

Improving the Impact of the National Rural Employment Guarantee Scheme by Identifying Corruption and Reducing Leakages in its Electronic Payment Scheme

Researchers:

Abhijit Banerjee

Esther Duflo

Clement Imbert

Santhosh Mathew

Rohini Pande

Sector(s): Political Economy & Governance

Location: Bihar

Sample: 195 blocks across 12 districts in Bihar

Target group: Rural population

Outcome of interest: Social service delivery Transparency and accountability Corruption and Leakages

Intervention type: Digital and mobile Community monitoring

AEA RCT registration number: AEARCTR-0000009

Data: aeaweb.org

Research Papers: E-governance, Accountability, and Leakage in Public Programs: Experimental Evid...

Partner organization(s): Bihar Department of Rural Development, International Growth Center (IGC), International Initiative for Impact Evaluation (3ie)

Social programs in developing countries are often plagued by corruption, especially within the flow of funds from the central government to beneficiaries. For the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India, the central government disburses funds to local governments based on projected spending. In Bihar, researchers tested the effect of an information technology reform that linked the flow of funds to actual expenditures and reduced the number of officials involved in the process. The reform reduced program expenditures by 24 percent without a concurrent decrease in MGNREGS employment or wages received, suggesting that increased transparency reduced leakage. These results led to a national scale-up of the fund-flow model, with sustained effects.

Policy issue

Corruption often limits the effectiveness of social programs in developing countries. In addition, some government-instituted accountability structures can reduce transparency and efficiency; for instance, in a system with advanced payments, disbursements are justified ex-post, rather than on the basis of actual expenditure. This creates opportunities for leakages and reduces the quality of audits, as local officials can delay justifying expenses until it is convenient for them, resulting in a long gap between officials receiving the funds and documenting their use.

In recent years, many governments have been attracted by the promise of digital financial platforms. By enabling just-in-time financing, such platforms can end the need for advance funds disbursement. This can enhance transparency and enable a leaner administrative structure. However, there is not enough evidence on the success of these technologies in decreasing government corruption and improving service delivery. It is also not clear whether such a reform benefits the central government, local officials, and villagers in the same way, which might affect their preferences for a scale-up.

Context of the evaluation

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India is the largest social protection program in the world, reaching almost 50 million households in 2013. MGNREGS guarantees households 100 days of work per year, typically in unskilled manual labor on infrastructure projects. However, demand for employment is often greater than supply: in Bihar, where this evaluation took place, an estimated 77 percent of households wanted but could not find MGNREGS work in 2009-2010.

Evidence suggests that fund leakages have constrained MGNREGS work availability in Bihar. Almost half of local officials (47 percent) identified corruption in the administration as a major implementation issue and estimated that the improper use of government funds accounted for 21 to 30 percent of the program expenditures. The fund flow system design may have provided opportunities for these leakages: funds were disbursed annually to local governments based on projected spending amounts, rather than on the bases of actual expenditures. The Bihar government introduced e-governance reforms to improve MGNREGS' fund flow in 2010-2011 and introduced further reforms in 2012-2013.

Details of the intervention

Researchers conducted a randomized evaluation to measure the impact of e-governance reform of the MGNREGS cash flow on corruption and overall program performance. The evaluation, conducted between September 2012 and March 2013, spanned twelve districts in Bihar, covering a rural population of 33 million. In each district, 69 blocks (encompassing 1,033 villages) were randomly selected to implement the new fund flow system and the remaining 126 comparison blocks (encompassing 2034 villages) kept the status quo.

The e-governance reform enhanced transparency by linking the flow of funds to actual expenditures and reducing the number of officials involved in the process. Specifically, the reform required village-level officials to input the names of beneficiaries who had worked in the scheme and were owed wages into an online database. Submitting this information automatically released funds into the village bank account. These changes were intended to reduce opportunities for leakages and enable more effective audits. However, the reform also increased the administrative burden of village-level officials, who had to travel to block offices to input data, and on banks, which had to process more payments to village bank accounts.

Researchers used MGNREGS administrative data, as well as surveys with participants and government officials, to measure government expenditures, wages, program participation, and implementation issues, among other outcomes.

Results and policy lessons

The financial reform reduced corruption and program costs but did not increase the amount of work offered through the program. The reform led to delayed payments to workers during initial implementation stages and was unpopular among district-level officials. In spite of that, the reform gained traction in the central government, leading to a national reform of MGNREGS fund flow in 2015.

Program spending: The reform reduced government spending on MGNREGS by 24 percent in treatment villages, a reduction of INR 230,600 (US\$3,604) from INR 954,000 (US\$14,909) in comparison villages.

Program costs: The electronic transfer system reduced the amount of idle funds held in treatment village accounts, reducing the financial costs of implementing MGNREGS. Average bank balances for treatment villages were 30 percent lower than comparison villages. Overall, the combination of lower spending and a decline in idle funds reduced program expenditures by 38 percent in treatment villages, which translates into a cost saving of roughly US\$6 million.

Employment through MGNREGS: Through surveys with beneficiary households, researchers found that there was no effect on household participation in MGNREGS or wages earned through the program.

Leakages: The reduction in MGNREGS spending in treatment villages reflected a reduction in leakages, as there was no corresponding reduction in public employment provision or public infrastructure built under the program. Researchers found evidence that personal wealth of presumably corrupt MGNREGS functionaries declined by 19 percent due to the intervention. They also found evidence that the number of “ghost” workers (people who are reported to be paid but are non-existent or have never worked) fell by 5 percent due to the intervention.

Timing of payments: Delays in payments to beneficiaries increased, especially in the first three months of the reform. Workers in treatment villages waited an average of 125 days for their payments, compared to 70 days in comparison villages during the first three months of the program. During the second three-month period, workers in treatment villages waited on average 82 days for their payments, compared to 50 days in the comparison villages. The data entry requirements for village officials and initial strains on banks to process more payments may have caused these delays. Thus, while the program objective was to speed up payments, it seems to have had the opposite effect, at least in the short-run.

Unhappy district officials effectively lobbied the state government to end the reforms in April 2013. However, the final results of the evaluation, which indicated that the reform reduced corruption and program costs, gained traction at the central government level following dissemination efforts by the researchers and J-PAL South Asia. By 2015, the federal government had promoted a new reform, and an Electronic Fund Management System (e-FMS) platform was being adopted almost nationwide to implement the MGNREGS. This new system reduced administrative burden by transferring money directly from the central government to the beneficiary's bank account.

Finally, the results have influenced the broader discourse on fund flow in government spending. For example, in June 2016, India's Ministry of Finance issued orders to extend the use of expenditure-based release of funds to all centrally-funded government programs.

For more details, see the evidence to policy case study.

Banerjee, Abhijit, Esther Duflo, Clement Imbert, Santhosh Mathew, and Rohini Pande. "Can E-Governance Reduce Capture of Public Programs? Experimental Evidence from a Financial Reform of India's Employment Guarantee." Working Paper, December 2014.