKHAND AADHAAR MGNREGS PILOT

#### Background

The state of Jharkhand was carved out of the southern part of the erstwhile undivided state of Bihar in the year 2000. Famed for its mineral wealth and forest products, it has 24 districts and covers an area of 79,714 sq. km.

The total population of Jharkhand as per the Census 2011 is 3.29 Crore out of which approximately 2.5 Crore is primarily rural, the remainder 79 lakh population is urban/semi-urban.

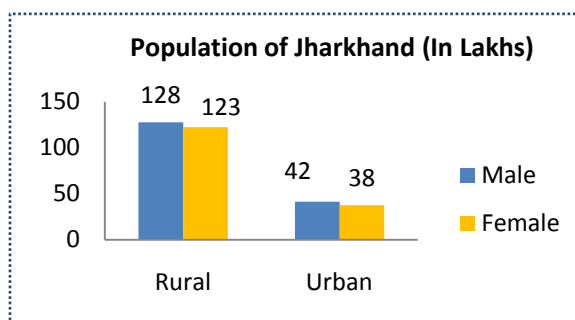


FIGURE 2: POPULATION OF JHARKHAND  
Source: Census 2011

#### Aadhaar Coverage in Jharkhand

As of April 2013, more than 1.28 Crore Aadhaar enrolments have been completed in Jharkhand and of these approximately 95 lakhs<sup>4</sup> have been generated and delivered. The district of Ranchi is leading in the enrolment exercise with 14.76 lakh enrolments till March 2013. The chart below shows the current district wise Aadhaar enrollment status for Jharkhand.

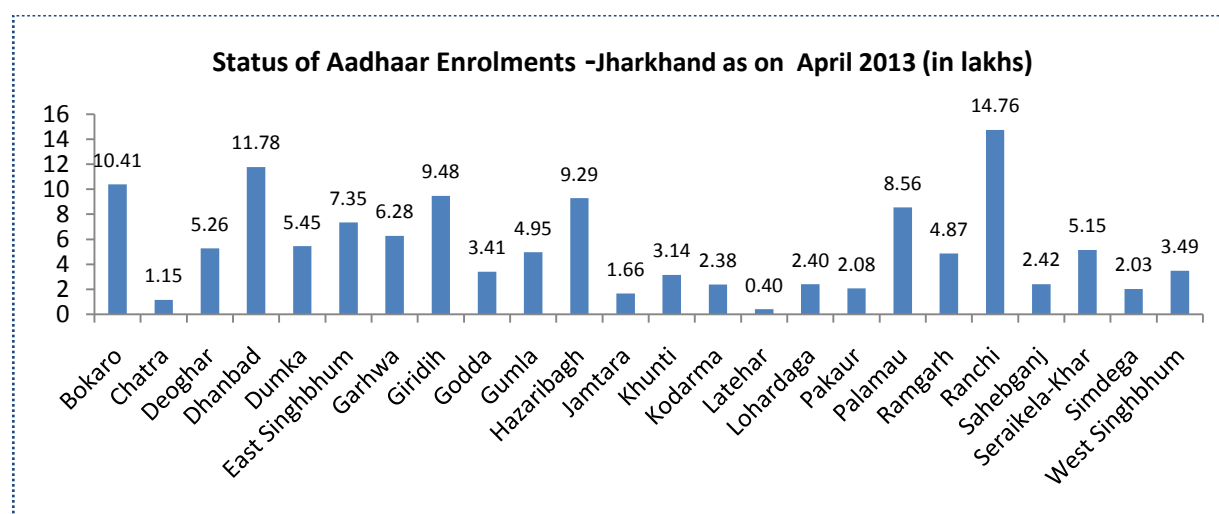


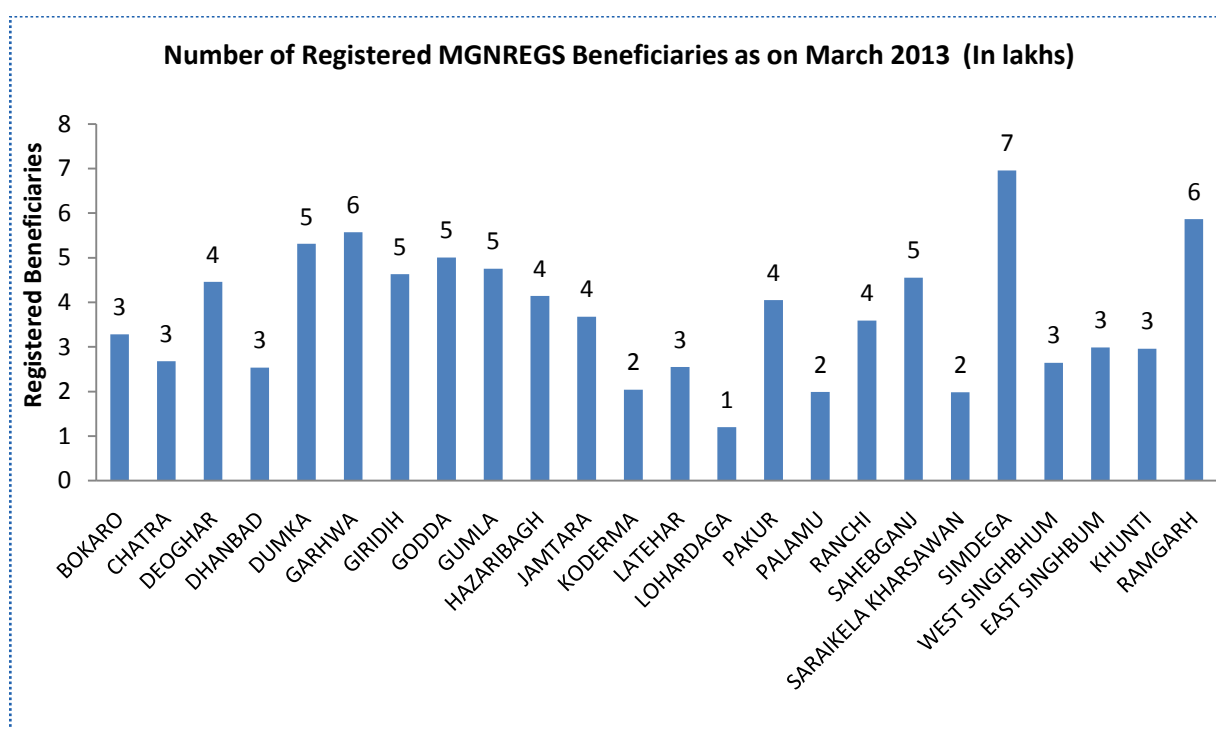
FIGURE 3: AADHAAR ENROLMENT IN JHARKHAND  
Source: UIDAI

#### MGNREGS Coverage in Jharkhand

MGNREGS with its prime objective of improving the rural livelihood security had a comprehensive span in the state since its inception. The number of registered beneficiaries for MGNREGS in Jharkhand as of March 2013 is approximately 89.23 lakh. The chart below shows the district wise distribution of the MGNREGS beneficiaries in the state.

<sup>4</sup> Source: Planning Commission





**FIGURE 4: REGISTERED MGNREGS BENEFICIARIES**

Source: NREGASoft

Over the years MGNREGS has extended its reach in Jharkhand in terms of the number of beneficiaries covered and the wages distributed. Per day wages paid under the MGNREGS in Jharkhand has gone up from Rs. 65 in 2006-07 to the present rate of Rs. 122.75 per day in 2012-13<sup>5</sup>.

The mode of wage payments to the MGNREGS beneficiaries has changed over the years. During the initial years, MGNREGS payment was done through cash disbursement at the village or panchayat level. Later, this transitioned to being done through banks and post offices, where accounts had been opened for the beneficiaries. The rural population in Jharkhand has limited access to the banking system primarily because of its diverse geography. Around 29.6%<sup>6</sup> of the land in Jharkhand is covered by forests which is also a limiting factor for access to the banks. Anti-social activities in some districts, particularly in remote areas, have also limited the reach of the banks. Jharkhand has been relying primarily on post office accounts for disbursement of MGNREGS wages rather than to bank accounts as is evident from the following table.

**TABLE 5: SNAPSHOT OF MGNREGS ACTIVE BENEFICIARY POST AND BANK ACCOUNTS IN JHARKHAND**

MGNREGS Beneficiary Accounts breakup in Jharkhand (2012-2013)	
Particulars	In Lakhs
Active Bank Accounts ( joint + individual )	2.3
Post Office Accounts	17.8

Source: NREGASoft MIS

<sup>5</sup>[www.nrega.nic.in](http://www.nrega.nic.in)

<sup>6</sup>As per Department of Forest and Environment, Government of Jharkhand

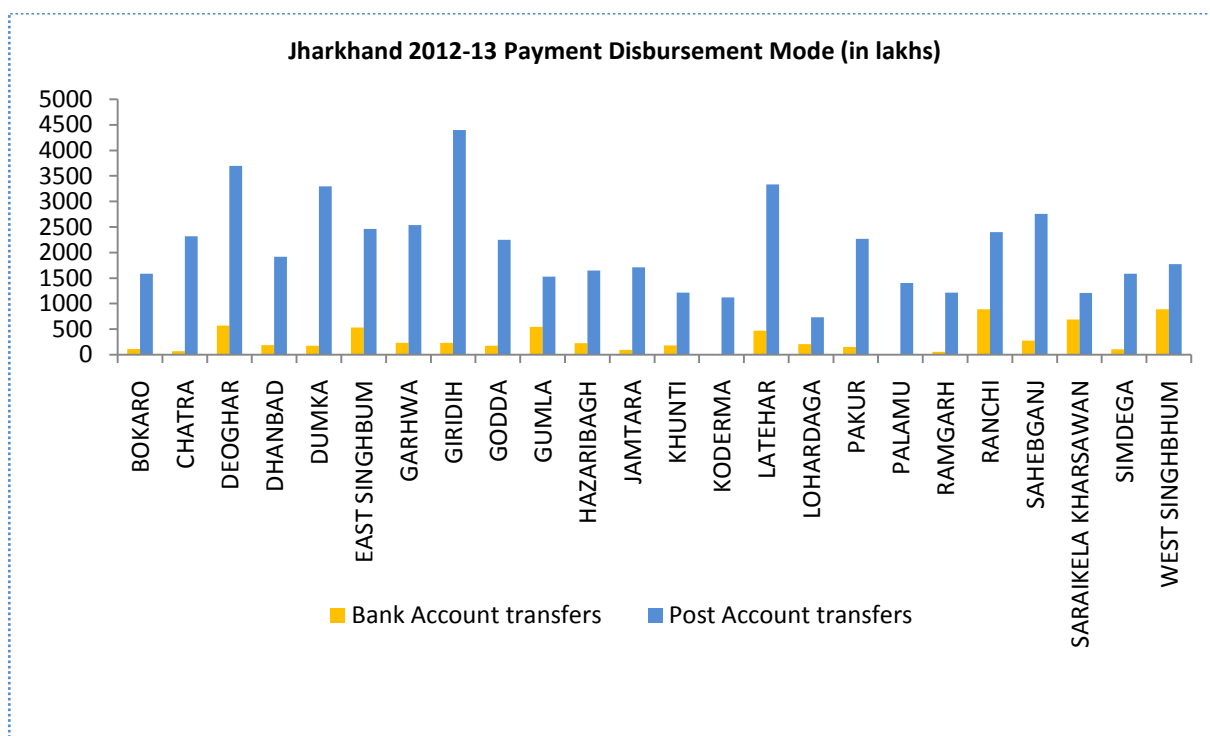


FIGURE 5: MGNREGS PAYMENT MODES IN JHARKHAND

Source: NREGASoft

In the recent years, there has been a sustained effort on part of both the state and central governments towards financial inclusion of the rural population, such as the financial inclusion campaign -Swabhimaan, payment of wages to MGNREGS workers through BC model, convergence of UIDAI Aadhaar Number with financial inclusion, direct transfer of subsidy on LPG, Kerosene and Fertilizer etc. to the beneficiaries through their bank accounts etc.

Banks have also become more active in providing services to the rural population through Business Correspondents, Ultra Small Branches and other such initiatives. In addition, banks have been providing smart cards and biometric cards (not Aadhaar based) to improve the financial inclusion. A total of 5.57 lakh smart cards / biometric cards have been issued in the state out of which 1.16 lakh cards have issued during current financial year till September 2012 (Source: 41<sup>st</sup> meeting SLBC Jharkhand).

Public Sectors banks, namely the Bank of India and the State Bank of India are leading the exercise of biometric based smart card based accounts and transactions through BCs housed at CSCs, Panchayat Bhavan etc. Private banks such as ICICI Bank are also providing similar services and have issued more than 45,000 cards to its account holders. These banks' biometric based system is different from the Aadhaar based payment system. Various government initiatives have also facilitated the opening of "no frills" accounts in the state. A total of 32.81 lakhs "no frills" accounts have been opened in the state.

#### **Difference between banks biometric based system and Aadhaar enabled payment system**

- The biometric based system of banks process payments through the Central Banking Services (CBS) of the Banks while the Aadhaar linked payment system uses the Aadhaar payment bridge system.
- The biometric based system of banks use the internal biometric database of the bank for authentication whereas the Aadhaar linked payment system uses the UIDAI's CIDR database for authentication.

The following figure highlights the trends of wage payments to MGNREGS beneficiaries for the last three years made through bank accounts. It is observed that there is no significant increase in the payments through bank accounts despite the increase in the number of bank accounts opened.

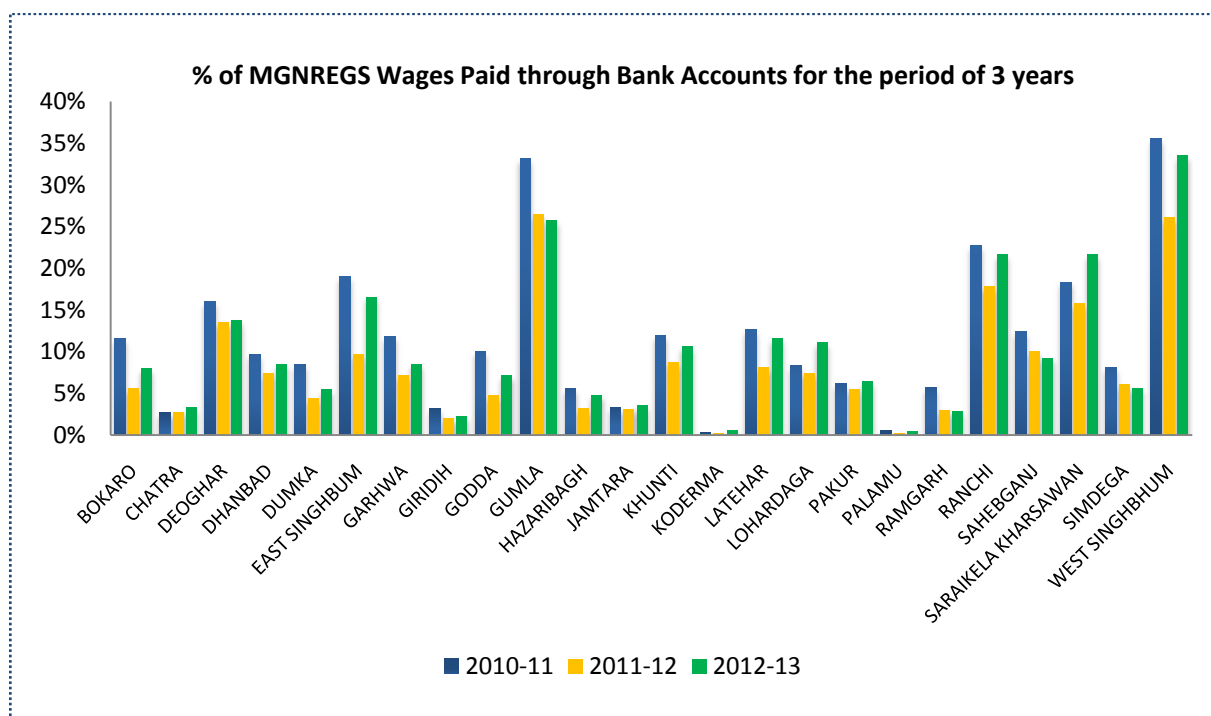


FIGURE 6: TREND OF THE PAYMENTS MADE THROUGH BANK ACCOUNTS IN JHARKHAND DURING 2010-2013

Source: NREGASoft

**Two major inferences can be drawn from it:**

- Majority of the beneficiary accounts operate through Post office accounts and shifting to banking system is an additional burden
- Access to bank is a major concern that needs to be addressed

### 3.1.1 A Snapshot of Aadhaar and MGNREGS in Jharkhand

TABLE 6: A SNAPSHOT OF AADHAAR AND MGNREGS IN JHARKHAND

Particulars	In Lakhs
<b>Population:</b> Source: CENSUS 2011	329.66
<b>Rural Population</b>	250.37
<b>Urban Population</b>	79.29
<b>Aadhaar Generated:</b> Source Planning Commission	133.62
<b>Aadhaar Delivered:</b> Source Planning Commission	94.92
<b>No of Registered MGNREGS Workers For Last 3 Years:</b> Source: NREGASoft	56.7
<b>No of Job Card Seeded with Aadhaar:</b> Source: NREGASoft	0.74

## Jharkhand MGNREGS - Aadhaar Integration: Pilot

As nearly 76% of the total population of Jharkhand resides in the rural areas, Jharkhand was a suitable state to initiate the pilot for integration of MGNREGS with Aadhaar. Residents in rural areas of Jharkhand have limited access to payment services and were required to travel long distances to visit the bank branch/post office for transactions with concurrent travel and opportunity costs. So, UIDAI in collaboration with Government of Jharkhand launched the pilot for MGNREGS wage payments integrated with Aadhaar Enabled Payment System at the panchayat level using Aadhaar enabled micro ATMs.

### The primary and the only objective of the pilot was

- Proof of Concept (PoC) of the Aadhaar Technology i.e. payment to Aadhaar Enabled bank account using Aadhaar enabled Payment System and Aadhaar Authentication framework
- Last mile delivery of wages to beneficiary using Aadhaar based Micro ATM operated by Business Correspondent (BC)

The blocks selected for the pilot were already a part of the Government of Jharkhand initiative with UIDAI to launch financial inclusion and welfare payments. Besides that, the number of MGNREGS beneficiaries with Aadhaar was the decisive factor for selection of a particular block in the pilot project.

The MGNREGS-Aadhaar pilot project was launched in Ranchi district of Jharkhand in December 2011 followed by roll out in Hazaribagh district in the same month. Subsequently, it was launched in Saraikela-Kharsawan district in January 2012 and finally in Ramgarh district in February 2012. Till date MGNREGS-Aadhaar pilot project has been operational in these four districts only. The summary of the coverage of the pilot is as follows:

TABLE 7: MGNREGS AADHAAR PILOT COVERAGE: JHARKHAND

District	Block	Panchayat	Pilot Launch	Participating Bank
Ranchi	Ratu	Puriyo, Tarup, Tigra	Dec 2011	Bank of India
Ramgarh	Ramgarh Sadar Mandu Gola	Dohakatu, Marar	Feb 2012	Bank of India
Hazaribagh	Hazaribagh Sadar	Hazaribagh Sadar	Dec 2011	ICICI Bank
Saraikela-Kharsawan	Chandil	Chandil	Jan 2012	Union Bank of India

Source: Discussion with the stakeholders from the state's Rural Department

Initially launched pilot in three districts (Ranchi, Hazaribagh and Saraikela-Kharsawan) were not able to expand the rollout within other blocks of the same district whereas Ramgarh even though a late entrant in this pilot, was able to implement the pilot in the nearby blocks of Mandu and Gola along with the initial Dohakatu block.

### Reasons behind Ramgarh's success in expanding the pilot areas

- The District administration in Ramgarh is proactively implementing the scheme. They have been leading in the efforts to map MGNREGS job cards with Aadhaar. This has helped in maximizing the number of beneficiaries
- The District as well as Block administration is closely and extensively monitoring the scheme and coordinating with its stakeholders for efficient service delivery
- BOI as sponsor bank is proactively working towards the opening of AEBA and seeding of the same.
- The existing VLEs act as BCs and are housed at the CSC centers thus enabling VLE-BC synergy

### 3.1.2 Key Stakeholders in the Pilot and their roles and responsibilities

The stakeholders' in the pilot ecosystem were UIDAI, Government of Jharkhand, NPCI, Banks and their BC network. Besides the institutional support, infrastructure support in terms of internet connectivity, AEPS, APB, Authentication framework was crucial for the success of the project.



FIGURE 7: KEY STAKEHOLDERS IN THE PILOT

#### 3.1.2.1 UIDAI

UIDAI was the key stakeholder as Aadhaar was at the core of this pilot project. The role of UIDAI and its Regional Office was not confined to support the pilot but was also to drive it towards success in collaboration with the state Government. UIDAI was the key driver of the pilot. As the pilot was a Proof of Concept, hence UIDAI was coordinating with the State, Bank, NPCI and BSNL to facilitate successful demonstration of Aadhaar based service and payment delivery.

#### Role of UIDAI in the Pilot project:

- Increase awareness among the Government officials about Aadhaar enabled payment system
- Increase awareness of the beneficiaries on Aadhaar enrollment
- Provide web based tool for checking Aadhaar number generated in case of failed delivery
- Comprehensive field testing of AEPS prior to the pilot roll out
- Enrolment of Beneficiaries as well as facilitation of banks in opening AEBA
- Issue and Deliver Aadhaar number to the beneficiaries
- Support in manual data gathering for seeding of the Aadhaar number with the MGNREGS job card number
- Enable Gateway Service to CIDR (UIDAI) in collaboration with NPCI
- Authenticate requests during the payment transactions on the Aadhaar based micro ATMs

### 3.1.2.2 Government of Jharkhand

The Jharkhand Government was another key stakeholder in the pilot project. The state Rural Department along with the state Nodal Department for UID was responsible for the success of this project together with UIDAI.

#### Role of Jharkhand Government in the Pilot project:

- Map MGNREGS job cards and number of beneficiaries with their Aadhaar number enabling Aadhaar based MGNREGS payments
- Appoint Sponsor banks for the pilot process and ensure effective integration
- Engage participating banks to open AEBA
- Increase awareness of the pilot process amongst beneficiaries
- Enable issuances of Aadhaar based payment advise i.e. provide an e-payment file containing the Aadhaar number, Bank reference number, Amount and Benefit reference number to the Sponsor bank for transferring the MGNREGS wages to the end beneficiary's bank account

### 3.1.2.3 Banks

The Aadhaar enabled payment takes place only if the targeted MGNREGS beneficiaries' have a bank account linked to their Aadhaar known as Aadhaar Enabled Bank Account (AEBA). While opening the AEBAs, the sponsor banks were chosen on a "One Block One Bank" concept in the state.

#### Role of Participating Banks in the Pilot project:

- Open AEBA bank accounts of the MGNREGS beneficiaries who do not have an existing bank account
- Increase beneficiary awareness on advantages of AEBA
- Map (Seed) the MGNREGS beneficiary bank account number with their Aadhaar number in their Core Banking System (CBS)
- Use APB and the e-payment file provided by the state Government to credit the MGNREGS beneficiary's bank account with their wages.
- Appoint BCs at the Panchayat level for providing the banking services using Aadhaar based Micro ATMs.
- Coordinate with NPCI to facilitate the Aadhaar Payment Bridge

The participant banks during the pilot are:

TABLE 8: BANK PARTICIPATION IN JHARKHAND PILOT

District	Block	Bank
Ranchi	Ratu	Bank Of India
Ramgarh	Ramgarh Sadar	Bank Of India
Hazaribagh	Hazaribagh Sadar	ICICI Bank
Saraikela-Kharsawan	Chandil	Union Bank of India

Source: State Rural Development Department: Stakeholders Discussion



### 3.1.2.4 Business Correspondent Agency (BCA)/ Business Correspondents (BCs)

The Public Sector Banks opted to engage Business Correspondent Agencies (BCAs) as permitted by Reserve Bank of India (RBI), with a view to ensure greater financial inclusion and provide comprehensive financial services to the underprivileged, particularly in unbanked and under-banked areas. The BCAs provide services through BCs operating in CSC outlets or in a separate location on behalf of the banks through use of Information and Communication Technology (ICT), as desired by the state Government.

#### Key features of BCAs/BCs:

- The banks empanel Business Correspondent Agency (BCAs) who in turn appoint Business Correspondents (BCs).
- The Business Correspondents (BCs) are the bank's representatives in the Panchayat who are responsible to provide banking services at the last mile.
- The BCs have an overdraft bank account with the Sponsor bank, which gets debited or credited when the BC makes or receives a payment.
- The BCs remain present at the Panchayat Bhawan.
- The BCAs are being paid a commission by the Banks based on the number of transactions whereas the BCAs pay the BCs fixed wages for a month in addition to the commission based on the transactions done.

#### Role of BCs during the Pilot project:

- Facilitate opening of beneficiary AEBA
- Provide information to the beneficiaries on the deposit of wages
- Sensitize the beneficiaries on the right practices during transaction processing using Aadhaar based Micro ATMs such as cleaning hands, using best finger etc.
- Provide banking services such as Account Balance Check, Withdrawal of Funds, Deposit of Funds, and Transfer of Funds etc. through micro ATMs.
- Provide ease of access to banking services through doorstep delivery to beneficiaries in some cases

UTL and FINO as BCAs were empanelled by the participating banks to provide BCs at the designated Panchayats in pilot areas. The engagement of the BCAs was effectively done to maintain the synergy with the existing operations of the CSC by agencies.

TABLE 9: BC AGENCY PARTICIPATION IN PILOT

District	Bank	Business Correspondent Agency
Ramgarh	Bank Of India	United Telecoms Ltd (UTL)
Ranchi	Bank Of India	United Telecoms Ltd (UTL)
Hazaribagh	ICICI Bank	FINO
Saraikela-Kharsawan	Union Bank of India	FINO

Source: State Rural Development: Stakeholders Discussion

**United Telecoms Limited (UTL):** UTL is implementing the Common Service Centre (CSC) as well as (Financial Inclusion) FI projects in Jharkhand. Hence, appointment of UTL in Ranchi and Ramgarh districts as BCA to provide not only banking services but also services under CSC was a good decision to build synergies as well as viability for the existing BCs too.

**FINO:** FINO provided standalone Business Correspondent for the pilot who visited the Panchayats for providing banking services. FINO BCs were accompanied by the bank representatives when payments were being disbursed by them.

### 3.1.3 Pilot Process Overview

#### 3.1.3.1 Pre-Pilot Readiness

##### **Aadhaar, Micro ATM and Technology Readiness**

Prior to the launch of the pilot project, the Aadhaar enabled Payment System was tested through comprehensive field testing to assess the efficiency and performance standards of the hardware, software and network connectivity. The field testing assessed the technology intended for the pilot project rollout. Beta testing of the micro ATMs and the supporting architecture was also initially conducted at the UIDAI office with dummy transactions in a controlled environment. After successful testing, the field testing was performed in a few more districts intended for the pilot project. .

##### **IEC for Stakeholders**

Prior to the inception of pilot, it was important to bring all the stakeholders on common understanding of the process, usage and benefits of Aadhaar integration with MGNREGS. For this purpose, the UIDAI Regional Office (RO), Ranchi facilitated communication and coordination between the involved state Departments. Capability building sessions were also conducted for the stakeholders on Information, Education and Communication (IEC) required for the PoC as well as pilot.

##### **Aadhaar enabled payment system Readiness**

UIDAI in coordination with the state's Rural and UID Nodal Department identified sponsor banks for each district. This Sponsor bank was registered with NPCI in order to use the Aadhaar Payment Bridge. The sponsor bank was required to enroll for a membership of APB in response to which the NPCI issues an Identification Number (IIN). After the Sponsor banks were identified, these banks enabled the opening of AEBA for the beneficiaries through awareness drives and door-to-door service.

The Sponsor Banks appointed across the pilot Blocks and the number of Micro ATMs are mentioned in the table below:

**TABLE 10: BANKS AND MICRO ATMS IN PILOT DISTRICTS**

Block	Sponsor Bank	Number of Micro ATMs
Ratu	Bank of India	3
Ramgarh	Bank of India	1
Chandil	Union Bank Of India	1
Hazaribagh	ICICI Bank	1

*Source: State Rural Development: Stakeholders Discussion*

### 3.1.3.2 Mapping of beneficiaries (Seeding)

The first and the most essential step of this pilot project was the mapping of the MGNREGS job card numbers of the beneficiaries with their Aadhaar numbers. Though UIDAI RO coordinated, the state Government played a key role in this activity. The following steps were followed by the state Government officials:

- A list of MGNREGS beneficiaries in the selected blocks was prepared
- Camp based approach was adopted for mapping Aadhaar number with Job card of the selected beneficiaries for PoC. However later based on the list, door to door collection of Aadhaar numbers from the MGNREGS beneficiaries was done in every block
- UIDAI supported the data collection during the PoC by providing its own resources in some cases as it was manual and resource intensive process. However the state Government is supposed to drive the process post the pilot which got effected once UIDAI pulled out of the pilot
- Following the collection, the data was manually filled into excel sheets for mapping between MGNREGS job card and Aadhaar and preliminary verification of the data collected was done. The data mapping was used in pilot for linking bank accounts and conducting the Pilot
- Further to pilot, this process is being used and the mapped data is being uploaded into NREGASoft MIS to complete the mapping exercise.

#### MGNREGA Aadhaar Mapping

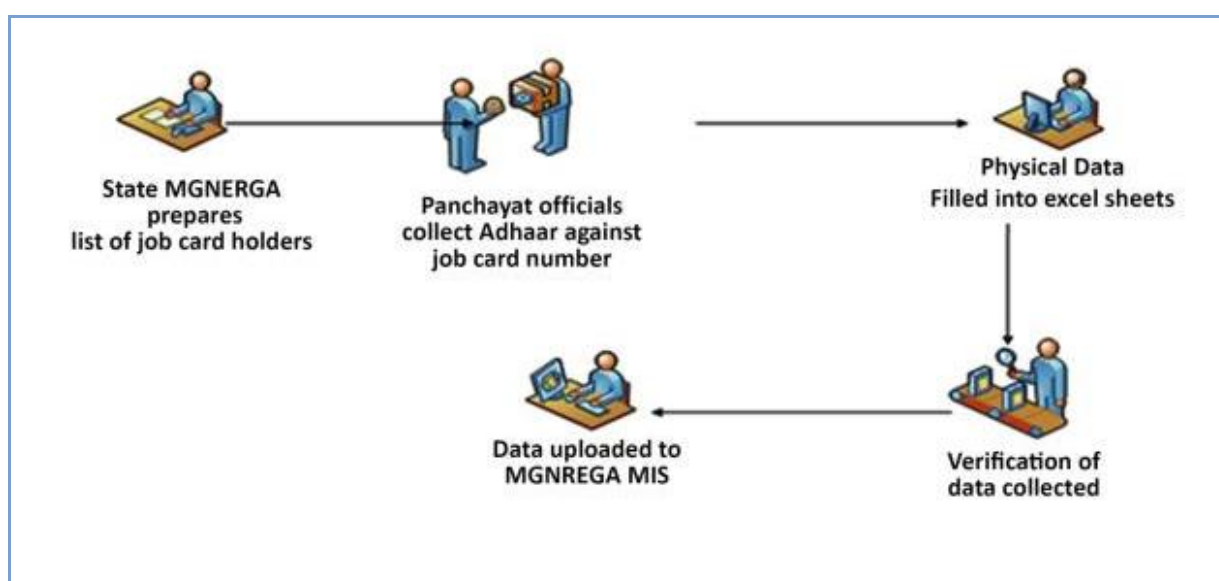


FIGURE 8: AADHAAR MAPPING OF MGNREGS BENEFICIARIES

#### Key attributes of the process

- This process was done only for the beneficiaries who possessed Aadhaar numbers
- The process was resource intensive and time consuming as it required one-to-one interaction with the beneficiaries.
- It lacked advanced technological enablement i.e. the use of tools and technologies for seeding and its validation
- The data collected was not 100% accurate and lacked data validations i.e. Aadhaar number, Job Card Number, KYR data etc. for which transaction failure was observed

### 3.1.3.3 Aadhaar Enabled Bank Account (AEBA) opening for Beneficiaries

The beneficiaries were required to open AEBA with the sponsor banks as most of the beneficiaries had post office accounts in the selected blocks. Further to seeding Aadhaar numbers in MGNREGS database, it was necessary to map the same with the beneficiaries AEBA for facilitation of transactions through Aadhaar enabled Micro ATMs.

In this process, the list of Aadhaar enrolled beneficiaries was shared with the banks of the respective regions for getting the bank accounts opened. The process of AEBA opening for beneficiaries was as follows:

#### Aadhaar Linked Bank Account (Seeding at Banks)

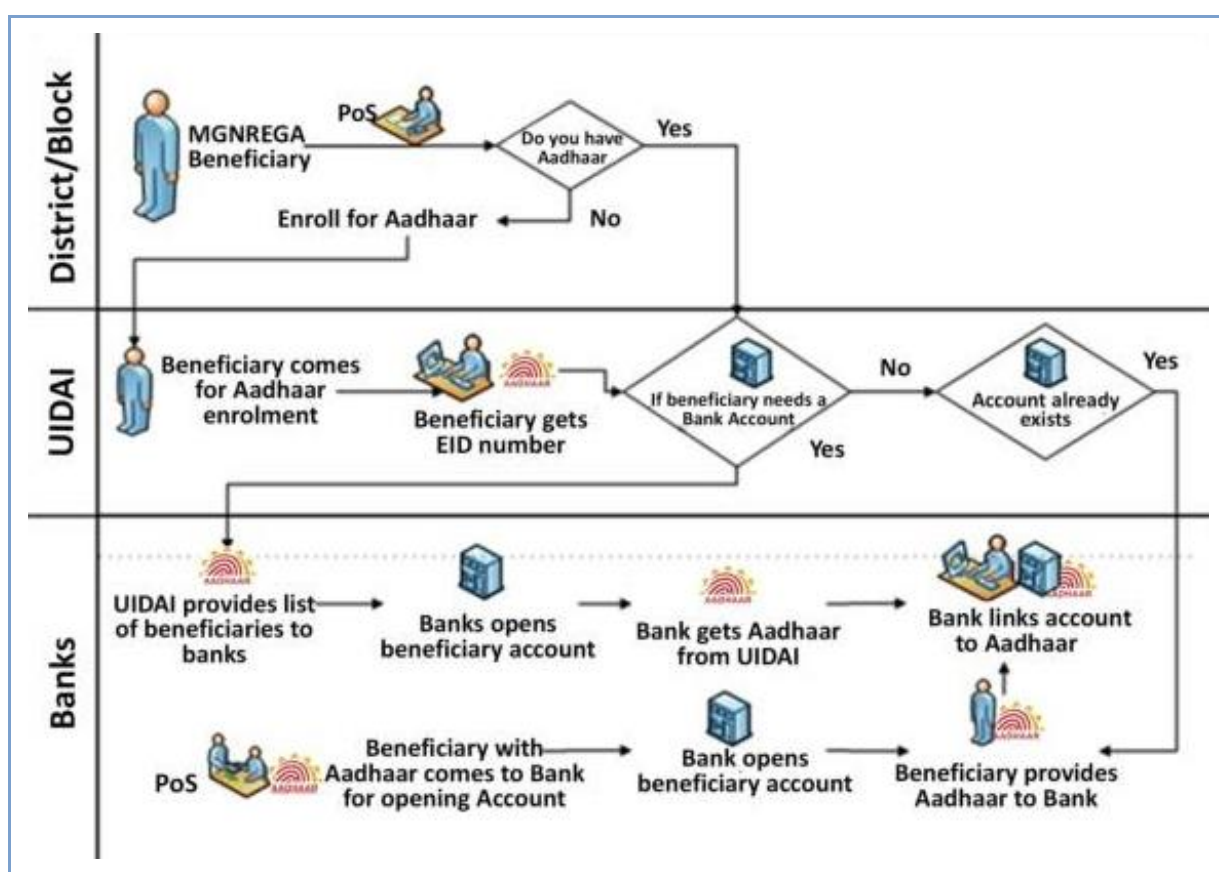


FIGURE 9: AADHAAR LINKED BANK ACCOUNT (SEEDING AT BANKS/POS)

In a camp based approach the bank representatives facilitated Aadhaar enrollment as well as AEBA opening and mapping by visiting the Panchayats or by enabling the Business Correspondents operating in the Panchayat to do the same. In most of the cases the BCs facilitated the opening of the bank accounts by collecting the forms and the supporting documents.

It was vital for the beneficiaries to have an Aadhaar number before applying for a bank account. In case they didn't possess it, they were first enrolled for Aadhaar and then checked for a bank account. If they already had a bank account with the Sponsor bank, it was linked to the Aadhaar number. In case they didn't have any of both, a new account linked to the Aadhaar number was opened during the enrollment. At the end of this process, all the three entities namely the beneficiaries bank account number, Aadhaar number and MGNREGS job card number were linked.

#### **Key features of the process in Pilot**

- During the PoC/Pilot, mapping of beneficiaries with Aadhaar was only encouraged
- Further the beneficiary with post office Accounts were asked to open new account with participating banks(Bank of India) for linking with Aadhaar to enabled Aadhaar based Payments as PO accounts were yet to be enabled with CBS and AEPS

#### **3.1.3.4 Aadhaar Linked MGNREGS Payment Process**

After all the pre-requisites for Aadhaar based payment were in place, the system was ready for processing Aadhaar linked MGNREGS payments through the Sponsor banks and the last mile delivery was ensured using Aadhaar enabled Micro ATMs with GSM Network connectivity operated by BC of the sponsor banks.

The Sponsor banks for each block were pre-identified and registered with NPCI. The state Rural Development Department provided an e-payment file (advice) to the sponsor bank which comprises of the transaction reference number, the Aadhaar number of the beneficiary and the amount in Rupees to be transferred to the individual accounts. This e-payment advice is sent to the sponsor bank which in turn forwarded it to NPCI for processing.

After authenticating the details of the e-payment advice NPCI credited the beneficiary bank with the amount, which in turn credited to the beneficiary account. The beneficiary then withdrew the wages from either the bank branch or the BC present in his/her Panchayat.

**During the PoC the operational challenges were addressed by the enabled eco-system to test the technology but following key challenges were still unaddressed and highlighted by State Administration, Banks and BCs**

- The role of NPCI was limited in some cases as the Sponsor banks directly credited the beneficiaries' accounts. But, a more prominent role of NPCI will bring about interoperability between banks
- The coordination with the banks was delayed as the bank branches in the state would forward any coordination with NPCI through their head office rather than resolving it at the state level
- Interoperability of Banks limited with inadequate updation of information in APB

## MGNREGS- Aadhaar payment process

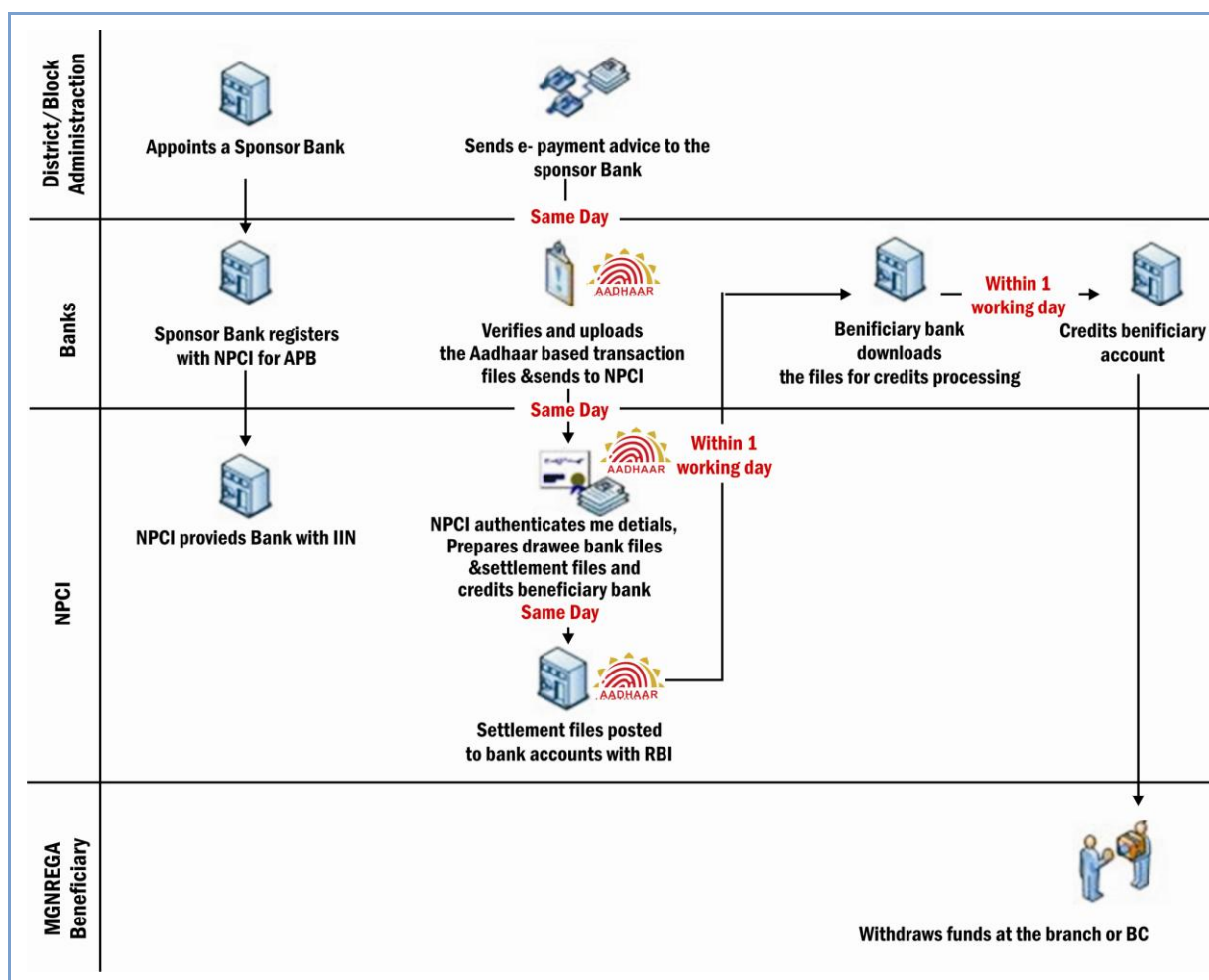


FIGURE 10: PILOT PROJECT PAYMENT PROCESS MAP

### 3.1.3.5 Transaction Process for MGNREGS Beneficiary at the BC level

The MGNREGS beneficiaries who were a part of the pilot project were paid by BC at their respective Panchayat. The Panchayat officials provided information about the MGNREGS wages credited for the period to the BC and the beneficiaries. The beneficiaries have been approaching the BC for their payments. Beneficiaries provided their Aadhaar and gave the finger impression (bio-metric) on micro ATM. On successful authentication, the BC paid the beneficiaries the amount they want to withdraw along with the receipt of the transaction. In case a beneficiary wanted to deposit funds into their account, they handed over the amount to the BC who made the transaction on the micro ATM using their Aadhaar and fingerprint impression. At end of day all the debit and credit transactions done by the BC were reconciled by the bank and the amount due for the BC was generated.



## Business Correspondent Cash Management

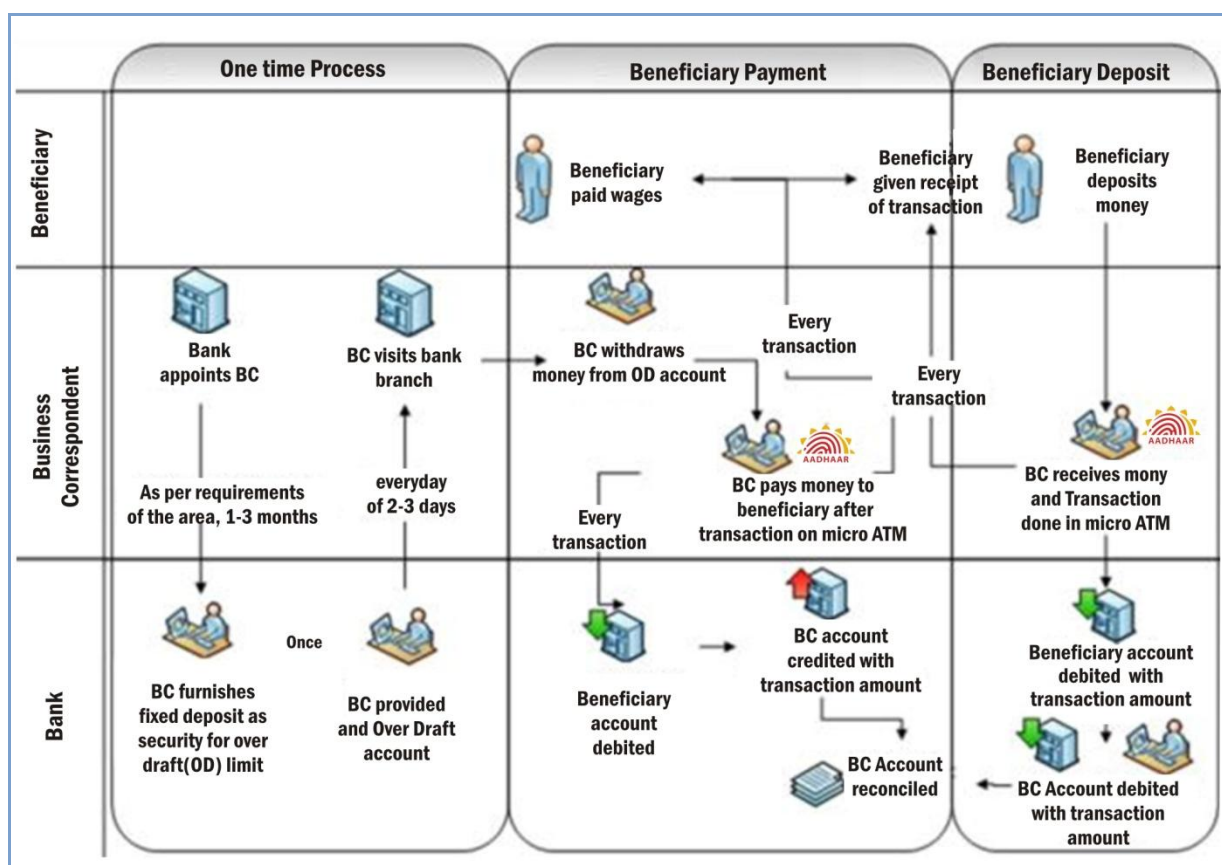


FIGURE 11: BC CASH MANAGEMENT MGNREGS-AADHAAR PILOT

### Key Attributes of the process:

- Limit on the overdraft facility causing shortage of funds for disbursement by BC especially on Pay Day
- Lack of awareness amongst the beneficiaries and BCs

### 3.1.4 Impact of the Pilot

The study team conducted an assessment of MGNREGS Aadhaar pilot in Jharkhand in terms of the existing process of MGNREGS payments and the impact of the Aadhaar integration on that process. The impact was assessed by means of process observations, structured questionnaires, surveys, focus group discussions and one to one discussion with various stakeholders. The focus was to identify the operational excellence and challenges encountered against the process, the people involved in the pilot project and Government interventions such as the Direct Cash Transfer (DCT) and technology limitations.

The confidence of the stakeholders in the implementation of the pilot project is an important factor in determining its success. Hence, mapping the satisfaction of the stakeholders with the process as well as the people involved in the pilot was also covered.

### 3.1.4.1 Coverage and Seeding of Beneficiaries

A detailed MIS covering the Micro ATM transactions and beneficiaries covered under the pilot was not made available. Hence based on the discussion and information gathered from Jharkhand Block and District officials the details of the coverage of the pilot were gathered. The pilot was operational in six blocks within four districts. The breakup of beneficiaries seeded with Aadhaar and linked to Aadhaar enabled bank account across pilot districts and blocks as on December 2012 is mentioned in the chart below.

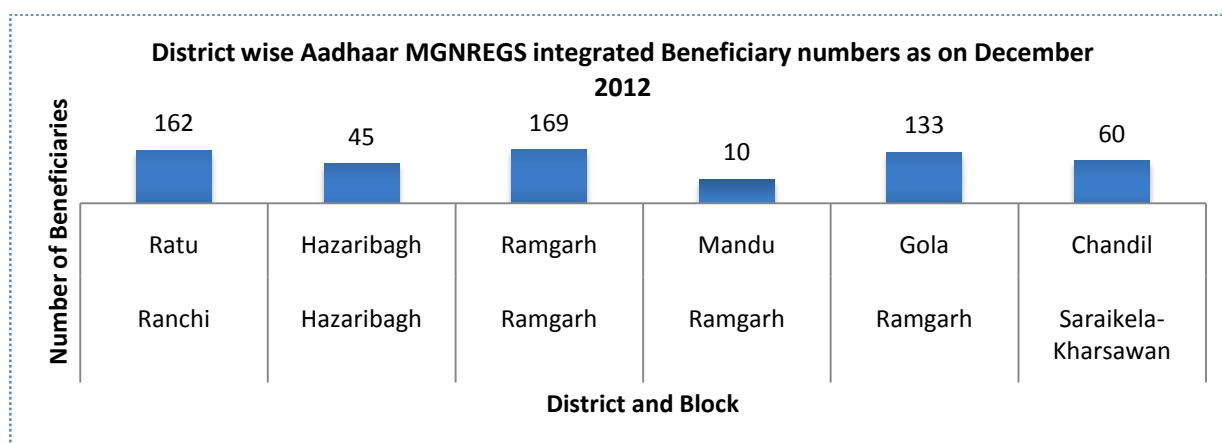


FIGURE 12: DISTRICT WISE PILOT PROJECT BENEFICIARIES AS ON DEC 2012

Source: Jharkhand Block level Rural Development Officials and BCs: Stakeholder Discussions

#### Current Status of MGNREGS Aadhaar Seeding in Jharkhand (Pilot District)

Further to the pilot process in Jharkhand, the seeding process has been expedited as per the Government directives in Jharkhand in order to move MGNREGS payments through Direct cash Transfer. Further to discussions with District Officials (District Program Officer- MGNREGS) following was ascertained

**Ranchi:** Ranchi is targeting 67,000 active job card holders to be a part of the seeding process. Out of this around 60% seeding has been completed as on April 2013 and the remaining is targeted to be completed by end of May 2013. Since most beneficiaries do not have Aadhaar, District officials are using EID of the beneficiaries to get the Aadhaar from the UIDAI database directly to speed up the process. However there are significant beneficiaries with EID whose Aadhaar are yet to be generated.

**Ramgarh:** Ramgarh is ahead of Ranchi since this exercise has been continuing since the initial PoC stage from Jan'12. Ramgarh has appointed Gram Rozgar Sevak to collect the Aadhaar/EID through door-door survey for seeding of MGNREGS with Aadhaar number. The district has mapped nearly 75% of the active job cards in the districts. However keeping the resource intensive and time consuming process of the seeding process in consideration, there was discrepancies observed in MIS generated in ground to that mentioned in MGNREGS MIS.

An analysis of seeding status collected from ground and that reflected in NREGASoft is highlighted below:

Status of Seeding in Pilot Districts (As per ground Vs. As per NREGASoft)				
District	Total registered MGNREGS Beneficiaries – worked in last 3 years	Active beneficiaries on ground*	Seeding status* (as per ground)	Seeding status (as per MIS) as on March 2013
Ranchi	3,79,491	67,000	40,200	632
Ramgarh	1,26,093	50,000	37,500	18,518
Jharkhand	56,70,692	NA	NA	74,862

Source: NREGASoft

\* Source: Approximate figures shared by District Program Officer

The state and district officials stated the following reasons for variance in the number of beneficiaries seeded with Aadhaar.

- There is a time lag in data reflected in NREGASoft and that seeded on ground
- The time lag is due to lack of resources for data entry, computers at block level etc.,
- Lack of training for effective seeding, validation etc.
- Quality of data of MGNREGS Data set for seeding with Aadhaar

Besides the variance in seeding number, the district officials also highlighted cases of unavailability of UID number and significant beneficiaries with EID for whom Aadhaar has not yet been generated. There is considerable delay in updating NREGASoft in respect of Aadhaar MGNREGS data seeded.

#### Reason for Time lag in data reflected in MGNREGS MIS and that seeded on ground

- Lack of resources for data entry, computers at block level etc.
- Lack of training for effective seeding, validation etc.
- Quality of data of MGNREGS Data set for seeding with Aadhaar

Hence it is imperative to build an effective monitoring system to capture the data from the source for effective reconciliation and MIS

### 3.1.4.2 Wage Payments made to Beneficiaries

The wage disbursement to the beneficiaries covered in the pilot was done through Aadhaar Enabled bank account. The following table highlights the total amount of payments made across the blocks in the pilot districts using AEBA through Micro ATMs as on December 2012

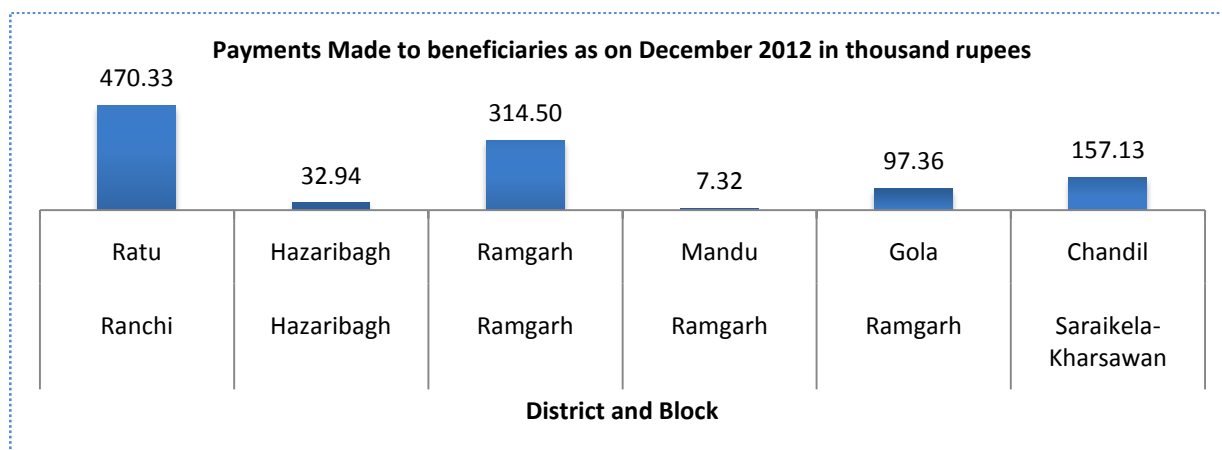


FIGURE 13: PAYMENTS MADE TO MGNREGS BENEFICIARIES AS ON DEC 2012

Source: Jharkhand Block level Rural Development Officials and BCs: Stakeholder Discussions

According to the data above, maximum number of transactions was made in Ramgarh district closely followed by Ratu district. The remaining districts have not shown substantial progress due to lack of proactive participation by District Administration, Banks and reduced payment disbursement to the beneficiaries after March –April 2012. The blocks of Mandu and Gola in Ramgarh District commenced Aadhaar enabled Payment recently with payments on 1-2 occasions only.

In Hazaribagh and Saraikela-Kharsawan, the payments through the pilot project happened only during first few months of the pilot and ceased after that due to lack of proactive participation by the associated bank and officials.

During discussions, Key state and District officials highlighted the approximate MGNREGS wages paid during the Pilot phase- Dec'11 to Mar'12

#### Ranchi

- Ratu block has made payments of around Rs 4.8 lakh to 162 beneficiaries.

#### Ramgarh

- Ramgarh Sadar has made payments of around Rs 3.14 lakhs to 169 beneficiaries
- Gola block has made payments of Rs 97,000 to MGNREGS beneficiaries
- Mandu block has only recently started payments of MGNREGS wages through the pilot process with Rs7000 paid so far

Further to discussion with MGNREGS state and District Officials, it was ascertained that the pilot was in swing during January 2012 to March 2012 with wages being transferred to seeded and linked Aadhaar enabled account of select beneficiaries in select districts.

However, since April 2012, the number of payments made through the Aadhaar enabled system has been waning in all districts other than Ramgarh. It was ascertained that the decline was due to the lack of support and participation from the Sponsor bank officials in that area. The BDO from Hazaribagh said that they faced support issues from ICICI Bank and had requested for a nationalized bank to be made the Sponsor bank in that district.

Contrary to Hazaribagh, Ramgarh district has been gaining strength as far as the payment through this pilot process is concerned. In Ramgarh Sadar block, the payments are being made through the pilot process on a monthly basis.

Dohakatu Panchayat in Ramgarh block has the maximum number of beneficiaries being paid through the pilot project and has the highest amount wages paid to the beneficiaries so far. This Panchayat has made payment of MGNREGS wages through the Aadhaar enabled system as the de-facto mode of payment to beneficiaries who have Aadhaar linked bank accounts.

During discussion with state and District Officials, it was further ascertained that there was no clear demarcation of end of pilot. During the period of March'12 – April'12, there were not much participation from UIDAI RO Ranchi leading to cessation of the transaction and seeding activity. However, with required preparedness of DCT scheme, the seeding activity and subsequent transaction activities gained strength from January 2013.

The following table highlights the amount of wages disbursed using Aadhaar enabled in pilot phase and DCT phase. Due to lack of consolidation of MIS at state, District as well as NPCI level, analysis cannot be representative, but is informative in nature.

TABLE 11: INDICATIVE TRANSACTIONS MADE DURING PILOT PHASE IN DEC'11 TO MAR-12 AND DCT PHASE JAN'13 TO MAR'13

Analysis of Transactions made during Pilot phase in Dec'11 to Mar - 12 and DCT phase Jan'13 to Mar'13				
State	District	Transactions during pilot * (Rs.)	Transactions during DCT Scheme implementation** (Rs.)	
		Dec'11 to Mar '12	Feb'13	Mar-13
Jharkhand	Ramgarh	4.18 lakhs	72,946	12,810
	Ranchi	4.8 lakhs	NA	NA
	Hazaribagh	0.32 lakhs	73,278	10,248
	Saraikela	1.57 lakhs	NA	NA

Source: \* State and District Officials Discussion- Jharkhand

Source: \*\*National Automated Clearing House

### 3.1.4.3 Frequency of payments made to a single beneficiary

As the success of this project lies in its continuity, it was necessary to consider if the AEPS was used on a regular basis for payment of wages or was just used to test the pilot. Hence, the study attempted to capture the number of unique payments made to particular beneficiaries. Since information on the same was not available for all the pilot district/blocks, an attempt was made to capture the same at least for one Panchayat.

The frequency chart below shows the unique number of times an individual MGNREGS beneficiary was paid for work done each time through the pilot project in Dohakatu Panchayat in Ramgarh block.

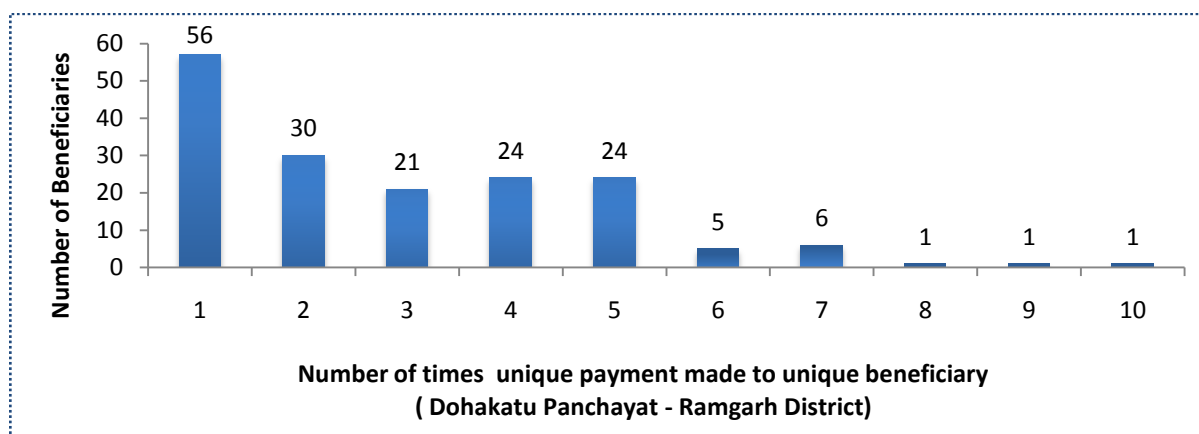


FIGURE 14: FREQUENCY MAP OF BENEFICIARIES PAID IN DOHAKATU (DURING PILOT AS ON DEC 2012)

Source: Block Officials: Stakeholders discussion

The chart above highlights the following

- 56 beneficiaries have received wages only once through AEPS.
- The remaining 113 MGNREGS beneficiaries have received their wages through the pilot project more than once.
- Dohakatu seems to be achieving the objectives set out by the pilot project by bringing about continuity in payments.

#### Pilot in Jharkhand phased out by March-April 2012

Out of all the Pilot districts, Ramgarh is progressing successfully. Due to proactive administration and effective coordination with UDIAI RO and Bank officials, it has not only been able to add new blocks for MGNREGS Aadhaar payment but also has been able to maintain continuity in terms of using AEPS for MGNREGS payment of Wages even after March 2012.

Though there was no official communication on closure of pilot, but State officials informed that it ceased to operate from **March 2012**. During the period of March'12 – April'12, there was not much participation from UDIAI RO Ranchi leading to reduction of the transaction as well as seeding activity.

However, with required preparedness of DCT scheme, the seeding activity and subsequent transaction activities gained strength **from January 2013**.



### 3.1.4.4 Impact on Process

The impact of the pilot project on the overall MGNREGS process can be seen through a comparison of the current payment process (**Pre integration process**) and the pilot process (**Post-integration process**). The post-integration process map denotes the overall process flow for the pilot project after Aadhaar intervention which shows process improvement and increased process efficiency in terms of authentication, ease of access, etc. The pilot process integrated with Aadhaar was affirmed after one-to-one discussions with the state government officials

#### Stakeholders view on Pilot Project

Out of the 5 state government officials interviewed, 4 were of the view that the pilot project has fared well in terms of reducing delay in payment whereas 1 felt that the pilot project has not resulted in any reduction in delay in payments and had scope for improvement.

### 3.1.4.5 MGNREGS Payments Process Pre-integration with Aadhaar

#### MGNREGA Process Map

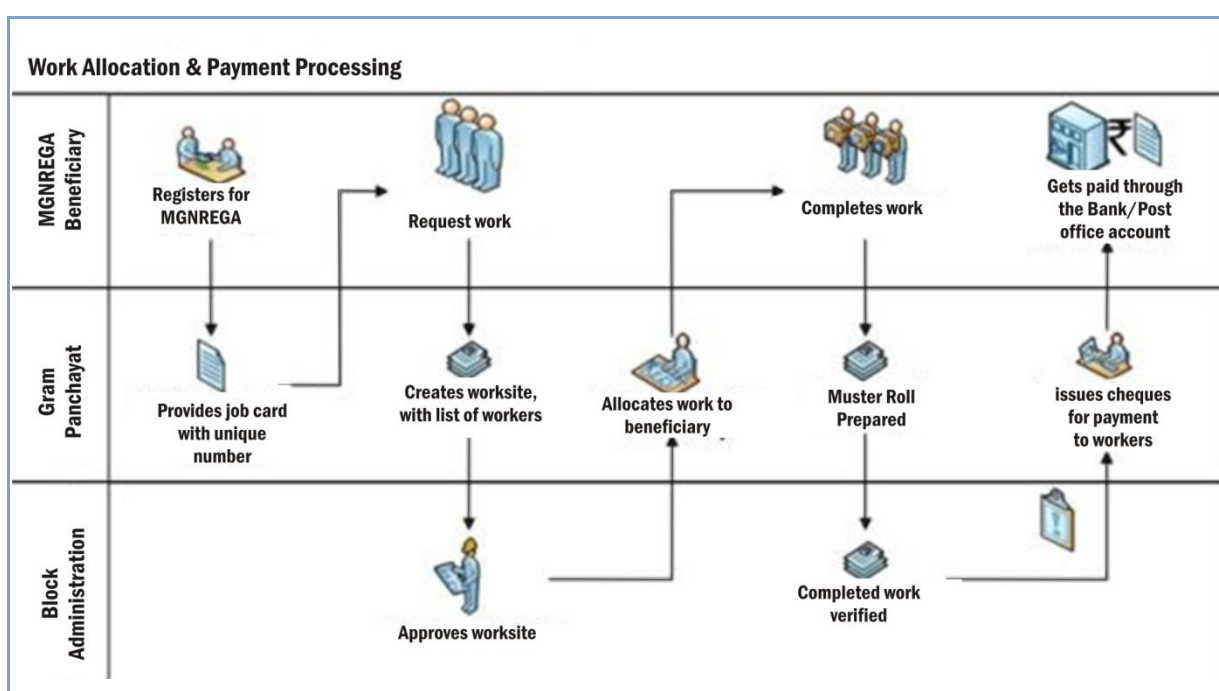


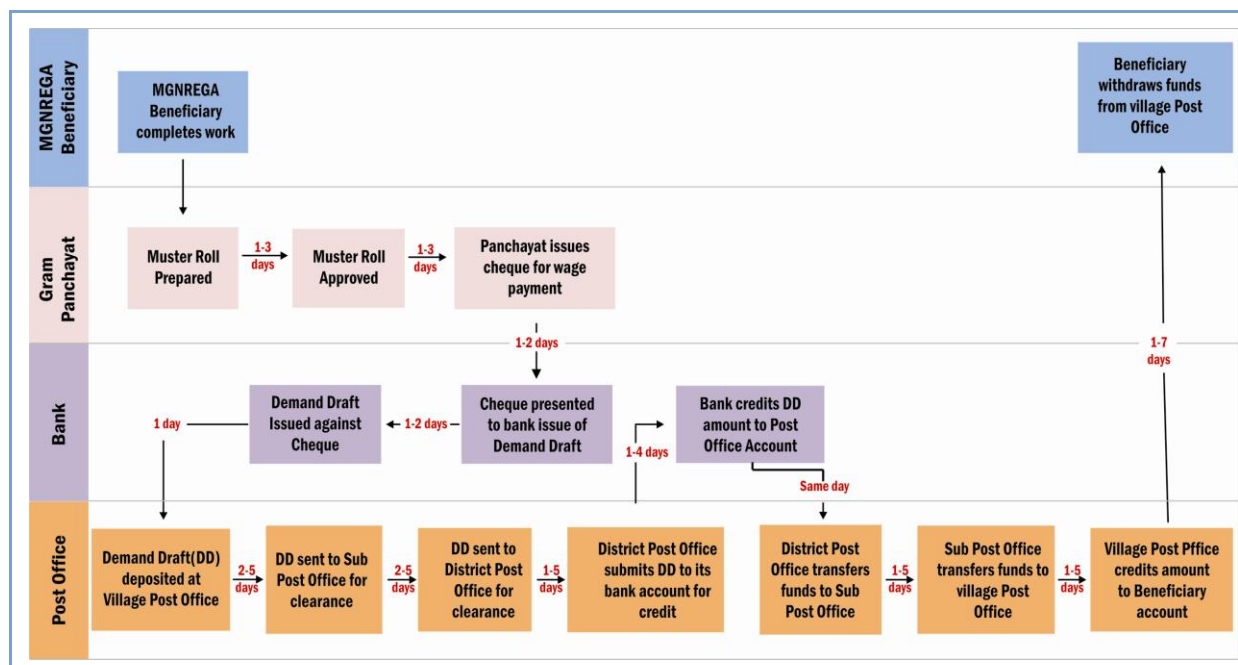
FIGURE 15: MGNREGS PROCESS MAP IN JHARKHAND (PRE-INTEGRATION WITH AADHAAR)

In the above process, beneficiary willing to perform unskilled work under the MGNREGS scheme registers for the same and becomes a beneficiary. He/she receives MGNREGS job card from the Gram Panchayat shortly after which he/she requests for work as per requirement. The Gram Panchayat personnel on receipt of such requests from various beneficiaries create a worksite with the list of workers and forward it to the Block officials for approval. On approval, the Gram Panchayat personnel allocate work to the beneficiaries as per the worksite and prepare Muster roll once the beneficiaries complete the work. Subsequently, they send the muster rolls for verification to the block officials and on approval issue cheques for the wage payments to beneficiaries. These wages are credited in the bank accounts/post office accounts of the beneficiaries from where the beneficiaries eventually draw their wages.

### 3.1.4.6 MGNREGS Payments Process using Post Office Accounts

The process highlights the time taken for the wages to credit to the beneficiary Post office Account. As each post office caters to number of villages, in principle they have allocated specific day in a week for each village to facilitate withdrawal of wages. Hence beneficiary has to wait for on an average more than a month to get his wages through the existing mode of payment through post office.

#### MGNREGA- Post Office Payment Process Map



### 3.1.4.7 MGNREGS Payments Process Post-integration with Aadhaar

End to End Aadhaar integration expects changes across the workflow for efficient service delivery. However the current integration is limited to mapping of Aadhaar with the Job card of the beneficiaries enabling payment of the beneficiaries through Aadhaar enabled bank account. There has been no change in the MGNREGS workflow except that of mentioning Aadhaar number in the payment advice. However this has effected in following improvements

- Addressing the challenge of duplication of job card
- Wages being disbursed to intended beneficiaries through AEBA
- Reduction of time for the beneficiaries to withdraw wages by virtue of Aadhaar enabled Micro ATM at their door step

## MGNREGA-Business Correspondents-Payment Process Map

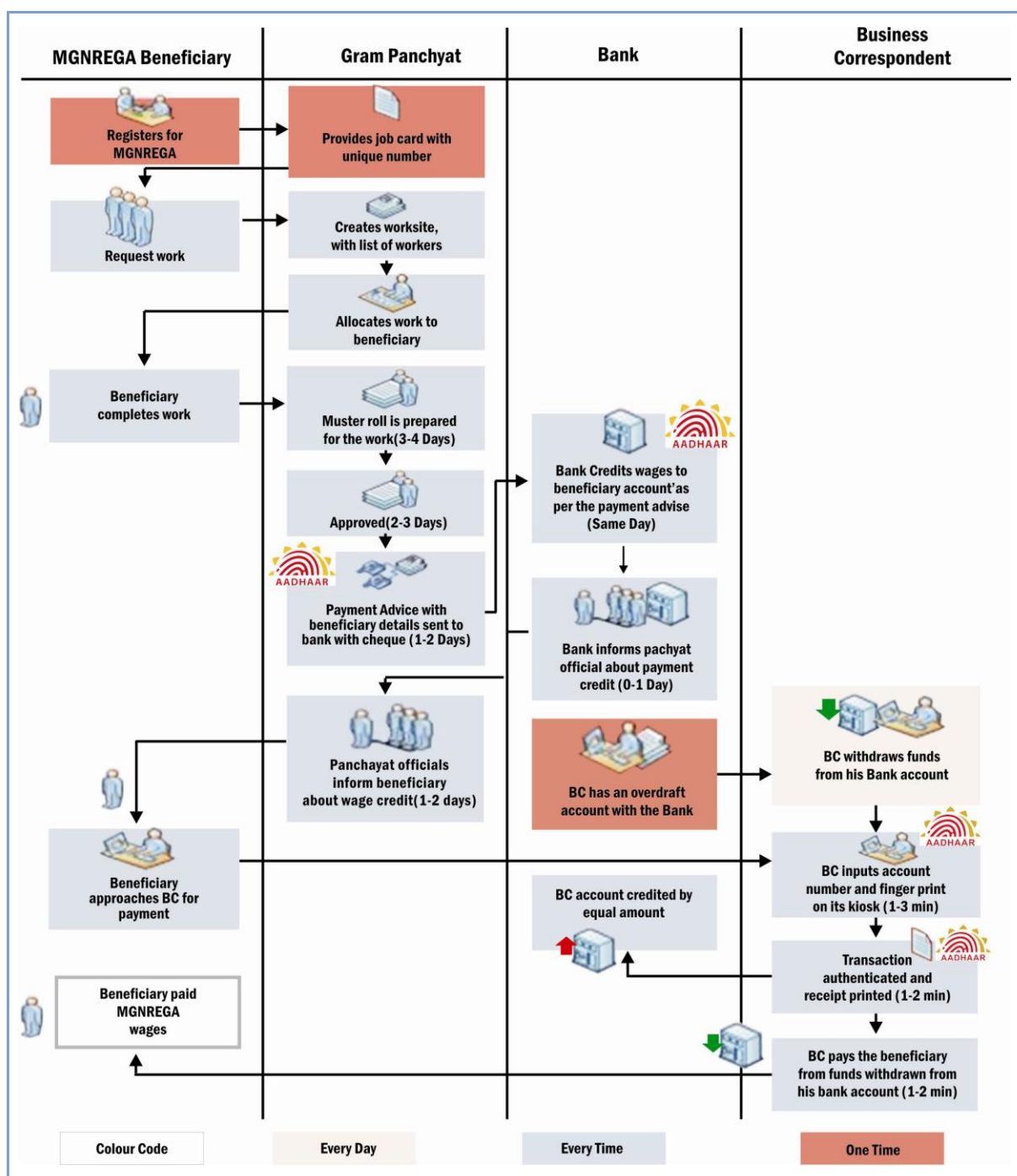


FIGURE 16: MGNREGS PAYMENT PROCESS MAP IN JHARKHAND (POST AADHAAR INTEGRATION)

The pilot shows process improvement only in the payment process post Aadhaar integration. The Aadhaar intervention has sped up the credit of wages to beneficiary accounts and has brought the banking services to their doorstep through Aadhaar based Micro ATMs. This has led to substantial savings of both time and money for the beneficiaries. But, there is no change in the overall process of beneficiary registration, work allocation, muster roll preparation, work verification, funds flow and payment advice preparation. Aadhaar integration in these processes should also be taken up to improve the overall process efficiency of the MGNREGS

### 3.1.4.8 Synergy of last mile service delivery

One of the key success factors of pilot is the availability of the banking services at the beneficiaries' doorstep. The pilot project created synergy by engaging the SCA as the BCA and in turn the VLE as BC thus increasing interoperability between them.

The state Government empanels SCAs in the state who in turn engage VLEs to deliver services through CSCs. It is similar to the engagement of BCs by the BCAs to provide services. In the areas where the CSC centers were already set up, the Micro ATM PoS were operated out of the CSCs.

The VLEs acted as the BCs and performed the banking activities in addition to services provided through the CSC. VLEs were glad to act as BCs as it provided them with additional income with the same initial investment.

This led to additional coverage of some remote areas at no extra infrastructure cost neither to the BC nor to the Bank thus increasing the penetration of the availability of the MGNREGS wage processing services. Besides, the VLE being a local resident of the area garnered confidence of the beneficiaries for BC related operations.

However the similar synergy did not work smoothly in all the areas such as the ones where more than one BC were available due to an already existing BC appointed by the local banks.

The Bank officials provided an input during discussions that these cases sometimes leads to multiple accounts of same beneficiaries leading to confusion amongst the beneficiaries while identifying the account where the MGNREGS scheme wages would be credited to. The BCs also felt that the coexistence of another BC in the same area would lead to a loss of revenue for them and acts as a demotivation factor.

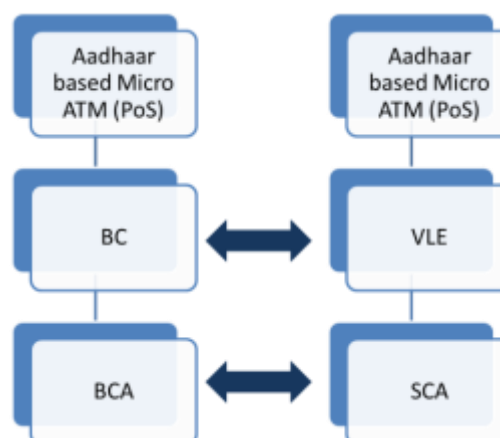


FIGURE 17: SYNERGY OF LAST MILE SERVICE DELIVERY

UTL was the SCA as well as the BCA in Ramgarh district. Besides operating the CSC, the VLE was acting as the BC and facilitating the Micro ATM based services. This has provided the ease of access to beneficiaries and increased their confidence and satisfaction which is demonstrated by the high wage disbursements done in the district.

However, it cannot be ruled out that increasing service delivery points through various channels viz. BC, Postman, CSC etc. can act a boon for the beneficiaries as it will:

- Reduce dependency on a particular BC as the beneficiary will have various options for accessing services
- Bring in a competitive spirit amongst the existing BC network and other service providers which in turn will motivate them towards quality and efficient service delivery

However, one key bottleneck is the Interoperability of Micro ATM as well as enabling Aadhaar based payment through Post Office account which is yet to be operationalized. This would further increase effectiveness in service delivery.

### 3.1.4.9 Beneficiaries Satisfaction of the overall Pilot Process

As the beneficiaries were the end users of this pilot process it was important to assess their satisfaction with the entire process. A positive response was received from them indicated by the following findings:

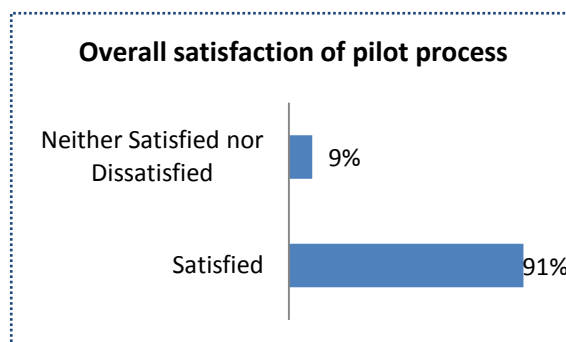
- 9 out of 92 respondents were neither satisfied nor dissatisfied with overall new process of Transactions.
- 83 out of 92 respondents were overall satisfied by adoption of new process of transactions.

The beneficiaries welcomed and adopted the new process and responded to continue to use it to avail uninterrupted benefits.

None of the respondents wanted to revert to withdrawing money through their post office accounts/ normal bank accounts (not AEBA).

This finding was further strengthened as the UIDAI, bank officials and government officials responded in favor of the new improved Aadhaar based Micro ATM wages disbursement process. Even in areas where the BCs were already disbursing payments, the official felt that BC powered with Micro ATMs at CSCs provided an added advantage as it provided:

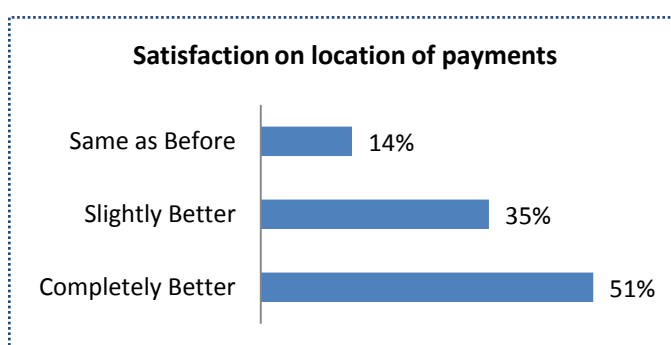
- Ease of withdrawal
- Instant authorization
- Expedited credit to account
- Arrested duplicates



### 3.1.4.10 Location of payments

The Bank branch/Post office is generally located approximately 10-15 Km away from a village. So, accessing the bank/post office account consumes the resources of the beneficiaries. With the BC available at the village level, the beneficiaries save money and time wasted in the earlier process. BCs local availability at the village level increases accessibility and coverage of the banks.

During our Survey of beneficiaries covered under pilot, most respondents informed that it cost them Rs. 12-15 on an average and half a day to visit a bank. In case they have account with post office, it takes more than a month for funds to be credited in their account and have to visit on a specific day of a week to Post office to withdraw their wages. Through the Micro ATM process, the end beneficiary payments are made at the Panchayat level by a business correspondent who is a resident of the Panchayat. In the areas surveyed the payments were being made at the Common Service Centre branded as Pragy Kendra's.



- 47 out of 92 end beneficiaries were of the view that there could be no better alternative than the present location at the village Panchayat.
- 32 out of 92 respondents felt that the location of the payment is better than the earlier locations
- 13 out of 92 beneficiaries were neutral to the location of payments as they felt the location of payments made no difference to their wage withdrawal exercise
- None of the beneficiaries were dissatisfied with the location of payments

The bank officials felt that the BCA model has not only enhanced banks accessibility in terms of distance but also in terms of availability. In their opinion, this improvement is attributed to the BCAs availability and flexible timings on request unlike the bank's branches/post offices. It has led to easy availability of funds at the same time has cut down time and resources needed for beneficiary to visit a nearby bank branch. They further added that Micro ATM based transactions with AEPS has empowered the process with time and accuracy. However they confirmed that though it has reduced cost of service delivery at this stage, but the sustainability and viability of the same has to be assessed when implemented in large scale.

The district and block authorities were of the view that the location for withdrawal of cash at the Panchayat level is convenient in comparison to the earlier options. It was felt that the beneficiary had ease of access to information about transfer of wages to the beneficiaries' accounts through the BC or the Panchayat officials at the village level itself. All the stakeholders interviewed were of the view that the mobility of the Micro ATM has allowed the BCs to operate at any place and time thus providing doorstep service delivery to the beneficiaries.

The UIDAI officials were also of the opinion that the Business Correspondents operating in the Common Service Centers (CSC) or in separate area as instructed by the bank's BCA made it possible for the end beneficiaries to easily access the financial system in their Panchayats.

**Besides being placed at convenient location i.e. CSC- Pragya Kendra, BC based Micro ATM services with its mobility has been able to provide services during times of emergency at any convenient location to the beneficiaries. Bank and BCA also feel that BC being located at local level and with mobile Micro ATM, has added effective mobility dimension to their service delivery process**

#### 3.1.4.11 Removal of External Dependency

Most of the end beneficiaries targeted by this pilot project were dependent on middlemen for aid while money withdrawals. The pilot project facilitated Aadhaar number and finger impression of the beneficiaries for the withdrawal of money through a BC. Hence, the beneficiaries did not need the assistance of the middlemen to fill bank or post office withdrawal slips.

**The Aadhaar based Micro ATM has empowered the beneficiary by bringing the bank to his/her door step, but scope for resistance from existing interface in the process exists. During the study, it was observed in Ratu block that the Mates were resisting the new pilot process. They didn't even cooperate with the assessment process.**

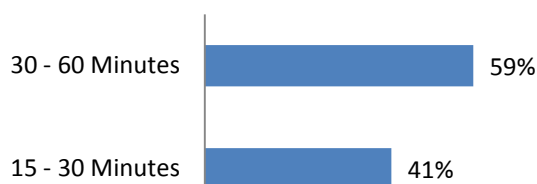
The UIDAI official as well as the state, District and Block authorities validated this finding that the constraint of the end beneficiaries due to formalities of filling forms etc. had diminished with the disbursement being made through biometric authentication. Thus, it has reduced dependency on the middlemen allowing withdrawal of funds from the end beneficiary account only by the beneficiary himself on receiving information on credit of wages by the BCs/Panchayat officials.



### 3.1.4.12 Time Taken for Withdrawal of Wages

As the part of PoC, the beneficiaries having post office accounts were asked to open Aadhaar enabled Bank account with partnering banks. Most of the pilot beneficiaries surveyed had migrated from PO to Bank accounts. There was an overall reduction in time taken for fund withdrawal with the Aadhaar enabled process. The survey captured time taken for the fund withdrawal from Bank/PO account before the pilot and during the pilot vis-à-vis time taken to withdraw money using Micro ATM.

**Time taken for withdrawal of wages from Bank / PO Accounts before pilot**

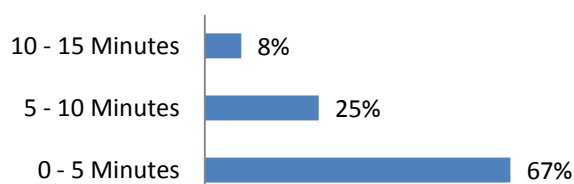


**Pre Pilot:** On an average, a beneficiary used to spend 45 minutes for fund withdrawal excluding the travel time.

- Out of the 92, 54 respondents mentioned that it takes 30 to 60 minutes for fund withdrawal
- 38 respondents said that it takes 15 to 30 minutes for fund withdrawal

**During Pilot:** However, with Aadhaar enabled Micro ATM process, the time taken for the fund disbursement has reduced to a large extent. The average time that the beneficiary spent for fund withdrawal was found at 5 to 10 Minutes compare to 45 minutes during pre-pilot.

**Time taken for withdrawal of wages via MicroATM during pilot**



- 62 out of 92 beneficiaries mentioned that it took upto 5 minutes for fund withdrawal via Micro ATM
- 23 out of 92 respondent shared that it took 5 to 10 minutes
- 7 beneficiaries out of 91 responded that it took average 10 to 15 minutes for fund withdrawal.

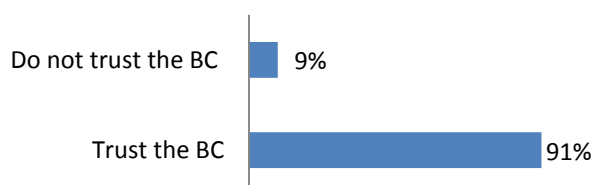
### 3.1.4.13 Beneficiaries perception of BC during Micro ATM transactions

The study also covered the beneficiaries' perception on BCs i.e. Trust, awareness and their satisfaction on the same.

#### Beneficiary Trust and Confidence on BC

Majority of the beneficiaries trusted the BC for all financial transactions using Micro ATM. This is because the BC being local resident is generally acquainted with the residents of the village.

**Beneficiaries Trust and Confidence on BC Wages Withdrawal**

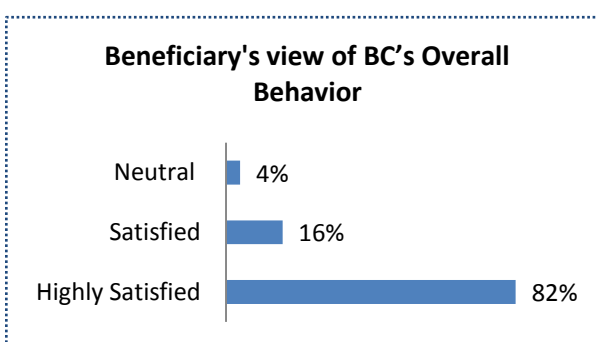


- 84 out of 92 respondents trust BCs for withdrawing money and performing transactions using Micro ATMs.
- 8 out of 92 respondents do not trust on BCs for withdrawal of Wages from Micro ATM.

### Beneficiary view on BC's Overall Behavior

In addition to the trust, the study also captured response on beneficiary's view on overall BC behavior during interaction for withdrawal of wages.

- 75 out of 92 respondents were highly satisfied with BC's behavior while making the transaction.
- 15 out of 92 respondents were satisfied while remaining 2 beneficiaries were neutral.

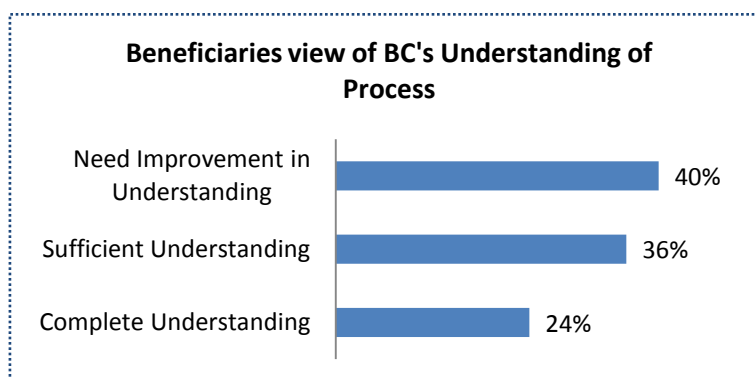


The respondents also mentioned that the BC made himself available along with Micro ATM in case of emergency or similar situations. In a view of the same, during the survey, 89 out of 92 respondents were satisfied with timely availability of BC. The mobility of Micro ATM has not only enabled benefits for beneficiaries, but also has impacted the BC in a positive manner which is reflected with his behavior and approach to the overall process

### Beneficiary view of BC's of the Process

The beneficiaries' view of the pilot in terms of the BC's understanding of the process is skewed as they perceived transaction failure as lack of knowledge of the BCs on the transaction processing. However, the following responses were received:

- 22 out of 92 respondents who felt that the BCs have complete understanding of the process involved were extremely satisfied.
- 33 out of 92 respondents who felt that BCs have sufficient understanding of the process, with some scope for improvement were satisfied.
- 37 out of 92 respondents felt that BC's understanding could be better and were dissatisfied.



On further probing it was learnt that the dissatisfaction had arisen due to unsuccessful transactions in some cases. As given above, the main issue was not the BC's understanding but failure in transaction processing due to the issues of supporting infrastructure such as network connectivity, no. of attempts, etc. These transaction failures due to network issues, attempts issues were perceived as the lack of knowledge of BCs for which transactions were failed.

### 3.1.4.14 Understanding of the transaction Process of Micro ATM

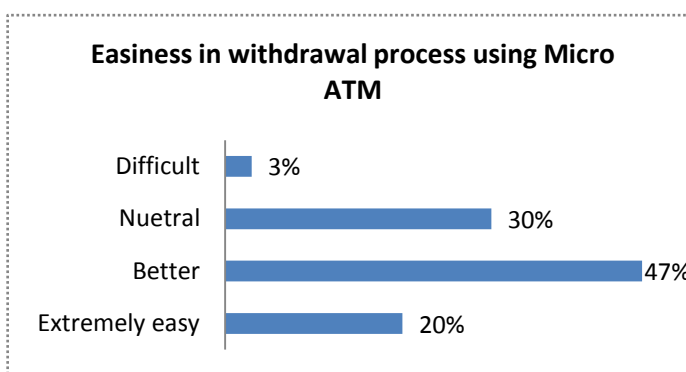
The transaction process through Micro ATMs has increased the efficiency of the current process. The time taken for completing a transaction through the pilot process at Micro ATM was lesser than the normal process as it involved instant Aadhaar based authentication through Micro ATM and transaction thereof. Due to its ease of use, the pilot process was well accepted among the end beneficiaries.

The study touched upon the easiness of withdrawal process, attempts required for successful transactions and reasons for failure as perceived by Stakeholders. Further the reasons were validated with UIDAI and NPCI to come up with actual reasons for transaction failure and necessary action to be taken thereof.

#### Easiness in withdrawal process using Micro ATM

Majority of the beneficiaries were satisfied with the overall transaction processing and did not see the pilot process adding complexity to it. They found the process faster and hassle free. Thus, it can be inferred that the Aadhaar based Micro ATM transaction processing is well accepted by the end beneficiaries. The responses recorded were as follows:

- 18 out of 92 respondents were of the opinion that the process was extremely easy and user friendly than the earlier process and were extremely satisfied.
- 43 out of 92 respondents were of the opinion that the process was better than the earlier process
- 28 out of the 92 respondents felt that payment processing through micro ATMs is not much different as earlier. Just that they don't have to travel to bank/post office as earlier. Some of the beneficiaries were already using biometric based bank account in the locality
- 3 out of 92 respondents were dissatisfied and felt the transaction processing in the pilot process was more complex. The main reason for dissatisfaction of beneficiaries as confirmed with the BC was that they were not comfortable with the technology interface and preferred the manual process of withdrawal of wages.

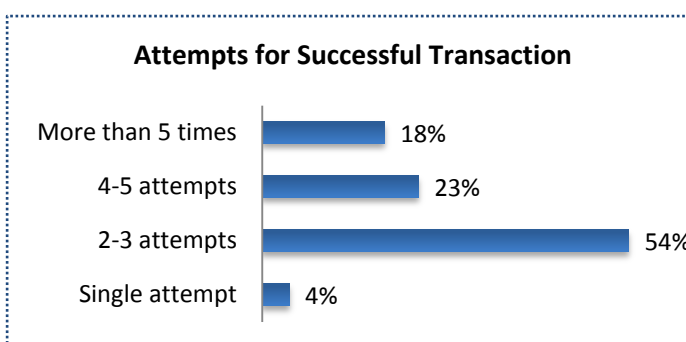


#### Attempts for successful transaction in Aadhaar based Micro ATM

The time taken for the transaction processing depends on the attempts taken to process a transaction successfully.

Even though the beneficiaries were satisfied with time taken for the pilot transaction processing, all the transactions were not successfully completed in a single attempt.

There is scope for improvement on this front and this improvement will further boost the satisfaction levels of the beneficiaries thus increasing their faith in the transaction process in turn increasing their participation in the same.



The beneficiaries as well as the BC responses noted in terms of successful transaction attempts highlighted that the transactions are generally not successful in one attempt and require an average of 2-3 attempts for completion. The beneficiary responses were as follows:

- *Only 4 out of 92 respondents could make a successful transaction in a single attempt.*
- *50 out of 92 respondents had to try at least 2-3 times.*
- *21 out of 92 respondents had to try 4-5 times*
- *17 out of 92 respondents had to try more than 5 times*

On further discussion with BC, the reason as perceived by BC for the same were ascertained:

- *Un Cleaned Hands: The beneficiaries coming in for withdrawal of cash after a day's hard work with unclean and rugged hands leading to improper capture of biometrics*
- *Data Entry Error : Data entry error in input of Aadhaar in Micro ATM*
- *Network Failure: Network failure during transactions lead to asking the beneficiaries for multiple attempts*

### **Reasons for Transaction Failure**

Though there is no analytics at present either maintained by the officials or publicly available to ascertain the reason for transaction failure, but the study attempted to capture the reason from BC, Banks and validate it during the discussion with NPCI officials. BC views the following as reasons for transaction failure:

- *Network failure*
- *Biometric rejection*
- *Device Malfunction in earlier phase*

The BCAs were also of the opinion that the transaction failures did not happen due to biometric issues but because of connectivity related issues especially in the remote areas. They felt that while it is currently addressed through installation of mobile towers in some areas or by exploring alternative options like usage of multiple service provider's SIM cards to check network availability. Hence a more robust solution was required to address this challenge.

The District and the Block coordinators were of the view that the quality of initial capture of biometrics during Aadhaar enrollment was poor, leading to a biometric mismatch during authentication. They felt that this issue was further aggravated when the beneficiaries collected their wages at the end of the day with unclean hands after a day's work. They recommended the sensitization of the beneficiaries as well as BCs on the importance of activities such as cleaning of hands before biometric authentication to address this issue.

On discussion with UIDAI officials on the device malfunction as one of the reason for transaction failure, it was highlighted that during the initial phase of the pilot, the device malfunction was identified during the testing. Further to that extensive field testing of the machines were conducted and improvements were incorporated subsequently. Also, no complaints in regards to the machines were made by the BCs/BCAs during further discussions.

UIDAI officials and NPCI officials highlighted quality of initial capture of biometrics during Aadhaar enrollment as one of the reason. During discussion with NPCI, they stated that a majority of the transactions were rejected in the first attempt resulting due to authorization risk and de-duplication errors. The detailed breakup was not made available by them but they added that tentatively 16% UIDs were rejected during authentication due to incorrect mapping.

Further they ascertained that in terms of the transaction failure for each AUA operating in Jharkhand in the pilot, approximately 16% of the total transactions performed by Bank of India and 12% of the total transactions performed by UBI were failed

To summarize, it was ascertained that unsuccessful transaction attempts in the pilot process were caused due to one of the following reasons:

- *Quality of biometric capture during Aadhaar enrollment*
- *Incorrect mapping of MGNREGS beneficiaries Job Card with Aadhaar number*
- *Network failure or low network connectivity in some areas also lead to transaction failure*
- *With unclean and rugged hands, beneficiaries coming for withdrawal of cash after a day's hard work leading to improper capture of biometrics*

- Effective Seeding has to be enabled with correct mapping of Aadhaar with MGNREGS. This has to be backed by validation with UIDAI before any transaction is affected
- Further, the State is required to improve the network availability and engage in effective sensitization of beneficiaries and other stakeholders on process of biometric authentication and necessary elements of it
- From the learnings of pilot in Jharkhand, UIDAI introduced Best Finger and Fusion Finger technology in its authentication framework to improve the success rate of authentication without compromising on quality and security

### 3.1.4.15 Beneficiary speaks

**Name: Riman Devi; Location: Dohakatu; Date of interview: 22nd December 2012**

**Story of Riman Devi from Dohakatu:**

Riman Devi, a 36 years old MGNREGS beneficiary, lives in the Dohakatu Panchayat of Ramgarh district. Her weekly MGNREGS wages of Rs. 732 were paid through her post office account earlier. To collect the wages deposited in her account, Riman Devi used to walk to the post office in Ramgarh town which is around 10-12 km from her village.

Hence, collecting the wages was a hassle for her as it required her to plan a day trip and there were delays in receipt of wages from the post offices. Some of the reasons for the delay were as follows:

- The funds transfer from the Panchayat bank account to Riman Devi's post office account took anywhere between 5 to 50 days.
- A single post office serves multiple villages with large number of MGNREGS beneficiaries.
- The village post offices can only disburse up to Rs. 10,000 a day.

However, the MGNREGS beneficiaries and the demand it caters to is more. Hence, the post offices have devised a way (unofficially) to manage this flow by assigning a particular day of the week to a particular village for withdrawal of funds by beneficiaries. So Riman Devi had to wait anywhere between 5-50 days to get wages credited to her post office account.

To avoid this issue, Riman Devi later opened a bank account with Bank of India which is linked to her MGNREGS job card. The wages for her work under MGNREGS were directly credited to her bank account when the Panchayat Cheque was presented to the bank. But again, Riman Devi's bank account is at Ramgarh branch which is around 10 km from her village. After she received information regarding her account being credited, Riman Devi travelled to Ramgarh for collecting her wages. Riman Devi was accompanied by her husband to help her at the bank as she is illiterate. The trip to the bank cost Rs. 20 per person for return journey and the travel time was around 1 hour. In addition to that, the withdrawal process at the bank took anywhere between 20 minutes to few hours depending on the crowd.

Hence to withdraw weekly wages of Rs 732, both of them had to forgo at least half day wages and additionally incur around Rs 40 towards travel expenses. A total of Rs 290 was the cost for the banking transaction incurred by Rimani Devi which is a high transaction cost in comparison to her wages

With Aadhaar intervention, she now receives payment either at her door step or at the Pragya Kendra in the village, where a BC with Aadhaar enabled micro ATM is present six days a week. She also has the option to approach the BC to get her wages as per her convenience without having to forgo her half day wages as it takes her less than 5 minutes for a transaction on the micro ATM . She doesn't even have to be dependent on someone to fill the withdrawal slip for which she had to pay some convenience charges earlier. Besides that, she doesn't withdraw the complete wages as done earlier and prefer saving some amount for future use.

### 3.1.5 Overall Summary of the Pilot in Jharkhand

#### 3.1.5.1 Coverage and Participation:

- The coverage of pilot was limited and was just an Proof of Concept (PoC), hence cannot be replicated as success model for scale up
- The pilot was Proof of Concept of technology demonstration of Aadhaar based Micro ATM and its authentication framework and was initiated and driven by UIDAI during December 2011
- Beneficiary with Aadhaar were made part of the pilot and were asked to open new bank account with participating bank. Since Post is not yet a part of APES or CBS, despite having post office accounts, the beneficiary were asked to migrate to new bank account to test the AEPS using Micro ATMs.
- Transactions in the pilot using AEPS substantially reduced post March 2012 with reduced participation from UIDAI after the technology PoC. However, Ramgarh district is an exception to it which maintained the continuity. However it needs to be noted that there has been increase in transaction from January 2013 subsequent to the DCT scheme drive.

#### 3.1.5.2 Process

- There was no change in work flow process except that of mentioning Aadhaar number in the payment advice. However the remaining process has not been altered with similar time taken to credit wages etc. An end to end integration of Aadhaar with MGNREGS would bring in overall efficiency of the process.
- However the process has impacted substantially on the payment of wages to beneficiaries. It has eased the process for beneficiaries to a great extent.
- Involvement of CSC and BC has helped in creating a synergy between both the activities and acting to the advantage of the process.
- Beneficiaries, BCs and Banks interaction were satisfied with the pilot process to a great extent. In contrary to it, there was some resistance to the pilot process from few Mates was also observed.

#### 3.1.5.3 Ownership and Initiative by the Project Stakeholders in Ecosystem

- The UIDAI, state Government and banks were the stakeholders as well as the implementation partners of the pilot project. However, UIDAI RO Ranchi was driving the pilot while the other stakeholders played a supporting role. With UIDAI RO pulling out, there was hardly any movement on the pilot process and seeding until the guidelines on DCT schemes were enabled.
- For subsequent phases for effective seeding and integration of Aadhaar with MGNREGS, effective coordination between state Nodal UID department and a proactive state administration is the need of the hour.





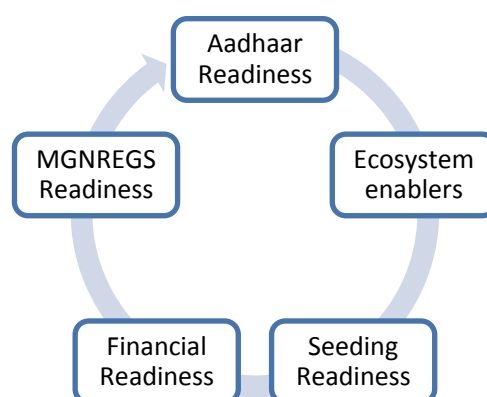


**AADHAAR MGNREGS  
INTEGRATION READINESS  
IN ANDHRA PRADESH,  
KARNATAKA, TRIPURA  
AND GUJARAT**

## 4 AADHAAR MGNREGSINTEGRATION READINESS IN ANDHRA PRADESH, KARNATAKA, TRIPURA AND GUJARAT

An assessment of readiness in Andhra Pradesh, Karnataka, Gujarat and Tripura was conducted to gain insight on the readiness of these states with regards to the Aadhaar linked MGNREGS implementation.

The study of the Jharkhand pilot project was completed before commencing the assessment of the other states. It was essential to understand the mechanism of operation of the pilot project and the challenges that are to be addressed prior to scaling up. Based on the interactions with the various departments and agencies enabling the Jharkhand pilot, the list of the Departments and Agencies to assess in the selected states was finalized. It was observed that the approach in the states was similar to the one adopted in Jharkhand in terms of BC/Banking Inclusion and Seeding Methodologies. Following are the parameters against which the states were assessed for Aadhaar MGNREGS integration.



### Aadhaar Readiness

The generation of Aadhaar number for every beneficiary is a basic premise for MGNREGS- Aadhaar integration. Hence, it was important to assess the standing of each state in terms of Aadhaar generation to ascertain its readiness for the implementation of Aadhaar linked payments of MGNREGS. Besides the generation, delivery of Aadhaar is also one key factor for effective integration. A snapshot of Aadhaar generated and delivered versus population across the study states is highlighted below.

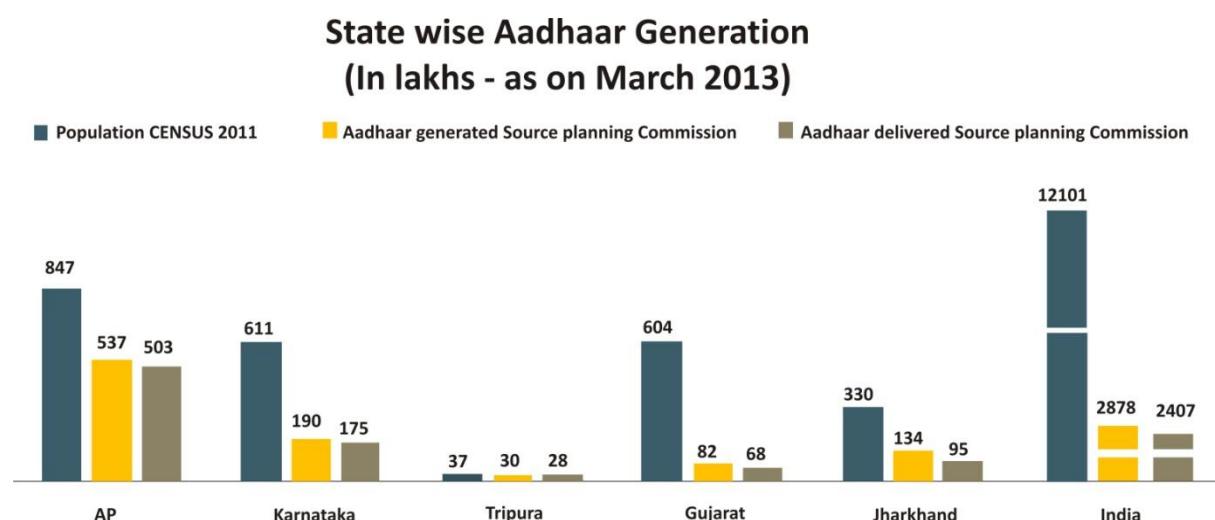


FIGURE 18: STATE WISE AADHAAR GENERATED

Source: Planning Commission and Census 2011

Though the overall coverage of Aadhaar generation across country has not achieved significant numbers and is around 25%, yet the coverage of Aadhaar across other study states are significant. Tripura is the leading state in terms of the percentage of population enrolled for Aadhaar. Till date over 30 lakh people have been enrolled for Aadhaar, which accounts for about 80% of the total state population, whereas more than 61% of the total state population is covered under Aadhaar in Andhra Pradesh.

Jharkhand, of total state population, stands at 42% Aadhaar coverage closely followed by Karnataka at 32%. Gujarat is majorly lagging with only 14 % population coverage under Aadhaar due to delayed commencement of enrolments during Phase 2 of UIDAI enrolments.

Besides the Aadhaar generation status, it was also necessary to keep tab on Aadhaar Delivery status. Across the study states, delivery of Aadhaar letter has been more than 90% of the total Aadhaar generated. This highlights that the Aadhaar coverage though important, but not a major bottleneck for seeding as maximum number of Aadhaar generated has been already delivered.

However a quick look on the seeding so far highlights that there has been low coverage in seeding so far across all the study states.

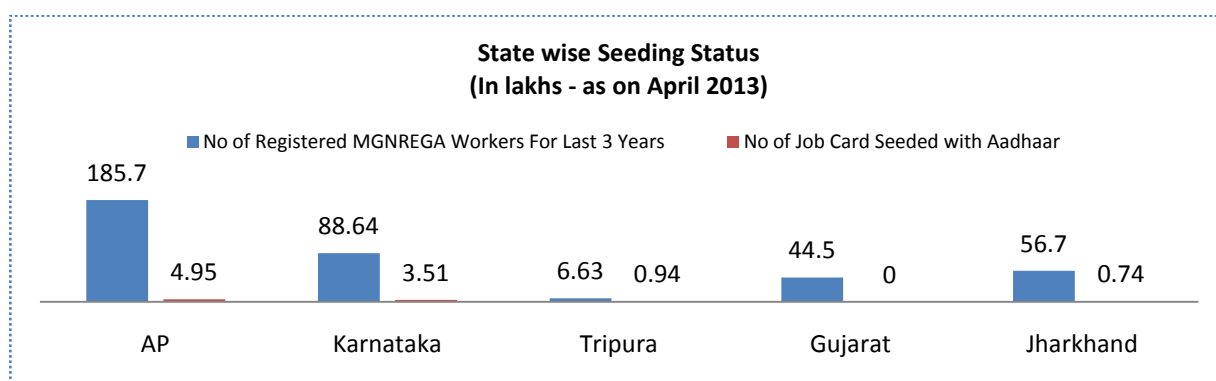


Figure 19: STATE WISE SEEDING STATUS

Source: NREGASoft

#### District wise Coverage of Aadhaar (More than 70% of the population covered under Aadhaar)

A deep dive of coverage of Aadhaar in these states gives a view of the leading districts in Aadhaar coverage across these states. This would be necessary to decide upon districts to be focused for seeding in these states. Following is the list of leading district with more than 70% of coverage of Aadhaar generation across the study states.

TABLE 12: DISTRICTS WITH MORE THAN 70 % AADHAAR COVERAGE

Andhra Pradesh	Karnataka	Tripura	Gujarat	Jharkhand
Adilabad	Bangalore Rural	North Tripura		Khunti
Anantapur	Mysore	South Tripura		Lohardaga
Chittoor	Tumkur	West Tripura		Pakur
East Godavari				
Guntur				
Krishna				
Srikakulam				
Hyderabad				

Source: UIDAI

The above table indicates that Andhra Pradesh has the maximum number of districts with more than 70% of coverage whereas Gujarat has none. A detailed coverage of all districts in these states is given in Annexure 5.

A deeper look into the high performing districts across the study States reflect that these districts are already part of Direct Cash Transfer Scheme and have been identified as Financial Inclusion districts (Phase-1 and Phase-2). Hence it makes sense to identify FI districts and Districts with maximum Aadhaar coverage to focus MGNREGS seeding and integration drive across the country

## Eco System Enablers

### 4.1.1 Nodal Department

One of the key success parameter for Aadhaar MGNREGS integration would be enabling ecosystem in the state. It has been observed during the study that proactive coordination between state Rural Department and the UID nodal Department in the state has helped in effecting seeding and integration.

For example: The Ramgarh District with an proactive administration is working in tandem with UIDAI RO Ranchi and the state UID nodal department to expedite the seeding process and enable wages disbursement using AEPS. Similar cases have been observed during visit to Andhra Pradesh and Karnataka.

The nodal departments of the study states are as follows:

TABLE 13: UIDAI NODAL DEPARTMENTS

State	UID Nodal Department	Coordination between state RD department and Nodal Department
<b>Andhra Pradesh</b>	Department of Planning	High
<b>Karnataka</b>	Department of e-Governance	High
<b>Tripura</b>	Planning and Coordination Department	Medium
<b>Gujarat</b>	General Administration Department (Planning)	Low
<b>Jharkhand</b>	Department of Information Technology	High

Source: Stakeholder Discussions

UIDAI has also appointed Manager State Project (MSPs) and State Resource Person (SRPs) in each state to assist the UID nodal departments in the implementation of various UIDAI linked initiatives.

### 4.1.2 Financial Assistance by UIDAI

In order to facilitate required infrastructure, hiring of human resources for seeding and integration of Aadhaar across schemes, UIDAI has allocated ICT fund support to every state Nodal Department and Central ministries. The states as well as Central Ministries need to leverage the ICT funds in the implementation of various Aadhaar integrated schemes in the state. The status of assistance provided for the study states as ICT as on date is as follows:

TABLE 14: ICT ASSISTANCE STATES

SN	State/UT	Approved Amount	Amount Released as on March 2013
1	Andhra Pradesh	10 Crore	50 Lakh
2	Karnataka	10 Crore	1 Crore
3	Tripura	10 Crore	50 Lakh
4	Gujarat	10 Crore	1 Crore
5	Jharkhand	10 Crore	20 Lakh

Source: UIDAI

### 4.1.3 DCT as an enabler for MGNREGS Aadhaar Integration

Direct Cash Transfer Scheme has enabled an effective ecosystem for Aadhaar ecosystem. It has enabled proactive participation of state administration, Banks, NPCI and all key stakeholders required for successful integration for Aadhaar enabled Payments and Aadhaar enabled service delivery.

The launch of DCT has facilitated ecosystem with increased stakeholder awareness as compared to the initial period of Jharkhand Pilot.

The first phase of the scheme identified 51 districts across 16 states of the country, covering almost 30 social welfare programmes of several central ministries. In the first phase of DCT, MGNREGS was not part of the selected schemes.

In the same direction, phase 2 has been announced by planning commission which has extended the coverage of DCT from 51 to 121 districts across the country.

Detailed list of districts identified and schemes identified are attached in Annexure 7, Annexure 11 and Annexure 12.

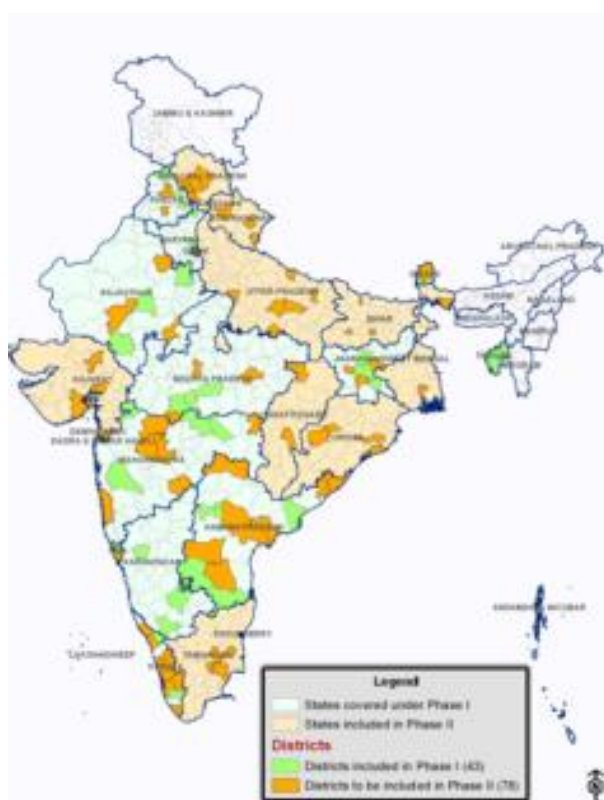


FIGURE 20: A SNAPSHOT OF DCT PILOT DISTRICTS AS IDENTIFIED BY GoI



As observed during the study, Jharkhand pilot slowed down in some areas due to the lack of participation by the Banks in opening of AEBA as well as operationalization of AEPS. However, due to the DCT, the Banks have become proactive. The following table highlights the extent of DCT coverage across the study states. A detailed District wise Aadhaar covered of FI districts is attached in Annexure- 7.

Particulars	Andhra Pradesh	Karnataka	Tripura	Gujarat
<b>Aadhaar Coverage</b>				
<b>Total Dist. vs. FI Districts</b>	13/23	3/30	3/8	4/26
<b>Districts with more than 70% Aadhaar Coverage</b>	7 nos.	3 nos.	3 nos.	None
<b>FI District within the 70% coverage</b>	7 nos.	2 nos.	2 nos.	None

The DCT drive has created awareness amongst various stakeholders on the advantages of the use of AEPS and has set in a proactive ecosystem. As a result of the drive, banks, Government entities and private players are active in seeding, enabling AEPS, actively on boarding as Authentication User Agencies (AUA) and Authentication Service Agency (ASA) to make efficient use of the Aadhaar authentication services provided by UIDAI. The participating banks and other agencies as AUA under DCT are as below:

TABLE 15: PARTICIPATING AUA IN DCT

Participation of Banks in DCT as AUA		Government Entities in DCT as AUA	
Bank of India*	IDBI Bank	CDAC *	CeG- Govt. of Karnataka
AXIS Bank*	Indian Bank	Department of Food and Civil Supplies, Govt. of Andhra Pradesh *	Department of Food and Civil Supplies, Govt. of Punjab
United Bank of India*	Corporation Bank	Government of Himachal Pradesh	Department of Post
Bank of Maharashtra*	Bank of Baroda	CSC e-Governance	Department of IT, Rajasthan
Punjab National Bank*	Syndicate Bank	Delhi e-Governance Society	Department of IT, Punjab
Indian Overseas Bank*	Canara Bank	ITandC Department, Government of Andhra Pradesh	UTI Infrastructure Technology And Services Ltd.
Oriental Bank of Commerce*	UCO Bank	SETU, Government of Maharashtra	Govt. of Daman and Diu
HDFC Bank*	Andhra Bank	Government of Haryana	
Vijaya Bank*	Ratnakar Bank	<b>Participation of Other Organizations in DCT as AUA</b>	
DENA Bank*	Catholic Syrian Bank	Vodafone	NPCI
ICICI Bank*	South Indian Bank Ltd	BSNL	Airtel
Central Bank of India*	The Federal Bank Ltd	NSDL	Indian Oil Corporation Limited
Union Bank of India*	IndusInd Bank		
State Bank of Patiala	Allahabad Bank		
TJSB Bank			

\*Registered and operational, Source: UIDAI



**Key Features: First phase DCT initiatives**

- Of the 26 selected schemes, cash transfers were rolled out seven schemes – majorly covering student scholarships, stipends, Indira Matrutva Yojna and Dhanalakshmi schemes
- MGNREGS was not part of the first phase of DCT which was operationalized in Jan 2013. However it is listed in the 34 schemes to be covered under Direct Cash Transfer by GOI. However, Andhra Pradesh has launched Aadhaar based MGNREGS wages as part of DCT in East Godavari Districts during Phase-1
- Overall, over 30,000 transactions have been reported under first phase of DBT since 1.1.2013 as on 4.3.2013 resulting into total amount of Rs. 10.37 Crore
- UIDAI is planning to provide Financial Assistance to Banks for deploying micro ATMs

The MGNREGS Aadhaar integration scheme would be able to reap benefits from the ecosystem created by the launch of DCT in the 51 pilot districts. The launch has enabled the readiness of these districts for Aadhaar integration which can be leveraged by MGNREGS scheme for Aadhaar linked payment disbursement.

- It has brought about active participation and administrative support of Government officials at the state as well as the Central level and policy reforms necessary in the implementation of the Aadhaar linked MGNREGS scheme. For instance, GR has been formulated by the Government of Maharashtra to provide subsidy on the procurement of Micro ATMs by VLEs acting as BCs.
- Due to the involvement of the Central government in DCT, individual states are able to drive, facilitate and support the efforts for Integration and its implementation. This favorable climate in the states can be leveraged to roll out the pilot process of MGNREGS on PAN India basis.
- As the DCT programme is using Aadhaar payment bridge for the disbursement of payments, NPCI and bank readiness for payments, seeding of Aadhaar numbers with beneficiary Bank accounts of various schemes and the coverage of micro ATMs is taken care of. Besides that the use of Aadhaar authentication for disbursement of payments has enabled the readiness of Authentication user agencies (AUA) and Authentication service agencies (ASA) in the states covering the pilot districts.
- As it is necessary to cover all the beneficiaries of schemes identified for direct cash transfer to be covered under Aadhaar, the UIDAI has geared up Aadhaar enrolment, its generation and actual delivery. Besides that it has been supporting the Banks and the state government in their initiatives of seeding the Aadhaar number against the Aadhaar enabled Bank accounts and scheme ID respectively
- A comprehensive dashboard presenting the current status of DCT with respect to MGNREGS is attached in Annexure 7.

#### 4.1.4 Other enablers

While going forward with Aadhaar enabled service delivery, there are other enabling factors which support the ecosystem. The states have been assessed based on these parameters.

##### **AUA/ASA readiness:**

Though for Aadhaar enabled payment, NPCI becomes the AUA and there is no need for state to have its own AUA and ASA, however having state level AUA/ASA aids to the advantage of effective monitoring of transactions, effective transaction reconciliation, reduced dependency on NPCI etc. Following is the status of state Level AUA and ASA in the study states

Particulars	Andhra Pradesh	Karnataka	Tripura	Gujarat	Jharkhand
<b>AUA- state level</b>	Dept. of IT & C	Centre for e-Gov	No	No	No
<b>ASA- state level</b>	Dept. of FCS	Centre for e-Gov	No	No	No

##### **Guidelines**

The state Government across study states has issued guidelines to District and Block offices towards the sensitization of Aadhaar and expedited seeding process. Guidelines are aimed at ensuring effective IEC implementation, Opening of Aadhaar enabled bank Account, KYR+ field inclusion and Quality and validation of data being captured.

*For example, Karnataka Government has mobilized dedicated team for seeding of Aadhaar with various schemes with instructions given to the District and Block Level Coordinators to provide assistance in this effort; Similarly, Andhra Pradesh deputed dedicated team of SeMT personnel as additional support capacity regarding Aadhaar implementation and SRDH Setup.*

The states Government, SLBC and the UIDAI have come up with various policies and incentives to encourage the implementation of Aadhaar integration with the schemes. Workshops have been conducted across study states by UIDAI RO offices and states to sensitize various stakeholders viz. departments, Banks, BCAs etc.

##### **Enabling Ecosystem key to effective implementation**

An enabling ecosystem for MGNREGS Aadhaar Integration is the key to success of scale up. Even though the DCT creates an enabling environment for the ecosystem, lack of proactive participation from State Rural Development officials and drive without a focused project oriented approach would not lead towards effective and timely integration.

## Seeding Readiness

Seeding is the key to effective integration. Seeding for Aadhaar linked payments has two aspects namely the seeding of beneficiaries' job card number against the Aadhaar number and seeding of Aadhaar enabled bank account numbers with Aadhaar number. Since majority of the MGNREGS beneficiaries have already been linked either with a post office or bank, the concern of opening of bank account for the same is reduced. However, in case a beneficiary is not having any of the account, the process of seeding would ensure that the account is opening as well as linked to Aadhaar during the course of enrolments

### 4.1.5 Seeding Approach

Seeding is a resource intensive and time consuming exercise, it is necessary to have the right approach for seeding. A broad level strategy and approach for seeding has been laid out in separate section 'Seeding'. However it was necessary to understand the current approach adopted by the states. Following section highlights seeding approach followed by study states:

#### Andhra Pradesh

- A hybrid approach for seeding through Door-to-Door survey, SRDH, PoS etc. is being used
- The data mapped is verified at the Panchayat level by the field officials post seeding
- The data mapped is also verified using Demographic Authentication by sharing with the UIDAI
- Additionally, a scheme-wise seeding approach is adopted by the state wherein the data is seeded scheme by scheme in all districts
- MGNREGS is being done by Rural Development Department in close coordination with Department of IT and Communication.
- Out of the total MGNREGS beneficiaries approximately 12 lakh beneficiaries have been seeded (out of which 1.21 lakh beneficiaries have been seeded by field verification, 10,000 using Mobile Application based seeding and remaining beneficiaries were seeded using Inorganic ways i.e. SRDH tools and technologies)
- Approximately 2.5 lakh beneficiaries are in the process of seeding.
- Department of Andhra Pradesh has already launched MGNREGS pilot in Gollaprolu block of East Godavari district along with DCT Schemes.
- 30% of the total seeding in Gollaprolu block has been done using various tools provided by state IT Department while the remaining has been done by doing door-to-door survey.

*(Source: stakeholder discussion: Rural Department officials)*

#### Karnataka

- A hybrid approach for seeding through KRDH is being used
- A dedicated web solution for seeding up to GP Level has been facilitated
- However majority of seeding is done through Web Application developed by Centre for e-Governance
- Dedicated teams have been mobilized for seeding through door to door survey
- A district-wise seeding approach is adopted by the state wherein all schemes in a particular district are seeded
- Out of the 7 Lakhs beneficiaries seeded, 1.92 lakhs beneficiary are from Tumkur and 3.28 lakhs are from Mysore
- The job card have been mapped with their Aadhaar through a door to door data

*(Source: stakeholder discussion: Rural Department officials)*

## Tripura

- State is yet to start mapping of the MGNREGS job card numbers on full scale with the beneficiaries Aadhaar, however it has experience in seeding of Aadhaar number into Register of Ordinary Residents which can be leveraged
- Unavailability of SRDH is a major bottleneck

(Source: stakeholder discussion: Rural Department officials)

### 4.1.6 Seeding Status

The seeding is in progress in these states as per the NREGASoft and as per inputs received through stakeholders discussion is given in the table below. It can be seen that there is a variance in the number reported through the MIS and the field. The reason for the variance as also observed in Jharkhand is lack of data entry operators, hardware and effective mechanism for validation. Effective mechanism must be developed for capturing the data in NREGASoft right from the source.

TABLE 16: SEEDING OF MGNREGS STATUS IN STATES

State	No. of Registered Workers Who have Come For Work in Last 3 Years (In Lakh)	Seeding status* (as per ground)	Seeding status** as on March 2013
AP	185.70	Approx. 12 lakhs	494326
Karnataka	88.63	Approx. 7 lakhs	210397
Tripura	6.62	NA	76511
Gujarat	44.49	Not started	103
Jharkhand		Approx. 48 thousand	57869

\* Source: State Rural Department

\*\* NREGASoft

### 4.1.7 KYR+

One of the basic techniques earlier envisaged for capturing MGNREGS information during Aadhaar enrolments was the inclusion of field for MGNREGS job card number in the KYR+ fields. Most of the states have MGNREGS job card number in the KYR+ fields. But during interactions with state officials, UIDAI Officials and Rural Department officials, it was ascertained that the information collected on KYR+ field during enrolments is not appropriate i.e. either data is not filled or is erroneous. Hence the data captured in form of KYR+ cannot be relied upon for seeding.

### 4.1.8 Tools and Technology Readiness

The technological enablement in the states is also a crucial factor in their readiness assessment as it optimizes the process as well as practices involved in the implementation. The implementation of Aadhaar enabled Service Delivery needs supporting IT infrastructure and solutions viz. deployment of tools like SRDH, Departmental Applications for Seeding and MIS, Aadhaar Enabled Financial Inclusion Applications etc.

#### 4.1.8.1 SRDH,e-KYC,RASF

The UIDAI plays a major role in the technological enablement as it provides various tools to augment states effort towards Aadhaar linked implementation of various initiatives. The tools provided by UIDAI are SRDH, RASF, Ginger, e-KYC etc.

**Andhra Pradesh:** In Andhra Pradesh, SRDH is owned and managed by the Information Technology and Communication Department and is already operational. It is being used for seeding, KYR+ Database, Cross-Departmental Queries etc.

**Karnataka:** In Karnataka, SRDH is implemented as Karnataka Resident Data Hub (KRDH) and is managed by the Centre for e-Governance. It is in the process of on boarding a service provider for developing Enterprise Seeding System consisting tools and technologies for Seeding, Mapping and MIS, which would act as a platform for all state Department's Aadhaar enabled service delivery.

**Gujarat and Tripura:** SRDH is not implemented in Gujarat as well as Tripura. Gujarat is currently in process of setting up SRDH which is to be managed by the Department of Science and Technology. No SRDH centric activities are initiated by the state of Tripura. However Tripura has the state's Registrar of Ordinary Residents (ROR) being seeded with Aadhaar which is the key to seeding. During a pilot in Agartala, Aadhaar was seeded with ROR and it was observed that the quality of data in ROR was of high standards. According to the state officials in Tripura, the delay in SRDH implementation is due to infrastructure unavailability and procurement required for SRDH Software setup.

In respect of other key tools, RASF has been accessed only by Andhra Pradesh so far. No other states have yet adopted RASF for seeding and integration. Similarly, e-KYC has not been used so far in any of the states

#### 4.1.8.2 Web Application for manual seeding

Though UIDAI has enabled various tools for seeding, various states have developed key tools for manual seeding. The Centre of e-Governance, Karnataka has developed a web application for organic and inorganic seeding of MGNREGS beneficiaries that provides access to information till Panchayat Level. Proof of Concept for seeding Aadhaar into the databases of one department has been completed and the corresponding changes have been made in the applications.

A similar initiative has been taken up in Andhra Pradesh and Tripura too. There are no such initiatives in Gujarat for developing Web based seeding applications so far.

**Though SRDH is not mandatory for seeding, yet a Resident Data hub expedites the seeding process. Besides that the extent of MGNREGS Aadhaar seeding in respective States is a good parameter for evaluating readiness, as it showcases that the MGNREGS officials are actively pursuing the seeding drive. With support from administration and with additional tools and technology support, the seeding can be expedited**

TABLE 17 CURRENT MGNREGS AADHAAR SEEDING COVERAGE IN STUDY STATES

Particulars	Andhra Pradesh	Karnataka	Tripura	Gujarat	Jharkhand
<b>Current MGNREGS Aadhaar Seeding Coverage</b>					
<b>MGNREGS Seeding considerable progress in how many Districts</b>	4nos (all FI Districts on top)	3 nos (all FI Districts on top)	All Districts	No considerable progress even in FI districts	8 nos. (all FI Districts on top)
<b>Seeding Coverage as %age of Beneficiaries</b>	3%	4%	14%	0%	1%
<b>Seeding Readiness</b>					
<b>Functional SRDH or Similar</b>	SRDH	KRDH	ROR*	No	Under Implementation
<b>Other Customized Manual seeding Apps</b>	Enterprise App, Mobile App	Web Based App	Basic Excel, App	None	None
<b>Other Seeding Experience</b>	PDS	PDS	ROR	No	Pilot
<b>MGNREGS in KYR+</b>	Yes	Yes	Yes	Yes	Yes
<b>Current Seeding Approach</b>	Hybrid	Hybrid	NA	NA	Organic
<b>Dedicated Team for Seeding</b>	Yes	Yes	No	No	No

## Bank Readiness

The Banks play a crucial role in the transfer and disbursement of payments till the last mile. Hence, it is important to assess the readiness and participation of financial institutions in the implementation of scheme as well as level of coordination with all the stakeholders.

### 4.1.9 Partnering with UIDAI

24 banks have currently signed MoU with UIDAI in partnering their initiatives under Aadhaar coverage.

TABLE 18: PARTNER BANKS WITH UIDAI

Partners with UIDAI			
Allahabad Bank	Andhra Bank	Bank of Baroda	Bank of India
Bank of Maharashtra	Canara Bank	Central Bank of India	Corporation Bank
State Bank of Patiala	IDBI Bank	Indian Bank	Indian Overseas Bank
Punjab and Sind Bank	Syndicate Bank	State Bank of Mysore	State Bank of India
State Bank of Bikaner and Jaipur	Dena Bank	Oriental Bank of Commerce	The State Bank of Travancore
United Bank of India	UCO Bank	Union Bank of India	Vijaya Bank

Source: UIDAI

#### 4.1.10 Partnering for AEPS

A considerable number of banks are coordinating actively with NPCI for the processing of transaction made through AEPS. The following table lists the nationalized/private as well as rural banks registered with NPCI.

TABLE 19: NPCI MEMBER NATIONALIZED / PRIVATE BANKS

NPCI Member Nationalized / Private Banks for AEPS	
Bank currently boarded	Banks currently in process of on-boarding
Bank of India	Indian Bank
Union Bank of India	UCO Bank
ICICI Bank	HDFC Bank
Bank of Maharashtra	Dena Bank
Punjab National Bank	Syndicate Bank
Axis Bank	Corporation Bank
Central Bank of India	Andhra Bank
Vijaya Bank	United Bank of India
Oriental Bank of Commerce	

Source: UIDAI

In addition to above, the following regional rural banks are also associated with NPCI:

TABLE 20: NPCI MEMBER REGIONAL RURAL BANKS

NPCI Member Regional Rural Banks		
Bank currently boarded	Banks currently in process of on-boarding	Sponsor Bank
Tripura Gramin Bank	Jharkhand Gramin Bank	RRB of United Bank of India
	Narmada Malawa Gramin Bank	
	Wainganga Krishna Gramin Bank	
	Baitarni Gramya Bank	
	Aryavart Gramin Bank	

Source: UIDAI



#### 4.1.11 Partnering with Rural Department

Every state has designated a 'Lead Bank' (Sponsor Bank) to lead the initiatives to be undertaken by the Banks and act on behalf of all the banks in the state while all the other banks act as 'participating banks'. The Lead Banks along with the participating banks partner with the Rural Department in the implementation of their initiatives. The following table shows the lead bank across the study states

TABLE 21: LEAD BANKS

State	Lead Bank
AP	Andhra Bank
Karnataka	Syndicate Bank
Tripura	United Bank of India
Gujarat	Dena Bank
Jharkhand	Allahabad Bank

Source: SLBC of each state

#### 4.1.12 Coverage of Banks

The above section highlighted the partnering banks and lead banks of the state. Though this has showcased the list of banks in the ecosystem, yet it is necessary to understand, how these banks are placed across the study states.

The coverage of the banks has been assessed through its reach and penetration in the state i.e. average density of population it caters to. This assessment is necessary to take informed decision towards further enablement of banking and alternate channels

TABLE 22: STATE WISE OVERALL BANK COVERAGE

States	Population in lakhs	No. of BCs	No. of Bank Branches	Population covered per BC	Population covered per Bank Branch
Andhra Pradesh	846.65	5989	7353	14137	11514
Karnataka	611.30	3103	5987	19701	10211
Tripura	36.71	363	278	10113	13205
Gujarat	603.83	3623	6490	16667	9304
Jharkhand	329.66	883	1798	37334	18335

Source: Ministry of Finance

It can be seen that Tripura has a high density of the availability of BCs while Gujarat has a high density of Bank branches against its population indicating the extensive reach and penetration of the banks in these two states. However it is to be noted that in Gujarat majority of MGNREGS beneficiaries holds Post Accounts compared to bank accounts for disbursement of Wages.

## IEC Initiatives

The success of any project depends on its beneficiaries' awareness and realization on the project. For this purpose, the IEC initiatives taken up by these states to promote awareness amongst the beneficiaries were assessed. It was observed that all the states were involved in the IEC propagation and engaged in similar means and media to create awareness. Following are the key IEC initiatives taken across the study states:

Andhra Pradesh	Karnataka	Tripura	Gujarat
Media Campaigning Rural Financial literacy Camps Call center by SLBC to address AEBA queries Camp based approach for	Rural Financial literacy programs on air NGO engaged for awareness camps One Bank One Gram Panchayat for AEBA	Directorate of Information and Cultural Affairs (ICA) coordinates the awareness program Accounts for DCT being linked with Aadhaar	Rural Financial literacy Camps Account Opening Drive for migratory workers / laborers Call center by SLBC

## Current MGNREGS wages disbursement Initiatives

State	Initiatives
<b>Andhra Pradesh</b>	<p>The state has been focusing its efforts in integrating IT tools with the implementation of MGNREGS but without Aadhaar enabled payment system. MGNREGS payments are done in the village using bio-metric identification process through smart cards. Each beneficiary is issued a biometric smart card (finger print technology) at the village level and bank appointed Customer Service Provider (CSP) is equipped with a smart card reader networked to the bank server. Each beneficiary is given a bank account after biometric authentication by the bank. All disbursements are credited electronically to the accounts of the beneficiaries. Banks arrange cash to the CSP using a Business Correspondent (BC).</p> <p>The state is making payment for MGNREGS through AEPS in the Gollaprolu block of the East Godavari district where the pilot for the same has been launched.</p>
<b>Karnataka</b>	<p>The current mode of Payment of wages in the state is the standard form of payment. The lead bank for MGNREGS, upon getting the Payment advice, credits the beneficiary account through Core Banking Solution (CBS). The last mile payments are being made through BCs as well as Rural Banks across the state.</p>
<b>Tripura</b>	<p>Majority of the wage payments in Tripura are being made to the beneficiaries through bank accounts of four banks namely, Tripura Grameen Bank (TGB), Tripura State Cooperative Bank (TSCB), United Bank of India and State Bank of India.</p> <p>TGB covers around 60% of the beneficiaries while TSCB makes payment to another 30% of beneficiaries. The remaining beneficiaries are paid through United Bank of India and State Bank of India.</p>

	<p>Most of the beneficiaries are paid at Panchayat level through the BCs appointed by the banks through kiosks. The beneficiaries are provided with smartcards that use biometric based authentication on the kiosks used by the BCs. These kiosks use the biometric data captured and stored locally and most of the transactions are done in offline mode through kiosks due to internet connectivity issues in some areas.</p> <p>SBI and UBI provide transactions with real time update, but it involves the beneficiary to visit the designated bank areas.</p> <p>AEPS has been initiated in Mandai block by the Tripura Grameen Bank to pay beneficiaries of old age pensions only.</p> <p>The state has already devised a roadmap for the 419 unbanked villages having population over 2000 under FI and the banks are actively engaging BCs in the areas allocated to them.</p>
<b>Gujarat</b>	<p>The state is undergoing the Pilot phase of Aadhaar integration and inclusion of BC Model in Dahod and Navsari districts and would be scaled up there on. During the recent SLBC briefing, the banks were asked to speed up opening of no-frill accounts across districts.</p>

Source: Stakeholder Discussions

## MGNREGS Readiness

### Overview

In order to assess the implementation of MGNREGS Aadhaar integration in all the states, it is important to have a holistic view of current status of MGNREGS implementation in terms of banks and post office linkage across these states. The following table highlights the status of bank penetration for MGNREGS beneficiaries. This is one of the key parameter to be taken into consideration as post office accounts are yet to be part of CBS and AEPS

TABLE 23: MGNREGS BENEFICIARIES BANK/POST OFFICE COVERAGE AS ON 2012-13
















MGNREGS Bank Readiness	Andhra Pradesh	Karnataka	Tripura	Gujarat	Jharkhand
<b>MGNREGS beneficiaries worked in the last 3 years</b>	185.69 lakhs	88.63 lakhs	6.6 lakhs	44.50 lakhs	56.70 lakhs
<b>MGNREGS beneficiaries with Active Bank Accounts</b>	5.82 lakhs	14.19 lakhs	2.35 lakhs	3.10 lakhs	2.30 lakhs
<b>MGNREGS Beneficiaries with Active Post Accounts</b>	34.36 lakhs	2.89 lakhs	0.9 lakhs	6.84 lakhs	15.60 lakhs

Source: NREGASoft

## MGNREGS Applications readiness

Tools and technology such as NREGASoft, e-FMS, e-MMS etc. are essential elements for effective operationalization of MGNREGS. The effective use of applications provided for MGNREGS management (e-FMS, e-MR etc.) must also be taken into consideration as it will also aid the end-to-end integration of Aadhaar with MGNREGS scheme. Hence, it was necessary to conduct a preliminary assessment of the status on adoption of key applications developed exclusively for MGNREGS. MGNREGS's work flow based e-Governance system; 'NREGASoft' captures all the activities under MGNREGS at Center/State/District/Block and Panchayat level. It is available in offline as well as online mode which assures 100% coverage in data digitization of the beneficiaries' details in all states. The following table shows the readiness of the states in terms of the adoption of these applications.

TABLE 24: MGNREGS APPLICATION READINESS MATRIX

	e-MR	e-FMS*	e-MVR
Andhra Pradesh			
Karnataka			
Tripura			
Gujarat			
Jharkhand			

Source: Rural Department officials: Stakeholder discussion

\* Implemented across few districts of the states

Payment advice and other financial transactions under MGNREGS are being done through eFMS application which also sends instructions to Banks for payments to beneficiaries in Andhra Pradesh and Karnataka.

Electronic Muster Verification System (e-MVS) is under the process of operationalization in the Andhra Pradesh and Jharkhand. Muster Verification officers (MVO) are appointed to visit Gram Panchayats on a daily basis to review the musters and are given specific daily targets.

e-Muster Roll (e-MR) is also implemented in all the four states except that of Andhra Pradesh while e-MVS is implemented only in Andhra Pradesh and Jharkhand. Details on implementation status of e-MR as on 1<sup>st</sup> February 2013 are given in the table below:

TABLE 25: STATUS OF E-MUSTER IMPLEMENTATION IN STATES

State	Total Panchayats	E-muster implemented in Panchayats	Implementation of e-MR in GPs (%)
Andhra Pradesh	21863	0	0.00
Karnataka	5630	5630	100.00
Tripura	1044	852	81.60
Gujarat	14184	14184	100.00
Jharkhand	4577	2756	60.20

Source: No. K-II011/2/2008-NREGA-MonTS (1742), MoRD, MGNREGS Division

### Other MGNREGS system software

While the other states use NREGASoft as primary tool for Monitoring the Scheme, Andhra Pradesh uses a transaction based software called Andhra Pradesh Rural Employment Guarantee Scheme (APREGS). APREGS uses templates for each type of work for arriving at the manpower, material requirement estimates and complete engineering calculations. It is also used for the issuance of job cards, maintenance of shelf of projects, generation of estimates, issuance of work commencement letters, Updation of muster rolls and generation of pay orders. A Mandal computer center (MCC) manned by 2 computer operators is available at each Mandal level (25 villages) and a Departmental Computer Center (DCC) at Mandal / cluster of Mandals is available for recording and accessing the information. In addition, the Department of Rural Development has also developed MGNREGS-AP portal for monitoring the implementation of MGNREGS scheme effectively. This serves as a real time transaction MIS for implementation of MGNREGS and data is exported into NREGASoft through the same.

## Overall Inference from the State Assessment

The idea behind studying the readiness of these states was to assess the states based on the enabling requirements and build on the learnings from the Jharkhand pilot. But these states are either in line as per the implementation readiness in pilot districts of Jharkhand or moving towards the same with advance technology readiness. Independently the states have already initiated Pilot projects pertaining to Aadhaar MGNREGS integration and disbursement of wages.

For example: State of Andhra Pradesh and Karnataka are already under the pilot mode for Aadhaar MGNREGS integration while states of Gujarat and Tripura are under process of setting up the support infrastructure.

Some of the states have made considerable progress in terms of seeding and bank readiness that are greatly driven by the DCT initiatives in the state where as some have established infrastructure for effective seeding. However every state has initiated seeding with support from enabling environment on its own way.

The need of the hour is to streamline the activities undertaken by each state with a target project oriented approach. A detailed strategy with step by step guidelines would not only make the seeding process systematic and time bound but also will help in building an effective MIS. A comprehensive state assessment Dashboard is kept at Annexure 8 which sums up all the readiness parameters described in previous section.





## **AADHAAR SEEDING AND INTEGRATION ECOSYSTEM**

## 5 AADHAAR SEEDING AND INTEGRATION ECO-SYSTEM

### Aadhaar enabled payment system (AEPS)

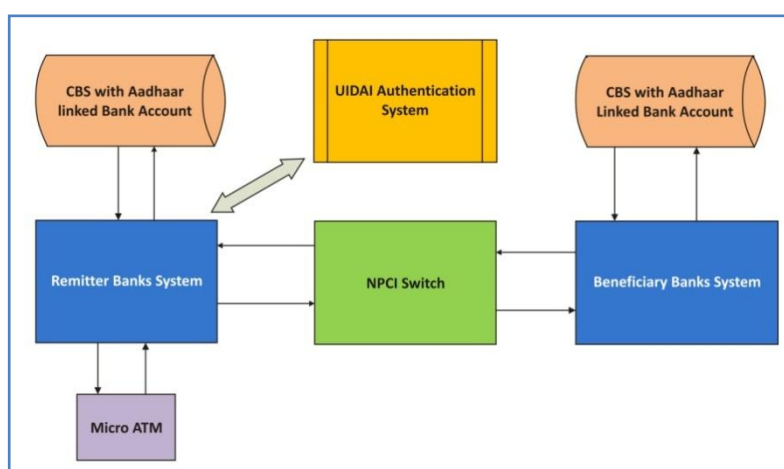
Aadhaar enabled payment system (AEPS) allows online interoperable transactions using Aadhaar enabled micro ATM through a business correspondent (BC) of sponsor bank. Thus, it enables financial inclusion by providing banking services to the rural population at the Panchayat level through bank appointed BC. The micro ATM deployed under AEPS uses Aadhaar to authenticate the beneficiary. Four basic transactions that can be undertaken using AEPS are:

- Balance Enquiry
- Cash Withdrawal
- Cash Deposit
- Aadhaar to Aadhaar funds transfer

The inputs required to make a transaction through the AEPS are

- IIN (Identifying the Bank with which the customer has an account – provided by NPCI to the bank)
- 12 digit Aadhaar
- Fingerprint captured during Aadhaar enrolment

AEPS is aimed to be an interoperable system working across multiple banks, BC network with NPCI managing the switch. UIDAI authentication system is used by the remitter bank to validate the details provided by the beneficiary at the Aadhaar enabled micro ATM. Figure 22 shows the process flow of AEPS.



In AEPS, a beneficiary is required to provide his/her Aadhaar Number

FIGURE 21: AADHAAR ENABLED PAYMENT SYSTEM ARCHITECTURE

and fingerprint impression at the micro ATM. Data packets are transferred to Bank Switch from where they are routed to NPCI and UIDAI in a digitally signed and encrypted manner through Internet Connectivity. UIDAI Authentication Server decrypts the data packets and matches against the Aadhaar Number. Based on the matching of fingerprint impression in data packet versus the fingerprint impression in backend, UIDAI Authentication Server sends a response back in the form of either 'Yes' or 'No'. Using the same route the digitally signed and encrypted response is sent back to Banks, wherein depending upon the response they can proceed to conclude the financial transaction. The NPCI switch updates the bank accounts based on the transaction done at the BC.



## Aadhaar Payment Bridge (APB)

The Aadhaar Payment Bridge (APB) developed by NPCI enables electronic benefit transfer to the beneficiary accounts using their Aadhaar in an easy and secure manner from the Government Agencies and Departments. The Government Agencies and Departments willing to electronically transfer the welfare payments to the beneficiary accounts appoint a sponsor bank having their account. The sponsor bank registers with NPCI and receives unique identification number (IIN).

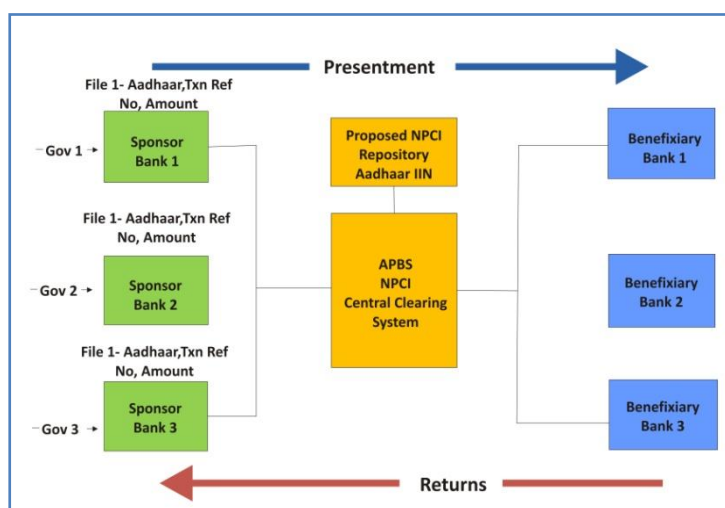


FIGURE 22: AADHAAR PAYMENT BRIDGE SYSTEM PROCESS MAP

The process map above shows the process in detail. For processing beneficiary payments through APB, the Government Department provides an e-payment file (advice) to the Sponsor bank. The Sponsor Bank uploads the APB File containing Aadhaar Number, Bank IIN, Amount and Job Reference Number onto NPCI server. The Aadhaar number is used as unique identification for validation. NPCI processes the uploaded files, prepares destination bank files and generates settlement file. The Settlement file is posted to bank accounts with RBI. The destination banks downloaded the incoming files for credit processing after the settlement file is processed. The sponsor bank account is debited while the beneficiary bank and in turn the beneficiary account is credited.

## Micro ATMs for fund withdrawal

With wage payment directly transferred to beneficiary's AEBA, it is important that the beneficiary is able to withdraw money from the account easily without travelling long distance. Aadhaar enabled Micro ATMs through BCs provides access to banking at the beneficiary's doorstep. A micro ATM is a handheld device that is used to authenticate the biometric provided by the beneficiary with CIDR (Aadhaar Authentication ecosystem) and disburses payments on successful authentication.

The Micro ATM allows beneficiaries to perform financial transactions (Deposit, Withdrawal, Funds Transfer, Balance Enquiry and Mini Statement) using the Aadhaar number and their fingerprint as identity proof (along with a Bank Identification Number for inter-bank transactions). However for a successful transaction to happen backend linking of Aadhaar with the Bank account as well as Aadhaar with the beneficiary scheme number has to be facilitated. The cash-in / cash-out functions of the micro ATMs are performed by an agent of the bank known as Business Correspondent (BC). Micro ATM brings in mobility, portability and can operate with basic GPRS connectivity. The interoperable Aadhaar-enabled payments through Micro ATM architecture is an overlay on the existing payment architecture, where authentication information is routed to UIDAI.

## Aadhaar Authentication Service

In order to use UIDAI Authentication services to validate the biometrics of an individual, following are the enabling ecosystem entities to facilitate the same. UIDAI has the following entities to deliver Aadhaar authentication service:

### Authentication User Agency (AUA):

AUA is any Government / public / private legal agency registered in India that uses Aadhaar authentication for its services. It delivers Aadhaar enabled service to the beneficiary using an authentication device. It is the principal agency that sends authentication requests to enable its services / business functions. It can connect to the CIDR by itself or through an existing Authentication Service Agency (ASA).

### Authentication Service Agency (ASA):

ASA is an entity that establishes secure leased line connectivity with the CIDR compliant with UIDAI's standards and specifications. ASAs offer their UIDAI-compliant network connectivity as a service to AUAs and transmit AUAs' authentication requests to CIDR.

To utilize Aadhaar Authentication to enable its services, the Government Departments have the following options:

- Sign up as an AUA and enter into an agreement with UIDAI
- Access Aadhaar authentication services through an existing AUA and become a sub AUA

An overview of the Aadhaar authentication operating model and the transaction process flow is illustrated below:

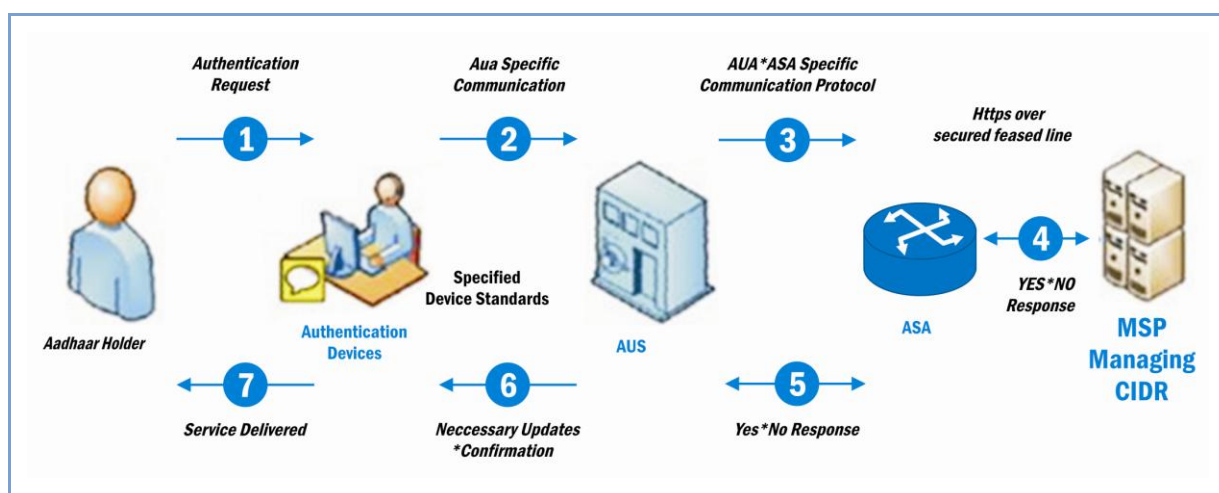


FIGURE 23: AADHAAR AUTHENTICATION BASED SERVICE DELIVERY

## SEEDING

Mapping of UID number in MGNREGS beneficiary database is one of the important tasks for going forward with Aadhaar Enabled Service Delivery (AESD) or payment of wages using Aadhaar Enabled Payment System (AEPS). It is essential to seed Aadhaar numbers with beneficiaries' Job card numbers as well as Bank account numbers to facilitate payment of wages and its disbursement based on Aadhaar number.

Mapping of MGNREGS Job card Number with bank account Number and UID in NREGASoft is an example of seeding for MGNREGS Beneficiaries. Similarly, seeding for integration of the other schemes can be done. As a result of seeding, the beneficiary can be validated using biometric authentication process driven by the UIDAI at the time of service delivery and withdrawal of wages.

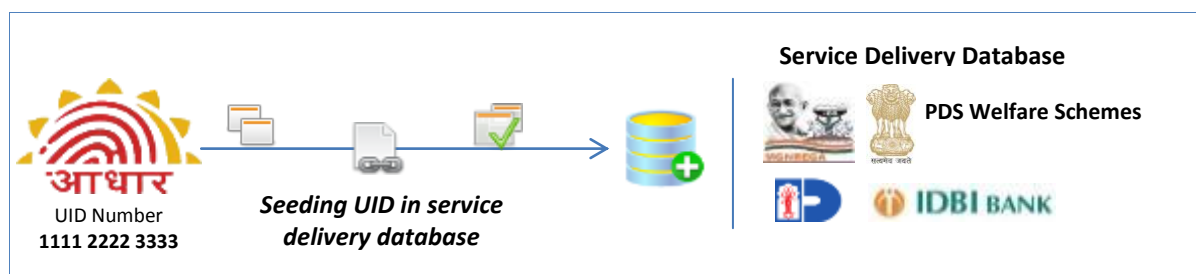


FIGURE 24: UID SEEDING

The Demographic and Biometric data collected during the enrolment is known as 'Know Your Resident' (KYR) data and supplementary data captured pertaining to the services and benefits such as PAN Card Number, EPIC No, Job Card No etc. is known as KYR+. This data collection is done by the state Registrar; hence the fields captured under KYR+ depend on the Registrars preferences and agreement.

### 5.1.1 Importance of Seeding

Seeding is a continuous process and can be done with combination of various methods, technologies and software tools. Few of the benefits of seeding are highlighted below:

- Cleaning of Service Delivery Database
- Standardization of Data
- Availability of cleaned and common service delivery database for authorization and Aadhaar Enabled Service Delivery
- Increase in reliability of service delivery database of various beneficiaries
- Scope for integration that can be used across different schemes as Aadhaar acts as a unique identification
- Development of Single Source beneficiary database

### 5.1.2 Types of Seeding

Seeding is dependent on individual Departmental readiness, level of digitized beneficiary records and availability of service delivery associated data sets according to the nature of benefits. There are two broad approaches of seeding cutting across various channels viz. Organic Seeding and Inorganic Seeding. However, it is observed that the most effective way of seeding is the use of combination of both approaches (Hybrid).

### 5.1.2.1 Inorganic Seeding (Batch-Algorithmic Seeding / Top-Down Seeding)

Seeding using tools and technologies with algorithmic, batch and top-down approach can be categorized as Inorganic Seeding. Records are processed for seeding with mapping based on certain logic, algorithms and techniques, such as Fuzzy Logic, Excel V-lookups, KYR+ Files etc. Inorganic seeding is not exact and accurate mapping as it is done using tools and technologies and in batch mode based on certain predefined logic. It has to be verified on ground to ensure that mapping is accurate. This type of seeding can be used for:

- Conducting Preliminary screening
- Mapping of beneficiaries for scheme whose financial transaction, service delivery is not depicted in seeding such as seeding with UID with EPIC Card
- Mapping of beneficiaries for scheme wherein validation/authentication is done at a later stage for example, at the time of service delivery

### 5.1.2.2 Organic Seeding (Manual Seeding / Bottom-Up Approach)

In organic seeding, the beneficiary and the seeding official/operator associate and perform the mapping of UID with Service Delivery Database. For example, the Aadhaar holder voluntarily provides his/her AADHAAR number at any of the seeding channel such as CSCs, Tehsildar Offices, District Level offices etc. or the seeding officials/operator interact with beneficiaries during the door-to-door survey for mapping of UID with service delivery database. The process of seeding could be expedited to a great extent if the scheme ID is captured as a part of KYR+ during the enrolment.

Hence according to the requirements, any of the following processes can be adopted for organic seeding.

TABLE 26: ORGANIC SEEDING PROCESS AND CHANNELS

Process	Channels
<b>Operator Driven/Assisted</b>	Door to Door Survey Point of Services Seeding Camps Call Centres
<b>Beneficiaries Driven (Crowd Sourcing)</b>	Self-Seeding using Self Service Web Portal SMS Mobile Application Email IVRS ATM/Kiosk
According to scale, availability and quality of beneficiary data, the appropriate process and channel of seeding can be implemented.	

Operator assisted process ensures utmost correctness of UID and Service Delivery Data Mapping as it provides instant authentication of the data captured under the scheme as well as UID. However, it is time and resource intensive and needs to be done in planned manner.

The following table shows holistic view of seeding selections.

Types	Operator Driven/ Assisted Channels	Beneficiary Driven Channels	Key Attributes	When to be used
Inorganic	Batch-Algorithmic Seeding using Tools like SRDH		<ul style="list-style-type: none"> <li>Un –Verified Seeding</li> </ul>	<ul style="list-style-type: none"> <li>Un-Verified Preliminary Seeding</li> <li>In assisting Organic Seeding</li> </ul>
Organic	<ul style="list-style-type: none"> <li>KYR+,</li> <li>Door to Door Survey</li> <li>Point of Services</li> <li>Seeding Camps</li> <li>Call Centres</li> </ul>	<ul style="list-style-type: none"> <li>Self-Seeding using</li> <li>Web Portal, SMS</li> <li>Mobile Application</li> <li>email, IVRS</li> <li>ATM/Kiosk</li> </ul>	<ul style="list-style-type: none"> <li>High level of Accuracy</li> <li>Resource and Time intensive</li> </ul>	<ul style="list-style-type: none"> <li>Final Verified Seeding</li> </ul>

### 5.1.3 Challenges in Seeding

A successful seeding depends on various seeding enablers, readiness parameters as well as adoption of suitable seeding methodology. However there are explicit challenges such as Quality of Beneficiary data, UIDAI Enrolment Data, Language etc. which needs to be addressed. Key challenges are mentioned below:

**Quality and Availability of Beneficiary data in Service Delivery databases:** As a prerequisite of seeding, the digitization of scheme information plays vital role. Since seeding is about mapping of beneficiary information available across two databases i.e. Scheme database and Aadhaar database, hence it is essential that the digitized beneficiary database should be of high quality to facilitate effective seeding.

Few of the key examples of Quality concerns in beneficiary data in scheme database are:

- **Lack of Standardization of data:** ex. Date of Birth mention in different formats within scheme database lacking consistency of information provided
- **Incorrect / out of date data:** ex- Data of beneficiary not updated leading to matching of old address of the beneficiary in Scheme database to that of an update address in Aadhaar database
- **Missing Mandatory KYR data:** Name not being captured in full leading to partial match with Aadhaar database, Date of Birth missing from election DB etc.
- **Language of Beneficiary data:** The language of beneficiary scheme information is in local language which might not be compatible with that of Aadhaar database

#### An analysis of MGNREGS Beneficiary Data from the Database:

One of the advantages of MGNREGS seeding with Aadhaar is the availability of digitized data of beneficiaries. However as mentioned, the quality of digitized data is the key parameter for successful seeding.

For successful seeding with Aadhaar, following are the key fields need to be aptly captured in any scheme database

- Full name
- Complete Date of Birth
- Complete address
- Pin code
- Aadhaar or EID
- Job Card or Scheme ID

However on a cursory analysis of MGNREGS Database for each of the study state highlighted following observations:

- MGNREGS beneficiary data is standardized across all states
- However the data found in the DB is partial viz.
  - Most of the name entered in the DB is either partial or incomplete
- Incomplete Address with just Village or District name mentioned
- The address of some beneficiary is not up to date

However a detailed study needs to be done to optimize the quality of MGNREGS DB which would not only facilitate in effective seeding but also would improve efficiency of the Database being maintained by MoRD across all levels

**Quality of UIDAI Enrolment KYR Data:** The data captured during the Aadhaar enrolment is not of apt quality leading to challenges in seeding. During Phase-1 of UIDAI enrolments, data captured in form of District and Village was not appropriately mapped leading to erroneous address parameters being captured.

**Availability of UIDAI Enrolment KYR Data in form of SRDH or equivalent:** The Service Delivery Departments would require Aadhaar KYR Data for seeding. The same made available either from an established state Data Hub or from UIDAI in form of RASF. A state not having a ready for use functional state Resident Data Hub is one of the challenge for seeding. The additional capabilities of SRDH help in preliminary screening of beneficiary information before door to door or camp based survey. Even some states having SRDH but not updated with UIDAI is also a bottleneck which needs to be addressed.

**Quality and Availability of UIDAI Enrolment KYR+ Data:** Additional Scheme IDs such as PAN Card Number, Job Card Number, and Pension ID etc. are being captured as KYR+ during the enrolment. Such fields were decided by the registrars so that the seeding process can be expedited however in most of the scenarios, the KYR+ data are either not captured properly or not captured at all. In case the state has KYR+ quality data, it will definitely fasten the process of seeding to large extent.

**Software and Hardware Infrastructure:** Adequate IT Infrastructure is one of the necessities of the seeding process. Capturing the seeding results and processing the same for Aadhaar enabled service delivery in secured manner expects a full fledged application/system in place. Without adequate tools, technologies and supporting IT infrastructure, successful seeding can be achieved.

**Change Management to understand the seeding anomalies and its objectives and Post Seeding Challenges:** The stakeholders involved in seeding process needs to be educated on certain anomalies of seeding.

For example:

- There is no fool-proof method of seeding. Seeding is bound to have errors and effort should be taken to build detailed process and guidelines to deal with them
- Seeding once done has to be validated and authenticated and can only be confirmed after first time authentication by the beneficiary. Hence the process should accommodate post seeding challenges in its guidelines to address so that none of the beneficiary is at loss due to incorrect seeding

## Seeding Tools and Technologies- Seeding Enablers

The role of technology is significant in Aadhaar eco-system. At each stage of seeding, various tool and technologies are being used. For example, RDBMS is used for capturing the digital records of beneficiaries, state Resident data Hub is used for capturing, mapping and validating UID with Beneficiary ID, Tablets and Handheld devices for field surveys, searching and sorting tools for processing of various arithmetical and logical algorithms such as Fuzzy Logic etc. Tools like SRDH, RASF are developed by UIDAI. Additionally, state Departments are developing independent web applications for effective manual seeding.

### 5.1.4 UIDAI Tools for seeding

Seeding of Aadhaar with MGNREGS Job card or in that case any scheme id is one of the initial and critical steps towards successful Aadhaar integration. This mapping enables weeding out of duplicate and ghost beneficiaries and also links the biometric features of a beneficiary to his/her job card thus facilitating authentication, mobility and uniqueness. The mapping facilitate Aadhaar enabled Service Delivery and Aadhaar enabled Payments. Fundamental use of RDBMS, spreadsheets, custom made applications, web applications, mobile based applications and tablet based loosely coupled applications etc. are few of the technical solutions used for seeding. In addition to that UIDAI has provided following tools to support the seeding initiative taken up by various state and departments

#### 5.1.5 5.1.4.1 State Resident Data Hub (SRDH)

SRDH is the single consolidated database containing all resident records in the state pertaining to Aadhaar numbers and KYR information. The state nodal department is the owner of the SRDH. SRDH resides with the state to facilitate effective seeding and service delivery using Aadhaar. It is equipped with tools and utilities developed by UIDAI such as KYR access, organic/inorganic seeding, web Interfaces for one-to-one seeding, web services for remote access of database, import/export utilities for bulk seeding etc. The SRDH code, application, manuals and documents are readily available with UIDAI. As on date few states have operational SRDH.

The impact of SRDH availability for seeding has been prominent. With the help of SRDH, the Department can perform following activities:

- Access Resident's KYR and EID – UID Records
- Connect SRDH via secured web-service
- Organic and Inorganic Seeding
- Import/Export Seeded records
- Batch Processing for Seeding
- Manually verify all beneficiaries with Photographs
- Service delivery with preliminary verification through SRDH

Few states like Maharashtra, Andhra Pradesh, Karnataka etc. have functional SRDH and route Aadhaar authorization to UIDAI through it. One of the key factors is regular updation of SRDH with that of UIDAI based on UID-EID XML files shared subsequent to generation of Aadhaar. However, the updation and quality of information available in SRDH depends on:

- Proactive ownership of state Nodal Department
- Availability of EID-UID mapping from UIDAI
- Updation of service delivery numbers based on the seeding methodology



- Quality of KYR and KYR+ data collected during enrollment
- Quality of beneficiary department data

### 5.1.5.2 Remote Aadhaar Seeding Framework (RASf)

Remote Aadhaar Seeding Framework (RASf) is conceived by UIDAI as a technical tool covering various seeding channels and a common mapping platform for service delivery owners in order to expedite the seeding process. It provides states with a utility to enable linking of Aadhaar numbers to beneficiary identities maintained by different schemes. The RASf application is a central platform that enables convergence of various seeding channels into a central staging area which is then accessible to seeding operators of various departments (service delivery owners) for verification of the seeding and inclusion of the same into their service delivery databases.<sup>7</sup> SRDH is not a mandatory requirement for implementation of RASf however SRDH is highly recommended by UIDAI for effective and prompt seeding. The RASf tool supports multichannel and hybrid approach of seeding. Some of the features of RASf are listed below:

- Supports multichannel of seeding such as SMS, Online, Operator Driven channels etc.
- Can be integrated with state Resident Data Hub and perform various seeding activities
- Secured user access management with role, geography and activity based security.
- Verification utility for beneficiary record seeding correctness
- MIS Reports
- Audit Trails
- Different access rights to Administrators, Seeders, state Administrators, Verifiers and Residents.

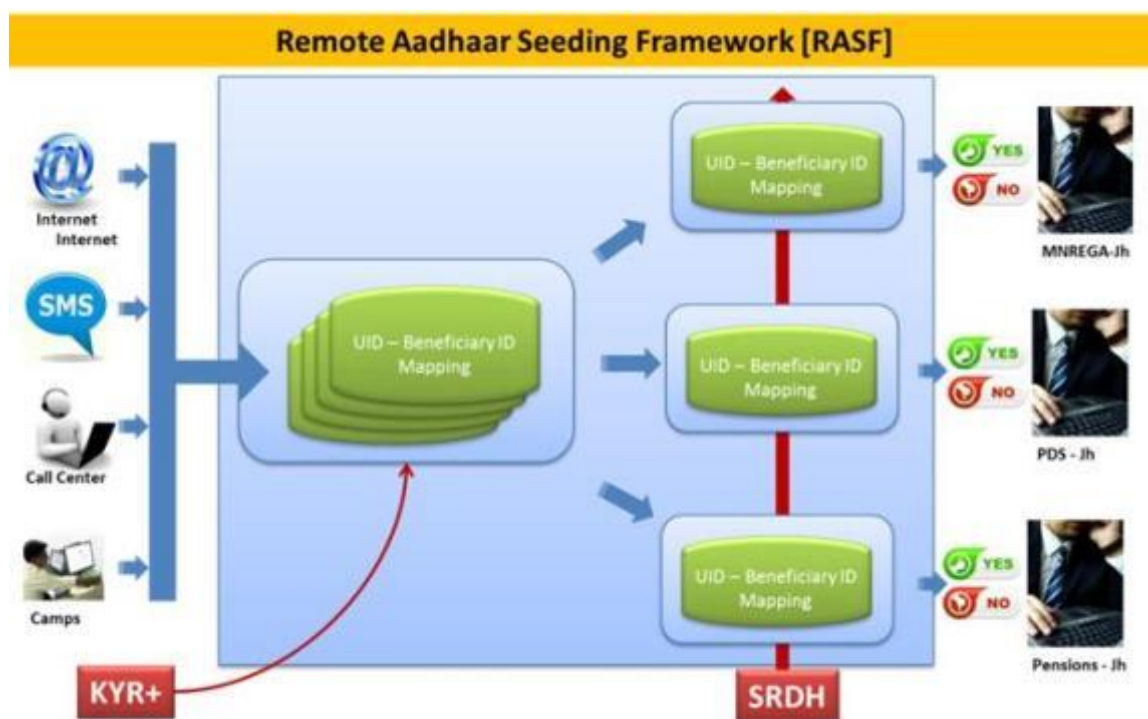


FIGURE 25 : RASf FRAMEWORK

Source: UIDAI

<sup>7</sup> RASf Paper published by UIDAI, December 2012

### 5.1.5.3 e- KYC

e- KYC is another leading tool developed by UIDAI. e- KYC enables sharing of a beneficiary's electronic Aadhaar document with demographic information collected during Aadhaar Enrolment such as Name, Address, Gender, Date of Birth, Photograph and Mobile No. instantaneously with an agency upon successful authentication of UID and beneficiary's consent. It contains only demographic information and acts as a catalyst in opening the Aadhaar enabled bank account for the beneficiaries. This can be used to screen the data captured during door-to door seeding to expedite the complete process of seeding.

A postman can capture Aadhaar Number and Biometric of MGNREGS Beneficiary for validating the mapping. On successful validation, the e-KYC service will return success flag along with demographic information of the same UID holder. e- KYC provides Identity and Access Management platform for any Aadhaar enabled service delivery.

### 5.1.5.4 Demographic Authentication Client

UIDAI has developed a client that enables department to perform authentication with demographic parameters of citizen. Aadhaar authentication is used wherein citizen's UID with demographic is submitted to Central Identity Repository (CIDR) for its verification and CIDR responds back with whether or not the verification was successful. This would not only help in preparing preliminary list before organic seeding but also data validation post seeding to weed out erroneous data.

### 5.1.5.5 e- Aadhaar Portal

e-Aadhaar Portal (<http://eaadhaar.uidai.gov.in/eDetails.aspx>) has been launched by UIDAI to enable the citizens to download their Aadhaar card online by providing details. It requires Enrolment ID (EID), Date Time of enrolment, Resident Name, Pin code and verification code (generated using Captcha) as a parameter. This can be used by MGNREGS beneficiaries whose Aadhaar is still awaited after anticipated time post to enrolment process. It can also be used in the camp based seeding approach wherein the authorities can generate the Aadhaar card for these beneficiaries online and complete the seeding process.

## 5.1.6 Customized Application Development

SRDH and RASF have been developed by UIDAI considering the challenges and need of essential functionalities in seeding. However in some cases, the need for additional functionality catering to various seeding channels such as Mobile, Web, and IVRS etc. arises for effective manual seeding. Hence various the state Departments have developed such customized application for enhancement of their seeding process.

Without tools and technologies seeding can be performed using simple excel sheets or similar application, however it requires extra effort and becomes complex in case of large volume of data. In addition, the effort for data entry and data validation adds to the complexity of seeding.

Few States are frontrunners in implementation of SRDH and seeding related applications. Andhra Pradesh uses high-end RDBMS Tool instead of UIDAI provided SRDH which has additional capabilities of Batch-processing, cross departmental KYR queries etc. Karnataka is also developing common seeding solution for all the Departments while Maharashtra has already developed handheld device based application for seeding and self-seeding frameworks

## Seeding Readiness

Seeding enablers such as beneficiary data digitization, seeding methodology, seeding tools etc. need to be identified and applied in order to perform seamless seeding and achieve effective outcomes. Seeding methodologies can vary from state to state and scheme to scheme. For example, seeding methodology for Janani Suraksha Yojna beneficiary can be completely different from that of PDS beneficiary or seeding in Maharashtra can be different from that in Meghalaya/Tripura owing to the fields to be captured, network dependency, geographical terrain etc.

### 5.1.7 Digitization of Beneficiary Data

Digitization of data is a process of converting data in digital format and storing it in database for easy data retrieval and usage. The first and foremost requirement for successful seeding is that the beneficiary database should be in digitized format. In some cases, the data is already digitized but in different formats and unstructured manner. As a practice, all beneficiary data should be stored in common structure and format. While digitization process, the following can be considered:

- Standard Database Management System should be utilized for capturing, retrieving and populating database.
- Digitization Standards should be implemented for quality of data.
- Mandatory use of Unicode and standard numerical inputs should be used while capturing/processing the data.
- Data correctness and completeness should be ensured.

### 5.1.8 Seeding Approach

Seeding can be done in two basic approaches, Organic and Inorganic Seeding. Any one of the approaches or a combination of multiple approaches can be adopted for seeding. Depending upon number of beneficiaries, quality of data, readiness of the department etc. approach has to be identified.

Department of IT, Government of Maharashtra has adopted granular approach for seeding beneficiary database with Aadhaar. While performing seeding, the beneficiary data with Scheme related ID and UID were segregated till Taluka Level mapped Taluka by Taluka using SRDH Seeding Utilities and then validated through Door-to-door surveys.

state of Karnataka has developed a dedicated application for Organic and Inorganic seeding of MGNREGS beneficiaries. The application is hosted over the web and given access of it till Panchayat level further to which door-to-door survey is being carried out for verification of the seeding.

### 5.1.9 Identification of Tools and Technologies

Effective adoption of technologies during seeding would expedite the process; ensure effective quality and validation of the data. Use of QR Codes and Tablet based applications by Maharashtra, Dedicated Web Tool for Seeding by Karnataka are few of the live examples. Some states are also using the tools developed by UIDAI such as SRDH, eKYC, Ginger etc. for seeding. These tools available with UIDAI can be adopted by the state to increase the efficiency in seeding.

### 5.1.10 Seeding Implementation Plan

For effective seeding, a detailed seeding implementation plan and strategy is required based on the following:

- Nature of service
- Status of Aadhaar enrolment
- Availability of Scheme KYC Data
- BPR and Policy Guidance
- Dedicated teams for seeding

UIDAI has published various white papers, presentations, case studies; technology papers etc. that may be used while making the Seeding Implementation Plan.

### 5.1.11 Policy and Incentives Support

Policy guidelines are necessary to bring about standardization as it details the processes to be adopted. In activities like Door-to-Door campaigns, individuals are involved to associate with beneficiaries to perform seeding activity. In the same direction, it is a good practice to involve local authorities, self-help groups, business correspondent, Sakshimandals, Anganwadi Workers, Aasha Workers, Village Level Entrepreneurs etc. for performing seeding related activities such as door-to-door survey, printing of e-Aadhaar Card etc.

The stakeholders involved can be incentivized to ensure effective and expedited seeding. Besides that guidelines to mandate use of Aadhaar based payment with certain deadlines would also help in expediting the seeding process.

Maharashtra Government awards Rs 10 per bank account opening and Rs. 10 per seeding to Anganwadi, Asha Workers and Sangram Centre Operators (VLE) as an incentive to facilitate seeding

### 5.1.12 Validation of Data with UIDAI

It is important to authenticate the beneficiary once before the actual service delivery in order to ensure that the seeding process has been performed correctly. Alternatively, the validation and verification can also be done by involving Sakshimandals, Panchayat officials, Business Correspondents etc.

## Methodologies of Seeding

Seeding process comprise of three core activities, Capture, Validate and Seed. The seeding methodology should be customized, depending on the timelines and availability of resources, tools and technologies at Department level. As the seeding is an evolving process, it is to be noted that the implementation of various technologies would be required over a period of time in order to reach 100% seeding coverage. No matter what type of seeding is used viz. organic, inorganic or combination of both seeding type, the process of seeding remains same i.e. Capture, Validate and Seed.

In wake of different methods, tools, technologies of seeding, an attempt has been made to develop various scenarios of Seeding and activities involved keeping a Gram Panchayat as the level of integration. Following scenarios has been developed based on key readiness of either a functional SRDH is in place or not. Accordingly high level activities has been described under each scenario

### 5.1.13 Seeding Scenario #1: State with functional and usable SRDH or similar set up:

	Task	Scenario/Parameters	Action points	Tools
Step 1	<b>Select District for mandated complete seeding</b> of all beneficiaries	i. Aadhaar Coverage ii. SRDH Coverage iii. Quality Digitized Data iv. Effective team in place	Preferred list of Districts	
Step 2	<b>Conduct unverified Seeding using SRDH</b>  Beneficiaries list with UID data in SRDH	i. Exact Match ii. Partial Match iii. No Match	Unverified Seeded List:  UID-Job Card (JC)	SRDH
Step 3	<b>Conduct Manual Seeding</b> on the Unverified Seeded List: UID-Job Card	Beneficiary with i. UID ii. EID iii. Not Enrolled iv. Bank/Post Account v. No Bank/Post Account	Seed i. UID-JC ii. EID-JC iii. Send for enrolment iv. Confirm Account v. Send for opening Account	e-Aadhaar Customized tools: • Tablet based • Excel based • Mobile based • Paper based
Step 4	Generate Verified Mapped list and Update in Department DB	i. Validate and Update	i. Update DB accordingly	
Step 5	Post first transaction correction	i. Incorrect mapping after transaction	i. Update DB accordingly	

#### 5.1.14 Seeding Scenario #2: State with no functional SRDH or similar set up

	Task	Scenario/Parameters	Action points	Tools
Step 1	Select District for mandated complete seeding of all beneficiaries	i. Aadhaar Coverage ii. SRDH Coverage iii. Quality Digitized Data iv. Effective team in place	Preferred list of Districts	
Step 2	Conduct Manual Seeding on the beneficiary list using Seeding Agents	Beneficiary with i. UID ii. EID iii. Not Enrolled iv. Bank/Post Account v. No Bank/Post Account	Seed i. UID-JC ii. EID-JC iii. Send for enrolment iv. Confirm Account v. Send for opening Account	e-Aadhaar Customized tools: • Tablet based • Excel based • Mobile based • Paper based
Step 3	Validate and upload data in RASF tool	i. Validate ii. Upload in RASF	i. Upload seeding list in RASF ii. Upload Beneficiary date in RASF	RASF
Step 4	Use Verifier for verification on RASF tool	i. Offline JC- Online UID ii. Online JC- Online UID	i. Confirm / Reject Seeding ii. Update Department DB	RASF
Step 5	Post first transaction correction	i. Incorrect mapping after transaction	i. Update DB accordingly	







## **CHALLENGES IN MGNREGS- AADHAAR INTEGRATION IDENTIFIED DURING THE PILOT ASSESSMENT**

## 6 CHALLENGES IN MGNREGS-AADHAAR INTEGRATION IDENTIFIED DURING THE PILOT ASSESSMENT

The MGNREGS- Aadhaar pilot in Jharkhand was successful as a proof of concept for Technology viability as well as in beneficiary satisfaction, initiating the integration with its key benefits. But the overall scale was low in coverage as well as the continuity of payment using AEBA was limited except cases at Ramgarh District. Hence this cannot be a base model for scale up. But it has highlighted key enabling Infrastructure requirement for nationwide effective integration and Operational excellence and challenges achieved during the pilot.

Though other study states have already initiated Aadhaar MGNREGS integration building on the existing ecosystem around them with their own key features, yet it is essential to understand and address the overall challenges which would lead to a successful implementation and scale up of the MGNREGS-Aadhaar integration.

### Aadhaar Enrolments, Delivery and Seeding

Time and quality factors of Aadhaar enrollments is one of the key element and seeding is the most essential and basic requirement of the MGNREGS-Aadhaar integration. The challenges faced are as follows:

#### 6.1.1 Coverage and Delivery of Aadhaar

The coverage of Aadhaar enrollments is one of foremost criteria for effective integration leading to Aadhaar enabled payment and service delivery. The low coverage under enrolment led to low participation in pilot in Jharkhand. Besides that another important factor for successful integration is delivery of Aadhaar to the beneficiaries already enrolled. Non delivery of Aadhaar was one of the major challenges identified during the pilot for which key beneficiaries were included.

However with new tools like e-KYC, e-Aadhaar in place, a beneficiary data can be seeding using EID too. Hence the core challenge remains to be addressed is Aadhaar enrolment of beneficiary. Though a separate analysis of how many beneficiary has not been done, but during seeding process, that may be analyzed and additional steps may be taken to target the same.

**Survey Observations:** *During our discussion with officials engaged in seeding, it was ascertained that there are number of cases where the beneficiary doesn't have an EID which highlights that they have not been enrolled.*

It is also mandated by GOI to take up Aadhaar based Direct Cash transfer only in Districts with Aadhaar coverage more than 80% of the population. Hence for an effective nationwide scale up, strategy around addressing the challenge of expedited coverage of beneficiaries under Aadhaar needs to be focused on.

### 6.1.2 Quality of Seeding

Seeding or mapping of Aadhaar with Job card number is the basis of the integration. The quality of seeding is dependent on various factors

- Quality of digitized MGNREGS beneficiaries data which aids effective integration
- Quality of data captured during manual mapping of Aadhaar with job card number in process of door to door survey
- Validation of data mapped for accuracy of Aadhaar number, bank account/ post office account number, and job card number for successful transaction

Due to low quality of digitized MGNREGS beneficiary records and manual nature of data collection during the business process, it gives room for incorrect mapping leading to transaction failure.

For example:

- Inorganic Seeding Quality issues
  - The name as in Aadhaar doesn't match the name in MGNREGS job card list due to limitations
  - Language in which beneficiary's data is available vis-à-vis availability of Aadhaar data in English only
- Organic – Door to Door/ Camp based Seeding Quality issues
  - Human error in incorrect noting of Aadhaar number against incorrect job card number
  - Data entry error after successful door to door or camp based collection and verification

**Survey Observations:** During the survey and discussion with key NPCI officials, it was highlighted that there were nearly 16% failure of transactions during pilot due to authentication failure. One of the reasons for the same is incorrect mapping of Aadhaar with Job card with bank account.

For an effective Aadhaar enabled Payment of wages, mapping or seeding of data with highest quality is the key, lest it would lead to transaction failures, incorrect transactions and various reconciliation errors, ineffective monitoring etc. Hence effective use technology and importantly demographic and biometric validation needs to be exercised effectively.

### 6.1.3 Low seeding Coverage

Though one of the focuses is coverage of Aadhaar, but another key challenge highlighted during the study was low coverage of seeding. Even with existing Aadhaar generation and delivery status, the seeding is comparably low.

**Survey Observations:** During our analysis of study States, it was ascertained that so far only 2-3% of MGNREGS beneficiaries have been seeded with Aadhaar.

The challenges of seeding in terms of time and resource have to be addressed with an effective and focus target oriented approach for seeding to bring the beneficiaries under the AEPS.

#### 6.1.4 Time taken for Seeding

Seeding is a time consuming and resource intensive process. One of the key issues to be addressed is timely seeding with effective use of technology and resources.

**Survey Observations:** During the assessment of pilot in Jharkhand it was observed that during seeding using door to door campaign, surveyors have to visit every beneficiary in district as per the MGNREGS Job Card list and capture the Aadhaar details. In case the beneficiary doesn't have Aadhaar, then the visit turns out to be unfruitful. After collection of data in manual mode, consolidation of data at a central level, screening validation and cleaning of the data took lot of time as well as resources.

Other study states have commenced using effective technologies before door to door survey or setting up seeding camps to streamline the process of seeding. Use of Inorganic ways before approaching beneficiaries for information and on the run validation is also being attempted to save on time and maintain quality of seeding.

However, still there is scope for improvement in use of technologies, standardization of formats and approach for making the seeding exercise effective and efficient across all states.

#### 6.1.5 Poor Biometric and Demographic Quality

The last mile delivery of service or Payments using Aadhaar based ecosystem is dependent on the biometric and demographic authentication of beneficiaries. Hence it becomes important that the biometric as well as demographic obtained during enrolment as well during the authentication should be of high quality which would enable effective authentication and in turn service delivery or payments.

The quality of MGNREGS is also to ensure that the mapping is accurate and there are no transaction failures.

**Survey Observations:** The data collected by UIDAI during Phase-1 didn't have sub district information leading to seeding challenges and mapping of scheme data. Similarly, in some cases incorrect demographic information of beneficiaries has increased complexity of seeding

### Ecosystem Implementation Challenges

#### 6.1.6 Lack of Project oriented approach and Inter department collaboration at State level (Nodal UID department and State Rural Department)

Aadhaar integration with MGNREGS for that matter integration of any scheme requires interface with multiple stakeholders. As most of the schemes are leading towards Aadhaar integration and the process of integration is similar, it has created multiplicity of interfaces with stakeholders in the ecosystem. Hence this multiplicity of interfaces not only encourages redundancy but also creates confusion, delay with no single agency taking complete ownership for end to end integration. Further it also adds up to different departments taking different approach with no standardization or effective adaptability to technology interventions and best practices followed.

- Coordination between state Rural Department and Nodal UID department for sharing SRDH, technology etc.
- Coordination with UIDAI regional Officials for expedited enrolments of the beneficiaries, Aadhaar delivery, validation of seeding
- Coordination with other agencies viz. NPCI, CGA for integration of CPSMS etc.

- Coordination to ensure quality seeding of all beneficiaries, awareness across all levels
- Interaction with Bank officials for setting up of Aadhaar Micro ATM using BC model
- Interaction with Bank officials for opening of bank accounts or linking Bank accounts with Aadhaar
- On boarding of AUA and ASA
- Interaction with state Nodal Department for UID for setting up of SRDH

During study, it was highlighted that the coordination is absent between state Rural Department and other stakeholders. In case where the state Rural Department is proactive and the coordination is well, it has yield results not only in effective from seeding to enabling Aadhaar based payment and service delivery.

#### **Survey Findings:**

For example: Though MGNREGS was not part of DCT – Phase-1 yet with effective coordination between state Rural department officials, Nodal UID department, Andhra Pradesh could launch Aadhaar enabled payment of wages to MGNREGS workers in East Godavari District.

During the assessment in Jharkhand it was observed that there was lack in timelines for integration. Further to pilot the seeding and for that case payment to seeded beneficiaries also ceased.

During assessment of Pilot in Jharkhand, it was also observed that due to proactive drive from state Administration and support from banks, Ramgarh district is ahead not only in seeding, but also in payment of wages to beneficiaries on a continuous basis.

Some states have effectively addressed the same viz. Maharashtra, state IT department is the nodal department managing end to end integration and interaction with all concerned departments and Stakeholders for most of the schemes identified for DCT. The state nodal department with help of program management team is responsible for managing SRDH, developing technology solutions for effective seeding, coordinating with banks etc.

Besides that there is no project oriented approach with specific timelines, key responsible owners of the task and a primary driver of the project from state Rural Department to MoRD to drive the Aadhaar MGNREGS integration. This has left integration of MGNREGS with Aadhaar at the behest of state Nodal Department or on specific drive for Direct Cash Transfer. MGNREGS being one of the important schemes with high volume of beneficiary wages transfer need to have a focused and project oriented approach with appropriate coordination with state Nodal UID departments and other stakeholders at a Central and state level

#### **6.1.7 Lack of ownership by State Administration Agencies**

UIDAI Regional Office has been the driver in pilot in Jharkhand as well as in other states too. May it be seeding or coordination with Banks or set up of AUA and ASA, along with support from state Administration, UIDAI has been in forefront. However end to end integration of schemes with Aadhaar is a continuous process and requires ownership from state Administration owning the scheme to drive the process and enable Aadhaar based payment and service delivery.

**Survey Observations:** During assessment of pilot in Jharkhand it was observed that the seeding was driven by UIDAI Regional office with support of state Administration. However due to lack of ownership of state Administration some districts has seen low coverage and no continuity of payments using Aadhaar based payment system whereas some districts viz. Ramgarh is doing well in terms of smooth operation of the pilot. In other study states, it was also observed that Direct Benefit Transfer scheme has enabled proactive effort from State Administration.

However, key challenge to be addressed is to instill ownership along with responsibility among state Administration to drive the end to end integration of MGNREGS with Aadhaar.

#### 6.1.8 Lack of Continuity in the process

Aadhaar integration is a continuous process and after the successful integration of Aadhaar with beneficiary account and Job card, subsequent payment of wages through AEPS is essential. Hence it is essential to drive the integration from departments end with continuity in payment using AEPS and AEBA as well as mechanism to address Post Seeding Challenges and not limited only to pilot drive.

**Survey Observations:** *Though there was no specific timelines for closure of pilot in Jharkhand, but the payment to AEBA of the beneficiaries ceased post March 2012. Except of Ramgarh District, other districts have not shown substantial progress due to reduced payment disbursal to the beneficiaries after March 2012*

#### 6.1.9 Ineffective Monitoring mechanism

One of the key success parameters for MGNREGS is its integrated MIS which has helped in mapping each beneficiary, their engagement, wages disbursed etc. However the integration with Aadhaar with various schemes has faced the challenge of ineffective monitoring mechanism. Due to involvement of multiple agencies, departments there is no single source of information or consolidation of information at a single source and real time monitoring of the scheme.

**Survey Findings:** *The study faced challenges while gathering information on pilot and transactions there of viz.*

- There is time lag and difference in information on seeding of Aadhaar and MGNREGS both in ground and that reflected in MGNREGS Soft and UIDAI
- It was difficult to ascertain exact information of number of beneficiaries seeded, number of bank accounts linked with Aadhaar, transactions done using Aadhaar Enabled Bank Account, failed transactions, etc.
- Each stakeholder has different information on beneficiaries seeded, accounts seeded, transactions done using Aadhaar Enabled Bank Account, transaction failed etc.
- Lack of apt data analytics to derive transaction patterns by beneficiaries, number of repeat transactions etc.

The existing monitoring system is not apt enough to track each activity involved in Aadhaar integration of Schemes as well as Direct Cash Transfer scheme and needs improvement and integration with single source of information.



## Financial Ecosystem Readiness challenges

### 6.1.10 Lack of proactive participation from Banks and Financial Institutions affecting accessibility

Financial institutions with support of BCs and BCA play an important role in enabling Aadhaar based payments. With most of the beneficiaries already mapped either with a bank account or Job card makes the process easy for linking to Aadhaar. However during the study of pilot, it was observed that there is lack of proactive participation of banks in the process of enabling Aadhaar based transactions. Financial institutions are not proactively engaged in enabling the integration viz.

- Accepting Aadhaar as KYC and enabling Aadhaar based bank accounts ( no frills accounts ) or linking existing accounts with Aadhaar
- Deployment of adequate Micro ATM and engaging BCs
- Coordination between NPCI and Bank for facilitating interoperability by updating beneficiary information in Aadhaar Payment Bridge
- Coordination between local bank branches and headquarter
- Updating Aadhaar payment Bridge on beneficiary account information for interoperability

**Survey Observations:** During assessment of Pilot in Jharkhand, it was observed that due to proactive support from banks, Ramgarh district is ahead not only in seeding, but also in payment of wages to beneficiaries on a continuous basis. However the BDO from Hazaribagh said that they faced support issues from ICICI Bank and had requested for a nationalized bank to be made the sponsor bank in the district.

Even coordination with NPCI and Banks for updating Aadhaar Payment Bridge has not been effective.

Though most of the BCs and Banks during the pilot appreciated the Micro ATM based model, yet the sustainability and viability of the same is yet to be established.

### 6.1.11 Limitations in linking beneficiaries accounts with Aadhaar and last mile delivery

Once effective seeding of MGNREGS and Aadhaar is complete, the next important step is to link beneficiary account with Aadhaar for enabling Aadhaar based payment and withdrawal using Aadhaar enabled Micro ATM. However there are multiple challenges in the same which has been observed during the study

- **Post office accounts are kept out of the Aadhaar enabled Payment system:** As on date Post office accounts are not integrated for Aadhaar enabled Payment system using Aadhaar based Micro ATMs. With more than 50% of the MGNREGS beneficiary's accounts with Post office, it is a major bottleneck to be addressed for successful integration for payment of wages linked to Aadhaar.
- **Limitation on Interoperability of Aadhaar based Micro ATMs:** The existence of BC model is not new to many states. BC based transactions were already in place but Aadhaar enabled payment system using BC operated Aadhaar enabled Micro ATM and Aadhaar as unique identifier is the difference. This brings in mobility and empowerment to beneficiaries. Though Micro ATM has brought the bank to the door step of the beneficiaries, but the dependency on few participating banks has increased. To address the same it is necessary to have interoperability of Aadhaar enabled Micro ATMs which is currently not enabled.



- This has not only increased dependency on a few participating bank and BC network, but also has constrained the scope of increased POS from enabling ecosystem keeping post office and other participating banks out of the AEPS. The effective utilization of existing post office accounts as well as Postman acting as BC for payments and service delivery would enable an existing ecosystem and address the challenge of dependency on few banks and BCs

**Survey Observations:** *As most of the beneficiaries in Jharkhand and other states have post office accounts for MGNREGS wages payment, either they were left out of the pilot or were asked to open new accounts for payment of wages with participating banks viz. Bank Of India, Union Bank Of India, ICICI Bank. For the purpose of the pilot, their beneficiaries migrated to new bank account. This not only limited the coverage of pilot but also has created dependency on few participating banks, BCs and BCA for receiving MGNREGS payments*

Meanwhile India Post is working towards integration of post office accounts for Aadhaar enabled payment system and Core Banking Solution and NPCI is in process of enabling interoperability of Aadhaar based Micro ATMs.

## Effective end to end integration of MGNREGS still not addressed

### 6.1.12 Integration is limited to ease of disbursement of wages to beneficiaries only

The current integration of MGNREGS and Aadhaar as assessed in pilot and initiated in some states is limited to enabling disbursement of wages through Aadhaar enabled bank account. Though this has addressed the delay attributed towards time taken in credit of wages to post office accounts, ease of access to banking channel for beneficiary, but still other areas of potential delays is yet to be addressed. For example: Job Demand, Worksite Attendance, Workdays monitoring, automatic preparation of Muster roll, and other activities in workflow which can be facilitated by effective integration with Aadhaar.

**Survey Observations:** *Though MGNREGS has various applications aimed towards complete automation viz. e-MMS, e-FMS, e-MR, but they are in process of implementation. Currently there is no plan for integration of these applications with Aadhaar.*

Integration of Aadhaar with e-MMS, e-FMS would bring in uniqueness in the process by identifying beneficiary right from the source and utilization of the same information in rest activities in the workflow which in turn would increase efficiency of the process.



## RECOMMENDATIONS

## 7 RECOMMENDATIONS

The study assessed the operational challenges and enabling infrastructure requirements for effective and successful Aadhaar MGNREGS integration. Based on the learnings and best practices observed, key recommendations are laid down with specific action points required.

### Recommendation #1: Target Oriented Seeding in selected Districts

**Initiate Targeted oriented seeding in selected Districts of study states and scale up based on learning and success thereof (Focused drive only for MoRD scheme):**

#### 7.1.1 Issues to be addressed:

- Low Seeding percentages even with well coverage of Aadhaar enrolments
- Coverage of Aadhaar enrolments

#### 7.1.2 Action Enablers

**Enabler #1: Identify key districts in study states to commence Seeding drive exclusively for MGNREGS and key schemes of MoRD**

The focus seeding drive should aim not only at seeding MGNREGS but also at other key schemes managed by MoRD. The parameters for selection of District are based on Aadhaar coverage, enabling environment and proactive rural department.

Particulars	District Selection Parameters	Values
District Selection Parameters	FI District	Yes
	Coverage of Aadhaar Enrolments	More than 70%
	NREGASoft Seeding Status	Highest
Block Selection Parameters	NREGASoft Seeding Status	Highest

Being an FI district under Direct Cash Transfer scheme provides an 'enabling environment' with participation of Banks, State administration, UIDAI and State Nodal Department etc. It also ensures expedited Aadhaar enrolment coverage too. Similarly coverage of Aadhaar enrolment as a parameter suggest maximum coverage of beneficiaries during seeding process and with additional MGNREGS MIS seeding status, it ensures an existing involvement of State rural department in driving the seeding process.

Based on the above parameters, following are the key districts for target oriented seeding for MoRD. The seeding in this district would not only enable Aadhaar enabled service delivery and payments but also facilitate in detailing standard guidelines for nationwide scale up.

State	Districts
Andhra Pradesh	Anatpur, Chittoor and East Godavari
Karnataka	Tumkur and Mysore
Tripura	West Tripura and North Tripura

Gujarat is kept out of the list, as the coverage of Aadhaar is too low to commence seeding. Instead of Gujarat, Maharashtra can be taken as one of the State with Wardha being the district based on the above parameters. Similarly, one key district has been added in Andhra Pradesh, because of the proactive effort of launching Aadhaar based MGNREGS wages payment i.e. East Godavari

**Enabler #2: Coordinate with State UID Nodal Department for targeted based enrolments of MGNREGS beneficiaries**

**Enabler #3: Devise a standardized approach for seeding with improved seeding technologies, EID based seeding etc.**

*A District Selection Dashboard has been created for dynamically selecting District for seeding based on the above parameters and placed in Annexure-7.*

## Recommendation #2: Develop Standard Operating Procedures

**Develop High level and detailed Geographic Specific Standard Operating procedures for nationwide seeding for MGNREGS as well as other rural development schemes**

### 7.1.3 Issues to be addressed

- Quality of Seeding
- Time being taken for effective Seeding
- Resource (Individual) inventiveness

### 7.1.4 Action Enablers

Organic Seeding is ideal for final and verified seeding however it needs to be supported by effective use of tools, techniques, procedures and guidelines for expediting with high quality of seeding. Hence it is necessary to build robust high level and detailed step by step guidelines addressing every scenario of seeding on ground.

The Standard Operating Procedures would address the following:

- Detailed guidelines for each Scenario of Seeding not just for MGNREGS but also for other key rural development schemes
- Analysis on anomaly of existing digitized MGNREGS Database and process to clear legacy entries and standardization in new entries

- Evolve with standardized process and tools for Manual seeding based on best practices followed
- Detailed geographic specific approach and methodology for seeding
- Proper validation mechanism to ensure quality of seeding
- Process to be adopted for Post seeding reconciliation

The Standard Operating Procedures should be evolved from the past experience of focussed drive of seeding and Aadhaar integration across selected Districts. Hence it is necessary to commence seeding at selected districts as well as develop the Standard Operating Procedures based on the ground level experience. A broad level strategy for seeding has been detailed in previous section 'Methodologies of Seeding'.

A pilot on payment using MGNREGS wages and Pensions using India Post accounts and Aadhaar authentication has been successfully attempted. Despite not being in CBS and AEPS, the transactions were successful. However key highlights were that, the success rate of pension disbursement was on a higher scale than that of MGNREGS Wages payment. The reasons ascertained was that of improper validation mechanism of MGNREGS seeding which is leading to transaction failures due incorrect mapping of Job card, Aadhaar number and Post Office accounts. Hence the necessity to have a detailed SOP for seeding is further ascertained

### **Recommendation #3: Set up a Central MoRD Aadhaar Integration Team**

**Set up a Central MoRD Aadhaar integration team to drive the end to end integration with project oriented approach and Capacity building for State, District and Block level officials for effective integration**

#### **7.1.5 Issues to be addressed**

- Lack of Project oriented approach and Inter department collaboration at State level (UID Nodal Department, IT Department and State Rural Department)
- Lack of ownership by State Administration
- Ineffective monitoring of the initiatives

#### **7.1.6 Action Enablers**

- Set up and engage Central MoRD integration team to drive the seeding across selected districts and look after the following activities:
  - Drive capacity building efforts, target oriented seeding, coordination with all stakeholders at State, District and Block level, Monitoring
  - Develop High level and detailed Geographic Specific Standard Operating procedures for nationwide seeding for MGNREGS beneficiaries
  - Identify and coordinate with participating banks, PO and other key stakeholders
  - Facilitate on-boarding of AUA and ASA specific for MoRD
  - Identify integration of other key rural development scheme
- Target to complete the seeding of MGNREGS with Aadhaar for selected districts in a span of 6 months and develop SOP during the course of the seeding
- Target to complete end to end integration with seeding across selected States in a span of 1 year

## Recommendation #4: Engage to maximize participation of Banks

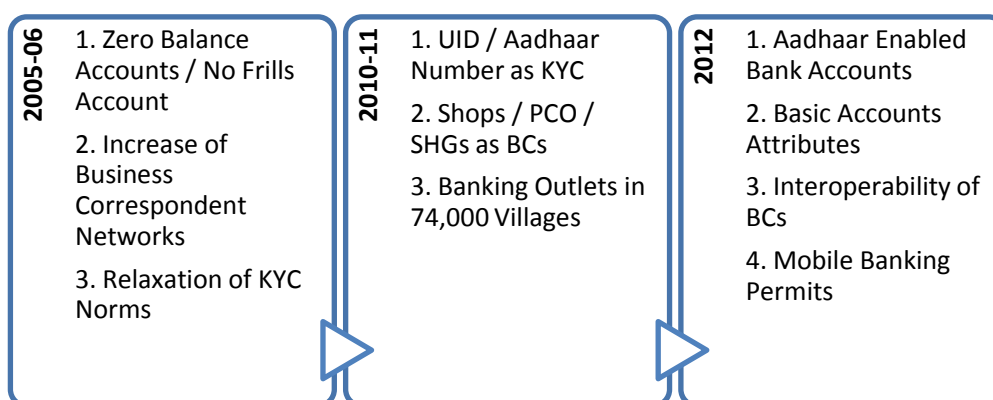
Participating banks play a key role in Aadhaar enabled service delivery. Hence MoRD need to engage with Ministry of Finance, RBI and SLBC to enforce RBI guidelines on Participating bank aimed at proactive participation of banks in the integration process

### 7.1.7 Issues to be addressed

- Lack of proactive participation from Banks and Financial Institutions for
  - Opening of no-frills Accounts
  - Linking Aadhaar with bank accounts
  - Deployment of BC
  - Updating APB with NPCI
  - Accepting Aadhaar as KYC
- Interoperability of Micro ATMs and BC operating for different banks affecting the Accessibility to beneficiaries

### 7.1.8 Action Enablers

Government of India, through its various agencies, has announced many key regulations over the years with an aim to improve financial inclusion. However for proactive participation of banks in the integration process, MoRD may need to engage with Ministry of Finance and RBI to ensure enforcement of these guidelines. Snapshots of guidelines issued are as follows:



- Engage with State Level Bankers Committee (SLBC) and lead bank to encourage proactive participation of banks and define Service Level Agreements with banks

The regulation on Interoperability is to come into effect as a Committee of Banks, BCs and Government officials are in the process of preparing interoperability guidelines to facilitate technological and procedural interoperability.



## Recommendation #5: Constitute a Study on effect of Aadhaar integration

**Constitute a study on analysis of exact savings, nature and quantum of additional expenses to be incurred for Post seeding transaction error (limited period) and incentives for the Stakeholders not just for MGNREGS but for all schemes under MoRD**

### 7.1.9 Issues to be addressed

- Business viability and sustainability of BC model a concern in long run
- Incentive mechanism for participating agents of change

### 7.1.10 Action Enablers

There is no second opinion that Aadhaar integration with MGNREGS and specifically payment of wages through Aadhaar enabled bank account and withdrawal through Aadhaar based Micro ATM would bring in efficiency as well would direct savings to Government exchequer. However a detailed study on the quantum of savings should be instituted during the focus seeding drive of selected district so as to accommodate post seeding challenges as well as devise an incentive mechanism structure for participating entities (stakeholders)for change. This would help in nation- wide scale up of the integration.

Incentive for the Participating agents for change:

- Subsidy for Micro ATMs
- Incentives for successful seeding for each entity such as inclusion of local officials, VLEs etc.
- Incentives for BCs, Postman etc.

**Post Seeding challenges:** Unless the first transaction is administered and confirmed by the beneficiary, it is difficult to assess the success of the seeding. Due to incorrect mapping of beneficiary account, the error in credit of wages is possible. However, this would be a one-time exercise as on confirmation of at least one transaction to beneficiary account confirms the successful mapping and post to it correction can be made thereof upon the need. Hence provision should be made to accommodate claims so as to ensure that no genuine beneficiary is at disadvantage due to technology integration. The purpose of the study is to administered and assess the quantum of post seeding challenges and capture step by step guidelines to address the same in SOP.

## Recommendation #6: Other Key Recommendations

- Engage with seeding even for post office accounts with an option to the beneficiaries to open a bank account
- Engage with India Post for expediting PO enabled AEPS
- Conduct a study on assessment of connectivity
- Evaluate option for offline–online Aadhaar authentication model using Micro ATM and other relevant information technologies.

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## **CASE STUDY**

## 8 CASE STUDY: AADHAAR INTEGRATION INITIATIVES BY MAHARASHTRA

Government of Maharashtra has been in forefront of Aadhaar implementation and its integration with various Schemes for Aadhaar enabled service delivery and Payment disbursements. Aadhaar was initially launched in Tembli village in Nandurbar district of Maharashtra in Sept 2010 which was subsequently rolled out in a phased manner across the State. Currently, the State has not only covered around 44% of its population with Aadhaar enrollment but also has deployed fully operational SRDH which facilitates robust seeding solutions such as Mobile based Self-seeding, Web based Self Seeding to the participating Departments for effective Aadhaar Enabled Service Delivery.

As on March 2013, the State has completed approximately 5 Crores of Aadhaar enrolment out of the total population of 11.5 Crores. As a Registrar, Govt. of Maharashtra has generated 4.19 Crores UID, which is the largest by any single Registrar. In initial phase of the Aadhaar integration with various Schemes for Aadhaar based Service delivery and Aadhaar based payment of benefits, the State had envisaged 8 pilot projects across schemes viz: Pension Schemes, UID for Faster Salary, Scholarship disbursements etc. (Annexure 9).

However with UIDAI and Government of India mandate of priority Aadhaar integration of Central Sector and Centrally Sponsored Schemes (Annexure 10) for Direct Cash Transfers across FI districts in India, the State had renewed its focus in achieving the same. The State additionally has also identified key schemes for integration i.e. PDS, MGNREGS, Sanjay Gandhi scheme.

In an attempt to achieve the above objectives, the nodal department for Aadhaar in the State, Directorate of Information Technology (DIT), and Government of Maharashtra has enabled effective ecosystem for Aadhaar integration. Initiatives like One District One Aadhaar Integrated Pilot Project, One Aadhaar Ready Village in every Taluka in Every District i.e. 100% seeding of Aadhaar and beneficiary details across Schemes endorses overall Aadhaar readiness of the State.

### **Seeding Approach and Methodologies**

Seeding being the first and foremost activity for effective integration and enablement of Aadhaar based service delivery and payment, the State has adopted innovative ways of seeding. Initially door to door survey approach was adopted with pre-defined beneficiaries list and Aadhaar generated list for seeding the Aadhaar and other scheme details for integration. However the process was substantially improved with technology enablement which not only expedited the seeding process but also ensured effective data quality and validation. Some of the key technology enablers used by the State for seeding are as follows:

### **State Resident Data Hub and U-SRDH**

As an early initiative, the State had deployed SRDH in State Data Centre. More than 4.2 Cr. residents' data is present in the SRDH as on 31st Dec 2012, which is the highest in the country. SRDH played a very critical role in overall seeding readiness of the State by enabling first level of screening before the actual door to door verification process. Moreover, the State is currently implementing Usable SRDH (USRDH) in order to make SRDH usable by various departments for effective Aadhaar integration with schemes. The initiative aims to create a Usable version of the SRDH (U-SRDH), which will have data (including address) completely standardized and cleaned. The U-SRDH details would be leveraged for Aadhaar Integration across Central and State Government Schemes and e-Governance initiatives.

## **Self-Seeding**

One of the most impactful uses of technology in the State is demonstrated in its implementation of the Self Seeding Services which is also one of the unique examples of execution of crowd sourcing in the Government Programme. Using such services, any resident of the State can seed his or her Scheme centric ID (for example, PDS, MGNREGS, Driving licenses number, pan number etc.) via SMS from his or her registered mobile number or Web. The request from the resident in prescribed format is processed and the results are notified back to user on immediate bases.

### **Android platform based seeding client**

The State has also developed an Android platform based seeding client which is compatible with any Android based tablet and Smartphone and effective during door to door survey and seeding process.

With the help of above technology enablement viz. SRDH, U-SRDH, BI Tools, etc. the State is in forefront of effective seeding and integration of identified Schemes with Aadhaar. Following approach is being followed for effective seeding of scheme identifier with that of Aadhaar and subsequently maintained at U-SRDH.

- Initial Inorganic Seeding of beneficiaries with exact match through sync between list of beneficiaries from departments and Aadhaar generated list from SRDH.
- Next, use of fuzzy logic with the help of other demographic information available for the remaining set of data
- Finally, door to door survey and physical verification to cover the balance set of data for seeding as well as verification of seeding completed in inorganic process
- Once the seeded list is prepared, the same is shared with UIDAI, NPCI for effective validation and updating APB for Aadhaar based Payments.

### **Aadhaar, Bank and FI Enablement**

Aadhaar coverage, Aadhaar delivery, seeding and Aadhaar based bank accounts is key to integration of Schemes with Aadhaar. Though Seeding is being taken care of, the State has effectively adopted ways to address the other areas too.

To ensure increased Aadhaar coverage in focus district or for target beneficiaries, target based enrolment camps were set up. Viz. Enrolment camps at educational institutions to cover Post Metric Scholarship beneficiaries. Even though delivery of Aadhaar is a key concern and also key criteria for seeding, the State had aptly used UIDAI enabled e-Aadhaar at CSC and camps to generate Aadhaar card of beneficiaries and conduct the seeding exercise aptly. In wake of this, the State had released GR for Citizens to get printouts of their respective Aadhaar letters at Rs 2 at any of the Mahae-Seva Kendra's (CSCs, Setu, and Sangrams etc.). Instructions have also been given to enable seeding with EID without waiting for UID generation.

For enabling Aadhaar enabled Bank account for each beneficiary for Aadhaar based payments, State has identified lead banks for every District as per the SLBC guidelines who in turn would take charge of priority opening of bank account in respective Talukas/ Village with the support of other participating banks. FI camps were set up by participating banks for opening of Aadhaar enabled Bank accounts for the beneficiaries.

## **Other enablers**

### **Dedicated UID integration Team and empowerment of District Administration:**

The State has its dedicated UID team with Centralized Project Management Office, District Guardian Consultants to drive Aadhaar integration for each district and development team for creation and maintenance of the U-SRDH, development of evolving seeding technologies and solutions using Facial Recognition and Image Processing based seeding etc. The State has also consciously empowered District Administration for effective integration.

### **One Aadhaar Ready Village in every Taluka in Every District:**

For effective integration, District Administration and District Guardian Consultants have adopted Village Sweep approach. 6-7 villages across each Taluka where enrolment is more than 90% is identified for 100% seeding for at least 2-3 schemes from the selected 34 CSS schemes and PDS, MGNREGS, Sanjay Gandhi scheme.

### **VLE BC Synergy:**

The State has also enabled subsidy for VLE operating CSC to set up Aadhaar based Micro ATM, which is an important incentive towards enabling last mile service delivery.

### **IEC:**

The IT Department is not only leveraging the web platform for Aadhaar Sensitization and IEC for integration but also using well planned campaigns over Social Networking platforms, Local Radio and Television medium, Local Transport etc.

### **Key Achievements towards Aadhaar Integration:**

The constant effort of the State towards Aadhaar integration has yielded effective results. Total Beneficiaries seeded for Direct Cash Transfer as on March 2013 across few Schemes are as follows:

TABLE 27: BENEFICIARIES SEEDED IN MAHARASHTRA

Schemes	Total Beneficiaries Across FI districts	Total UID Seeded So far
Indira Gandhi Matritva Sahyog Yojana (IGMSY)	27571	3633
Janani Suraksha Yojana (JSY)	10080	1486
Other Scholarship Schemes	9645	1342
National Means cum Merit Scholarship Scheme (NMMSS)	10705	3659
National Scheme for Incentive for The Girl Child for Sec Education (NCIGCSE)	10021	1740
Post Matric Scholarship	179277	50278
Pre- Matric Scholarship	18752	1663
Grand Total	<b>266051</b>	<b>63801</b>

Source: Government of Maharashtra- IT department

As part of FI initiative, more than 44,000 scholarship applications from Districts of Amravati, Mumbai, Mumbai Suburban, Nandurbar, Pune, Wardha districts have been provided the Scholarships by leveraging the UID Platform. The detail of the same is mentioned below:

TABLE 28: DETAILS OF SCHOLARSHIP SCHEME

e-Scholarship Scheme for OBC and SC Details for 6 FI Districts as on March 2013						
	Application count	UID Count	EID Count	UID Seeded into Bank account	Applications linked to Bank Account	Students to whom scholarship disbursed using AEBA
<b>Amravati</b>	59828	22420	12701	12656	59828	13168
<b>Mumbai</b>	8669	3681	1398	2163	8669	2459
<b>Mumbai Suburban</b>	11037	4716	1747	1747	11037	5084
<b>Nandurbar</b>	10918	2369	1099	1009	10918	7014
<b>Pune</b>	55268	22468	15314	11256	55268	6127
<b>Wardha</b>	41593	17353	4357	8164	41593	10547
<b>Total</b>	187313	73007	36616	36995	187313	44399

Source: Government of Maharashtra- IT department

Wardha district was awarded Skoch Foundation Award under the category of “Access to Banking and Financial Services” for its UID linked FI project for the Janani Suraksha Yojana which is an example of end to end Aadhaar enabled fund transfer and cash withdrawal using Aadhaar enabled Micro ATM via BC Model. In the continuation of the same, the following six centrally sponsored schemes have been launched:

- Janani Suraksha Yojana
- National Means Cum Merit Scholarship
- Post Matric Scholarship for ST students
- Post Matric Scholarship for OBC Student
- Post Matric Scholarship for Children of those engaged in Unclean Occupation and
- Post Matric Scholarship for SC students

## 9 CASE STUDY: ANDHRA PRADESH BIOMETRIC SMARTCARD SYSTEM: NREGS

*(The Case study is an extract of Accenture work on Government to Person (G2P) Payment Initiatives Study, India, submitted to International Finance Corporation)*

### **Objective:**

In Andhra Pradesh (AP), the Department of Rural development started out on a project with the objective of:

- Increasing the outreach of mainstream banking and financial services to the financially excluded population through the use of technology based solutions
- Ensuring the efficient and timely transfer of Government benefits to the poor
- Minimizing the possibility of fraudulent payments

### **Approach:**

The AP Government decided to create branchless banking infrastructure across the state with a banking outpost in each village. The Banks would also be required to deliver payments for MGNREGS and the National Social Assistance Program (NSAP) through these outposts.

Banks were empanelled for each Gram Panchayat to open accounts and issue Smartcards to the poor. These Smartcards store biometric identification (all 10 fingerprints) of the account holder which is used to verify the identity at the banking outpost when required. Banks were responsible for registering Beneficiaries under both schemes in their service areas and for creating the biometric ID database.

Each banking outpost is a Customer Service Point (CSP) which is attached to a Business Correspondent Network (e.g. FINO, ALW, ZMF etc.). The CSP is outfitted with a Point of Service Terminal which is used to verify the identity of the Beneficiary at the time of making payments. The total cost of setting up the infrastructure and appointing and maintaining CSPs is the responsibility of the Bank. Typically, the CSP services are entrusted to a member of an SHG/ Community based organization chosen by the Village SHG Federation, in order to ensure a degree of trust in the CSP.

### **Fund Transfer Process:**

MGNREGS payments are required to be made within three days of receipt of an E-Payment order while the NSAP payments are made between the first and fifth day of each month. The AP Government issues instructions to the Banks authorizing payment and provides a list of Beneficiaries and the authorized amount.

The Bank then credits the individual account of the Beneficiary. The Bank is then responsible for ensuring that Cash is physically transported and delivered in the village to the CSP in a timely manner.

The CSP sits at a pre-designated site, usually Government premises such as the Gram Panchayat building and makes the disbursement to the Beneficiary after verifying their biometric details.

### **Contractual Arrangements and Fee Structure:**

Each of the impaneled Banks is bound by an agreement with the Government of AP and is paid a commission of 2 percent on the total value of payments made. These payments are released in two tranches: 1 percent with the E-Payment order and 1 percent after it has been verified that both MGNREGS and NSAP payments have been made within mandated time limits. In case there have been delays in the payment, penalties are automatically calculated and deducted from the amount paid to the Bank.

In return, the Bank pays 1.75 percent commission of total value of payments to its BC service and Technology partners (e.g. FINO, ALW). This BC partner is responsible for ensuring actual payment and disbursement of the cash, i.e. transferring the cash from the District Bank to the CSPs, security, etc. The CSP receives 1 percent of the total value of payments as commission for providing the cash disbursement service. In addition, the bank pays a one-time fixed sum of INR 55 to the BC partner for issuance of the Smartcard. Initially, the RBI bore this cost, however, from June 2010; this cost was passed on to the Bank.

The Bank itself retains 0.25 percent of the total value of payments for its expenses, i.e. maintaining the accounts on its Core Banking System, transferring adequate cash to District level Bank Branches, monitoring the cash disbursement process, paying for the Smartcards, covering penalties applied if any and recovering the cost of setting up infrastructure in its service area. The Bank is also wholly responsible for making payments to Beneficiaries who have not yet been registered or provided with a Smartcard.

### **Progress:**

This process has been initiated across the State, with more than 157.05 lakhs for Beneficiaries enrolled so far. Stakeholder discussions lead to the conclusion that it has been mostly successful, though challenges remain. Beneficiaries are provided with financial services closer to their homes, the Government is assured of timely payments and Financial Service Providers are able to recover costs, at least partially.

TABLE 29: ENROLMENT PROGRESS FOR AP SMARTCARD PROJECT

Enrolment Progress	NSAP	NREGA	Total
No. of GPs with Enrolment Initiated	20,345	20,058	20,345
Target (Number. Of Beneficiaries)	62.23 lakhs	141.35 lakhs	203.588 lakhs
Number of Beneficiaries Enrolled	53.30 lakhs	103.75 lakhs	157.05 lakhs
Number of Cards Issued	50.57 lakhs	90.29 lakhs	140.87 lakhs
GPs with Payment Initiated	16,976	16,088	17,865
Amount paid since Inception	2597 Crores	5686 Crores	8284 Crores

Source: Department of Rural Development, Government of Andhra Pradesh

### **Services Offered:**

Banks under the MGNREGS in AP offer RBI mandated No-Frills Accounts to Beneficiaries. These accounts offer the following benefits:

- Easier opening and KYC norms
- Zero account balance requirements
- Free withdrawal/ deposit transactions
- Bank Passbook
- Business correspondent services
- Biometric ID-enabled Smartcard

These accounts, though capable of taking deposits, do not offer deposit transactions. This is due to the mandate from the Government of Andhra Pradesh that all MGNREGS funds be **disbursed** within three days of receipt of pay order by the Bank. In order to avoid penalties levied for non-disbursal of funds, Banks do not encourage Beneficiaries to withdraw their wages in part or to make deposits in these accounts.



However, some banks, such as Axis Bank, have begun to offer Beneficiaries a second full-service savings account attached to the MGNREGS account. Axis Bank estimates<sup>8</sup> that approximately 60,000 such savings accounts have been opened for MGNREGS and NSAP Beneficiaries in AP. Other than the services listed above, these accounts also offer deposits and remittance services.

### **Sustainability of Model:**

Discussions with banks and Business Correspondents working with the AP Smartcard project on the viability of the model have shown that at current levels of cost and revenue, the model is considered sustainable. On the basis of stakeholder discussions, it was found that the primary business model for the Bank and the BC is as follows:

TABLE 30: COST AND REVENUE MODEL OF AP SMARTCARD MODEL

	Bank	Business Correspondent	Customer Service Point
Fixed/ One-Time Costs	<ul style="list-style-type: none"> <li>• Cost of Smartcard</li> <li>• Cost of Appointment of Business Correspondent</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of Enrolment of Beneficiaries</li> <li>• Cost of Point of Transaction Device</li> <li>• Recruitment and Training of CSPs</li> </ul>	<ul style="list-style-type: none"> <li>• Nil</li> </ul>
Variable Costs	<ul style="list-style-type: none"> <li>• Cost of Cash Handling till District Level</li> <li>• Cost of Account Maintenance</li> <li>• Cost of Core Banking System Licenses</li> <li>• Cost of Administration</li> <li>• Cost of Reconciliation of Wages Disbursed and Reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of Operation (Rent, Electricity, Connectivity Etc.)</li> <li>• General Administration Costs</li> <li>• Cost of Cash Handling from District to GP level</li> <li>• Cost of Salary and Incentive for CSPs</li> <li>• Maintenance of Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Time Cost of Disbursal of Wages</li> <li>• Reporting and Reconciliation of Cash and Wages Disbursed</li> </ul>
Net Revenues	<ul style="list-style-type: none"> <li>• 0.25 percent of Wages Disbursed</li> </ul>	<ul style="list-style-type: none"> <li>• 1.5 percent of Wages Disbursed</li> </ul>	<ul style="list-style-type: none"> <li>• INR 300 per Month</li> <li>• 0.25 of Wages Disbursed</li> </ul>

Source: Discussions with Stakeholders

<sup>8</sup> Estimate based on discussion with the Axis Bank Project Manager for the AP Smart Card Project

### **Conclusion and Impact on Challenges:**

The AP model of biometric Smartcards has been largely successful in achieving its objectives and in mitigating some of the challenges faced by NREGS in promoting financial inclusion:

- The project has provided greater convenience to Beneficiaries in accessing banking services; it has removed the opportunity and time cost of withdrawing wages
- The AP model has helped reduce delays, as banks have to face penalties in case wage and pension disbursements are not made in time
- As Business Correspondents are usually residents of Gram Panchayat, Beneficiaries have greater comfort in transacting with them. The Business Correspondents also help Beneficiaries become more familiar with banking procedures
- This Project has effectively provided incentives for bank to offer better services to NREGS Beneficiaries and has made the BC model more sustainable
- The project has also helped reduce pressure on rural bank branches

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## ANNEXURES

## 10 ANNEXURES

### Annexure 1: Stakeholder interaction details

Stake-holders	Jharkhand	Andhra Pradesh	Karnataka	Tripura	Gujarat	Maharashtra
<b>State officials</b>	<ul style="list-style-type: none"> <li>Secretary Rural Development</li> <li>Commissioner NREGA</li> <li>UIDAI Cell NREGA</li> <li>MIS Officer NREGA</li> </ul>	<ul style="list-style-type: none"> <li>Director, MGNREGS</li> <li>Director, ITandC</li> <li>Director, Communication</li> <li>SeMT Teams</li> </ul>	<ul style="list-style-type: none"> <li>Director, MGNREGS</li> <li>Special Officer, Rural Development Panchayat Raj SeMT Team</li> <li>SeMT Teams</li> </ul>	<ul style="list-style-type: none"> <li>Joint Secretary Rural Development Department</li> <li>Director Social Welfare Deptt.</li> <li>Asst. Engineer, Rural Development Department</li> <li>Nodal Officer MGNREGS</li> </ul>	<ul style="list-style-type: none"> <li>Programme Officer MGNREGS ,</li> <li>Rural Department</li> <li>State IT Department</li> <li>SeMT Team</li> <li>Dy. Secretary, GAD (Planning)</li> <li>Under Secretary, GAD (Planning)</li> <li>SRP UID</li> </ul>	<ul style="list-style-type: none"> <li>PS, DIT, Govt. of Maharashtra</li> <li>Head SeMT, Govt. of Maharashtra</li> <li>Wardha Officials</li> <li>Sello Officials</li> </ul>
<b>District officials</b>	<ul style="list-style-type: none"> <li>DC Ramgarh</li> <li>DC Saraikela-Kharsawan</li> <li>District Program officer Ranchi</li> <li>District Program officer Ramgarh</li> </ul>					
<b>Block officials</b>	<ul style="list-style-type: none"> <li>BDO Ramgarh</li> <li>BDO Ratu</li> <li>BDO HazariBagh</li> <li>Block Program Officer Ratu</li> <li>Block Program Officer Ramgarh</li> </ul>					

Stake-holders	Jharkhand	Andhra Pradesh	Karnataka	Tripura	Gujarat	Maharashtra
<b>UIDAI</b>	<ul style="list-style-type: none"> <li>• ADG UIDAI RO Ranchi</li> <li>• Deputy Director UIDAI RO Ranchi</li> <li>• MIS Officer UIDAI RO Ranchi</li> <li>• Consultants , UID HQs</li> </ul>					
<b>NPCI</b>						<ul style="list-style-type: none"> <li>• NPCI Office</li> </ul>
<b>Banks</b>	<ul style="list-style-type: none"> <li>• Branch Manager BOI Ramgarh, Ratu</li> <li>• Zonal Manager BOI Ranchi</li> <li>• Section Officers BOI Ramgarh, Ratu</li> <li>• Manager ICICI Bank</li> </ul>			<ul style="list-style-type: none"> <li>• Manager, Tripura Grameen Bank</li> <li>• Manager, TRIPURA STATE COOPERATIVE BANK</li> <li>• Manager United Bank of India</li> </ul>		
<b>BC/BCA</b>	<ul style="list-style-type: none"> <li>• Manager JAPIT</li> <li>• Area Manager UTL</li> <li>• Payment In-charge UTL</li> <li>• MIS Officer UTL</li> <li>• National Manager FINO</li> <li>• Area Manager Ranchi FINO</li> <li>• BCsTigra, Tarup, Puriyo, Dohakatu</li> </ul>					

## Annexure 2: Study Tools - End Beneficiary Survey Form

Respondent's Details
Respondent Number
Respondent's Name
Respondent's Village/Panchayat
Respondent's Block/District

### MGNREGS payments related: applies to all end beneficiaries.

This section captures the data pertaining to when and where is the payment made for the work performed under the MGNREGS scheme.

*To be answered by all the end beneficiaries.*

1	Are you a beneficiary of the MGNREGS scheme where you receive payments for the work done by you under this scheme?	1. Yes	2. No
2	Since how long have you been a beneficiary of the MGNREGS scheme?	1. 0-6 Months 3. 1-2 Years	2. 7-12 months 4. More than 2 years
3	Are you aware of the per day remuneration stipulated for your category of work under the MGNREGS scheme?	1. Yes	2. No
4	Do you keep a record or remember how many days have your worked under the MGNREGS scheme in a particular month?	1. Yes	2. No
5	Do you calculate how much payment is due to you for your work under the MGNREGS scheme for a particular month?	1. Yes	2. No
6	How frequently are you paid for your work performed under the MGNREGS scheme?	Weekly Bi Monthly	Monthly Once in more than 2 months



7	Where do you receive your wages under MGNREGS scheme?	1. Your Home.	2. Your Village/Panchayat		
		3. Your Block Headquarters	4. Your District Headquarters		
		5. Your worksite	6. Others, specify		
8	Is there a fixed date or a day for receipt of your wages under MGNREGS scheme?	1. Yes	2. No		
9	<i>Skip this question if answer to Question 8 is No.</i> By Which date of the month do you receive your wages under MGNREGS scheme? Collect the date/day of month.				
10	Have you ever received short payment(less than due amount) for your work under the MGNREGS scheme?	1. Yes	2. No		
11	<i>Skip this question if answer to Question 10 is No.</i> How many times have you received short payments for your work under MGNREGS scheme?	1. Once in 10 payments	2. Once in 5 payments		
		3. Once in 2 payments.	4. Every time.		
12	Have you ever faced a delay in the receipt of your wages under MGNREGS scheme?	1. Yes	2. No		
13	Skip this question if answer to Question 12 is No. How many times have you faced a delay in the payment of your wages under MGNREGS scheme in the last six months?	Specify the number of times			
MGNREGS payments related: applies to all end beneficiaries. <i>This section captures the data pertaining to how the payment is made for the work performed under the MGNREGS scheme.</i>					
This section to be answered by all the end beneficiaries.					
14	How do you receive the payment of your wages under MGNREGS Scheme?	1. Cash	2. Cheque/DD		
		3. Bank account Transfer	4. Any other way.		
15	<i>Skip this question option 3 is selected for Question 14.</i> Who gives you the wages under the MGNREGS scheme? Collect the name of the official				
16	How many officials/people do you need to meet to get your payment for the MGNREGS scheme approved?				

<b>17</b>	Please rank your satisfaction with the following factors relating to the receipt of payments under MGNREGS scheme?	<i>Rank 1-5 (1 completely satisfied, 2- Sslightly satisfied, 3 Neither Satisfied or Dissatisfied, 4- Slightly dissatisfied, 5- completely dis-satisfied) Questions 17.1- 17.3</i>	
<b>17.1</b>	Please rank your satisfaction with the Frequency of Payments relating to the receipt of payments under MGNREGS scheme?		
<b>17.2</b>	Please rank your satisfaction with the Delay in Payments relating to the receipt of payments under MGNREGS scheme?		
<b>17.3</b>	Please rank your satisfaction with the Short Payments relating to the receipt of payments under MGNREGS scheme?		
<b>18</b>	Do you have a bank account?	1.Yes	2.No
<b>19</b>	<i>Jump to Question 30 if Question 19 is answered as No.</i> Do you have a passbook for this bank account?	1.Yes	2.No
<b>20</b>	Since when do you hold this bank account?	1. 0-6 Months	2. 7-12 months
		3. 1-3 Years	4. More than 3 years
<b>21</b>	Where is the branch of the bank where you have your account located?	1. In your village.	1. In your Panchayat
		2. In your Block	3. In your district
<b>22</b>	How far is the bank branch where your account is operational, from your dwelling? (In Km)		
<b>23</b>	How long does it take for you to reach the bank branch where your account is operational, from your dwelling? (In minutes/hours)	1. 0-1 Hour	2. 1-2 Hours
		3. 2-4 Hours	4. More than 4 Hours
<b>24</b>	Do you know when your wages are transferred to your bank account?	1. Yes	2. No
<b>25</b>	Is there a specific date designated for your withdrawal of your wages under the MGNREGS scheme at your bank branch?	1. Yes	2. No
<b>26</b>	How Often do you withdraw money from the bank branch where your account is operational?	2. Once a fortnight	3. Once a Month
		4. Once in 2 Months	4. Less than once in 2 months

27	How much time does it take for you to withdraw funds from your account at the bank branch?	1. 0-15 minutes	2. 15-30 Minutes
		3. 30-60 Minutes	4. More than 1 hour
28	Are you satisfied with your banking experience at the branch of your bank account?	1. Yes	2. No
29	<i>Skip this question if the response to question no 28 is Yes. Why you are not satisfied with your banking experience at the branch of your bank account? Please choose as many as applicable.</i>	1. Processes are difficult to understand	2. Public/private transportation is very poor
		3. Technology is hard to understand	4. Bank officials are not helpful
		5. Time taken at the bank is high (give an estimate of time taken to withdraw funds in minutes)_____	6. Time taken to reach the bank is high (give an estimate of time taken to reach the bank from home in minutes)_____
		7. No information is available on services and how to avail them	8. Other (specify)

#### Business Correspondent(BC) Model Related

This section will capture the responses about the end beneficiary user experience with the business correspondents while getting payments for MGNREGS scheme under the MGNREGS-Aadhaar pilot project.

*To be asked to end beneficiaries in the experimental blocks only.*

30	Is there a Business Correspondent (BC) that operates in the area?	1. Yes	2. No
31	Do you receive payments for MGNREGS scheme through a Business correspondent (BC)?	1. Yes	2. No
32	Do you need to get your payment approved before you receive it through the BC in the MGNREGS-Aadhaar pilot project	1. Yes	2. No
33	<i>Skip this question if the response to Question no.32 is No. How many officials you need to meet to get your payment approved.</i>	1. Yes	

34	How long have you been receiving your MGNREGS wages through the BC?	1. 1-2 months	2. 3-6 months
		3. 6-12 months.	4. More than 1 year
35	How often does the BC visit the respondent for payment of the wages of the MGNREGS scheme?	1. Weekly	2. Fortnightly
		3. Monthly	4. Less than once a month
36	Do you pay any money to the BC to receive the payment of your wages under the MGNREGS scheme?	1. Yes	2. No
37	<i>Skip this question if the response to question 38 is no.</i> How much money do you pay to the BC for getting your wages?		
38	How much time does it take for you to get your wages from the BC using the micro ATM?	1.0-5 Minutes	2. 5-10 minutes
		3. 10-15 Minutes	4. More than 15 Min
39	Do you trust the BC to make the transactions properly?	1. Yes	2. No
40	Is there a fixed location for the BC's visit?	1. Yes	2. No
41	Which is the fixed location where the BC visits the beneficiary?		
42	How would you rate the complexity of the micro ATM being used by the BC for identification and payment of wages? Rank on a scale of 1-5 (1 Completely Better, 2 Slightly Better, 3 Same as before, 4- Slightly Worse, 5- Completely Worse)		
43	Have you ever faced a situation where the transaction with the BC was declined using the micro ATM?	1. Yes	2. No
44	Why the transaction on the micro ATM was declined?	1. Fingerprint not matched.	
		2. Name mismatch in Aadhaar Card and MGNREGS card.	
		3. Network Issues with BC's micro ATM	
		4. Micro ATM malfunctions.	
45	How many attempts does it take as an average to perform successful transaction?	1. Once	2. 2-3 Times
		3. 4-5 times	4. More than 5 times

46	Provided a chance, would you like to withdraw yourself from pilot and utilize your PO Account or earlier bank account, if yes, why?	1. Yes	2. No
47	Would You Recommend the BC model of getting wages to others?	1. Yes	2. No
<b>BC Model User Experience related</b>  This section will capture data relating to the end user experience related to the process of getting payments for their MGNREGS work under the MGNREGS-Aadhaar pilot through the BC's.  <i>To be asked to end beneficiaries in the experimental block only.</i>			
	Please rank your satisfaction with the Business Correspondent's service provided to you?	<i>Rank 1-5 (1-completely satisfied, 2-Slightly Satisfied, 3 Neither Satisfied or Dissatisfied, 4- Slightly Dissatisfied, 5- Completely dissatisfied) Questions: 48-53</i>	
48	Please rank your satisfaction with the Frequency of Payments made by the BC under the MGNREGS-Aadhaar pilot project?		
49	Please rank your satisfaction with the time taken to make a transaction through the BC under the MGNREGS-Aadhaar pilot project?		
50	Please rank your satisfaction with the complexity of the process of making a transaction through the BC using the micro ATM under the MGNREGS-Aadhaar pilot project?		
51	Please rank your satisfaction with the BC's understanding of the processes and technology used to make payments under the MGNREGS-Aadhaar pilot project?		
52	Please rank your satisfaction with the behavior/interaction of the BC under the MGNREGS-Aadhaar pilot project?		
53	If the BC provides other banking/financial service, would you like to avail of them?	1. Yes	2. No

### MGNREGS-Aadhaar Pilot vs. MGNREGS payment related

This section will try to gain the end beneficiary response on the changes they have experienced in getting their wages during the MGNREGS-Aadhaar pilot project vs. the earlier system in place in MGNREGS?

*To be answered by the end beneficiaries in the experimental block only.*

	Please rank the following process attributes in the MGNREGS-Aadhaar pilot project against the earlier method of receiving payment for your work under MGNREGS?	Rank 1-5 (1 Complete Satisfaction, 2-Some Satisfaction, 3 Same as Before, 4-Some Dissatisfaction, 5-Complete Dissatisfaction) Questions 55-60
54	Please rank your satisfaction with the Frequency of Payments made in the MGNREGS-Aadhaar pilot project vs. the earlier payments under MGNREGS scheme?	
55	Please rank your satisfaction with the attempts needed to make a successful transaction in the MGNREGS-Aadhaar pilot project vs. the earlier payments under MGNREGS scheme?	
56	Please rank your satisfaction with the timing of the payments in the MGNREGS-Aadhaar pilot project vs. the earlier payments under MGNREGS scheme?	
57	Please rank your satisfaction with the technology used in the MGNREGS-Aadhaar pilot project vs. the earlier payments under MGNREGS scheme?	
59	Please rank your satisfaction with the location of the payment in the MGNREGS-Aadhaar pilot project vs. the earlier payments under MGNREGS scheme?	

## Annexure 3: Study Tools - Business Correspondents (BC's) Survey Questionnaire

This section is intended for the business correspondents who provide the payment to the end beneficiaries through Micro ATM's in the MGNREGS-Aadhaar pilot project.

BC Basic Information	
1	Serial Number
2	Headquarter Location of Business Correspondent Network Manager
3	Local Office of Banking Correspondent Network Manager (BCNM):
4	Name of Banking Correspondent Network Manager:
5	Name of Banking Correspondent:

MGNREGS-Aadhaar Pilot Related			
6	Does the correspondent provide payment services under the MGNREGS-Aadhaar pilot project?	1. Yes	2. No
7	Since how long has the respondent been providing the payment services under MGNREGS-Aadhaar pilot project?	1. 0-3 Months	2. 4-6 Months
		3. 7-12 Months	4. More than 1 Year
8	What services does the respondent offer under the scheme? (Tick all applicable)	1. No frills account	2. Loans
		3. Savings account	4. Insurance
		5. Smart card/ ATM card	6. Savings instruments
		7. Withdrawal of funds	8. Mobile Based Banking
		9. Deposit of funds	10. Fund transfer
		11. Others (please specify in detail)	



9	Which services are most frequently used by scheme beneficiaries?	1. No frills account	2. Loans
		3. Savings account	4. Insurance
		5. Smart card/ ATM card	6. Savings instruments
		7. Withdrawal of funds	8. Mobile Based Banking
		9. Deposit of funds	
		11. Others (please specify in detail)	
10	How frequently does the respondent visit the end beneficiaries?	1. Weekly	2. Fortnightly
		3. Monthly	4. Less than once a month
11	Where does the respondent make the payments to the end beneficiaries for payment of their wages under MGNREGS-Aadhaar pilot?	1. End Beneficiary Home	2. End Beneficiary Village
		3. End Beneficiary Panchayat	4. End Beneficiary Block
12	How much distance does the BC have to travel to provide the payment services to the end beneficiaries under the MGNREA-Aadhaar scheme?		
13	How much time does the BC have to spend in travelling to provide the payment services to the end beneficiaries under the MGNREA-Aadhaar scheme?		
14	How much time does the respondent need to make a payment for the MGNREGS wages using the micro ATM?	1. < 5 Minutes	2. 5-10 minutes
		3. 10-20 Minutes	4. More than 30 minutes
15	How many transactions do the respondent performs in a day?	1. 5-10	2. 10-20
		3. 20-50	4. More than 50

16	Has the respondent's supervisor or his manager accompanied him, on his trip to the end beneficiary?	1. Yes	2. No
17	If the Manager/supervisor has accompanied him, please ask how many times?		
18	What devices or technology does the respondent carry and what are the functions possible with these (regardless of whether these are used)?		
19	How has been the respondent trained for the services (Technical and Soft skills) he is providing to the end beneficiaries?	1. Training Session Attended	2. Trained by supervisor
		3. Self learnt using manual	4 Self learnt by usage
20	How does the respondent rate the effectiveness of the training he has received, in performing his duties for payment of wages under MGNREGS-Aadhaar scheme? Rank on 1-5 with 1 being most effective and 5 being least effective.		
21	Does the respondent face transaction failures on the micro ATM for payment of wages under MGNREGS-Aadhaar pilot?	1. Yes	2. No
22	How often does the respondent face transaction failures using the micro ATM for payment of wages to end beneficiaries under MGNREGS-Aadhaar scheme?	1. 1 in 10 transactions	2. 1 in 25 transactions
		3. 1 in 50 transactions	4. 1 in 100 transactions
23	What are the causes of the transaction failures the respondent has faced so far? Rank on 1-4 with 1 being most often and 4 being least often.	1. Biometric	2. Network Coverage
		3. Error in Name/Aadhaar	4. Device Malfunction
24	What other key issues/ challenges are faced in providing services to beneficiaries?		
25	What fee structures/ revenue generation mechanisms are in place for these customers?		
26	Is the fee structure for the Banking Correspondent different for these customers? How?		
27	Will the Banking Correspondent continue to work in this field? Why or Why not?		

## Annexure 4: Study Tools - Government Agencies Survey Questionnaire

Basic Information	
1.	Name of Agency
2.	Type of Agency: Central Government/ State Government/ Local Government/ NGO
3.	Location and address:
4.	Name of Official(s) Interviewed:
5.	Designation of Official(s) Interviewed:

MGNREGS-Aadhaar Pilot Related			
1	Has the Aadhaar based payment pilot been introduced in your area for payment of MGNREGS wages?	1. Yes	2. No
2	Since how long has this Aadhaar based payment of MGNREGS wages functional in your area?	1. 3 months 3. 1 Year	2. 6 months 4. More than 1 year
3	How many Panchayat are being served through this scheme? Specify how many?	1. 1-3 3. 6-10 How many?	2. 4-6
4	How many work sites are currently operational under MGNREGS scheme?	1. 1-5 3. 10-25 How many?	2. 5-10 4. 25-50
5	How many end beneficiaries are being served through this scheme?	1. 1-50 3. 100-200 How many?	2. 50-100 4. 200-500
6	What is the frequency of the payments made under the MGNREGS-Aadhaar pilot scheme?	1. Weekly 3. Every alternate Month	2. Monthly 4. Once in more than 2 months

7	Where do the end beneficiaries (EB's) of MGNREGA-Aadhaar pilot project receive the payments?	1. EB's Home.	2. EB's Village/Panchayat
		3. EB's Block Headquarters	4. EB's District Headquarters
		5. EB's worksite	6. Others, specify
8	How are financial details of beneficiaries collected? (e.g. bank account details)		
9	Who collects these details?		
10	Please rate the process of collecting these MGNREGS details compared to your normal work on a rank of 1-5 ( With 1-Most difficult, 2-Slightly Difficult, 3- Not Difficult at all, 4-Slightly Easier, 5- Completely Easier)		
11	How is this data maintained and updated?		
12	How are Aadhaar details of beneficiaries collected? (e.g. bank account details)		
13	Who collects these Aadhaar details?		
14	Please rate the process of collecting these Aadhaar details compared to your normal work on a rank of 1-5 ( With 1-Most difficult, 2-Slightly Difficult, 3- Not Difficult at all, 4-Slightly Easier, 5- Completely Easier)		
15	How is this Aadhaar data maintained and updated?		
16	What challenges/ issues are faced in creation/ maintenance of these beneficiary Aadhaar records?		
17	How disbursement of funds in the Aadhaar is based MGNREGA payment scheme tracked? What processes are in place in the event that a beneficiary does not withdraw the amount within a certain period of time?		

18	What issues/ challenges are faced in disbursement of funds through Aadhaar based MGNREA payment?	
19	Please rate the following based on your perception of the end beneficiaries' experience of MGNREGS-Aadhaar pilot project compared to the earlier system?	Please rank on a scale of 1-5 with (1-Completely Better, 2- Slightly Better, 3- Same as before, 4- Slightly Worse, 5- Completely Worse)
19.1	When the EB is getting his wages? <i>This question is tailored to capture which date/day/week/month the EB is getting the wages now as compared to earlier system.</i>	
19.2	Time taken to get the wages for a particular month. <i>The objective of this question is to measure the time taken by the EB to get his due wages for any particular month in a transaction. E.g. (Now EB spends 1 hour vs. earlier 40 minutes makes it slightly worse)</i>	
19.3	How much payment is the EB getting now vs. the earlier system? <i>Compares the payments made now vs. the earlier system as a % of stipulated amount. E.g.( Now EB gets 80% vs. earlier 85% makes it slightly worse)</i>	
19.4	Where the EB is getting his wages? <i>This question compares the location where the EB gets his wages e.g. (Payment received at home or Panchayat now vs. the block earlier makes it better. E.g.( Now EB gets his payment at his home vs. the block headquarter earlier make it completely better)</i>	
19.5	Delay in payments. <i>This question will capture if the current system has resulted in lesser delay in payments.</i>	

## Annexure 5: Detailed Aadhaar Coverage of Districts in States

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
1	ANDHRA PRADESH	ADILABAD	DBT Phase 2	2,737,738	2043100	75%
2		ANANTAPUR	DBT Phase 1	4,083,315	3537543	87%
3		CHITTOOR	DBT Phase 1	4,170,468	3506451	84%
4		CUDDAPAH	DBT Phase 2	2,884,524	1778757	62%
5		EAST GODAVARI	DBT Phase 1	5,151,549	4492391	87%
6		GUNTUR	DBT Phase 2	4,889,230	3794880	78%
7		KARIMNAGAR		3,811,738	1184994	31%
8		KHAMMAM		2,798,214	1547615	55%
9		KRISHNA	DBT Phase 2	4,529,009	3534434	78%
10		KURNOOL	DBT Phase 2	4,046,601	1111850	27%
11		MAHBUBNAGAR		4,042,191	608587	15%
12		MEDAK		3,031,877	1234836	41%
13		NALGONDA	DBT Phase 2	3,483,648	1573313	45%
14		NELLORE		2,966,082	1639611	55%
15		NIZAMABAD		2,552,073	959394	38%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
16	ANDHRA PRADESH	PRAKASAM		3,392,764	2032561	60%
		PRAKASAM		3,392,764	2032561	60%
17		RANGAREDDI	DBT Phase 1	5,296,396	2885546	54%
18		SRIKAKULAM	DBT Phase 2	2,699,471	2505459	93%
19		VISAKHAPATANAM		4,288,113	2122184	49%
20		VIZIANAGARAM	DBT Phase 2	2,342,868	1099336	47%
21		WARANGAL		3,522,644	1266926	36%
22		WEST GODAVARI		3,934,782	2335477	59%
23		HYDERABAD	DBT Phase 2	4,010,238	5107032	127%
24	GUJARAT	AHMADABAD		7,208,200	1473898	20%
25		AMRELI		1,513,614	144920	10%
26		ANAND	DBT Phase 1	2,090,276	166122	8%
27		BANAS KANTHA		3,116,045	246125	8%
28		BHARUCH		1,550,822	88435	6%
29		BHAVNAGAR	DBT Phase 1	2,877,961	353627	12%
30		DANG		226,769	8569	4%



State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
31	GUJARAT	DOHAD		2,126,558	111203	5%
32		GANDHINAGAR		1,387,478	180034	13%
33		JAMNAGAR		2,159,130	359759	17%
34		JUNAGADH		2,742,291	453472	17%
35		KACHCHH		2,090,313	43317	2%
36		KHEDA		2,298,934	201507	9%
37		MAHESANA	DBT Phase 1	2,027,727	319725	16%
38		NARMADA		590,379	104363	18%
39		NAVSARI		1,330,711	183173	14%
40		PANCH MAHALS		2,388,267	264070	11%
41		PATAN		1,342,746	193269	14%
42		PORBANDAR		586,062	200954	34%
43		RAJKOT		3,799,770	695977	18%
44		SABAR KANTHA		2,427,346	203984	8%
45		SURAT		6,079,231	941524	15%
46		SURENDRANAGAR		1,755,873	254940	15%
47		TAPI		806,489	66914	8%
48		VADODARA		4,157,568	356589	9%
49		VALSAD	DBT Phase 1	1,703,068	244185	14%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
50	TRIPURA	NORTH TRIPURA	DBT Phase 1	693281	533024	77%
51		SOUTH TRIPURA		875144	710594	81%
52		KHOWAI	DBT Phase 1	371722	23	0%
53		WEST TRIPURA	DBT Phase 1	1,724,619	1385051	80%
54	JHARKHAND	BOKARO	DBT Phase 2	2061918	1040579	50%
55		CHATRA		1042304	115232	11%
56		DEOGHAR		1491879	526412	35%
57		DHANBAD		2682662	1177872	44%
58		DUMKA		1321096	545213	41%
59		EAST SINGHBUM		2291032	735004	32%
60		GARHWA		1322387	627657	47%
61		GIRIDIH		2445203	948087	39%
62		GODDA		1311382	340777	26%
63		GUMLA		1025656	495498	48%
64		HAZARIBAGH	DBT Phase 1	1734005	928692	54%
65		JAMTARA		790207	166408	21%
66		KHUNTI	DBT Phase 2	530299	474134	89%
67		KODERMA		717169	77352	11%
68		LATEHAR	DBT Phase 2	725673	40288	6%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
69	JHARKHAND	LOHARDAGA		461738	351234	76%
70		PAKUR		899200	714963	80%
71		PALAMU		1936319	236187	12%
72		RAMGARH	DBT Phase 1	949159	487362	51%
73		RANCHI	DBT Phase 1	2912022	1475763	51%
74		SAHEBGANJ		1150038	241605	21%
75		SARAIKELA KHARSAWAN	DBT Phase 1	1063458	514799	48%
76		SIMDEGA		599813	203143	34%
77		WEST SINGHBHUM		1501619	348761	23%
78	KARNATKA	BAGALKOTE		1890826	485279	26%
79		BANGALORE		9588910	2921825	30%
80		BANGALORE RURAL		987257	966058	98%
81		BELGAUM		4778439	394388	8%
82		BELLARY		2532383	676761	27%
83		BIDAR		1700018	691480	41%
84		BIJAPUR		2175102	162103	7%
85		CHAMARAJA NAGARA		1020962	179283	18%
86		CHIKKABALLAPURA		1254377	297088	24%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
87	KARNATKA	CHIKMAGALUR		1137753	189084	17%
88		CHITRADURGA		1660378	209542	13%
89		DAKSHINA KANNADA		2083625	447105	21%
90		DAVANAGERE		1946905	918023	47%
91		DHARWAR	DBT Phase 1	1846993	416127	23%
92		GADAG		1065235	737339	69%
93		GULBARGA		2564892	206253	8%
94		HASSAN		1776221	609962	34%
95		HAVERI		1598506	114499	7%
96		KODAGU		554762	124183	22%
97		KOLAR		1540231	480876	31%
98		KOPPAL		1391292	1	0%
99		MANDYA		1808680	328146	18%
100		MYSORE	DBT Phase 1	2994744	2621523	88%
101		RAICHUR		1924773	230857	12%
102		RAMANAGARA		1082739	96945	9%
103		SHIMOGA		1755512	180654	10%
104		TUMKUR	DBT Phase 1	2681449	2345061	87%
105		UDUPI		1177908	584601	50%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
106		UTTARA KANNADA		1436847	617913	43%
107		YADGIR		1172985	242671	21%
108	MAHARASTRA	AHMEDNAGAR		4,543,083	1765580	39%
109		AKOLA		1,818,617	792734	44%
110		AMRAVATI	DBT Phase 1	2,887,826	1725177	60%
111		AURANGABAD	DBT Phase 2	3,695,928	1645169	45%
112		BEED		1,198,810	593812	50%
113		BHANDARA		2,585,962	541396	21%
114		BULDHANA		2,588,039	848904	33%
115		CHANDRAPUR		2,194,262	896083	41%
116		DHULE		2,048,781	1288366	63%
117		GADCHIROLI		1,071,795	205865	19%
118		GONDIA	DBT Phase 2	1,322,331	0	0%
119		HINGOLI		1,178,973	365540	31%
120		JALGAON	DBT Phase 2	4,224,442	1937814	46%
121		JALNA	DBT Phase 2	1,958,483	975556	50%
122		KOLHAPUR		3,874,015	1368631	35%
123		LATUR	DBT Phase 2	2,455,543	1170664	48%
124		NAGPUR		4,653,171	2832334	61%

State Profile			DBT Coverage	State Population (CENSUS 2011)	Aadhaar Status (UIDAI)	
Sr. No.	State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Enrolment as on April 2013 (UIDAI)	Aadhaar Coverage (% vs. Total Population)
125	MAHARASTRA	NANDED		3,356,566	1057359	32%
126		NANDURBAR	DBT Phase 1	1,646,177	674006	41%
127		NASHIK		6,109,052	2638763	43%
128		OSMANABAD		1,660,311	567349	34%
129		PARBHANI		1,835,982	280591	15%
130		PUNE	DBT Phase 1	9,426,959	3885772	41%
131		RAIGAD		2,635,394	0	0%
132		RATNAGIRI	DBT Phase 2	1,612,672	982549	61%
133		SANGLI		2,820,575	1371548	49%
134		SATARA		3,003,922	1276297	42%
135		SINDHUDURG		848,868	147626	17%
136		SOLAPUR		4,315,527	1433541	33%
137		THANE		11,054,131	5319048	48%
138		WARDHA	DBT Phase 1	1,296,157	1064047	82%
139		WASHIM		1,196,714	355763	30%
140		YAVATMAL		2,775,457	652953	24%
141		MUMBAI		12,478,447	7914922	63%

## Annexure 6: Estimated Hardware Size and Capacity for SRDH

State's Population in Lakhs	Total Number of blade servers	Storage space SAN for DB (in GB)	Number of Boxes for LDAP (if SDC uses LDAP)	Number of Boxes for HSM
10	2	2700	1	1
50	2	14000	1	1
200	4	52500	1	1
500	8	131164	1	1
1000	9	262264	1	1
2000	16	524523	1	1
3000	18	786784	1	1

Notes:

*Blade Servers of 96GB RAM and 3.1GHz CPU Speed*

*Initially, sizing for 50 Lakhs can be considered for development. After evaluating the usage and performance, servers can be added to the existing configuration. SAN storage is indicative expecting heavy usage of authentication.*

*Above requirements only for DC (Data Center). Equivalent (1:1) setup recommended for Disaster Recovery (DR) with equivalent SAN storage.*



## Annexure 7: Direct Cash Transfer (DCT) Pilot District Status Dashboard

State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Coverage (% vs. Total Population)	No. of Registered Workers Who have Come For Work in Last 3 Years	% age Seeded in MIS against Last 3 years active regd Workers	Active Bank Account	Active Post Office Account	Total Active Accounts (Bank and PO)	Amount of wages Disbursed through bank Accounts (in lakhs.)	Amount of Wages disbursed through post office Accounts (in lakhs.)	Total Amount Disbursed (in lakhs.)
ANDHRA PRADESH	ADILABAD	DBT Phase 2	2,737,738	75%	826529	0.00	2338	280204	282542	124.048	9487.383	9611.43
	ANANTAPUR	DBT Phase 1	4,083,315	87%	1018829	28.00	11695	218677	230372	619.64	8775.177	9394.817
	CHITTOOR	DBT Phase 1	4,170,468	84%	679430	26.61	12060	171454	183514	530.66	6828.894	7359.554
	CUDDAPAH	DBT Phase 2	2,884,524	62%	630674	0.00	40496	25320	65816	1417.865	796.681	2214.547
	EAST GODAVARI	DBT Phase 1	5,151,549	87%	852642	1.90	26589	125017	151606	1169.782	3891.581	5061.363
	GUNTUR	DBT Phase 2	4,889,230	78%	572776	0.00	13372	83456	96828	402.014	1809.735	2211.749
	KRISHNA	DBT Phase 2	4,529,009	78%	607460	0.00	58886	627	59513	1851.628	5.374	1857.003
	KURNOOL	DBT Phase 2	4,046,601	27%	1027157	0.00	26407	130332	156739	817.132	3614.186	4431.318
	NALGONDA	DBT Phase 2	3,483,648	45%	1318628	0.00	0	756416	756416	0	22233.894	22233.894
	RANGAREDDI	DBT Phase 1	5,296,396	54%	435273	2.77	45702	9416	55118	1759.514	438.873	2198.387
	SRIKAKULAM	DBT Phase 2	2,699,471	93%	898143	0.00	90980	69099	160079	4928.356	2718.779	7647.135
	VIZIANAGARA M	DBT Phase 2	2,342,868	47%	903361	0.00	43295	354799	398094	2547.954	14202.537	16750.491
GUJARAT	HYDERABAD	DBT Phase 2	4,010,238	127%								
	ANAND	DBT Phase 1	2,090,276	8%	54317	0.00	3164	5617	8781	106.146	216.319	322.465
	BHAVNAGAR	DBT Phase 1	2,877,961	12%	101483	0.00	3882	11006	14888	143.299	277.781	421.08
	MAHESANA	DBT Phase 1	2,027,727	16%	48369	0.00	4097	7046	11143	153.408	285.252	438.661
TRIPURA	VALSAD	DBT Phase 1	1,703,068	14%	100836	0.00	3243	16867	20110	121.908	517.801	639.709
	NORTH TRIPURA	DBT Phase 1	693281	77%	115395	9.92	37846	28260	66106	3308.096	2612.203	8396.846
	KHOWAI	DBT Phase 1	371722	0%	147083	16.46	51447	15877	67324	5213.928	1423.698	6637.626
	WEST TRIPURA	DBT Phase 1	1,724,619	80%	229849	14.28	81764	20629	102393	7905.946	1992.483	5920.298
JHARKHAND	BOKARO	DBT Phase 2	2061918	50%	161567	0.00	4034	47974	52008	125.58	1838.54	1964.12
	HAZARIBAGH	DBT Phase 1	1734005	54%	193630	3.68	8170	43927	52097	262.346	1962.329	2224.674
	KHUNTI	DBT Phase 2	530299	89%	157856	3.40	7140	40347	47487	215.585	1321.827	1537.412

State	District	DBT Status (Pilot Phase I and II)	State Population (CENSUS 2011)	Aadhaar Coverage (% vs. Total Population)	No. of Registered Workers Who have Come For Work in Last 3 Years	% age Seeded in MIS against Last 3 years active regd Workers	Active Bank Account	Active Post Office Account	Total Active Accounts (Bank and PO)	Amount of wages Disbursed through bank Accounts (in lakhs.)	Amount of Wages disbursed through post office Accounts (in lakhs.)	Total Amount Disbursed (in lakhs.)
JHARKHAND	LATEHAR	DBT Phase 2	725673	6%	301155	0.00	9826	81890	91716	535.438	4148.021	4683.459
	RAMGARH	DBT Phase 1	949159	51%	126003	14.68	2320	43694	46014	72.077	1314.942	1387.019
	RANCHI	DBT Phase 1	2912022	51%	379435	0.17	30972	84985	115957	986.07	2617.004	3603.074
	SARAIKELA KHARSAWAN	DBT Phase 1	1063458	48%	195085	6.49	22936	45909	68845	753.658	1297.006	2050.664
KARNATKA	DHARWAR	DBT Phase 1	1846993	23%	247435	2.13	50664	0	50664	5078.77	0	5078.77
	MYSORE	DBT Phase 1	2994744	88%	239844	4.62	33792	3	33795	1898.656	9.994	1908.65
	TUMKUR	DBT Phase 1	2681449	87%	471258	41.16	86534	10	86544	5971.519	11.593	5983.112
MAHARASTRA	AMRAVATI	DBT Phase 1	2,887,826	60%	257652	1.34	3976	131628	135604	265.337	5434.961	5700.298
	AURANGABAD	DBT Phase 2	3,695,928	45%	197843	0.11	4394	70060	74454	153.743	4875.83	5029.573
	GONDIA	DBT Phase 2	1,322,331	0%	340782	12.52	89673	5764	95437	3873.755	224.557	4098.312
	JALGAON	DBT Phase 2	4,224,442	46%	105437	3.14	1074	46343	47417	44.825	2978.526	3023.351
	JALNA	DBT Phase 2	1,958,483	50%	234650	1.41	115111	5669	120780	7797.416	416.883	8214.299
	LATUR	DBT Phase 2	2,455,543	48%	178401	1.74	12270	45580	57850	912.464	3472.562	4385.026
	NANDURBAR	DBT Phase 1	1,646,177	41%	220107	1.25	4928	84286	89214	314.882	5011.17	5326.052
	PUNE	DBT Phase 1	9,426,959	41%	91707	0.28	27652	16753	44405	1835.407	1049.052	2884.459
	RATNAGIRI	DBT Phase 2	1,612,672	61%	66453	3.23	4732	18709	23441	170.717	631.353	802.07
	WARDHA	DBT Phase 1	1,296,157	82%	94222	18.41	21563	25894	47457	880.498	1055.57	1936.068

## Annexure 8: State Readiness Dashboard

Parameter			Andhra Pradesh	Karnataka	Gujarat	Tripura
State Profile	Rural Population (In Lakhs)	Total	563.11	375.52	346.70	27.10
		Male	282.19	190.10	178.02	13.85
		Female	280.92	185.45	168.67	13.23
MGNREGS	No. of Registered Workers Who have Come For Work in Last 3 Years (In Lakhs)		185.70	88.63	44.49	6.62
	Banking Insight (2012-2013)	No of Bank Accounts (Joint + Individual) – In Lakhs	5.82	14.19	3.10	2.35
		Wages disbursed using Banks (In Lakhs)	23860.632	102983.078	10990.755	22302.76
	Post Insight (2012-2013)	No of PO Account (Joint + Individual) – In Lakhs	34.36	28.60	6.84	0.92
		Wages disbursed using post office	109853.176	26913.109	21490.512	8396.478
	Aadhaar	Seeding Strategy	Hybrid. Seeding is being done using SRDH and Survey, Pops etc.	Hybrid. Seeding is being done using KRDH, Dedicated Solution Seeding upto GP Level and Door-to-Door Survey, PoS.	Seeding is yet to initiate.	Seeding is yet to initiate.
		Current Status of Seeding	In DCT Districts, seeding is being performed. In pilot districts,	In DCT Districts, seeding is being done. More than 5 Lac beneficiaries	N/A	N/A

Parameter			Andhra Pradesh	Karnataka	Gujarat	Tripura
MGNREGS			seeding has been done by Door-to-Door survey.	already seeded.		
		Initiatives Taken so far	Dedicated Teams being setup for Aadhaar Integration and Seeding.	Mobilized Dedicated Teams for Seeding, District and Block Level Coordination and Sensitization.  Dedicated Applications being developed for Seeding and Aadhaar Integration	N/A	N/A
Aadhaar	Aadhaar Enrolment (In Lakhs)		519.00	184.75	78.60	26.28
	State Resident Data Hub		Yes	Yes	No	No
	Seeding Strategy		Hybrid	Hybrid	Not yet started	Hybrid
	ASA		Dept. of IT and C, Govt. of Andhra Pradesh	CeG, Govt. of Karnataka	Not yet Signed	Not yet Signed
	AUA		Dept. of Food and Civil Supplies, Govt. of Andhra Pradesh	CeG, Govt. of Karnataka	Not yet Signed	Not yet Signed
Technology	Initiatives / Implementations influencing Aadhaar Readiness		Dedicated Seeding Application with access till GP Level  Guidelines to District Offices, Blocks	Experience of implementing flagship schemes like PDS, eSeva etc.  Implementation of solutions at filed level	Inclusion of Banks for enrolment and sensitization of Aadhaar in Rural Areas of	Already experienced in Seeding Process of Aadhaar number into Register of Ordinary Residents as a part of

Parameter			Andhra Pradesh	Karnataka	Gujarat	Tripura
			Sensitization of Aadhaar and Seeding Support from Leading Bank has been effective and participative	with new technologies of handheld device	Pilot Districts	Agartala Pilot.
Banking	Coverage	Total Branches	7344	9760	6490	278
		Average Branch per District	319	325	196	35
		Total BCs	5989	3103	3623	363
		Average BC per District	260	103	110	45
Post	Coverage (No of post office)		16165	9760	8934	710
	Average PO per District		702	325	271	88

## Annexure 9: Maharashtra Case Study Details

Sl. No	Location	Project	Target Beneficiary
1	Aurangabad	DILASA project	Beneficiaries of Pension Scheme
2	Latur	“UID for Faster Salary” UID enrolment of student in Pvt. Aided schools (Education Dept.)	Employees of Collectorate, Zilla `Parishad and Private Aided School, Students of Private Aided School
3	Osmanabad (2 Talukas)	Remittance Corridor for Migrant Workers, PDS , “UID for Faster Salary”	Workers of Sugar Mills, Aasha/Anganwadi Workers, Ration Card Holders
4	Satara (Man and KhataTalukas)	UID Linked Ration card and Disbursal of Ration through UID enabled authentication (PDS)	Ration Card Holders
5	Solapur	Kisan Credit Card in co-operation with NABARD and Solapur Gramin Bank	Customers of Solapur Gramin Bank
6	Pune (Pimpri Chinchwad and Pune Municipal Corp.)	Registration of Leave and License with UID of residents	Residents coming to Registration Office for Leave and License
7	Pune (Yerwada)	UID linkage with LPG Distribution	LPG customers of Oil Marketing Companies
8	Mumbai	Mantralaya - Biometric attendance system linked with UID Integrating pay of teachers in Private Aided Schools with UID	Employees of Mantralaya, MCGM ,Other Govt. Offices in Mumbai ,Teachers of Private Aided Schools
9	Wardha	Financial Inclusion by integrating BC model with Setu, CSC, Gramdoot and SANGRAM Centers	Remaining District Population (Nearly 85% already covered)
10	Wardha (2 Taluk as to be finalized by the Dist. Collector based on the	UID Linked with NREGA/EGS for payment to beneficiaries into their bank account using authentication API	Remaining District Population (Nearly 85% already covered) Beneficiaries of NREGA Scheme

### Self-Seeding

Maharashtra has brought the innovative concept of self-seeding which had dramatic impact on UID pilot project implementation. Self-seeding allows the residents to update their KYR+ details themselves into their Aadhaar account.

For the benefit of the residents, there are two ways of Self Seeding UID:

- **SMS based Self Seeding:** User can send SMS to fetch his UID details. System will search through the data reserve based on the registered mobile number. In case found, the details will be messaged back to the user via SMS. User can then send SMS to seed individual department KYR+ data.
- **Web Based Self Seeding:** The user can visit the specially designed website <http://srdh.maharashtra.gov.in/utis/index.htm> and search for his/her data by entering UID number / Mobile No. /email id. If the resident information is available with SRDH, then a one-time password would be sent to the registered Mobile no. and registered Email Id of the resident. User can enter the One-time password in the space provided to proceed with the KYR+ data updation.

## Annexure 10: List of DCT Schemes: Maharashtra

Sl. No.	Ministry/Department	No. of Schemes	Name of the Scheme
1	M/o Petroleum and Natural Gas	2	1 Domestic LPG Subsidy Scheme.
			2 PDS Kerosene.
2	D/o Food and Public Distribution	1	1 Targeted Public Distribution System (in UTs).

## Annexure 11: List of Central Sector/ Centrally Sponsored schemes Amenable To Direct Cash Transfers

Sl. No	Ministry/Department	Name of the Scheme	
1	<b>M/o Social Justice and Empowerment</b>	12	Post Matric Scholarship for SC Students.
2	<b>M/o Human Resources Development, D/o Higher Education</b>	4	Pre-Matric Scholarship for SC Students.
			Pre-Matric Scholarship for Children of those engaged in unclean occupations.
			Up gradation of merit of SC Students.
			National Overseas Scholarship Schemes for SC Students.
			Post Matric Scholarship for OBCs.
			National Overseas Scholarship for OBCs.
			Post Matric Scholarship for economically backward class students.
			Post Matric Scholarship for students with disabilities.
			National Overseas Scholarship for persons with disabilities.
			Scholarship for top class education for students with disabilities.
			Top Class Education Scheme.
			Scholarship to Universities/College Students.
			Fellowship Schemes of UGC.
			Fellowship Schemes of AICTE.
			Subsidy on Fee to Students.
3	<b>M/o Human Resources Development, D/o School Education and Literacy</b>	2	National Means cum Merit Scholarship.
			National Scheme for Incentive for the girl child for secondary education.



4	<b>M/o Tribal Affairs</b>	5	National Overseas Scholarship for ST students.
			Post Matric Scholarship Scheme.
			Up gradation of Merit Scheme.
			Top Class Education System.
			Rajiv Gandhi National Fellowship.
5	<b>M/o Minority Affairs</b>	3	Matric Scholarship Scheme.
			Maulana Azad National Fellowship.
			Merit cum Means Scholarship Scheme.
6	<b>M/o Women and Child Development</b>	2	Indira Gandhi Matritva Sahyog Yojana (IGMSY).
			Dhanalakshmi Scheme.
7	<b>M/o Health and Family Welfare</b>	1	Janani Suraksha Yojana.
8	<b>M/o Labour and Employment</b>	5	Scholarship to the Children of beedi workers.
			Housing subsidy to beedi workers.
			Stipend to children in the special schools under the Child Labour Project.
			Permanent Disability Benefits, Dependent benefits, Sickness State Insurance Corp. to the insured persons and their families.
			Pension withdrawal of PF, Premature withdrawal of pension, payment related to Employees Deposit Linked Insurance.
	<b>Total</b>	34	

## Annexure 12: List of Schemes Relating To Subsidy Which Are Amenable To Direct Cash Transfers

Sl. No.	Ministry/Department	No. of Schemes		Name of the Scheme
1	M/o Petroleum and Natural Gas	2	1	Domestic LPG Subsidy Scheme.
			2	PDS Kerosene.
2	D/o Food and Public Distribution	1	1	Targeted Public Distribution System (in UTs).

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## STUDY TEAM

The study team comprised of the following key personnel.

Team	Team Member	Role
<b>Study Coordinator (UNDP)</b>	Marjo Maenpaa Nilay Ranjan Ritesh Saxena Neelakshi Mann	Study Coordination
<b>Core Study Team (Accenture)</b>	Nilaya Varma Ramendra Verma Devroop Dhar Amit Patjoshi Dr. Abhinav Akhilesh	Study Director Independent QA Aadhaar Integration Expert Study and Assessment Lead Documentation Expert
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<b>Field Study Team (Accenture)</b>	Rohit Purohit Ritu Raj Anushree Sanzagiri MadhukarMaraju Akshat Singhal	Study Team







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