Estimating leakages in India's Employment Guarantee: an Update Clément Imbert and John Papp¹

Despite the Indian government's efforts to promote transparency and encourage monitoring from the administration and the civil society (social audits), MGNREGS' implementation is plagued by corruption. Local officials inflate the number of days worked per person (*ghost days*) or register fake persons (*ghost workers*) to syphon off MGNREGS funds. Paul Niehaus and Sandip Sukhtankar carried out one of the first systematic attempts to measure leakages. The authors attempted to survey MGNREGS workers sampled from the MIS (Niehaus and Sukthankar 2013). Out of 1499 individuals, they found only 821 both existed and reported having worked. Of these 821, most received less than the reported payment amount.

Another method of measuring corruption in MGNREGS is to compare the aggregate levels of employment reported in official data (MPR or MIS) with independent measures based on household surveys (Bhalla 2011, Himanshu 2010, Imbert and Papp 2011). We follow this method here and compare MGNREGS employment in official reports to the estimated number of days spent by rural adults on *any* public works estimated based on NSS Survey data. The results, presented in Table 1, reveal that in 2007-08 only 51% of reported MGNREGS employment is independently confirmed by the survey data. This is despite the fact that our survey measure includes employment on any public works project. The gap between official and survey measures suggests large leakages of MGNREGS funds. Interestingly, this gap appears to narrow over time to 71% in 2009-10 and 80% in 2011-12. This is consistent with survey reports which indicate that corruption in MGNREGS decreased, due to improved monitoring and successive reforms in the payment of MGNREGS wages (Dreze 2014, Muralidharan, Niehaus and Sukhtankar 2014, Banerjee, et al. 2014).

Table 1 compares official figures on MGNREGS employment with survey estimates of employment on any public works, which may include other public infrastructure programs. In Bihar for example, MGNREGS implementation has been low since the start of the program, but the state government has carried out an ambitious road construction program. This is one possible explanation for why Table 1 shows twice as many days worked in public works based on the NSS survey data compared with the official MGNREGS data in 2009-10. This methodology leads to a downward bias in the estimated amount of leakages in MGNREGS implementation. An alternative strategy is to compare official MGNREGS employment with days of MGNREGS work in the NSS survey. Table 2 shows the results of this comparison: the gap is larger, with only 27% of reported employment confirmed by survey data. This alternative methodology likely overestimates the gap between official reports and

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survey data. In particular, enumerators and respondents in NSS surveys may be unable to distinguish between MGNREGS employment and other rural public works programs.

Bibliography

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

Bhalla, Surjit S. 2011. "Does NREGA Really Work?" Business Standard, March 27.

Dreze, Jean. 2014. "Learning from NREGA." *The Hindu*, August 20.

Himanshu. 2010. "Five Heady Years of MGNREGA." Live Mint, August 31.

Imbert, Clément, and John Papp. 2011. "Estimating Leakages in India's Employment Guarantee." In *The Battle for Employment Guarantee*, by Reetika Khera. Oxford University Press.

Muralidharan, Kartik, Paul Niehaus, and Sandip Sukhtankar. 2014. *Payments Infrastructure and the Performance of Public Programs: Evidence from Biometric Smartcards in India.* NBER Working Papers, National Bureau of Economic Research.

Niehaus, Paul, and Sandip Sukthankar. 2013. "Corruption Dynamics: The Golden Goose Effect." American Economic Journal: Economic Policy 230-69.

Table 1: Total number of days spent on any public works from NSS surveys and MGNREGS employment according to official reports

	2007-2008			2009-10			2011-12		
	NSS	MPR	Ratio	NSS	MPR	Ratio	NSS	MIS	Ratio
Andhra Pradesh	2665	2972	90%	4510	4317	104%	3162	4049	78%
Assam	75.76	572.5	13%	122	572.5	21%	275.5	329.9	84%
Bihar	292.8	1161	25%	1856	812.2	229%	1493	889.7	168%
Chhattisgarh	868.2	1508	58%	533.9	1152	46%	826.1	1134	73%
Gujarat	0	88.37	0%	315.3	597.4	53%	61	257	24%
Haryana	61.82	33.23	186%	17.51	52.71	33%	58.28	107.2	54%
Himachal Pradesh	115.1	121.7	95%	240.8	252.9	95%	436.3	281.7	155%
Jharkhand	111.9	872.1	13%	134.1	873.5	15%	381.6	585.6	65%
Karnataka	0.357	94.48	0%	122.4	1624	8%	12.84	697.9	2%
Kerala	41.09	59.6	69%	253.6	348.9	73%	704.7	706.5	100%
Madhya Pradesh	1938	3319	58%	886.8	1905	47%	1161	1712	68%
Maharashtra	43.78	247.1	18%	223.9	163.5	137%	133.4	961.3	14%
Orissa	228	441.7	52%	321.6	742	43%	482.3	474.5	102%
Punjab	20.13	21.99	92%	127.8	69.7	183%	11.37	59.02	19%
Rajasthan	1242	2818	44%	3297	3123	106%	1429	2070	69%
Tamil Nadu	343.5	654.3	52%	1924	1879	102%	3572	3617	99%
Uttar Pradesh	565.9	1631	35%	1162	3445	34%	2026	2224	91%
Uttaranchal	101.2	90.83	111%	80.9	158	51%	45.68	197.7	23%
West Bengal	364	1017	36%	712	1523	47%	1628	2107	77%
All 19 States	9079	17724	51%	16842	23611	71%	17900	22461	80%

Source: Monthly Progress Reports (MPR) and Monitoring Information System (MIS) are official reports on MGNREGS employment that are publicly available from nrega.nic.in. National Sample Survey (NSS) are nationally representative household surveys. The survey period extends from July 1st to June 30th of each year. Official data is aggregated over the same period.

Table 2: Comparison of MGNREGS employment in official reports (MPR and MIS) with estimated number of MGNREGS days in survey data (NSS)

	2007-2008			2009-10			2011-12		
	NSS	MPR	Ratio	NSS	MPR	Ratio	NSS	MIS	Ratio
Andhra Pradesh	2121	2972	71%	1737	4317	40%	2076	4049	51%
Assam	0	572.5	0%	0	572.5	0%	14.42	329.9	4%
Bihar	0	1161	0%	15.44	812.2	2%	2.661	889.7	0%
Chhattisgarh	490.1	1508	33%	170.8	1152	15%	334.7	1134	30%
Gujarat	0	88.37	0%	203.6	597.4	34%	55.56	257	22%
Haryana	19.93	33.23	60%	0	52.71	0%	0	107.2	0%
Himachal Pradesh	87.39	121.7	72 %	18.76	252.9	7%	200.9	281.7	71%
Jharkhand	45.45	872.1	5%	4.766	873.5	1%	0	585.6	0%
Karnataka	0	94.48	0%	122.4	1624	8%	0	697.9	0%
Kerala	0	59.6	0%	98.92	348.9	28%	318.5	706.5	45%
Madhya Pradesh	862.7	3319	26%	298.1	1905	16%	167.2	1712	10%
Maharashtra	0	247.1	0%	110.7	163.5	68%	0	961.3	0%
Orissa	63.29	441.7	14%	126.3	742	17%	115.2	474.5	24%
Punjab	3.888	21.99	18%	0	69.7	0%	11.37	59.02	19%
Rajasthan	470.5	2818	17%	2170	3123	69%	317.4	2070	15%
Tamil Nadu	120.8	654.3	18%	769.2	1879	41%	2234	3617	62%
Uttar Pradesh	168.1	1631	10%	481.8	3445	14%	632.4	2224	28%
Uttaranchal	45.04	90.83	50%	20.23	158	13%	21.53	197.7	11%
West Bengal	226.6	1017	22%	170.3	1523	11%	995.5	2107	47%
All 19 States	4725	17724	27%	6518	23611	28%	7497	22461	33%

Source: Monthly Progress Reports (MPR) and Monitoring Information System (MIS) are official reports on MGNREGS employment that are publicly available from nrega.nic.in. National Sample Survey (NSS) are nationally representative household surveys. The survey period extends from July 1st to June 30th of each year. Official data is aggregated over the same period