Political Reservation and Women's Empowerment:
Evidence from Local Governments in Rural India

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Introduction

- Women are under-represented in most political systems with estimates putting their share in the world's parliamentarians at 16% (Dahlerup and Francisco, 2005) and only few countries where women account for 30% or more of political positions (Roberts and Seawright, 2008).

- In rural India, a reservation policy ensures that, in one-third of randomly chosen local governments (panchayats), the position of village leader (pradhan) is reserved for a female.

- However, evidence is contradictory: some find significant increases in the quality of public goods provided by females, others note that the impact is rather limited or insignificant .

Objective

- The paper reconciles the seemingly contradictory findings by testing two propositions.

- Even though women's lower qualification may lead to a reduction in quality of governance, negative effects may be offset by the fact that having a female leader may prompt others, especially women, to participate more actively in political processes and the provision of local public goods.

- If effects on participation are permanent, they could outweigh losses that may be incurred as a result of reserving political positions for less qualified women.

Method

- The randomized control experiment (RCT) nature of the reservation policy make our identification strategy straightforward.

- In a large sample setting (250 villages, more than 10,000 households), a simple comparison of mean outcomes between the control and treatment villages gives us an average treatment effect.

- Panel data from 3 election cycles makes panel fixed-effect regressions possible.

Empirical models and results

- Impact on Gram Sabha Meetings

$$Y_{ivt}^j = \beta_v^j + \beta_1^j R_{vt} + \alpha_1^j R_{vt-1} + \beta_2^j X_{ivt} + \beta_3^j D_t + \varepsilon_{ivt}^j$$

$$Y_{ivt}^j = \beta_v^j + \beta_1^j R_{vt} + \alpha_1^j R_{vt-1} + \alpha_2^j (R_{vt} \times F_i) + \alpha_3^j (R_{vt-1} \times F_i) + \beta_2^j X_{ivt} + \beta_3^j D_t + \varepsilon_{ivt}^j$$

Y_{ivt} is the variable of meeting participation, R_{vt} is the reservation dummy, R_{vt-1} is the lagged reservation dummy, F_i is the female dummy, X_{ivt} is household characteristics, D_t is term dummy, β_v is the village fixed effect.

Table 1 Female Reservation for Pradhan Positions and Gram Sahba Meeting Activities

		Voiced during the meetings	Number of meetings attended	Always knew the content in advance	Never knew the content in advance
PD reserved for female (β_1)		-0.001	1.552+	-0.008	-0.065+
PD reserved for female, previous term (α_2)		0.033**	-0.581	0.017	-0.063*
Female (β_2)		-0.163*	-0.363*	-0.060*	0.040+
PD reserved for female (β_1)		-0.010	1.376+	-0.019	-0.072**
PD reserved for female, previous term (α_2)		0.035+	-0.632	0.006	-0.067*
PD reserved for female*Female (α_1)		0.049	0.937**	0.048	0.038
PD reserved for female in the past*Female (α_3)		-0.011	0.200	0.051	0.016
Female (β_2)		-0.171*	-0.582*	-0.079*	0.030
Test for:	$\beta_1 + \alpha_1 = 0$	(0.95)	(2.31)**	(0.90)	(0.75)
	$\alpha_2 + \alpha_3 = 0$	(0.55)	(0.52)	(2.05)**	(1.23)
	$\alpha_1 + \beta_2 = 0$	(3.15)*	(0.92)	(0.98)	(1.02)
	$\alpha_3 + \beta_2 = 0$	(4.73)*	(1.30)	(1.32)	(1.16)

- Impact on willingness to contribute to improve local public goods

$$C_{iv}^j = \gamma_s^j + \gamma_1^j R_v + \varphi_2^j R_{v-1} + \gamma_2^j X_{iv} + \eta_i^j$$

$$C_{iv}^j = \gamma_s^j + \gamma_1^j R_v + \varphi_1^j (R_v \times F_i) + \varphi_2^j R_{v-1} + \varphi_3^j (R_{v-1} \times F_i) + \gamma_2^j X_{iv} + \eta_i^j$$

C_{iv} is villager's willingness to contribute to improve a public good, R_v is the reservation dummy, R_{v-1} is the lagged reservation dummy, F_i is the female dummy, X_i is household characteristics, D_t is term dummy, γ_v is the village fixed effect.

Table 2 Female Reservation for Pradhan Positions and Villagers' Willingness to Contribute to Improve Public Goods

		Sanitation and sewage	Irrigation, Canal, and Wells	Drinking Water	Credit and Input Subsidies	Health Facilities
PD reserved for female (γ_1)		0.013+	0.038*	-0.029*	0.032*	0.036*
PD reserved for female, last term (φ_2)		0.033*	0.036*	0.008	0.048*	0.017**
Female (γ_2)		0.020**	-0.065*	0.063*	-0.037*	0.030*
PD reserved for female (γ_1)		0.023**	0.072*	-0.052*	0.053*	0.032*
PD reserved for female, last term (φ_2)		0.034*	0.076*	-0.025*	0.069*	0.025*
PD reserved for female*Female (φ_1)		-0.021	-0.070*	0.047*	-0.042*	0.007
PD reserved for female in the past*Female (φ_3)		-0.003	-0.082*	0.070*	-0.043*	-0.015
Female (γ_2)		0.027*	-0.021**	0.030*	-0.012	0.032*
Test for:	$\gamma_1 + \varphi_1 = 0$	(0.84)	(1.25)	(0.24)	(1.77)+	(4.27)*
	$\varphi_2 + \varphi_3 = 0$	(2.99)*	(1.65)	(4.24)*	(2.66)*	(0.62)
	$\varphi_1 + \gamma_2 = 0$	(0.00)	(10.48)	(6.18)*	(7.80)*	(4.84)*
	$\varphi_3 + \gamma_2 = 0$	(1.67)+	(11.06)*	(0.35)	(7.06)*	(2.53)*

Table 3 Pradhan's Characteristics

	Reservation for women (a)	No Reservation (b)	Test for (a)=(b)
illiterate	24.72	5.74	***
primary education	75.28	94.26	***
secondary education	28.65	62.69	***
high school education	6.18	22.08	***
Held GP positions before	11.67	24.24	***
candidates before	6.67	20.92	***
No. of observation	180	459	

Discussion

- The reservation of Pradhan positions to women in the current Panchayat term significantly increases the number of meetings attended. The reservation of Pradhan positions to women in the previous Panchayat term significantly increases the share of villagers to speak up in the GS meetings.

- The coefficients on the interaction terms in general support the argument that women are more empowered than men.

- The positive and significant coefficient on reservation dummy for the previous Panchayat suggests strong persistence effect of the reservation to women.

- The sign and significance of the coefficient on the interaction term suggests the reservation has impact on women's willingness to contribute to improve issues that are mainly of concern for female.

Conclusions

- The qualification of leaders who occupy reserved seats is much lower than in unreserved ones.

- The reservation of Pradhan position to women has strong and consistent effect in mobilizing villagers in participating in Gram Sabha meetings and in contributing to improve local public goods.

- The effect of the reservation of Pradhan position on villagers' political empowerment is highly persistent over time.

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