

Inform, Monitor, Advocate

Accountability of public works entitlements in rural India

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Information and power asymmetry as barrier to rights

- ▶ Information and power asymmetries can make it difficult to access rights, e.g. renter-landlord, employee-employer, welfare recipient-government agent.
- ▶ Research on the impact of information on corruption and program delivery find information effects depends on its nature: given publicly (Reinikka and Svensson, 2011; Banerjee, Hanna, Kyle, Olken, and Sumarto, 2015) and targeted on citizens versus government employees (Banerjee et al., 2015).

The role of information

- ▶ Awareness on rights alone can have important implications for programme outcomes
 - ▶ (Banerjee et al., 2015) find that providing information about food entitlements leads to improved distribution.
 - ▶ (DiRienzo, Das, Cort, and Burbidge Jr, 2009) find that information awareness by beneficiaries limits the discretionary powers of government, enabling a more efficient delivery

When information is not sufficient

- ▶ Other papers argue that awareness, while necessary, may not be sufficient for change (Banerjee, Banerji, Duflo, Glennerster, and Khemani, 2010; Ravallion, van de Walle, Dutta, and Murgai, 2013).
- ▶ We need to be able to act on the information received - power imbalances can be prohibitive (Dutta, Murgai, Ravallion, and van de Walle, 2014).
- ▶ Often demand side initiatives need to be complimented by supply side initiatives (Ravallion et al., 2013; Imbert and Papp, 2012).

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- ▶ In this paper we ask
 - ▶ Does information in the hands of citizens mobilised by independent, government endorsed agents affect the total days supplied of guaranteed employment?
 - ▶ Does adding a monitoring and grievance mechanism improve on the effect of the information campaign?

The right to work in rural India

- ▶ The 2005 National Rural Employment Act (MGNREGA) gives rural Indians the right to work 100 days per year on public projects
- ▶ The act provides the rural poor a social safety net by the guarantee of a work, particularly when other work is not available.
- ▶ Hard physical labour leads to self-selection into the programme
- ▶ However, pay is usually higher than alternatives in rural areas
- ▶ Funding provided on the state level but works are distributed through a local government agent
- ▶ Problematic implementation exemplified by high variance of participation by eligible households, e.g. 8% in Karnataka vs 38% in neighbouring Andhra Pradesh in 2008

Miss-allocation of works by local agents

- ▶ MGNREGA creates competition for rural employers due to additional labour demand at higher wages
- ▶ Local employers, e.g. farmers, might pressure agents to withhold work to reduce competition, in particular during the non-lean season
- ▶ Collusion between individual households and agents can lead to an uneven supply of works
- ▶ Therefore, corruption probably leads to lower and more uneven participation by households

Intervention to protect MGNREGA in Andhra Pradesh

- ▶ The state government in Andhra Pradesh intervenes in three steps from 2010
 1. In 2010, NGOs combine households into groups to facilitate the supply of work (more efficient work project size)
 2. Between 2011 and 2012, NGOs inform households about their rights, village by village
 3. From 2013: NGOs provide a monitoring and grievance mechanism through monthly meetings in villages
- ▶ Implementation of interventions is uneven across areas due to NGO failings (except step 1)

Intervention provides a natural experiment

- ▶ Treated and non-treated areas are empirically similar in key variables
- ▶ We test for parallel trends:
 - ▶ Non-treatment areas display a higher growth in total days worked.
 - ▶ This suggests a negative bias, which may result in an underestimation of results
- ▶ We use the treatment variation to estimate the effects of steps 2 and 3 using a difference-in-difference approach

Data

- ▶ Young Lives panel survey from Andhra Pradesh and Telangana (split in 2014)
- ▶ 1225 households in 87 villages, representative for regions and poverty distribution in the two states
- ▶ Rounds 3-5 (2009-2016) contain detailed data on MGNREGA, in particular total days worked by lean and non-lean seasons
- ▶ Round 3 data is collected before treatment, round 4 data after the information campaign, and round 5 data after the provision of the grievance mechanism

Empirical strategy

- ▶ We estimate days worked by a household, overall and by lean/non-lean season

$$y_{it} = \beta_1 D_i + \sum_{k \in 4,5} (\beta_k D_i \times T_k + \tau_k T_k) + X_{it} \gamma + \alpha + \epsilon_{it}$$

- ▶ Here, days worked by household i in period t , y_{it} , are a function of being in the treatment group (D_i), the time period T_t , and further household and regional control variables in X_{it}

Days worked overall and by agricultural season

	(1)	(2)	(3)
	Days Worked	Days Lean	Days Non-lean
Treatment group	1.154 (6.10)	0.928 (4.53)	0.178 (2.91)
Treatment group $\times$ round 4	7.759 (8.48)	1.668 (6.93)	6.148* (3.49)
Treatment group $\times$ round 5	10.925** (5.32)	7.598* (4.19)	3.384 (4.10)
Round 4	6.521 (4.26)	14.370*** (3.58)	-7.902*** (2.41)
Round 5	3.854 (3.87)	10.508*** (3.23)	-6.711*** (2.33)
Constant	52.196*** (9.95)	31.774*** (6.91)	20.364*** (4.18)
Observations	3,673	3,673	3,673
Regional Dummies	Yes	Yes	Yes
Household and Village Controls	Yes	Yes	Yes

Linear model, estimated by OLS. Clustered standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Effects by Gender

	(1)	(2)	(3)	(4)	(5)	(6)
		Female			Male	
	Days	Days Lean	Days Non-lean	Days	Days Lean	Days Non-lean
Treatment group	1.161 (3.54)	0.645 (2.48)	0.517 (1.74)	-0.117 (3.01)	0.244 (2.32)	-0.361 (1.42)
Treatment group $\times$ round 4	3.493 (4.70)	1.051 (3.72)	2.442 (2.02)	4.378 (4.19)	0.655 (3.44)	3.724** (1.81)
Treatment group $\times$ round 5	4.201 (3.16)	2.731 (2.48)	1.470 (2.26)	6.306** (2.73)	4.374** (2.05)	1.932 (2.05)
Round 4	3.080 (2.54)	8.094*** (2.10)	-5.014*** (1.48)	3.410 (2.09)	6.298*** (1.71)	-2.889** (1.12)
Round 5	3.032 (2.27)	7.247*** (1.93)	-4.215*** (1.24)	1.304 (2.00)	3.800** (1.61)	-2.496** (1.22)
Constant	30.205*** (6.13)	18.206*** (4.34)	11.999*** (2.49)	22.075*** (4.86)	13.713*** (3.38)	8.362*** (2.14)
Observations	3,673	3,673	3,673	3,673	3,673	3,673
Regional Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Household and Village Controls	Yes	Yes	Yes	Yes	Yes	Yes

Linear model, estimated by OLS. Clustered standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Conclusion

- ▶ Evidence that treated households worked more days overall
- ▶ Treatment also affected non-lean season, evidence for addressing power imbalances
- ▶ Therefore, the combination of informing workers and providing them with access to a monitoring and grievance mechanism can affect the ability for households to access work when they want it
- ▶ Important caveat, we can not disentangle whether the impact in Round 5 is driven by the information campaign (late treatment effect or the added grievance mechanism

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Robustness checks: Changing Sample conditions

VARIABLES	(1) JC one round min Ttl days Worked	(2) TotDaysLeanMG	(3) TotDaysNonLeanSMG	(4) JC all rounds Ttl days Worked	(5) TotDaysLeanMG	(6) TotDaysNonLeanSMG	(7) Early MGNREGA Area Ttl days Worked	(8) TotDaysLeanMG	(9) TotDaysNonLeanSMG
Intervention2	3.425 (6.71)	2.412 (5.02)	0.962 (3.10)	2.733 (7.24)	1.791 (5.38)	0.884 (3.46)	-6.965 (8.41)	-5.182 (6.48)	-1.851 (4.82)
Treated households round 4	7.945 (8.87)	1.758 (7.26)	6.247* (3.66)	10.909 (9.13)	4.020 (7.52)	6.957* (4.02)	23.408** (10.93)	16.899* (8.46)	6.613 (5.22)
Treated households round 5	11.412** (5.51)	8.100* (4.45)	3.370 (4.37)	15.618*** (5.64)	11.726** (4.46)	3.960 (4.85)	20.826*** (6.64)	14.363*** (5.28)	6.580 (6.23)
Round = 4	5.981 (4.37)	14.407*** (3.71)	-8.482*** (2.50)	0.863 (4.03)	11.035*** (3.47)	-10.236*** (2.80)	-2.812 (4.96)	7.865* (4.57)	-10.772*** (3.75)
Round = 5	2.312 (3.89)	9.760*** (3.30)	-7.508*** (2.40)	-4.393 (3.81)	5.080 (3.27)	-9.542*** (2.65)	-4.239 (4.84)	4.156 (4.38)	-8.507*** (3.66)
Constant	46.914*** (9.81)	27.794*** (6.98)	19.058*** (4.14)	46.080*** (11.00)	27.415*** (7.75)	18.589*** (4.65)	35.249*** (12.87)	28.084** (11.69)	7.115 (5.31)
Observations	3,490	3,490	3,490	3,130	3,130	3,130	2,118	2,118	2,118
Regional Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household and Village Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment4+Treatment5	19.36	9.858	9.618	26.53	15.75	10.92	44.23	31.26	13.19
P value	0.153	0.328	0.187	0.0552	0.121	0.177	0.00810	0.00535	0.228
Mean Control R4	46.06	39.11	6.951	46.79	39.29	7.505	38.86	33.47	5.390
SD Control R4	48.06	44.35	18.21	48.69	44.93	18.99	50.39	47.89	18.99
Mean Control R5	37.92	31.59	6.329	37.46	30.77	6.685	33.37	26.95	6.422
SD Control R5	39.16	33.91	17.14	37.02	31.22	17.56	39.22	32.36	18.91

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Robustness checks: Estimation Model

VARIABLES	(1) Fixed Effects Ttl days Worked	(2) Fixed Effects TotDayLeanMG	(3) Fixed Effects TotDaysNonLeanSMG	(4) Poisson Ttl days Worked	(5) TtlDays IRR	(6) Poisson TotDaysLeanMG	(7) TtlDays IRR	(8) Poisson TotDaysNonLeanSMG	(9) TtlDays IRR
Intervention2				0.019 (0.15)	1.019 (0.150)	-0.002 (0.19)	0.998 (0.190)	-0.061 (0.18)	0.941 (0.167)
Treated households round 4	5.997 (8.203)	0.857 (6.895)	5.199 (3.334)	0.169 (0.19)	1.184 (0.227)	0.089 (0.25)	1.093 (0.271)	0.700*** (0.26)	2.014*** (0.533)
Treated households round 5	10.682** (5.348)	8.065* (4.541)	2.671 (3.943)	0.259** (0.13)	1.295** (0.168)	0.255 (0.16)	1.290 (0.212)	0.529* (0.32)	1.698* (0.540)
Round = 4	3.333 (3.897)	12.224*** (3.441)	-8.934*** (2.238)	0.152 (0.10)	1.164 (0.117)	0.467*** (0.11)	1.596*** (0.183)	-0.752*** (0.22)	0.471*** (0.102)
Round = 5	-3.087 (3.690)	5.980* (3.345)	-9.106*** (2.080)	0.080 (0.10)	1.083 (0.105)	0.365*** (0.12)	1.441*** (0.167)	-0.699*** (0.22)	0.497*** (0.108)
Observations	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673
R-squared	0.017	0.043	0.051						
Number of childid	1,225	1,225	1,225						
Regional Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household and Village Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1