

#### **DIRI Data Brief:**

## **MGNREGA** and Aadhaar:

# **Misdirected Wage Payments in Jharkhand**

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January 2019

#### **Key Facts**

- Aadhaar-linkage with wage payments under MGNREGA has been underway across the country since 2013.
- Aadhaar-based Direct Benefit Transfers are intended to curb leakages due to "ghost" beneficiaries.
- The beneficiary's Aadhaar-seeded bank account need not be the same as their erstwhile MGNREGA-linked account.
- Between April 2014 and March 2018, approximately 33.4 million wage payment transactions were made to beneficiaries in lharkhand
  - Of these, 33.6% of were made via the Aadhaar Payments Bridge system.
- Since the introduction of Aadhaar-linkage, more than 1 million job cards have been deleted. Of these, we find approximately 400,000 job cards had availed work before deletion during the period of our analysis.

#### **Data Sources**

NREGA program data from the Department of Rural Development, Government of India was used in this analysis. NREGASoft is the online MIS platform where all program data is captured. We utilize data on wage payment transactions through Fund Transfer Orders (FTOs), and data on Job Cards made publicly available through this website. Further information may be found at: <a href="https://www.nrega.nic.in">www.nrega.nic.in</a>

Data for this analysis covers the 48-month period from April 2014 to March 2018. Data was scraped and analysed using open source tools.

#### **Summary**

MGNREGA, India's flagship rural workfare program, is one of the preeminent public entitlements to be linked to Aadhaar. The linking of Aadhaar to the MGNREGA wage payment process alters the existing path of payments to from State to the beneficiary. Aadhaar-linked wage payments under MGNREGA are routed through the Aadhaar Payments Bridge (APB) system, and into the beneficiary's Aadhaar-seeded account. This Aadhaar-seeded account may or may not be the same as the beneficiary's erstwhile MGNREGA-linked account. Accidental mismatch between these two accounts holds the ability to vastly diminish the beneficiary experience and impact further uptake of work under the scheme. This study aims to identify and describe patterns of misdirected payments in the state of Jharkhand from April 2014 to March 2018.

We utilize wage payment transaction data to compare the beneficiary's preferred bank account with the Aadhaar-linked account as a measure of misdirection.

We find that the volume of APB transactions rise steadily in our four year period of analysis to achieve considerable penetration of Aadhaar-seeding. Further, there is evidence of beneficiaries switching back and forth on the APB platform. The mis-direction of funds is observed to affect 68% of all APB transactions in the state of Jharkhand. Of these transactions, 38% redirect wages to a completely unrelated account (the remainder being redirected to other beneficiaries in the same household). We further analyse temporal and geographic patterns in the occurrence of mismatch.

**Keywords:** MGNREGA, Aadhaar Payments Bridge System, payment misdirection

## 1. Background:

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) is India's flagship rural workfare program, and one of the preeminent public schemes to be linked to Aadhaar. The Act guarantees 100 days of manual work per year, at a predetermined wage rate, to every rural household in the country. The seeding of beneficiary Aadhaar accounts with the MGNREGA infrastructure has been underway since 2013 as part of the broader effort on the part of state and central governments to link all cash entitlements to Aadhaar.

The scheme is intended to provide timely relief from unemployment to rural poor, particularly in times of agrarian distress. As such, timely and accurate wage payments to beneficiaries is a prerequisite for the effective implementation of the scheme. In practice however, MGNREGA's implementation has been affected by corruption and leakage on account of ghost beneficiaries<sup>1</sup>. Since the inception of the scheme, the most significant effort to curb such leakages was the shift from cash payments to electronic bank transfers, mandated in 2008. Following this, the introduction of Aadhaar linkage is certainly the most noteworthy change to the MGNREGA wage payment process, intended to identify and eliminate spurious job cards and beneficiaries.

Aadhaar – linkage with MGNREGA alters the path of wage payments from the State by routing them through the Aadhaar Payments Bridge (APB) system, and directly into the beneficiary's Aadhaarseeded account. This overrides the beneficiary's previously stated choice of account for the receipt of their wages under MGNREGA. In other words, it is possible that the account where the beneficiary expects to receive their wage is not the same as the account into which it is actually transferred, i.e. that is Aadhaar-seeded. This introduces a new kind of payment failure due to misdirection or diversion of wages.

Anecdotal evidence of diverted payments abounds: beneficiaries have reported being unable to locate their wages, as accounts were opened and seeded without beneficiaries' complete knowledge and data entry errors led to strangers' accounts being linked<sup>2</sup>. We attempt to identify these instances of misdirection through program data on wage payment transactions generated by the NREGA MIS ("NREGASoft") during the period between April 2014 and March 2018.

#### How can misdirection occur?

Prior to Aadhaar-seeding, beneficiaries would receive their wages in their account of choice as stated on the job card and registered in NREGASoft. However, this account need not be the same as the "Aadhaar-seeded" bank account. The seeding of an account with Aadhaar is not scheme-specific but it overrides the choice of account previously stated by the beneficiary for MGNREGA.

This creates two possible accounts for wage disbursement. The beneficiary's Aadhaar may be linked to their existing bank account, or a different bank account that may or may not have been created at the time of seeding. This is particularly relevant possibility in the context of the implementation of the Jan Dhan Yojana and the push for financial inclusion that occurred during the period of our analysis. It is possible that the beneficiary is unaware of such a linkage altogether while their wages go on to be credited in the Aadhaar-seeded bank account.

<sup>&</sup>lt;sup>1</sup> Anderson, S., Kotwal, A., Kulkarni, A., & Ramaswami, B. (2013). Observations on the Scope of Corruption in NREGA. (IGC Working Paper F-7013-INC-1)

<sup>&</sup>lt;sup>2</sup> Aggarwal, A. (2017). Ten Ways MGNREGA Workers Do Not Get Paid. *Economic and Political Weekly, Vol. 52* (Issue No. 6), pp 24-27.

#### How do we identify misdirection?

We examine information on beneficiary account details for every wage transaction recorded in the MGNREGA MIS. The possibility of misdirection arises only when a job card is linked to Aadhaar and the payment is made via the APB system. We therefore consider all APB transactions in our data. We compare account holder names on the stated and realised accounts to identify potential misdirection.

Based on this data, we categorize transactions as either accurate or misdirected. We further subcategorize misdirected transactions based on the nature of the misdirection — misdirection may occur within the job card, i.e. the realized account may be a mismatch with the worker in question, but a match with another worker on the same job card. Alternatively, the realized account is of no relation to the worker and a complete mismatch.

**Table 1** illustrates the categorization and nature of mismatch that we use for this study:

Worker/Beneficiary	Stated Preference Account	Realised Aadhaar- linked Account	Match Category
Raghu Mahato	Raghu Mahato	Raghu Mahato	Matched
Raghu Mahato	Raghu Mahato	Shruti Mahato	Misdirected — but match within JC
Raghu Mahato	Raghu Mahato	Nikhil Sharma	Complete misdirection

Table 1: Mismatch Categorization

We study data on all wage transactions in Jharkhand from 2014-18, which contains information on beneficiary names, amount credited, date of transfer, preferred and realised account holder names, and the platform (APB/Non-APB) used to disburse wages for each transaction.

# 2. Key Findings:

### 2.1 Time and spatial trends of Aadhaar-linkage:

We first examine the pattern of adoption of Aadhaar linkage over time. **Figure 1** illustrates the growth in the volume of APB transactions as a percentage of the total number of MGNREGA wage transactions month-on-month during the four-year period of our analysis.



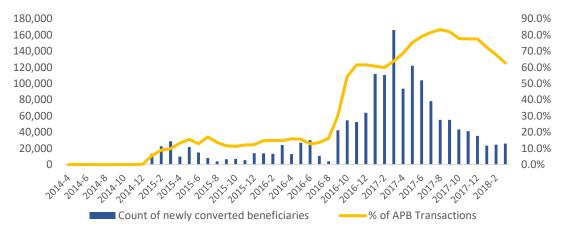


Figure 1: Monthly proportion of APB transactions, and number of new conversions

We define APB conversion as the instance of the beneficiary's first APB linked transaction. We find that the number of new conversions rose steadily during the four-year period, slowly at first and then sharply rising around August 2016. The fluctuation prior to this is likely explained by the seasonality of demand for work under MGNREGA. We find new conversions peaking in February 2017, and then steadily declining. This is consistent with narratives from the field and from government officials which suggest that the push for Aadhaar – seeding has since stabilized, and seeding camps are no longer being conducted.

We also see a sharp increase in the proportion of APB transactions, coinciding with the steep rise in new APB conversions beginning in August 2016. Interestingly, we then see a dip in the proportion of APB transactions a year later, beginning in June 2017. This points to the curious phenomenon of beneficiaries switching from Aadhaar-linkage back to non-Aadhaar transactions. We find that approximately 28% of all beneficiaries who have transacted during the period of analysis have switched back and forth between APB and non-APB transactions. It is unclear however what motivates this shift.

**Figures 2 and 3** present the shift in the proportion of converted beneficiaries from 2014-15 to 2017-18. We examine this at a district level.

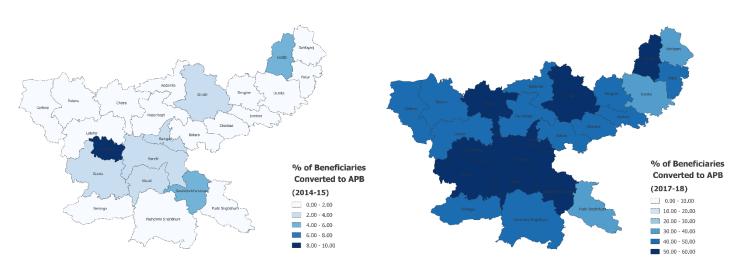


Figure 2: Percentage of Beneficiaries Converted to APB (2014-15)

Figure 3: Percentage of Beneficiaries Converted to APB (2017-18)

#### 2.2 Time trend of Misdirected transactions:

We examine the patterns in the occurrence of misdirected transactions identified using the beneficiary account holder names. Figure 4 illustrates the month-on-month volumes of total transactions and APB transactions and, within them, the volume of misdirected transactions of both kinds i.e. a match found within the job card, and complete mismatches.

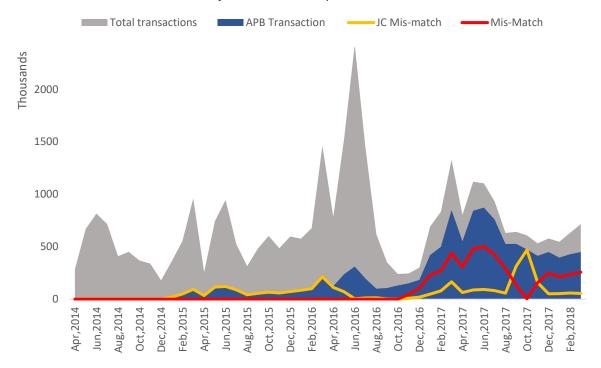


Figure 4: Time trend of mismatches

We find that misdirected transactions as a proportion of total transactions rose gradually between April 2014 and June 2016, when it reached 14.36% of total transactions. We see a significant dip in the following 5 months, corresponding with a dip in overall number of transactions. However, in November 2016 begins a steep increase in the proportion of misdirected transactions, which then remains in the range of 45-55% for the remainder of our period of analysis (barring October 2017, when it touched 77%). The proportion attributed to the two categories of mismatch fluctuates over time.

It must be noted that we find that beneficiaries switch back and forth between categories of misdirection, i.e. the details of the Aadhaar-seeded account change multiple times during the duration of our analysis. The mechanism and motivation for these changes is as yet unclear.

#### 2.3 Geographic patterns of Misdirection:

We finally examine the occurrence of both degrees of misdirection across districts in the four-year period of our analysis.

**Figure 5** illustrates the percentage of APB transactions in each district that are *misdirected but with a match within the job card*. We find that the percentage of misdirected transactions across districts is not widely disparate – most districts fall within the range of 20-35%. Further, we find that districts with the lowest proportions of misdirected transactions of this type (out of the APB transactions)

tend to coincide with districts having the lowest proportions of APB transactions (of the total transactions)

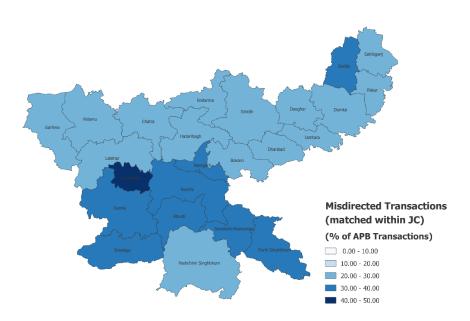


Figure 5: Misdirection (match within Job Card) - % of APB Transactions

We further examine the incidence of complete misdirection (without a match within the job card) across districts. **Figure 6** illustrates the incidence of complete misdirection in each district, as a percentage of APB transactions. In contrast to the partial misdirection demonstrated above (Figure 5), we find that complete mismatch as a percentage of the number of APB transactions is generally higher but also more disparate across districts. The median percentage of mismatch is 34% but most districts fall in the range of 30-65%.

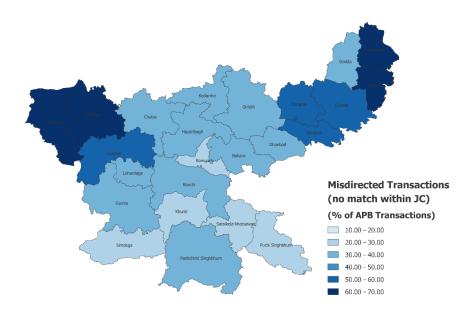


Figure 6: Complete misdirection - % of APB Transactions

We also find that the percentage of complete misdirection is highest in districts with lower proportion of APB transactions and lower conversion of beneficiaries to APB. **Figure 7** illustrates this pattern.

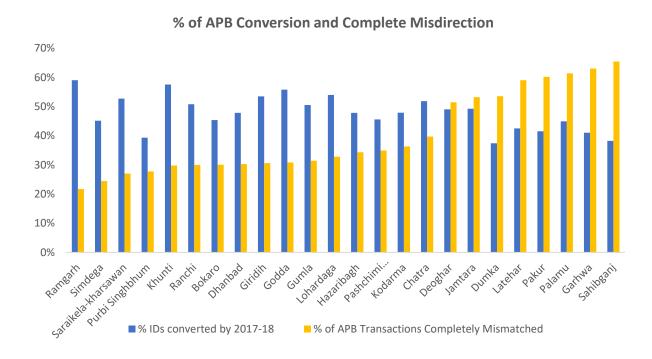


Figure 7: Complete Misdirection and APB Conversion

### 3. Conclusion and Further Research:

The findings of this data brief warrant further study towards a better understanding of the mechanisms by which misdirection may have occurred and the implications (in terms of actual beneficiary experience) of each type of misdirection observed in our data. We then intend to study the relationship between misdirection and beneficiary behaviour – particularly on their decision to demand work under the scheme. We also find the need to further examine changes in the payment preferences and accuracy of the same beneficiary; we find evidence in our data to suggest that beneficiaries switch back and forth between Aadhaar and non-Aadhaar payments, and across categories of misdirection. We intend to examine patterns in these changes, the manner in which they may occur, and whether or not they are initiated by the beneficiary. We believe these analyses will help shed light on how beneficiaries respond to such implementation failures in large public benefit programs and in MGNREGA in particular.

#### **About DIRI**

This data brief was prepared by the Digital Identity Research Initiative (DIRI), which was launched in July 2017 with funding from Omidyar Network. DIRI is aimed at producing high-quality and timely research on digital identity, engaging relevant stakeholders, and building a global research ecosystem for digital identity. In addition to such briefs, DIRI's activities include Research Fellowships, Summer Fellowships, and the International Conference on Digital Identity (11-13 July 2018). For more information, visit <a href="http://www.isb.edu/digital-identity-research-initiative">http://www.isb.edu/digital-identity-research-initiative</a>

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