



# Women political leaders, corruption and learning: evidence from a large public program in India

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# Policy entry point

- **Affirmative action policies: political reservations for women in India**
- **Extends the study of women as agents of development and change from the household to the political sphere**
- **Focus on what Agarwal (2010) describes as 'the potential of presence'**
  - **(i) political leadership**
  - **(ii) critical mass in governing bodies**

‘Theoretically’ women’s political presence may translate into:

***(i) diversity dividends*** (Page 2007; Ioannides 2010)

***(ii) other governance gains*** (e.g. Dollar et al 2001).

***(iii) nothing/or even be detrimental*** (e.g. Bardhan et al. 2010): **deterioration may be temporary**

# Existing evidence– GOVERNANCE GAINS

- **Two cross-country studies, Dollar et al. (2001) and Swamy et al. (2001), found greater female political representation (or presence in the bureaucracy) to be associated with lower corruption.**
- **Could be a spurious correlation: vital to close in on 'causal' relationships and on underlying mechanisms.**

# Women's political reservations as natural policy experiments: India's Gram Panchayats

- **Stand 1: it's all good news**
- **Using data from GPs in West Bengal and Rajasthan, Chattopadhyay & Duflo (2004) find that in GPs with a female village council head, public goods investments more strongly reflect the preferences of female voters (drinking water & roads).**
- **Duflo and Topalova (2005) report better availability and higher quality of public goods in such GPs.**

## continued...

- **Beaman et al. (2009): in female reserved village councils in West Bengal, people were less likely to have paid bribe to receive BPL card or obtain a water connection.**
- **Exposure to women political leaders associated with electoral gains: more women standing for office and improved odds for winning unreserved seats (ibid.).**

# Critical voices

**Stand 2: there are no news – or the news are not that good**

- **In four Southern states ' *Gram Panchayats led by women are no worse or better in their performance than those with male leaders, and women politicians do not make decisions in line with the needs of women* (Ban and Rao 2006).'**
- **Bardhan, Mookherjee and Torrado (2010): significant worsening of within-village targeting of Scheduled Caste/Scheduled Tribe households in village councils with female reserved leaders in West Bengal: pin this on women's inexperience.**

# Our study: what's new ?

- **Take advantage of the nation-wide policy of randomly reserving village council headships for women in India.**
- **Focus on *corruption* and the *quality of delivery* of MNREGA - the largest public program to date – in Andhra Pradesh.**
- **Panel of official audit report data with unchanged village council headship and composition (GP election coinciding with MNREGA phasing in).**
- **The first study of how governance outcomes evolve as women political leaders gain experience.**



## The program: steps to obtain MNREGA work

- **All households eligible ('rights'-based)**
- **Apply for registration to GP – in writing or orally**
- **GP issues job card to household, free of cost**
- **Submit written or oral application for work to GP**
- **Weekly wage disbursement**

# Data

- **Three surveys across 8 districts of Andhra Pradesh in April-July, 2011:**
  - **Current MPDOs (100 mandals)**
  - **Sarpanches (3 GPs in each sampled mandal) elected in 2006 for a fixed term of 5 years.**
  - **Beneficiary households (1,500 across 300 sampled GPs)**
- **Audit reports (supplemented by abridged reports) for surveyed GPs from 2006 to 2010.**
- **Village level census abstract, 2001**
- **State Election Commission, 2006**

## Reserved GP sarpanches relatively disadvantaged

Characteristic	Unreserved GP	Reserved GP	Difference
	N=172	N=124	
	(1)	(2)	(1)-(2)
Age	44.72	42.31	2.40**
Higher secondary or more education	0.54	0.15	0.40***
<i>Political experience and background</i>			
Own prior political experience	0.22	0.11	0.11**
Held sarpanch position previously	0.07	0.06	0.01
Relative of other GP member	0.07	0.14	-0.07**
<i>Assistance with day to day official work as sarpanch</i>			
Receives assistance	0.13	0.73	-0.60***
Is accompanied to GP meetings	0.07	0.50	-0.43***

## Summary (balance):

- **No difference in GP characteristics**
- **No difference in average, observable household characteristics across the two GP types**
- **Randomization effective**
- **Female leaders suffer from several 'handicaps'**

## Methodology – Cross-sectional household data

$$NREGS_{ijk} = \beta_0 + \beta_1 R_{jk} + \beta_2 \mathbf{Z}_{ijk} + \beta_3 \mathbf{X}_{jk} + \beta_4 D_k + \varepsilon_{ijk}$$

$NREGS_{ijk}$  : **program process experience of household  $i$  in GP  $j$  in mandal  $k$**

$R_{jk}$  : **GP  $j$  in mandal  $k$  is reserved for female sarpanch**

$\mathbf{Z}_{ijk}$  : **household characteristics (caste, religion, land ownership)**

$\mathbf{X}_{jk}$  : **GP characteristics including sarpanch attributes**

$D_k$  : **dummy for mandal  $k$**

# Methodology – GP level panel audit data

$$Audit_{jklt} = a_0 + a_1 R_{jkl} + \sum_t a_t (R_{jkl} * Year_t) + a_2 \mathbf{X}_{jkl} + a_3 D_k + a_4 Year_t + a_5 (D_l * Year_t) + \mu_{jklt}$$

$Audit_{jklt}$  : **Number of irregularities of given type in GP  $j$ , mandal  $k$ , district  $l$  in audit year  $t$**

$D_l * Year_t$  : **time trend of district  $l$  in audit year  $t$**

# Corruption and inferior program governance in female reserved GPs (household survey/cross-section)

<i>Program process</i>	<i>Coefficient on GP reserved for female</i>		
	(1)	(2)	N
<i>Registering with the program</i>			
(1) Asked to make payment for job card	0.066**	0.077**	1484
(2) Bribe amount conditional on payment	-4.228	-8.521	243
<i>Receiving program benefits</i>			
(3) Wages received lower than wages due	0.026	0.030	1453
(4) Weeks for wage payment receipt	0.089*	0.095*	1484
(5) Wage payment through cash-in-hand	0.002	0.002	1484
<i>Verification of program funds</i>			
(6) Asked to verify labor records	0.083**	0.086**	1473
(7) Discrepancy in labor records, cond. on (6)	0.055*	0.053	775
mandal fixed effects	√	√	
household characteristics	√	√	
sarpanch characteristics	√	√	
village census characteristics	x	√	

# Sarpanch experience, corruption and governance (household survey: restricted sample)

Coefficient	<i>Registering with the program</i>	<i>Receiving program benefits</i>			<i>Verification of program funds</i>		
	Asked to make payment for registration card	Asked to make payment to receive due wages	Wages received lower than wages due	Weeks for wage payment receipt	Wage payment through cash-in-hand	Asked to verify labor records	Discrepancy in wage payments, conditional on (6)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) GP reserved for female	0.366***	0.203***	0.098*	0.482***	0.039	0.318***	0.323***
(2) Prior political experience	0.122	-0.004	0.187*	-0.178	-0.060	-0.007	1.010***
(3) Prior political experience X GP reserved for female	-0.307*	-0.361***	-0.330***	-0.062	0.092	-0.104	-1.574***
(4) Constant	0.013	-0.156	1.393***	1.739***	0.005	-1.543*	3.197***
Test of overall significance: GP reserved for female	0.059	-0.158	-0.232**	0.421	0.131	0.215	-1.251***
N	599	599	582	599	599	595	330
R <sup>2</sup>	0.42	0.29	0.33	0.36	0.60	0.69	0.42

Note: The sample has been restricted to those GPs in which the election for the position of sarpanch was closely contested in 2006.



# Governance over time in female reserved GPs (audit data, irregularities filed by audit team)

<b>Coefficient</b>	<i>Labor related irregularites</i>			<i>Material related</i>	
	Total labour related irregularities	Non-payment/ delay in wage payment	Impersonation s/ benami wages	Work does not exist	Excess payments/ Bribes
GP reserved for female	0.910	0.383**	0.356*	-0.175	0.046
GP reserved for female x 2007-2008	-1.231**	-0.409**	-0.405*	0.180	-0.042
GP reserved for female x 2008-09	-0.788	-0.348**	-0.371*	0.142	-0.095
GP reserved for female x 2009-10	-1.143*	-0.437***	-0.400*	0.014	-0.111
GP reserved for female x 2010	-0.863	-0.378**	-0.345	0.312	0.159
N	484	484	484	484	484

# Robustness

- **Two districts in sample did not introduce MNREGA until 2007-08: our results might thus reflect that later implementers were better: re-running without these two districts, the first coefficient in column 1 also turns significant.**

# Interpretation: panel

- **Inexperienced women political leaders perform worse than men during the first year in office.**
- **They do, however, rapidly progress and not just in a remedial sense: we observe complete catching up.**
- **Women political leaders perform as well as men – neither better nor worse - once initial gendered disadvantages recede.**

# Rival explanations?

- ***Reporting biases?***
  - **Private information in household survey**
  - **Irregularities filed by social audit team (panel).**
- ***Gender stereotypes?***
  - **Irregularities filed by social audit team (panel).**
  - **Results vary by reserved sarpanch experience.**

# Conclusion

- **Cross-section:**
- **More corruption and poor administration in GPs with female reserved sarpanches**
- **Once we control for prior political experience, there is a differentially larger and usually positive effect on corruption-related MNREGA governance in reserved GPs.**

# Remedial, catching up or net governance gains?

- **Social audit panel data**
- **If women are more development oriented, this may be clouded by initial political inexperience: as experience builds up, governance in councils with female reservations should improve. This is what we observe.**
- **However, while women quickly catch up, we do not observe net governance gains: this is consistent with Bardhan et al's assertion that reservations may be costly to begin with.**
- **The good news is that women reserved leaders (in AP) catch up fully and very quickly.**


# Results preview

- ***Cross-section:*** Households in female reserved GPs are more likely to have experienced corruption and poor program administration.
- ***Panel data:*** Improved governance and reduced corruption in MNREGA projects in female reserved GPs over time.
- When female *sarpanches* have prior political experience, better MNREGA governance is observed.

# Behavioural underpinnings

- **Women more pro-social (literature on intrahousehold allocations)**
- **Women are more honest and committed to ethical conduct (experiments cited in Dollar et al 2001)**
- **Surveys showing women to be less tolerant of corruption (Swamy et al 2001)**



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- **Women more risk averse (Eckel and Grossman 2008; Fletschner et al 2010)**
    - **Female leaders may prefer to let public funds leak rather than confront and punish those responsible for pilferage.**

# GPs: Randomized reservation for women sarpanches

Characteristics	Unreserved GPs	Reserved GP	Difference
	N=172	N=124	
Persons per hectare of village area	3.55 (0.289)	3.26 (0.327)	0.30 (0.439)
Number of primary schools	4.58 (0.300)	3.66 (0.301)	0.92** (0.436)
Number of middle schools	1.54 (0.154)	1.41 (0.175)	0.13 (0.235)
Number of senior secondary schools	0.95 (0.107)	0.77 (0.114)	0.18 (0.159)
Number of primary health centre	0.28 (0.034)	0.23 (0.038)	0.05 (0.052)
Drinking water	0.99 (0.006)	0.99 (0.008)	0.00 (0.010)
Tap water	1.20 (0.034)	1.20 (0.040)	0.00 (0.052)
Tube well	1.43 (0.051)	1.38 (0.063)	0.05 (0.081)
Hand pump	1.03 (0.016)	1.01 (0.018)	0.03 (0.025)
Post office	0.88 (0.028)	0.82 (0.036)	0.06 (0.045)
Pucca road	1.10 (0.025)	1.16 (0.035)	-0.06 (0.042)
Proportion of cultivated area which is irrigated	0.28 (0.020)	0.24 (0.022)	0.04 (0.030)
Distance to nearest town	29.69 (1.512)	31.31 (1.855)	-1.62 (2.377)

Source: Census, 2001

## Beneficiary household comparison

	Unreserved GP	Reserved GP	Difference
	(1)	(2)	(1) – (2)
<i>Household characteristics</i>	<b>N=860</b>	<b>N=640</b>	
Household size	4.46 (0.053)	4.33 (0.062)	0.13 (0.082)
Total land owned	1.56 (0.133)	1.62 (0.122)	-0.05 (0.186)
Below poverty line (BPL)	0.99 (0.004)	0.99 (0.004)	0.00 (0.006)
SC household head	0.59 (0.017)	0.59 (0.019)	-0.01 (0.026)
ST household head	0.26 (0.015)	0.21 (0.016)	0.04** (0.022)
Hindu household head	0.92 (0.009)	0.94 (0.009)	-0.02 (0.013)
Household head casual laborer	0.82 (0.013)	0.85 (0.014)	-0.03 (0.02)
<b>Awareness of NREGA entitlements</b>	<b>3.58</b>	<b>3.52</b>	<b>0.06</b>
<b>(maximum score 5)</b>	<b>(0.023)</b>	<b>(0.028)</b>	<b>(0.036)</b>

# Role of Gram Panchayats in MNREGA

## *Nationwide*

- **Prepare shelf of projects to be implemented**
- **Planning and the subsequent execution of at least 50% of all projects**

## *Andhra Pradesh*

- **Appoint field assistant (FA): the direct interface between beneficiaries and program**
  - Register and issue job cards to households**
  - Intimation of work availability**
  - Maintain labor records for timely and correct disbursement of wages**
  - Choose suppliers for material components of MNREGA projects**