Voters' awareness of social insurance programs impacts electoral candidature: Experimental evidence from India *

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Abstract

Experimental evidence from a pre-election voter awareness campaign in rural India shows that heightened citizen awareness about government-provided social insurance influences citizen incentives to contest elections. First, the likelihood of incumbents running for re-election is halved, with worse-performing incumbents driving the decline. Family members seek to replace them, but lack any incumbency-related advantage. Second, members of worse-off population groups that typically participate in social insurance programs (lower caste and women) enter as candidates and gain positive vote share. The effect on low caste is immediate while the effect on female candidacy only appears in the next election.

Keywords: Elections, Candidate entry, Information campaign *JEL*: O12, D72, H75

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1 Introduction

There is broad agreement that the effectiveness of democratic governance rests, to a large extent, on whether high quality citizens enter politics (Myerson, 2011) and on whether citizens reward quality and performance at election time (Besley, 2007). There is also the concern that in low-income democracies this may be prevented by the entrenchment of the economic elite and barriers placed on candidates from traditionally under-represented groups (Acemoglu and Robinson (2008)). Term limits and quotas are valuable policies to weaken incumbents and promote better representation of disadvantaged groups (Chattopadhyay and Duflo, 2004; Pande, 2003). However, incumbents may find strategies to circumvent them and stay in power (Querubin, 2011; Labonne et al., 2021).

In this paper we examine whether awareness of the key role played by elected representatives increases incumbent accountability and encourage entry of new types of candidates. We do this in the context of elections for local village council heads (Sarpanch) in the Indian state of Rajasthan in 2010. From the 382 village councils (GP) in our sample, voters in 119 randomly selected GP were exposed to a pre-election voter awareness campaign (PEVAC) in which they were informed, through door-to-door canvassing and a theater play, about the responsibilities of the council head in implementing a large public workfare program (MGNREGS), and given information about average MGNREGS spending and employment provision per GP in the district.¹ Voters were encouraged to vote for candidates who could implement the program well, regardless of their gender or caste. Independently from the PEVAC, 123 GP in our sample had been randomly selected in the previous electoral round to be reserved for women, which allows us to contrast the effects of the PEVAC with those of past gender reservation and estimate their interaction.

Our first finding is that the PEVAC reduced the probability that the incumbent would run again by 26 percentage points (more than half), and reduced the (unconditional) vote share going to them by almost a half. Female incumbents elected on reserved seats were also less likely to re-run: only 7% of (female) incumbents in previously reserved control GP re-ran, against 46% of (typically male) incumbents in previously un-reserved control GP. We find strong evidence of dynastic strategies in response to reservation: the decrease in the probability that incumbents

¹Critically no village- or politician-specific information was given (in contrast to previous work by Ferraz and Finan (2008) and Banerjee et al. (2011)) and subsequent work by (Dunning et al., 2019).

ran was entirely offset by a 36p.p. increase in the probability that their spouse ran, although these family candidates were generally not elected.² In the case of the PEVAC, we find no evidence that incumbents were replaced by their spouse, even when the incumbent was female, which implies a strong decline in spousal entry as compared to previously reserved control GP (-27p.p.). There is an 11p.p. increase in the probability of running for incumbents' relatives (other than spouse), with some limited electoral gain.

Our second finding is that, despite the fact that no local information was provided, the anti-incumbent effect is particularly strong for the worst incumbents. We build an index of performance on the MGNREGS program from independently collected data on public employment provision, and find that the anti-incumbent impact of the campaign was strongest for those with the lowest value of the index. Going from average performance to one standard deviation below the mean almost doubles the negative effects of the campaign, from -26 to -47p.p for the probability of running, and from -6.8p.p to -13p.p for vote share. The electoral success of family members was not related to the incumbent's performance.

Our third finding is that while the PEVAC did not affect the number of candidates, it did affect the composition of the pool. It increased the number of challengers who were members of lower caste groups. Broader political representation did not come at a cost in terms of (observable) candidate quality: candidates were no less likely to have secondary education or to have previous experience in running for office, in fact they were more likely to have been elected leader at a lower level of government (wardpanch). Meanwhile, having a female incumbent elected through reservation encouraged candidate entry: one additional challenger entered in previously reserved GPs (on a base of seven). It did not however change the composition of the pool of candidates (not even gender, in the first cycle). This suggests that the higher share of lower caste in PEVAC villages was not simply the effect of having a weaker incumbent. Rather, the PEVAC motivated candidates from groups that benefit more from the MGNREGS program.

The fourth finding is that, the PEVAC had an enduring effect on the propensity of women to run for office. Five years later, in 2015 elections, the fraction of candidates that were women in places where a PEVAC campaign was run in 2010 was 16 percentage points larger and their voteshare 15 percentage points higher. It is likely that the PEVAC attracted female candidates

²This resonates with Querubin (2011) and Labonne et al. (2021) findings on term limits in the Philippines.

because MGNREGS employment is a rare opportunity of wage work for rural women. Reservation for women also have a long term effect on the propensity of women to run for office, which is of the same magnitude. These effects are not driven by female candidates who ran in 2010: only 2% of 2015 candidates were already running in $2010.^3$

Finally, we use survey data to investigate whether the PEVAC brought new information on the MGNREGS program or simply helped focus the attention of voters on the issue. We find no evidence that voters in treatment GP knew more about the rules of the program, or the politicians' responsibility in implementing it. We also do not find that voters in treatment GP were on average more critical of the quality of implementation of the program in their GP. We do find however that voters' rating of MGNREGS implementation was strongly correlated with our measure of performance, both in treatment and control GP. This suggests that rather than providing information, the PEVAC prompted voters to use information they already had.

Taken together, these results demonstrate that simply emphasizing the role and the importance of policy makers can influence citizens, both to become candidates and to change who they vote for. They also show that incumbents are highly reactive to the voters' preferences, and may decide to exit if they have underperformed. This suggests three important conclusions. First the cost of entry may not be as large as we commonly assume. Rather, low perceived benefits may be a key barrier preventing the entry of new candidates. Second, voters have the information they need to evaluate incumbents, but they may not consider it worth their while to make use of it. Third, incumbent exit is malleable to voter's perceived preferences, so that accountability may be stronger than we often imagine.

There is a rich theoretical literature (Barro, 1973; Ferejohn, 1986; Persson et al., 1997), and more recently several empirical studies on the effect of delivering specific information on politicians to voters (Ferraz and Finan, 2008; Banerjee et al., 2011, 2014; Arias et al., 2022; Banerjee et al., 2024). A recent multi-site randomized control trial across six countries finds little evidence that information about politician performance changes voters behavior (Dunning et al., 2019). A major difference between our study and theirs is that in our context the PEVAC did not give any information about individual politician performance. Interestingly, one of the

³This echoes Beaman et al. (2009) who find that the effect of women reservation on elections appear in the second cycle after reservation, and are not driven by the first generation of elected candidates, but by the fact that other women step forward.

studies in Dunning et al. (2019) did find effects of information on voters also when in an additional treatment arm it increased its salience, by emphasizing the role of politicians' performance on voters welfare and when it facilitated coordination, by providing information to voters about the fact that other voters were given the same information (Adida et al., 2020). This is much closer to the context of our study, where citizens were invited to a theater play that emphasized the responsibility of local leaders in providing jobs and infrastructure to the village, and encouraged them to choose the right candidate for the role.⁴

There is also a growing literature on candidate entry, which focuses mostly on pecuniary incentives (Keane and Merlo, 2010; Ferraz and Finan, 2009; Avis et al., 2017). There is less work on the potential impact of delivering more general information on candidate entry. In a recent experiment in Pakistan, Gulzar and Khan (2024) find that emphasizing social benefits to holding office increases candidate entry and improves public goods provision, while emphasizing personal benefits has no effect. Interestingly, the pro-social messaging is only effective when done in public, which the authors interpret as evidence of social influence, such as peer encouragement, in the decision to run. These findings resonate with ours, since we find that public meetings that emphasize the social benefits from office change incumbent and challengers' decision to run or not to run. In contrast, in the Philippines, Cruz et al. (2021) find that incumbents were able to completely undo the negative effects of a PEVAC on elected leaders' responsibility by increasing vote-buying. In our context, a similar PEVAC hurts worse performing incumbents and motivates candidates from disadvantaged groups to run and win votes.⁵ The long-term positive effects on female representation that we document compare advantageously with those of gender reservation (Beaman et al., 2009).

The paper is structured as follows. Section 2 introduces the context and the intervention. Section 3 describes the data and the empirical strategy. Section 4 presents the results. And section 5 briefly concludes.

 $^{^{4}}$ A related literature studies the effect of electoral debates (Bidwell et al., 2020). In our context, the NGO prevented candidates from using the PEVAC meetings to advertise their campaign.

 $^{{}^{5}}$ In Cruz et al. (2021), the PEVAC was done a few days before the election, after the deadline for new candidates to register, while our intervention was done a few weeks before, and candidates could register until the last minute.

2 The intervention

2.1 Electoral and policy context

Our focus is on the 2010 village council or Gram Panchayat (hereafter GP) elections in the Indian state of Rajasthan. GPs provide the lowest tier of elected representation, with elections every five years. The GP consists of electoral wards, and each ward directly elects a councilor by plurality rule. The Sarpanch (head councilor) is also elected by direct vote. GP council decision-making is by majority voting. While the Sarpanch does not have formal veto power, he or she is the only full-time member of the council, with significant control over the final council decisions (Besley et al., 2012). Our experiment was focused on the Sarpanch election.

GP officials are responsible for the implementation of a number of public programs targeted to the rural poor. This includes the provision of housing (Indira Awas Yojana), pensions (Indira Gandhi National Old Age Pension Scheme), and training (Swarnajayanthi Grama Swarozgar Yojana). In addition, they are given a budget for small local infrastructure (drinking water, paved streets, street lights). In a representative household survey we conducted (see below), 78% of respondents cited drinking water as the most important public good, 10% cited roads and only 8% cited schools.

Since 2006, GP officials also administer the federal government's flagship social insurance program, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). This scheme entitles every rural household to 100 days of annual employment on public works at the statutory minimum wage. At the time of our study, it represents more than half of the budget GP are responsible for (The World Bank, 2011). Program administration includes registering potential beneficiaries, planning and executing public works, providing employment on these projects and enabling wage payments. For lack of better local employment opportunities, there is high demand for MGNREGS work among women and low caste households. In our survey, 51% of low caste (OBC, SC or ST) households had done MGNREGS work in the previous year, against 38% of general caste households. 31% of female respondents had done MGNREGS work, which is much more than the 19% who had done any non-NREGA work outside the household or the family farm (See Appendix Table A.1).

The 2010 Sarpanch elections were conducted between 22nd January and 4th February. Our

sample is drawn from three relatively poor districts: Bharatpur, Dholpur and Karauli. The typical Rajasthani GP has an electorate of 3,000 spread across multiple villages. 50% of the GPs in each district were randomly selected to be reserved for women regardless of their previous reservation status; our evaluation focuses on the remaining 50%, or 382 GPs, that were not reserved for women. Roughly a third of our study sample GPs had been (randomly) assigned as reserved for women in the previous 2005 election. In addition, half of our study sample GPs were reserved for Other Backward Castes (OBC), Scheduled Castes (SC) or Scheduled Tribes (ST) in the 2010 elections. A GP's social group reservation status reflects its demographic composition, and thus is not randomly assigned. Hence, our analysis controls for, but doesn't seek to identify, impacts of social group reservation.

2.2 **Pre-election Voter Awareness campaigns**

Street theater is frequently used to raise awareness about particular issues (e.g. HIV) in rural India. We partnered with a local NGO Prayatn, which had previous experience running awareness campaigns for the government to design a campaign that was broadly similar to those run by other NGO and state-government campaigns. In the three weeks prior to the election, we worked with Prayatn to implement a pre-election awareness campaign (or PEVAC), which used calendars, door-to-door canvassing and street theater to convey information about the Sarpanch's responsibility in providing public goods and access to MGNREGS employment. The theater performance was the cornerstone of the campaign and conducted by a troupe of street theater actors who drew from a vast repertoire of songs written in Rajasthani dialects, including songs about elections for "get-out-the vote" campaigns, and songs about the right to employment for the launch of the MGNREGS.

A first objective was to prompt voters to focus on candidate performance on public good and MGNREGS provision, instead of caste or gender. On public goods, the street play highlighted the importance of leader performance by comparing citizen well-being in a village with wellmantained public infrastructure (roads or hand pump for drinking water) with that in another village where infrastructure was poor. On MGNREGS, district average statistics on MGNREGS performance were printed on a calendar which was distributed to villagers and read out during the play. The role of the leader in providing employment was discussed, but we deliberately abstained from providing GP-specific MGNREGS performance statistics. The statistics included expenditures per GP, share of participant households and number of working days per participant household, which we downloaded in December 2009 from the official MGNREGS website. Absent information on program demand, just providing information on employment provided would not have been a good measure of performance.

A second objective was to encourage qualified citizens, especially women, to stand for election. In half of the PEVAC villages the campaign emphasized the message that all adults resident in the GP could run for Sarpanch election in unreserved councils, and that women Sarpanches typically performed as well as men. The play depicted a male candidate who attempted to forbid a woman to run against him, but was forced by village elder to admit that she had the right to run. Statistics on MGNREGS implementation in GP reserved for women in 2005 and in unreserved GP were printed on the calendars and compared during the play.

Our intervention was implemented in a randomly selected set of 119 GPs (out of our full sample of 382 GP). The average treatment village was exposed to the PEVAC ten days before the election. Candidates are not allowed to have party affiliation, and candidate registration occurs on the day before the election. In our politician survey a quarter of candidates reported deciding to run in the three weeks leading to the elections.⁶ Most candidates campaigned door-to-door (96%), only a quarter held meetings (29%), used posters (28%), or distributed food (23%).

A typical PEVAC implementation went as follows – a team would start by distributing calendars and advertizing the evening show in the main village. It would then travel to each additional village in the GP with more than 300 inhabitants and both distribute calendars and conduct a theater show. The team would then return to the main village and undertake the evening show. Overall, 472 theater performances occurred in 439 villages (the bigger villages had 2 shows). On average 234 people (roughly a third of the adult population) attended a show, and 130,000 calendars were distributed. 41% of show attendees were women. Appendix Figures A.1 and A.2 present the calendars and Appendix Figures A.3 shows a picture of the theater play.

⁶The fraction of candidates who decided to run within three week before the elections is higher in treatment GP (27%) than in control GP (23%) but the difference is not significant (p-value of two-sided t-test is 0.23).

3 Data and empirical strategy

3.1 Data sources

We briefly describe the data sources we use, with further details in the online appendix. The program statistics on employment and wages that were shared during the intervention come from the MGNREGS public information database (nrega.nic.in).

In March 2010, just after the elections, we conducted a household survey in 240 GPs (all 119 treatment GPs and a random sample of 121 control GPs). In each household, one male and one female adult household members were randomly selected to be surveyed. The survey provided an alternative measure of household participation in MGNREGS: each respondent was asked if she had wanted work during the past 12 months and whether the GP administration had provided them employment. We construct a standardized index of incumbent performance in each GP based on the share of respondents who participated in MGNREGS in the sample, and the share of respondents who participated in MGNREGS among those who wanted work.

The main GP election of interest is the 2010 election, and we also examine persistence of treatment effects in 2015 elections. We collected electoral data for all 382 GPs for 2010 and 2015 (and reservation information for these and prior elections in 2000 and 2005) from Rajasthan's State Election Commission (SEC). This includes candidate name, caste, gender and village, and votes received for each candidate. Turnout information was available only for 374 GP and votes for each candidate only for 373 GP.

In October 2011, we surveyed 2,100 candidates and incumbents in the 240 GPs that were previously covered by the household survey. This survey covered all 2010 candidates and incumbents (whether they ran or not), and also collected information on their education, profession, wealth and political career. We collected additional information on the political career of respondents' family members in order to identify candidates that belonged to the incumbent's family.

To summarize, we have data for 2010 GP elections on the number of candidates by gender and caste for the complete intervention sample of 382 GPs. We have household and politician survey data for a subset of 240 GPs. Finally, because of GP caste reservation (which rotates across GPs) incumbents were eligible to re-run in 64% of the sample GPs in 2010 elections. Hence, our effective sample size for incumbent outcomes (the probability that the incumbent re-runs or incumbent's success in the elections) is reduced to 152 GPs. When we study 2015 election results, the sample of GPs not reserved for women in 2010 and 2015 consists of 89 GPs.

3.2 Empirical Strategy and Randomization Balance

Given random assignment of gender quotas in prior election and PEVAC campaign, we typically estimate the following specification:

$$y_i = \alpha + \beta T_i + \gamma R_i + \delta T_i * R_i + \lambda * X_i + \epsilon_i \tag{1}$$

where y_i is an outcome of interest (e.g. number of candidates in GP *i*) R_i is a dummy for having been reserved for women in 2005, and T_i is the PEVAC treatment dummy. β is the effect of PEVAC in villages that were not previously reserved and γ captures the effect of reservation in non-PEVAC villages. X_i is a vector of control variables, which include GP population, the literacy rate, the fraction of Scheduled Caste (SC) and Scheduled Tribe (ST) populations, the number of villages, caste reservation (OBC, SC, ST) for the 2000, 2005 and 2010 GP elections, and gender reservation in 2000 elections.

Appendix Table A.1 report village-level descriptive statistics. Reflecting the randomization of reservation policy and PEVAC treatment, 2 out of 60 treatment effects are significant at the 5% level, and 9 out of 60 that are significant at the 10% level.⁷ We also report balance tests for other subsamples we use in the analysis: Appendix A.2 for the survey sample, Appendix Table A.3 for the survey sample where incumbents could run in 2010 and Appendix A.4 for the sample of GP which were not reserved for women in 2010 and 2015. Treatment and control are comparable within these subsamples.

4 Results

We examine whether, and how, PEVAC exposure influenced candidate entry decision and their subsequent electoral success in several steps, where each result motivates the subsequent compo-

⁷The very significant negative correlation between reservation for women in 2000 and 2005 elections reflects the rotation of reservation decided by the State Election Commission.

nent of our analysis. At the outset, we note that neither PEVAC nor previous gender reservation affected turnout in the 2010 GP elections which was high at 83% (see Appendix Table A.5).

4.1 Effect on Incumbents and their family

We begin in Table 1 by examining how exposure to PEVAC affected electoral outcomes for the incumbent and his/her family members. We first examine the average treatment effects on the likelihood that incumbents ran for election, and their electoral success. Panel A, column (1) shows that the likelihood that the incumbent contested the 2010 election was halved in non-previously reserved treatment GPs (a decline of 26 percentage points). This effect size is comparable to the decline in female incumbent re-contestation rates in GPs previously reserved for women (38 percentage points). The PEVAC campaign did not further change the probability of contesting in these GPs. The lower probability of running translated into a reduced vote share for the incumbents, which went down from 10 to 4% in treated GPs (not previously reserved) and to zero in GPs previously reserved. In Appendix Table A.6, we show that there is no effect on the probability that the incumbent wins, which in part, reflects the low average rates of incumbent electoral success (6 % in unreserved control GPs).⁸

Dynastic politics are common in India. Columns (3) and (4) examine electoral outcomes for the incumbent's spouse. In GPs previously reserved for women, the decline in the probability that the incumbent runs is compensated by an increase in the probability that her spouse runs (column 3). This suggests that husbands and wives swap candidacy depending on whether seats are reserved for women, which is reminiscent of the use of family strategies to overcome term limits documented in the Philippines by Querubin (2016) and Labonne et al. (2021). Column (4) shows that female incumbents' husbands attract some votes, but their voteshare is lower than that of the (typically male) incumbent in unreserved places (6% versus 10%). Appendix Table A.6 shows that consequently they do not win the election. Interestingly, there is no evidence of spouses swapping candidacy in response to the PEVAC. Spousal entry is as low in treatment as in control for male incumbents, but for female incumbents it implies a strong negative effect of

⁸Appendix Table A.6 also shows treatment effects on voteshare and probability of winning conditional on running. Due to the small sample size (few incumbents run), none of the estimates is significant.

the campaign as compared to control GP (-0.27p.p. decline in the probability of entry, and -5% decline in voteshare).

Next, we consider incumbent family members other than the spouse. They are twice as likely to run in treatment GPs (from 8 to 19% in previously unreserved GP; column 5). Their voteshare is small on average (column 6) but they are slightly more likely to win in a treatment GP (Appendix Table A.6). Overall, it appears that the nature of family dynamics varies: while (female) spouse candidacy is used systematically to preserve family incumbency in GPs reserved for women, the entry of other family members in PEVAC GPs appears to be more opportunistic.

In Panel B of Table 1 we present the results separately for PEVAC GPs that did and did not receive the sub-treatment that emphasized women's role in politics. We do not find that the two versions had a differential effect. In the rest of the analysis we pool the gender specific and the non-gender specific versions of the PEVAC campaign together, but report the disaggregated results in appendix (Tables A.7, A.9, and A.12).

We now examine the impact of incumbent performance, on own and family members candidacy decisions. In Table 2 we estimate:

$$y_i = \alpha + \beta T_i + \gamma I_i + \delta T_i * I_i + X_i \lambda + \epsilon_i$$

where T_i is a PEVAC treatment dummy and I_i is the measure of Sarpanch performance, a standardized index of NREGA participation and unmet demand for NREGA work based on the representative household survey.⁹ We do this separately for GPs that were not previously reserved for women (Panel A of Table 2) and for those that were (Panel B). Column (1)-(2) in Panel A show in control GPs not reserved for women in 2005, better performing incumbents were if anything less likely to declare their candidacy (insignificant negative correlation) or to win votes (negative correlation significant at the 10% level). By contrast, the sum of the performance and performance × treatment coefficients is positive (significant at the 10% level for voteshare), which suggests that in treatment GPs well-performing incumbents were more likely to run and to win votes than poorly-performing ones.

⁹Although the PEVAC also mentioned drinking water and roads among the public goods provided by the Sarpanch, the survey only measured local provision of NREGA employment.

These differential impacts of treatment by incumbent performance occurred in an environment of general anti-incumbency: 46% of incumbents elected on unreserved seats ran again in 2010, and only 6% were reelected. Hence, a different way of reading the results in columns (1)-(2) are that the PEVAC campaign exacerbated anti-incumbency among the worst-performing incumbents. For example, moving from the average performance level to one standard deviation above the mean, the effect of the PEVAC on the probability of running for incumbents shrinks from -26.8p.p. to -6.1p.p, and the effect on voteshare from -6.8p.p. to -0.6p.p.

In columns (3)-(6) of Table 2, we ask whether family members' candidacy was helped or harmed by the incumbent's performance. We find little evidence that incumbents' family members' decisions to run or their electoral success was linked with the performance of the incumbent.

Overall, we find that the PEVAC increased accountability for bad-performing incumbents, but only in GPs that were not previously reserved for women. Panel B of Table 2 provides no evidence of stronger accountability for female incumbents elected on seats reserved for women in 2005 or for their spouses, whether in treatment or in control GPs. There may be little scope for accountability in these GPs, as incumbents' and their spouses' voteshares are extremely low, and their probability of winning close to zero (Appendix Table A.6).¹⁰

4.2 Candidate Entry

Table 3 examines candidate entry. We consider three sets of dependent variables: the number of candidates (including the incumbent), the number of challengers (excluding the incumbent), the proportion and voteshare of female challengers and the proportion and voteshare of lower caste challengers. We estimate the effects for the whole sample (Panel A), and separately for the sub-sample of GPs where the incumbent could run (Panel B) and for GPs where the incumbent could not run (Panel C). Given that our sample only contains GPs that were not reserved for women in 2010, this is due to (rotating) caste reservation.

The PEVAC and gender reservation had different impacts. Specifically, previous gender reservation increased the number of candidates, by one on average from a base of 7. Given that incumbents elected on gender quota were less likely to run, the effect is even stronger when we focus on challengers (+1.45). By contrast, there is no effect of the treatment on the

¹⁰We check in Appendix Table A.7 that the results are similar for the two versions of the PEVAC.

number of candidates or challengers. It also appears that compositional change in candidate mix associated with the two treatments differed. In the case of gender quotas, female incumbents largely dropped out and were replaced by others with the same socio-demographic profile.¹¹ In contrast, the PEVAC treatment altered the composition of the candidate pool and attracted more candidates from historically disadvantaged background.¹² The treatment increased the proportion of candidates from disadvantaged social groups (Other Backward Castes, Scheduled Castes and Scheduled Tribes) from 79% in control GPs to 87% in treatment GP (column 3).¹³ In Appendix Table A.10, we show that the representation of these groups did not come at the cost of candidates with less electoral experience or less education. Indeed, the results on vote castes confirm that these candidates were credible, since the voteshare of low caste challengers also went up from 79 to 86% (Column 6 in Table 4.2). The probability of having a low caste leader also went up from 82 to 90% (Appendix Table A.11)

Since we showed that both past gender reservation and the PEVAC affected the incumbent's decision to run, we test in Panel B and C of Table 3 whether the results are stronger in GPs where caste reservation allowed the incumbent to run.¹⁴ Indeed, there is evidence of stronger challenger entry in GPs previously reserved for women when the incumbent could run (Panel B Column 2). There is even some evidence that the PEVAC increased the fraction of women running in GPs where the incumbent could run (Panel B Column 3). Finally the increase in the representation of low caste challengers due to the PEVAC is entirely coming from GPs where the incumbent could run (Panel B Columns 5 and 6), but this is purely mechanical, as places where the incumbent could not run were reserved for low castes, with no margin for improvement.¹⁵

¹¹We find no short run effect of gender quota, but Appendix Table A.8 shows that GPs reserved for women two election rounds before, in 2000, do see more female candidates enter in 2010. The long run positive effect of gender quota is consistent with Beaman et al. (2009).

¹²Appendix Table A.9 shows that the impacts are similar across PEVAC GPs that did and did not receive the sub-treatment that emphasized women's role in politics.

 $^{^{13}}$ The very high fraction of candidates from disadvantaged groups in control GPs is due to reservation: 50% of the GP in our sample are reserved for Other Backward Castes, Scheduled Castes or Scheduled Tribes. In GPs with no caste reservation, one third of candidates (and winners) were high castes despite representing less than 15% of the population.

¹⁴We focus on GP that were not reserved for women in 2010 so incumbents could run regardless of their gender.

 $^{^{15}}$ In Appendix Table A.9 we show that the non-gendered version of the PEVAC had a more positive effect on the number of challengers, but that both versions had similar effects on the representation of women and low caste

4.3 Longer term Electoral Outcomes

Finally, we consider the long term effects of our intervention on electoral outcomes in 2015. We restrict the sample to the 90 GPs that were not reserved for women in 2010 and in 2015 and use the same specification as before, except that we add controls for caste reservation (OBC, SC, ST) in 2015 elections.¹⁶

Table 4 presents the results. Strikingly, *no* incumbent ran for re-election in control GPs. This is likely due, in part, to a new electoral rule which mandated that candidates should have at least eight years of education.¹⁷ Against this background, the PEVAC seems to have had some long run effects on incumbency and on the candidate pool. Sarpanches elected in 2010 were more likely to run (8.p.p in Table 4 Panel A column 2) and received a higher vote share (2.9p.p, Table 4 Panel B column 1) in treated GP. Ultimately, none was elected, however.

Regarding the candidate pool, one important effect appears in the next election round: an increase in women representation. Looking down column (4) we see that there were three times more female candidates (Panel A), their vote share was three times higher in GP treated in 2010 (Panel B).¹⁸ These effects are very similar to the long term effect on reservations which, interestingly, is also increasing over time.¹⁹ The estimated effects on the representation of low caste candidates have the same magnitude as in 2010, but they are not significant due to the lower sample size. Appendix A.13 shows the effects on who won 2015 elections: the coefficients on PEVAC are positive and large for both female and low caste leaders but the effects are not significant.

5 Discussion

In the context of a pre-election voter awareness campaign focused on the village head responsibilities for public good provision and implementing a public works program (MGNREGS),

¹⁶We check that treatment and control groups are still balanced in terms of observable characteristics within this smaller subsample (see Appendix Table ??).

 $^{^{17}\}mathrm{In}$ our survey sample, 35% of Sarpanches elected in 2010 had less than eight years of education.

 $^{^{18}\}mathrm{These}$ effects are not driven by the gender campaign, see Appendix Table A.12

 $^{^{19}}$ Beaman et al. (2009) also find no immediate effect of female representation after one cycle of reservation. In their data in West Bengal, it is after a given place was reserved for two cycles in a row that female candidates and representation increases. Here, it seems that there is a long term effect of one cycle of reservation even in a sample of villages which did not get reserved again.

we evaluate the differential impacts of a short awareness campaign (PEVAC) and longer term exposure to a female incumbent (via reservation) on citizen candidacy decisions and subsequent electoral outcomes. We find that both interventions led to incumbent exit from politics, but in the case of the PEVAC it is the worst-performing incumbents who were driven out. There is evidence of dynastic politics in the case of gender quotas, as husbands sought to replace their wives, while PEVAC treatment led to opportunistic entry by other family members.

Outside of the incumbent and his/her family, reservation for women led to entry of more challengers, perhaps sensing that the incumbent was weakened, but left the composition of candidates unchanged. In contrast, the PEVAC treatment had no effect on the number of challengers, but increased entry by low caste candidates. Importantly, this did not come at the expense of lower education or less political experience. Finally, very few of 2010 candidates chose to rerun for elections in 2015. This reflected, in addition to the rotating reservation quota, a new law requiring candidates to have a minimum of eight years of education. Against this background, we do observe one source of treatment effects in the longer run: and increased participation of women in politics, similar in magnitude to the long-term effect of gender quotas.

The results we document are consistent with two different interpretations. First, that the campaign provided voters information about MGNREGS, Sarpanch responsibility in implementing the program, and helped them benchmark the current state of MGNREGS implementation in their GP. Second, it didn't provide new information but primed citizens to make candidate entry and voting decisions based on it.

The household survey conducted after the elections tested voters' knowledge of two basic MGNREGS rules: the maximum number of days per household, and minimum wage. It also asked about the role of the Sarpanch in MGNREGS implementation: project development, worker registration, and work allocation. In Table 5 we show that, on average, in the control GP 65% of survey respondents gave a correct answer on MGNREGS rules, and 61% on Sarpanch role. We construct normalized indexes for these two sets of questions and test whether voters in treatment GP were better informed. As columns 1 and 2 in Table 5 Panel B show, there is no difference between treatment and control GP. These results suggest that the PEVAC occurred in a setting where citizens were already reasonably well-informed.

The survey also asked voters to rate the implementation of MGNREGS and public good

provision in their GP. We first regress these ratings on the performance index we constructed based on MGNREGS participation and rationing of demand for MGNREGS. Voters' opinion of MGNREGS implementation is strongly correlated with actual MGNREGS implementation (column 3 in Table 5 Panel A). This opinion is specific to MGNREGS: there is no such correlation for public good provision. Although the PEVAC did no provide any direct information on MGNREGS implementation in the GP, it did provide district level averages, which could have helped voters benchmark their GP. We test whether the PEVAC changed voters' opinion on average (column 3 Panel B) or the correlation between actual implementation quality and voters' opinion (column 3 Panel C), and find no evidence for it.

Given this, it is likely that the PEVAC campaign led citizens to pay more attention to information that they already had, and to connect opinions they already held to their decisions to enter as candidates and subsequently voting decisions. It possibly also helped citizens coordinate in encouraging certain individuals to run for election and subsequently in voting for them. Our results point to the possibility that some of the costs to candidate entry may be overcome by emphasizing the importance of elected representatives in implementing programs that benefit them and, possibly, in ways that help citizens coordinate their response. One caveat is that our findings occur in a setting characterized by significant anti-incumbency.

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	Incur	nbent	Incumbe	nt Spouse	Other Fam	ily Member
	Runs	Voteshare	Runs	Voteshare	Runs	Voteshare
	1	2	3	4	5	6
Panel A: Average Effects						
Treatment (Treat.)	-0.26***	-6.27***	0.06	1.04	0.11*	1.83
	(0.09)	(2.35)	(0.07)	(1.88)	(0.07)	(1.51)
Gender Quota (GQ) 2005	-0.38***	-10.22***	0.36***	5.76***	-0.15**	-2.05
	(0.11)	(2.65)	(0.08)	(2.12)	(0.07)	(1.70)
Treat x GQ 2005	0.36**	9.13**	-0.27**	-4.68*	0.03	1.78
	(0.14)	(3.52)	(0.11)	(2.82)	(0.10)	(2.25)
Observations	152	149	152	149	152	149
Mean in Control without GQ	0.460	10.10	0.0400	0.730	0.0800	0.860
Treat. with GQ = Treat without GQ	0.86	0.71	0.32	0.64	0.15	0.88
Panel B: Effects by Type of Campaign						
Gender Treatment	-0.24*	-4.28	0.01	0.70	0.11	1.28
	(0.12)	(3.04)	(0.10)	(2.43)	(0.09)	(1.93)
General Treatment	-0.28**	-7.81***	0.09	1.31	0.11	2.25
	(0.11)	(2.79)	(0.09)	(2.23)	(0.08)	(1.77)
Gender Quota (GQ) 2005	-0.38***	-10.53***	0.37***	5.71***	-0.15*	-2.07
	(0.11)	(2.66)	(0.08)	(2.12)	(0.08)	(1.69)
Gender Treat x GQ 2005	0.31*	8.06*	-0.38***	-8.08**	0.01	-1.60
	(0.18)	(4.46)	(0.14)	(3.56)	(0.12)	(2.83)
General Treat x GQ 2005	0.38**	8.92**	-0.18	-2.32	0.05	4.22
	(0.17)	(4.24)	(0.13)	(3.39)	(0.12)	(2.69)
Observations	152	149	152	149	152	149
Mean in Control without GQ	0.460	10.10	0.0400	0.730	0.0800	0.860
Gender Treat = General Treat (without GQ)	0.800	0.300	0.410	0.820	0.950	0.650
Gender Treat = General Treat (with GQ)	0.490	0.250	0.330	0.100	0.780	0.0500

Table 1: Incumbent and incumbent's family entry

NOTES: 1.The sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. Information on voteshare is missing for three GPs. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Treatment is a dummy equal to one for GPs which received the gender version of the PEVAC, General Treatment is a dummy equal to one for GPs that received the non-gender version of the PEVAC took place. 3. All specifications include district fixed effects and GP controls. Gender Quota 2005 is a dummy equal to one for GP reserved for women in 2005. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 4. Even-numbered columns are missing 3 observations since vote data does not exist for these GPs. 5. The Performance Index is based on the fraction of household who worked in MGNREGS in the last 12 months and the fraction of men and women who would have liked to work in MG-NREGS in the last 12 months and could get work (household survey). Both measures are standardized and summed up to build the Index. 6."Treat with GQ = Treat without" gives the p-value of the f-test that the sum of coefficients for GQ 2005 and Treatment*GQ 2005 is equal to zero. 7. "Gender Treat = General Treat" gives the p-value of the f-test that the effect of the two PEVACs is the same.

	Incu	mbent	Incumbe	nt Spouse	Other Farr	nily Member
	Runs	Voteshare	Runs	Voteshare	Runs	Voteshare
	1	2	3	4	5	6
Panel A: GP without Gender Qu	ota in 2005	5				
Treatment	-0.27**	-6.76***	0.07	0.60	0.10	1.44
	(0.10)	(2.52)	(0.05)	(1.20)	(0.07)	(0.99)
Performance Index	-0.09	-3.03*	0.01	-0.16	-0.02	-0.51
	(0.07)	(1.71)	(0.04)	(0.82)	(0.05)	(0.68)
Treatment*Performance	0.24**	7.05**	-0.06	-0.44	-0.02	1.05
	(0.11)	(2.82)	(0.06)	(1.34)	(0.08)	(1.12)
.						
Observations	92	90	92	90	92	90
Mean in Control without GQ	0.460	10.10	0.0400	0.730	0.0800	0.860
Panel B: GP with Gender Quota	in 2005					
Treatment	0.15	2.48	-0.27**	-5.82	0.12	2.49
	(0.11)	(2.53)	(0.13)	(3.58)	(0.07)	(2.62)
Treatment*Performance	-0.03	-0.18	0.07	4.57	-0.01	1.32
	(0.12)	(2.71)	(0.14)	(3.83)	(0.08)	(2.80)
Performance Index	-0.13	-2.54	-0.09	-5.11	0.17*	1.29
	(0.14)	(3.23)	(0.17)	(4.55)	(0.09)	(3.33)
Observations	60	59	60	59	60	59
Mean in Control without GQ	0.150	2.500	0.330	6.150	0	0

Table 2: Incumbent and incumbent's family entry depending on incumbent's performance in MGNREGS work provision

NOTES: 1.The sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010: 60 of them had been reserved for women in 2005. Information on voteshare is missing for three GPs. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. 3. All specifications include district fixed effects and GP controls. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 4. Even-numbered columns are missing 3 observations since vote data does not exist for these GPs. 5. The Performance Index is based on the fraction of household who worked in MGNREGS in the last 12 months and the fraction of men and women who would have liked to work in MG-NREGS in the last 12 months and could get work (household survey). Both measures are standardized and summed up to build the Index.

	Number Candidates	Number Challengers	Female C	hallengers	Low Caste	Challengers
			% Cand	%Votes	% Cand	%Votes
	1	2	3	4	5	6
Panel A: All GPs						
Treatment	0.31	0.38	0.01	-2.80	0.07**	7.49**
	(0.56)	(0.56)	(0.03)	(2.97)	(0.03)	(3.54)
Gender Quota (GQ) 2005	1.03*	1.22**	0.01	4.09	0.05	4.09
	(0.58)	(0.58)	(0.03)	(3.01)	(0.03)	(3.59)
Treat. X GQ 2005	-0.79	-0.90	-0.00	0.53	-0.05	-7.83
	(0.93)	(0.94)	(0.04)	(4.93)	(0.06)	(5.88)
Observations	382	382	382	373	382	373
Mean in Control without GQ	7.390	7.140	0.130	12.89	0.790	78.70
Treat. with GQ = Treat without GQ	0.760	0.690	0.790	0.280	0.850	0.460
Panel B: Incumbent can run						
Treatment	0.83	0.99	0.07**	2.45	0.10*	10.09*
	(0.77)	(0.77)	(0.03)	(3.67)	(0.06)	(5.91)
Gender Quota (GQ) 2005	1.14	1.46**	-0.01	3.47	0.09*	8.29
	(0.70)	(0.70)	(0.03)	(3.34)	(0.05)	(5.38)
Treat. X GQ 2005	-1.27	-1.49	-0.05	-5.08	-0.07	-10.16
	(1.15)	(1.15)	(0.05)	(5.52)	(0.08)	(8.90)
Observations	245	245	245	239	245	239
Mean in Control without GQ	7.360	6.960	0.110	10.74	0.660	66.04
Treat. with GQ = Treat without GQ	0.900	0.980	0.210	0.740	0.830	0.820
Panel C: Incumbent can not run						
Treatment	0.17	0.17	-0.03	-6.20	-0.00	0.00
	(0.90)	(0.90)	(0.05)	(5.45)	(0.01)	(1.26)
Gender Quota (GQ) 2005	1.06	1.02	0.03	4.31	-0.02	-2.36
	(1.05)	(1.05)	(0.05)	(6.26)	(0.01)	(1.45)
Treat. X GQ 2005	-0.76	-0.72	0.00	0.79	0.02	2.64
	(1.77)	(1.77)	(0.09)	(10.65)	(0.02)	(2.46)
Observations	137	137	137	134	137	134
Mean in Control without GQ	7.450	7.450	0.160	16.51	1	100
Treat. with GQ = Treat without GQ	0.840	0.830	0.650	0.560	0.880	0.890

Table 3: Challenger entry

NOTES: 1. In Panel A the sample includes all 382 GPs which were not reserved for women in 2010 elections. Panel B presents results in the subset of GP where the incumbents could run (given caste reservations) and Panel C presents results in the subset of GP where the incumbent could not run. The number of observations in Columns 4 and 6 is lower than the total sample since vote data does not exist for some GPs. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Quota (GQ) 2005 is a dummy equal to one for GP reserved for women in 2005. 3.The specification is described in Section 3.3. It includes district fixed effects and GP controls. 4. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 5. "Treat with GQ = Treat without GQ" gives the p-value of the f-test that the sum of coefficients for GQ 2005 and Treatment*GQ 2005 is equal to zero.

	Number of Candidates	Incur elected	nbent in 2010	Candio 20	date in 10	Fen	nale	Lower	⁻ caste
		Runs	%Votes	% Cand	%Votes	% Cand	%Votes	% Cand	%Votes
	1	2	3	4	5	8	9	10	11
Treatment (Treat)	0.51	0.08*	2.88**	0.01	1.39	0.16**	14.74*	0.10	8.46
	(1.11)	(0.05)	(1.23)	(0.02)	(2.91)	(0.08)	(8.75)	(0.07)	(7.76)
Gender Quota (GQ) 2005	0.76	0.07*	0.85	-0.01	-2.41	0.09	13.02*	-0.12*	-11.38*
	(0.95)	(0.04)	(1.05)	(0.02)	(2.49)	(0.07)	(7.49)	(0.06)	(6.64)
Treat x GQ 2005	-2.48	-0.14*	-3.37*	-0.01	1.23	-0.06	-9.05	0.12	8.67
	(1.78)	(0.07)	(1.97)	(0.03)	(4.65)	(0.13)	(13.99)	(0.12)	(12.41)
Observations	89	89	89	89	89	89	89	89	89
Mean in Control without GQ	7.830	0	0	0.0200	3.050	0.0800	8.100	0.800	86.65
Treat. with GQ = Treat without GQ	0.250	0.280	0.130	0.500	0.760	0.790	0.730	0.990	0.790

Table 4: Candidate entry in the next election

NOTES: 1. We restrict the sample to 89 GP not reserved for women in 2010 nor in 2015. 2. We matched the 2010 and 2015 candidate lists by name and caste to identify 2010 candidates who ran in 2015. 3. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Quota 2005 is a dummy equal to one for GP reserved for women in 2005. 4. The specification is described in Section 3.3, it includes districts fixed effects and GP controls. 5. GP controls include GP population, literacy rate, number of registered voters, and Caste (OBC SC and ST) reservation status for 2010 and 2015. 6. "Treat with GQ = Treat without GQ" gives the p-value of the f-test that the sum of coefficients for GQ 2005 and Treatment * GQ 2005 is equal to zero.

	Knowle	edge of	Rating of		
	MGNREGS Rules	Sarpanch Role	MGNREGS	Public Good	
			Implementation	Provision	
	1	2	3	4	
Panel A: Correlation with Performance					
Performance Index	0.0864***	-0.0231	0.128***	0.0212	
	(0.0147)	(0.0141)	(0.0223)	(0.0230)	
Panel B: Effect of the Campaign					
Treatment	0.00135	0.0245	0.0149	0.0840	
	(0.0365)	(0.0327)	(0.0476)	(0.0539)	
Gender Quota (GQ) 2005	0.0189	-0.0243	-0.00262	-0.0235	
	(0.0421)	(0.0421)	(0.0684)	(0.0553)	
Treat x GQ 2005	0.0343	-0.0203	-0.0592	-0.0737	
	(0.0578)	(0.0601)	(0.0875)	(0.0808)	
Panel C: Interaction with Performance					
Treatment * Performance	0.0275	0.00398	-0.0607	-0.000915	
	(0.0393)	(0.0350)	(0.0482)	(0.0528)	
Treatment * GQ 2005 * Performance	0.0105	-0.0215	0.0204	0.0639	
	(0.0677)	(0.0658)	(0.107)	(0.0791)	
GQ 2005 * Performance	0.00162	0.0349	0.0162	0.00742	
	(0.0504)	(0.0494)	(0.0959)	(0.0604)	
Treatment	0.00744	0.0221	0.0243	0.0833	
	(0.0344)	(0.0325)	(0.0450)	(0.0536)	
Gender Quota (GQ) 2005	0.0351	-0.0283	0.0289	-0.0209	
	(0.0398)	(0.0422)	(0.0633)	(0.0554)	
Treat x GQ 2005	0.0230	-0.0193	-0.0789	-0.0761	
	(0.0538)	(0.0605)	(0.0815)	(0.0801)	
Performance Index	0.0716***	-0.0335*	0.148***	0.00400	
	(0.0217)	(0.0202)	(0.0329)	(0.0401)	
Observations	9,788	9,788	9,783	9,770	

Table 5: Knowledge and Perceptions of MGNREGS

Notes: 1. The dependent variables are described below. In Columns 1 to 4 they are z-score standardized to have mean zero an standard deviation one in control GP not WR in 2005, 2. Individual controls include gender, age, years of education, literacy, and a dummy variable for individual participation in MGNREGS. 3. Household controls include a dummy variable for Below Poverty Line status, a dummy variable for whether the household owns land, a dummy variable for household MGNREGS participation, a set of dummy variables for religion, and a set of dummy variables for caste. 4. All specifications include district fixed effects and GP controls. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010.

Dependent variables:1. Knowledge of MGNREGS Rules: Average of correct answers to questions about the MGNREGS daily wage and the maximum number of MGNREGS days per household. 2. Knowledge of Sarpanch Role: Average of correct answers to questions about the Sarpanch role in registering households, providing employment and checking workers payments. 3. Rating of MGNREGS implementation: "How would you rate MGNREGS implementation in your village?" Possible answers were "Very good/Good/Bad/Very bad" 4. Rating of public good provision: "On a scale of 1 to 10, how satisfied are you with the provision of the following public goods in your village?". Respondents were asked successively about water, school and road.

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A Data Appendix

This appendix describes the several sources of data we use in the analysis.

A.1 Administrative Data

Our analysis relies on three sources of administrative data, electoral data, census data and MGNREGS data.

Electoral Data We collected data from the Rajasthan State Election Commission on four rounds of elections for the position of head of the GP, called Sarpanch. For 2000 and 2005, we obtained the reservation status of the seat, including reservation for women, and reservation for Other Backward Castes (OBC), Scheduled Castes (SC) and Scheduled Tribes (ST). For 2010 and 2015, we obtained reservation information, as well as the full list of candidates, their gender, caste, village, how many votes they received and whether they won. Information on gender, caste, and winners were available for the entire sample of 382 GP. Information on votes received was only available for 373 GP. Information on candidate villages was only available in 357 GP. For 2010 only we collected information on voter turnout by gender.

Census Data We also use data from the 2011 census in two different ways. First, we matched our sample GP with census villages using the local directory (http://lgdirectory.gov.in/). This allows us to provide GP-wise population figures, fractions of SC, ST, literacy rate, fractions of cultivators, agricultural laborers, fraction of villages with access to drinking water, with paved road and with power supply. Second, we matched candidates' villages with census villages by name. This allows us to categorize candidates depending on whether they came from a village that is more disadvantaged than the GP average, according to a disadvantage index which is the normalized mean of the fraction of SC-ST population, the illiteracy rate and the fraction of agricultural laborers in the workforce. **MGNREGS Data** Finally, we downloaded MGNREGS job cards in our sample GP from the official website (nrega.nic.in). We then matched candidate villages with villages of MGNREGS participants using the village census code, and computed the MGNREGS participation rate as the number of households who had worked between 2006 and 2009 divided by the total number of households in the village according to the 2011 census. Due to erroneous village codes in nrega.nic.in data, the match was only possible in 330 GP, out of 357 GP for which candidates' villages were available. This allows us to categorize candidates depending on whether the MGNREGS participation rate in the village where they live is higher or lower than the GP average.

A.2 Survey Data

Household Survey In March 2010, two months after the elections, we conducted a household survey in 240 GP, including the 119 treatment GP and 121 randomly chosen control GP. We sampled 20 households per GP from the voter lists, or a total sample of 4800 households. The questionnaire was composed of two parts. The household questionnaire included information about household composition, caste, religion and wealth. In each household, we randomly selected one female and one male adults, or 9600 respondents. Each sampled adult was asked about their participation in MGNREGS in the last 12 months. Respondents were also asked to rate MGNREGS implementation and Sarpanch performance in implementing MGNREGS in their village. We then tested their knowledge of MGNREGS rules and of the Sarpanch role in MGNREGS implementation. Finally we asked whether respondents believed a good Sarpanch could make a difference in a corrupt environment.

Candidate and Incumbent Survey In October-November 2011, we carried out another survey to interview all candidates who ran for Sarpanch in 2010 elections, as well as all incumbents, whether they re-ran or not. The survey provides us with reliable measures of candidates' education, occupation and previous political experience as a Sarpanch (head of GP) or as a Wardpanch (ward councillor). We also collected detailed information about each candidate's and each incumbent's family members and whether they had run and were elected to office. This allows us to check whether an family member of the incumbent ran in 2010.

B Appendix Tables

Table A.1: MGNREGS participation in the survey sample

Panel A	Panel A: Household Participation in MGNREGS in the Last Year					
	All Households	49%				
	General Caste	38%				
	Lower Caste	51%				
Panel E	3: Individual Participation in MGNREGS in the La	st Year				
	All Individuals	33%				
	Male	35%				
	Female	31%				
Panel C	: Non-MGNREGS Work Outside Household or o	wn Farm				
	All Individuals	34%				
	Male	50%				
	Female	19%				

NOTES: Calculations based on a representative survey of 4894 households. Lower Caste includes OBC, SC and ST households. Non-MGNREGS Work Outside Household or own Farm includes casual and regular wage work in the public or private sector and non-agricultural businesses as a main or secondary occupation in the last year.

	Mean in Control without Gender Quota in 2005	Difference in Control with Gender Quota in 2005	Difference in Treatment without Gender Quota in 2005	Difference in Treatment with Gender Quota in 2005
Panel A: Census 2011				
Number of villages	4.328	-0.472*	0.186	0.0278
	(2.242)	(0.276)	(0.287)	(0.347)
Population	5631	-82.44	215.5	-137.9
	(1958)	(250.9)	(261.1)	(315.2)
Fraction SC Population	0.222	0.00219	0.0175	-0.0223
	(0.121)	(0.0155)	(0.0162)	(0.0195)
Fraction ST Population	0.105	0.0270	0.0198	-0.00197
	(0.188)	(0.0254)	(0.0264)	(0.0319)
Fraction Literate Population	0.551	0.00383	0.0101	-0.0103
	(0.0651)	(0.00850)	(0.00885)	(0.0107)
Fraction Cultivators	0.180	0.00355	-0.00698	-0.00434
	(0.0606)	(0.00780)	(0.00812)	(0.00980)
Fraction Agricultural Laborers	0.0622	-0.0104*	-0.000603	-0.00281
C	(0.0417)	(0.00533)	(0.00554)	(0.00669)
Fraction of villages with drinking water	0.931	-0.0358*	0.0187	-0.0480*
	(0.151)	(0.0211)	(0.0219)	(0.0265)
Fraction of villages with paved access	0.414	0.0306	-0.0369	-0.0166
	(0.319)	(0.0403)	(0.0419)	(0.0506)
Fraction of villages with power supply	0.930	-0.0405*	0.0153	-0.0276
	(0.151)	(0.0224)	(0.0233)	(0.0282)
Panel B: State Election Commission 201	10			
Number of voters	2913	103.3	100.7	82.77
	(1036)	(128.1)	(133.3)	(160.9)
Reserved for women in 2000	0.444	-0.420***	0.0826	-0.356***
	(0.498)	(0.0565)	(0.0588)	(0.0709)
Reserved for OBC in 2000	0.144	0.0604	-0.0634	0.122**
	(0.353)	(0.0483)	(0.0503)	(0.0607)
Reserved for SC in 2000	0.228	-0.0109	-0.0926*	-0.0278
	(0.421)	(0.0536)	(0.0557)	(0.0673)
Reserved for ST in 2000	0.0667	0.0418	0.109***	0.0667
	(0.250)	(0.0405)	(0.0421)	(0.0508)
Reserved for OBC in 2005	0.117	0.00382	-0.0491	-0.00556
	(0.322)	(0.0412)	(0.0429)	(0.0518)
Reserved for SC in 2005	0.233	-0.0285	0.0775	-0.0556
	(0.424)	(0.0563)	(0.0586)	(0.0708)
Reserved for ST in 2005	0.0944	0.0260	0.0137	-0.00556
	(0.293)	(0.0404)	(0.0420)	(0.0507)
Reserved for OBC in 2010	0.161	-0.0165	0.0686	-0.0944
	(0.369)	(0.0485)	(0.0505)	(0.0609)
Reserved for SC in 2010	0.250	-0.0934*	0.0203	-0.0278
	(0.434)	(0.0559)	(0.0582)	(0.0702)
Reserved for ST in 2010	0,100	0.0566	-0.00541	-0.0111
	(0,301)	(0.0416)	(0.0433)	(0.0522)
Incumbent can run in 2010	0.633	0.0655	-0.0928	0.1000
	(0.483)	(0.0635)	(0.0660)	(0.0797)
Number of GP	180	74	83	45

Table A.1: Summary Statistics (whole sample)

	Mean in Control without Gender Quota in 2005	Difference in Control with Gender Quota in 2005	Difference in Treatment without Gender Quota in 2005	Difference in Treatment with Gender Quota in 2005
Panel A: Census 2011				
Number of villages	4.578	-0.0520	-0.0648	-0.223
	(2.237)	(0.395)	(0.323)	(0.373)
Population	5875	-241.2	-27.60	-381.0
	(2257)	(389.4)	(317.8)	(368.0)
Fraction SC Population	0.224	0.00154	0.0155	-0.0243
	(0.112)	(0.0225)	(0.0183)	(0.0212)
Fraction ST Population	0.115	0.0144	0.0102	-0.0115
·	(0.186)	(0.0373)	(0.0304)	(0.0352)
Fraction Literate Population	0.549	0.0111	0.0122	-0.00818
····	(0.0704)	(0.0129)	(0.0105)	(0.0122)
Fraction Cultivators	0.175	0.00370	-0.00180	0.000834
	(0.0557)	(0.0110)	(0.00901)	(0.0104)
Fraction Agricultural Laborers	0.0677	-0.0207***	-0.00609	-0.00830
U U	(0.0425)	(0.00794)	(0.00648)	(0.00750)
Fraction of villages with drinking water	0.929	-0.0421	0.0204	-0.0463
	(0.145)	(0.0304)	(0.0248)	(0.0287)
Fraction of villages with payed access	0.385	-0.0275	-0.00776	0.0126
······	(0.292)	(0.0531)	(0.0434)	(0.0502)
Fraction of villages with power supply	0.926	-0.0194	0.0195	-0.0234
	(0.152)	(0.0317)	(0.0259)	(0.0300)
Panel B: State Election Commission 2010)			
Number of voters	3106	-46.65	-91.57	-109.5
	(950.2)	(178.8)	(145.9)	(169.0)
Reserved for women in 2000	0.386	-0.359***	0.141**	-0.297***
	(0.490)	(0.0833)	(0.0680)	(0.0788)
Reserved for OBC in 2000	0.133	0.0517	-0.0514	0.134**
	(0.341)	(0.0693)	(0.0566)	(0.0655)
Reserved for SC in 2000	0.253	-0.0425	-0.118*	-0.0530
	(0.437)	(0.0784)	(0.0640)	(0.0741)
Reserved for ST in 2000	0.0843	0.0472	0.0913*	0.0490
	(0.280)	(0.0658)	(0.0537)	(0.0622)
Reserved for OBC in 2005	0.133	0.0517	-0.0650	-0.0214
	(0.341)	(0.0629)	(0.0514)	(0.0595)
Reserved for SC in 2005	0.217	-0.0590	0.0939	-0.0391
	(0.415)	(0.0822)	(0.0671)	(0.0777)
Reserved for ST in 2005	0.0843	0.0472	0.0238	0.00455
	(0.280)	(0.0592)	(0.0483)	(0.0559)
Reserved for OBC in 2010	0.157	-0.0777	0.0731	-0.0900
	(0.366)	(0.0694)	(0.0566)	(0.0656)
Reserved for SC in 2010	0.265	-0.0808	0.00521	-0.0428
	(0.444)	(0.0848)	(0.0692)	(0.0802)
Reserved for ST in 2010	0.0843	0.0472	0.0103	0.00455
	(0.280)	(0.0581)	(0.0474)	(0.0549)
Incumbent can run in 2010	0.627	0.0840	-0.0860	0.107
	(0.487)	(0.0941)	(0.0768)	(0.0889)
Number of GP	83	74	38	45

Table A.2: Summary Statistics (survey sample only)

	Mean in Control	Difference in Control	Difference in	Difference in
	without Gender Quota	with Gender Quota in	Treatment without	Treatment with
	in 2005	2005	Gender Quota in 2005	Gender Quota in 2005
		2000		2000
Panel A: Census 2011				
Number of villages	4.083	-0.391	0.117	-0.250
	(1.948)	(0.484)	(0.578)	(0.627)
Population	5327	22.00	133.2	-588.9
	(1436)	(483.4)	(577.3)	(626.1)
Fraction SC Population	0.236	0.0180	-0.0123	-0.0694*
	(0.0997)	(0.0280)	(0.0334)	(0.0362)
Fraction ST Population	0.113	0.0528	0.0391	0.0600
	(0.172)	(0.0545)	(0.0651)	(0.0706)
Fraction Literate Population	0.549	0.0189	0.0203	-0.00732
	(0.0476)	(0.0138)	(0.0164)	(0.0178)
Fraction Cultivators	0.196	-0.0171	-0.00455	-0.0136
	(0.0572)	(0.0146)	(0.0174)	(0.0189)
Fraction Agricultural Laborers	0.0519	-0.00576	-0.00879	-0.0141
	(0.0294)	(0.00719)	(0.00859)	(0.00932)
Fraction of villages with drinking water	0.961	-0.0354	-0.0635	-0.143***
	(0.0962)	(0.0383)	(0.0457)	(0.0496)
Fraction of villages with paved access	0.410	0.0906	-0.0412	-0.000463
	(0.340)	(0.0823)	(0.0983)	(0.107)
Fraction of villages with power supply	0.940	-0.0153	0.0204	-0.0374
	(0.165)	(0.0418)	(0.0500)	(0.0542)
Panel B: State Election Commission 201	.0			
Number of voters	2664	261.8	246.6	125.2
	(1054)	(279.9)	(334.2)	(362.5)
Reserved for women in 2000	0.472	-0.395***	0.194	-0.139
	(0.506)	(0.114)	(0.137)	(0.148)
Reserved for OBC in 2000	0.0556	0.0214	0.0778	0.194*
	(0.232)	(0.0776)	(0.0926)	(0.100)
Reserved for SC in 2000	0.250	0.0577	-0.117	-0.0833
	(0.439)	(0.111)	(0.132)	(0.143)
Reserved for ST in 2000	0.111	-0.0342	0.0889	-0.0278
	(0.319)	(0.0824)	(0.0984)	(0.107)
Reserved for OBC in 2005	0.0556	0.0214	-0.0556	0.0278
	(0.232)	(0.0602)	(0.0719)	(0.0780)
Reserved for SC in 2005	0.306	-0.190*	0.161	-0.222
	(0.467)	(0.108)	(0.129)	(0.140)
Reserved for ST in 2005	0.0833	0.147	0.117	0.167
	(0.280)	(0.0968)	(0.116)	(0.125)
Reserved for OBC in 2010	0.167	-0.0513	0.0333	-0.167
	(0.378)	(0.0885)	(0.106)	(0.115)
Reserved for SC in 2010	0.194	0.0363	-0.128	0.222
	(0.401)	(0.105)	(0.125)	(0.136)
Reserved for ST in 2010	0.0556	0.0214	0.0778	0.0278
	(0.232)	(0.0705)	(0.0842)	(0.0914)
Incumbent can run in 2010	0.694	-0.0406	-0.0278	-0.111
	(0.467)	(0.124)	(0.148)	(0.161)
Number of GP	36	26	15	12

Table A.3: Summary Statistics (survey sample where 2010 incumbents could run)

	Mean in Control	Difference in	Difference in	Difference in
	Not MR in 2005	Control WR in	Treatment Not	Treatment WR in
	NOT WK III 2005	2005	WR in 2005	2005
Panel A: Census 2011				
Number of villages	4.114	-0.485	0.136	-0.281
	(1.967)	(0.480)	(0.566)	(0.627)
Population	5340	23.12	38.29	-602.7
	(1454)	(479.5)	(565.0)	(626.3)
Fraction SC Population	0.237	0.0174	-0.0176	-0.0697*
	(0.101)	(0.0278)	(0.0327)	(0.0362)
Fraction ST Population	0.107	0.0557	0.0761	0.0657
	(0.171)	(0.0554)	(0.0652)	(0.0723)
Fraction Literate Population	0.548	0.0178	0.0173	-0.00643
	(0.0480)	(0.0138)	(0.0162)	(0.0180)
Fraction Cultivators	0.194	-0.0187	0.00883	-0.0121
	(0.0573)	(0.0154)	(0.0181)	(0.0201)
Fraction Agricultural Laborers	0.0524	-0.00475	-0.0118	-0.0147
	(0.0296)	(0.00727)	(0.00856)	(0.00949)
Fraction of villages with drinking water	0.960	-0.0315	-0.0560	-0.141***
с с	(0.0974)	(0.0380)	(0.0448)	(0.0497)
Fraction of villages with paved access	0.412	0.0884	-0.0665	-0.00266
C .	(0.345)	(0.0820)	(0.0966)	(0.107)
Fraction of villages with power supply	0.938	-0.0108	-0.0254	-0.0357
	(0.167)	(0.0461)	(0.0544)	(0.0603)
	. ,	. ,	. ,	. ,
Panel B: State Election Commission 201	0			
Number of voters	2669	257.8	59.97	120.5
	(1069)	(287.6)	(338.9)	(375.7)
Reserved for women in 2000	0.486	-0.412***	0.202	-0.152
	(0.507)	(0.113)	(0.133)	(0.147)
Reserved for OBC in 2000	0.0571	0.0169	0.0679	0.193*
	(0.236)	(0.0768)	(0.0905)	(0.100)
Reserved for SC in 2000	0.257	0.0392	-0.132	-0.0905
	(0.443)	(0.110)	(0.129)	(0.143)
Reserved for ST in 2000	0.114	-0.0402	0.0732	-0.0310
	(0.323)	(0.0817)	(0.0963)	(0.107)
Reserved for OBC in 2005	0.0571	0.0169	-0.0571	0.0262
	(0.236)	(0.0596)	(0.0702)	(0.0778)
Reserved for SC in 2005	0.286	-0.138	0.152	-0.202
	(0.458)	(0.108)	(0.128)	(0.142)
Reserved for ST in 2005	0.0857	0.137	0.164	0.164
	(0.284)	(0.0983)	(0.116)	(0.128)
Reserved for OBC in 2010	0.171	-0.0603	0.0161	-0.171
	(0.382)	(0.0877)	(0.103)	(0.115)
Reserved for SC in 2010	0.200	0.0222	-0.0750	0.217
	(0.406)	(0.107)	(0.126)	(0.139)
Reserved for ST in 2010	0.0571	0.0540	0.0679	0.0262
	(0.236)	(0.0742)	(0.0874)	(0.0969)
Incumbent can run in 2010	0.686	-0.0561	-0.0607	-0.102
	(0.471)	(0.125)	(0.147)	(0,163)
	(0.1/ 1/	(0.220)	(0.2.17)	(0.100)
Number of GP	35	27	16	17
Notoci 1. Standard doviation below in pr	ronthosis 2 Store	donoto the cignific		difference * for

Table A.4: Summary Statistics (GP not reserved for women in 2010 and 2015 only)

Table A.5: Effect on Voter Turnout

	Total Turnout	Male Voters Turnout	Female Voters Turnout
	1	2	3
Treatment (Treat.)	0.00	-0.00	0.01
	(0.01)	(0.01)	(0.01)
Gender Quota (GQ) 2005	0.01	0.00	0.01
	(0.01)	(0.01)	(0.01)
Treat x GQ 2005	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)
Observations	374	374	374
Mean in Control Unreserved	0.827	0.831	0.822
Treat with GQ = Treat without GQ	0.520	0.350	0.860

NOTES: 1. The sample includes all GPs not reserved for women in 2010 for which turnout information is available (374 from 382 GPs) 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Quota 2005 is a dummy equal to one for GP reserved for women in 2005. 3. The specification is described in Section 3.3. It includes district fixed effects and GP controls. 4. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 5. Treat with GQ = Treat without GQ gives the p-value of the f-test that the sum of coefficients for Gender Quota 2005 and Treat * GQ 2005 is equal to zero.

	Incumbent	Spouse	Other Family	Incumben	t who ran
-	Won	Won	Won	%Votes	Won
-	1	2	3	4	5
Panel A: Average Effects					
Treatment (Treat.)	-0.01	-0.00	0.07**	-5.13	0.09
	(0.05)	(0.03)	(0.03)	(6.95)	(0.29)
Gender Quota (GQ) 2005	-0.04	-0.03	-0.01	-0.09	0.29
	(0.06)	(0.03)	(0.04)	(8.14)	(0.34)
Treat x GQ 2005	0.03	0.03	-0.05	-3.95	-0.38
	(0.07)	(0.04)	(0.05)	(11.52)	(0.48)
Observations	150	150	150	40	40
Observations	152	152	152	43	43
Tread in Control without GQ	0.06	0.02	0	21.47	0.13
Ireat. with GQ = Ireat without GQ	0.83	0.95	0.15	0.62	0.77
Panel B: Heterogeneity depending on P	erformance				
Treat * Performance	-0.02	0.01	0.06	5.54	-0.36
	(0.06)	(0.03)	(0.04)	(11.38)	(0.42)
Treat * GQ 2005 * Performance	-0.04	0.01	-0.07	-12.81	-0.43
	(0.10)	(0.05)	(0.06)	(18.98)	(0.69)
GQ 2005 * Performance	0.09	0.01	0.01	1.90	0.99*
	(0.07)	(0.04)	(0.05)	(15.19)	(0.55)
Treatment (Treat)	-0.01	-0.00	0.07**	-7.77	0.02
	(0.05)	(0.03)	(0.03)	(8.18)	(0.30)
Treat * GQ 2005	-0.03	-0.03	-0.01	0.82	0.22
	(0.06)	(0.03)	(0.04)	(9.83)	(0.36)
Gender Quota (GQ) 2005	0.02	0.03	-0.04	-3.91	-0.26
	(0.08)	(0.04)	(0.05)	(13.04)	(0.48)
Performance Index	-0.03	-0.02	-0.01	-1.56	-0.16
	(0.03)	(0.02)	(0.02)	(5.40)	(0.20)
Observations	152	152	152	43	43
Mean in Control without GQ	0.06	0.02	0	21.47	0.13

Table A.6: Effect on Incumbent Outcomes Conditional on Running

NOTES: 1. In Columns 1 to 3 the sample includes all 152 GPs which were surveyed and where the incumbent could rerun in 2010. In Columns 4 and 5 the sample includes only 43 GPs where the incumbents ran. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. GQ 05 is a dummy equal to one for GP reserved for women in 2005. 3. All specifications include district fixed effects and GP controls. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 4 The Performance Index is based on the fraction of household who worked in MGNREGS in the last 12 months and the fraction of men and women who would have liked to work in MG-NREGS in the last 12 months and could get work (household survey). Both measures are standardized and summed up to build the Index. 5. Treated Reserved 05=Control Unreserved gives the p-value of the f-test that the sum of coefficients for Treatment, Reserved 05 and Treatment*Reserved 05 is equal to zero.

Table A.7: Effect of the two versions of the campaign on incumbents and incumbents family members depending on incumbents' performance in MGNREGS implementation

		Incumbent		In	Incumbent Spouse			Incumbent Other Family Member		
	Runs	Voteshare	Wins	Runs	Voteshare	Wins	Runs	Voteshare	Wins	
	1	2	3	4	5	6	7	8	9	
Panel A: GP without Gender Quota in	n 2005									
Gender Treatment	-0.28**	-5.35	0.06	-0.00	-0.07	0.00	0.14	0.84	0.01	
	(0.14)	(3.37)	(0.07)	(0.07)	(1.61)	(0.04)	(0.09)	(1.33)	(0.04)	
General Treatment	-0.23*	-7.42**	-0.07	0.12*	1.19	-0.00	0.10	2.14*	0.12***	
	(0.12)	(3.10)	(0.07)	(0.07)	(1.48)	(0.03)	(0.08)	(1.22)	(0.04)	
Gender Treatment * Performance	0.10	4.83	-0.07	-0.06	-0.61	0.02	-0.14	0.19	0.03	
	(0.16)	(3.97)	(0.09)	(0.09)	(1.90)	(0.04)	(0.11)	(1.56)	(0.05)	
General Treatment * Performance	0.34**	8.18**	0.02	-0.02	-0.01	0.01	0.06	1.99	0.11**	
	(0.14)	(3.55)	(0.08)	(0.08)	(1.70)	(0.04)	(0.10)	(1.40)	(0.04)	
Performance Index	-0.09	-3.19*	-0.05	0.02	-0.09	-0.01	-0.02	-0.45	-0.02	
	(0.07)	(1.74)	(0.04)	(0.04)	(0.83)	(0.02)	(0.05)	(0.69)	(0.02)	
Observations	92	90	92	92	90	92	92	90	92	
Mean in Control Unreserved	0.46	10.1	0.06	0.04	0.73	0.02	0.08	0.86	0	
Panel B: GP with Gender Quota in 20	005									
Gender Treatment	0.25*	4.60	0.02	-0.21	-3.58	0.05	0.18*	4.79	0.05	
	(0.14)	(3.12)	(0.07)	(0.16)	(4.44)	(0.05)	(0.09)	(3.23)	(0.05)	
General Treatment	0.05	0.56	-0.03	-0.35**	-8.71*	-0.02	0.07	-0.15	-0.01	
	(0.14)	(3.23)	(0.08)	(0.17)	(4.58)	(0.06)	(0.09)	(3.33)	(0.05)	
Gender Treatment * Performance	-0.19	-4.61	-0.09	-0.03	-4.80	0.02	0.12	0.67	-0.04	
	(0.17)	(3.73)	(0.09)	(0.19)	(5.29)	(0.07)	(0.11)	(3.85)	(0.06)	
General Treatment * Performance	-0.09	-0.36	-0.02	-0.19	-6.63	-0.01	0.20*	1.16	0.02	
	(0.18)	(4.06)	(0.09)	(0.20)	(5.77)	(0.07)	(0.11)	(4.19)	(0.06)	
Performance Index	-0.04	-0.19	0.04	0.05	4.24	-0.00	-0.01	1.10	0.02	
	(0.12)	(2.73)	(0.07)	(0.14)	(3.88)	(0.05)	(0.08)	(2.82)	(0.04)	
Observations	60	59	60	60	59	60	60	59	60	
Mean in Control Unreserved	0.15	2.5	0.04	0.33	6.15	0	0	0	0	

NOTES: 1.In Panel A the sample includes the 92 GPs which were surveyed and where the incumbent could re-run in 2010 which were not reserved for women in 2005. In Panel B it includes the 60 GPs which were surveyed and where the incumbent could re-run in 2010 which were reserved for women in 2005. Information on voteshare is missing for three GPs. 2. Gender Treatment is a dummy equal to one for GPs which received the gender version of the PEVAC, General Treatment is a dummy equal to one for GPs that received the non-gender version of the PEVAC took place. 3. All specifications include district fixed effects and GP controls. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 4.Columns 2, 5 and 7 are missing 3 observations since vote data does not exist for these GPs. 5. The Performance Index is based on the fraction of household who worked in MGNREGS in the last 12 months and the fraction of men and women who would have liked to work in MG-NREGS in the last 12 months and could get work (household survey). Both measures are standardized and summed up to build the Index.

		ç	% Female	Candidates	S	
	Ru	un	Vote	share	Wins	
	1	2	3	4	5	6
Panel A: All female candidates						
Gender Quota (GQ) 2000	0.0536**		5.322**		0.0601	
	(0.0239)		(2.704)		(0.0432)	
Gender Quota (GQ) 2005	0.0240		5.944**		0.0421	
	(0.0240)		(2.717)		(0.0434)	
GQ 2005 OR GQ 2000		0.0445**		6.919***		0.0677*
		(0.0213)		(2.399)		(0.0384)
Observations	382	382	373	373	382	382
Mean without GQ 2005 and GQ 2000	0.104	0.104	9.432	9.432	0.104	0.104
Panel B: Female not elected before						
Gender Quota (GQ) 2000	0.0486**		5.583**		0.0477	
	(0.0220)		(2.469)		(0.0418)	
Gender Quota (GQ) 2005	0.0196		4.544*		0.0323	
	(0.0221)		(2.482)		(0.0420)	
GQ 2005 OR GQ 2000		0.0395**		6.273***		0.0549
		(0.0196)		(2.191)		(0.0372)
Observations	382	382	373	373	382	382
Mean without GQ 2005 and GQ 2000	0.0973	0.0973	8.626	8.626	0.104	0.104

Table A.8: Effect of gender quotas on female candidate entry

NOTES: 1. The sample includes all 382 GPs not reserved for women in 2010 elections. 2.GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2010. 3."Voteshare" columns are missing 9 observations since vote data does not exist for these GPs. 4. All regressions include district fixed effects and GP controls. 5. GP controls include GP population, literacy rate, number of registered voters, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010.

	Number	Number	Female Challengers		Low	Caste
	Candidates	Challengers			Challe	engers
			% Cand	%Votes	% Cand	%Votes
	1	2	3	4	5	6
Gender Treatment	-0.665	-0.584	-0.00133	-4.692	0.0524	4.187
	(0.758)	(0.760)	(0.0364)	(3.964)	(0.0448)	(4.701)
General Treatment	1.083	1.162*	0.0122	-1.147	0.0810*	10.26**
	(0.698)	(0.699)	(0.0335)	(3.774)	(0.0412)	(4.476)
Gender Quota (GQ) 2005	1.097*	1.283**	0.0109	4.208	0.0467	4.301
	(0.574)	(0.575)	(0.0276)	(3.023)	(0.0339)	(3.585)
Gender Treat * GQ 2005	-0.676	-0.760	-0.00357	-0.238	0.0361	-1.484
	(1.257)	(1.261)	(0.0604)	(6.774)	(0.0743)	(8.034)
General Treat *GQ 2005	-0.427	-0.563	0.00511	1.827	-0.107	-10.37
	(1.167)	(1.169)	(0.0560)	(6.103)	(0.0689)	(7.239)
Observations	382	382	382	373	382	373
Mean in Control Unreserved	7.394	7.139	0.126	12.89	0.787	78.70
Gender = General without GQ 2005	0.0600	0.0600	0.760	0.470	0.600	0.300
Gender = General with GQ 2005	0.220	0.210	0.930	0.820	0.0200	0.0500

Table A.9: Effect of the two versions of the campaign on candidate entry in 2010

NOTES: 1.The total number of candidates by caste and gender is available for all 382 GPs. 2. Gender Treatment is a dummy equal to one for GPs where the PEVAC with a gender message took place. General Treatment is a dummy equal to one for the other treatment GPs. Reserved 05 is a dummy equal to one for GP reserved for women in 2005. 3. The number of observations in Panel B is lower since vote data does not exist for some GPs. 4.The specification is described in Section 3.3 . All regressions in clude district FE and GP controls: GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 5. Gender = General Treatment gives the p-value of the f-test that the effect of the two PEVACs is the same.

Table A.10:	Changes	in the	composition	of the	candidate	pool in	terms	of education	and e	xpe-
rience										

	Low Education Challengers		First-time	First-time Entrants		Previous Sarpanch		Previous Wardpanch	
	% Cand %Votes		% Cand	% Cand %Votes		%Votes	% Cand	%Votes	
	1	2	3	4	5	6	7	8	
Treatment	0.02	1.95	-0.01	-0.99	-0.01	-4.56*	0.04**	6.96***	
	(0.03)	(4.14)	(0.03)	(3.33)	(0.02)	(2.61)	(0.02)	(2.58)	
Gender Quota (GQ) 2005	0.02	6.03	-0.04	-3.92	-0.01	-2.15	0.03	-0.41	
	(0.04)	(5.03)	(0.04)	(4.03)	(0.02)	(3.17)	(0.02)	(3.14)	
Treat. X GQ 2005	-0.02	-4.47	0.02	-3.78	0.04	8.71*	-0.02	-2.78	
	(0.05)	(7.03)	(0.05)	(5.63)	(0.03)	(4.43)	(0.03)	(4.39)	
Observations	240	234	239	233	240	234	240	234	
Mean in Control without GQ	0.670	59.17	0.240	22.63	0.0700	10.35	0.0600	6.700	
Treat. with GQ = Treat without GQ	0.990	0.760	0.540	0.0600	0.280	0.0400	0.770	0.310	

NOTES: 1. Education and political experience of candidatess are only known for the survey sample (240 GPs). The number of observations in even columns is lower than the total sample since vote data does not exist for some GPs. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Quota (GQ) 2005 is a dummy equal to one for GP reserved for women in 2005. 3. The specification is described in Section 3.3. It includes district fixed effects and GP controls. 4. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 5. Treat with GQ = Treat without GQ gives the p-value of the f-test that the sum of coefficients for GQ 2005 and Treatment*GQ 2005 is equal to zero.

	Female	Low Caste	Low Education	First-time Entrants	Previous Sarpanch	Previous Wardpanch
	1	2	3	4	5	6
Panel A: Average Effects						
Treatment (Treat.)	0.00	0.08*	-0.06	-0.00	-0.06	0.10**
	(0.05)	(0.05)	(0.06)	(0.08)	(0.05)	(0.05)
Gender Quota (GQ) 2005	0.01	-0.02	-0.07	-0.02	-0.00	0.01
	(0.05)	(0.05)	(0.07)	(0.10)	(0.06)	(0.06)
Treat x GQ 2005	-0.03	-0.07	-0.08	0.05	0.05	-0.07
	(0.08)	(0.08)	(0.10)	(0.14)	(0.08)	(0.08)
Observations	202	202	220	240	240	240
Observations	382	382	239	240	240	240
Mean in Control without GQ	0.140	0.820	0.270	0.590	0.120	0.0500
Ireat. with GQ = Ireat without GQ	0.75	0.14	0.03	0.74	0.43	0.33
Panel B: Effects by Type of Campaign	0.00		0.05	0.05	0.05	
Gender Treatment	-0.02	0.04	0.05	0.05	-0.05	-0.11
	(0.07)	(0.06)	(0.10)	(0.10)	(0.06)	(0.09)
General Treatment	0.02	0.11*	-0.04	-0.04	-0.07	-0.09
	(0.06)	(0.06)	(0.10)	(0.10)	(0.06)	(0.08)
Gender Quota (GQ) 2005	0.01	-0.02	-0.02	-0.02	-0.00	0.03
	(0.05)	(0.05)	(0.10)	(0.10)	(0.06)	(0.08)
Gender Treat x GQ 2005	-0.03	0.01	0.09	0.09	0.02	-0.08
	(0.11)	(0.11)	(0.17)	(0.17)	(0.10)	(0.15)
General Treat x GQ 2005	-0.03	-0.11	0.00	0.00	0.06	-0.04
	(0.10)	(0.10)	(0.16)	(0.16)	(0.10)	(0.14)
Observations	382	382	240	240	240	240
Mean in Control without GQ	0.140	0.820	0.590	0.590	0.120	0.300
Gender Treat = General Treat (without GO)	0.640	0.390	0.210	0.450	0.710	0.150
Gender Treat = General Treat (with GQ)	0.750	0.0800	0.830	0.990	0.530	0.440

Table A.11: Effect on the identity of the elected leader in 2010

NOTES: 1.The sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. Information on voteshare is missing for three GPs. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. Gender Treatment is a dummy equal to one for GPs which received the gender version of the PEVAC, General Treatment is a dummy equal to one for GPs that received the non-gender version of the PEVAC took place. 3. All specifications include district fixed effects and GP controls. Gender Quota 2005 is a dummy equal to one for GP reserved for women in 2005. GP controls include GP population, literacy rate, number of registered voters, Gender reservation status of GP for 2000, Caste (OBC SC and ST) reservation status for 2000, 2005 and 2010. 4. Even-numbered columns are missing 3 observations since vote data does not exist for these GPs. 5. The Performance Index is based on the fraction of household who worked in MGNREGS in the last 12 months and the fraction of men and women who would have liked to work in MG-NREGS in the last 12 months and could get work (household survey). Both measures are standardized and summed up to build the Index. 6. "Treat with GQ = Treat without" gives the p-value of the f-test that the sum of coefficients for GQ 2005 and Treatment*GQ 2005 is equal to zero. 7. "Gender Treat = General Treat" gives the p-value of the f-test that the effect of the two PEVACs is the same.

Type of candidate	Incumbent	Candidate in	Female	Lower caste	Low Education	Sarpanch
		2010	2	4	F	before
Panel A: Punning	1	Z	3	4	5	0
Gender Treatment	-0 0237	0.00130	0 158	0 0446	0 00395	0.00361
	(0.0207)	(0.0328)	(0.123)	(0 116)	(0.0166)	(0.0568)
General Treatment	0 133**	0.0253	0 185*	0 124	-0 00498	-0.00918
	(0.0562)	(0.0261)	(0.0976)	(0.0923)	(0.0147)	(0.0451)
Gender Quota (GQ) 2005	0.103**	-0.0216	0.0501	-0.112	0.0102	-0.00328
	(0.0442)	(0.0205)	(0.0766)	(0.0725)	(0.0106)	(0.0354)
Gender Treat x GO 2005	-0.208**	-0.00375	-0.119	0.0627	-0.0112	0.0721
	(0.0923)	(0.0428)	(0.160)	(0.151)	(0.0229)	(0.0740)
General Treat x GO 2005	-0.0458	0.00689	0.0460	0 192	-0.00804	0.00926
	(0 105)	(0.0488)	(0 183)	(0.173)	(0.0246)	(0.0845)
	(0.105)	(0.0400)	(0.105)	(0.175)	(0.02+0)	(0.0045)
Observations	89	89	89	89	81	89
Mean in Control Unreserved	0	0.0199	0.0827	0.796	0	0.0500
Gender Treat = General Treat (without GQ)	0.0700	0.540	0.860	0.570	0	0.850
Gender Treat = General Treat (with GQ)	0.950	0.760	0.390	0.740	0	0.500
Panel B: Voteshare						
Gender Treatment	-0.381	1.752	7.400	3.828	0.314	8.798
	(1.806)	(4.535)	(13.56)	(12.11)	(1.319)	(8.769)
General Treatment	4.292***	1.511	20.24*	10.19	-0.396	-1.646
	(1.436)	(3.606)	(10.78)	(9.625)	(1.171)	(6.972)
Gender Quota (GQ) 2005	2.092*	-3.187	11.20	-9.018	0.811	-2.883
	(1.127)	(2.831)	(8.466)	(7.556)	(0.840)	(5.474)
Gender Treat x GQ 2005	-5.417**	3.234	-19.80	5.567	-0.893	10.12
	(2.356)	(5.917)	(17.69)	(15.79)	(1.821)	(11.44)
General Treat x GQ 2005	-0.927	-0.249	7.786	11.70	-0.639	-5.226
	(2.690)	(6.754)	(20.20)	(18.03)	(1.950)	(13.06)
Observations	89	89	89	89	81	89
Mean in Control Unreserved	0	3.053	8.096	86.65	0	8.424
Gender Treat = General Treat (without GQ)	0.0300	0.960	0.430	0.660	0	0.330
Gender Treat = General Treat (with GQ)	0.940	0.590	0.410	0.990	0	0.670
Panel C: Winning Probability						
Gender Treatment	0	0.128	0.0161	0.0764	0	0.480***
	(0)	(0.101)	(0.179)	(0.143)	(0)	(0.156)
General Treatment	0	-0.0518	0.168	0.109	0	-0.000555
	(0)	(0.0801)	(0.142)	(0.113)	(0)	(0.124)
Gender Quota (GQ) 2005	0	-0.105	0.117	-0.109	0	-0.100
	(0)	(0.0629)	(0.112)	(0.0890)	(0)	(0.0972)
Gender Treat x GQ 2005	0	0.246*	-0.195	-0.0279	0	0.0360
	(0)	(0.132)	(0.233)	(0.186)	(0)	(0.203)
General Treat x GQ 2005	0	-0.0435	0.107	0.132	0	-0.456*
	(0)	(0.150)	(0.266)	(0.212)	(0)	(0.232)
Observations	20	22	20	22	Q1	22
Mean in Control Unreserved	0	0.0556	0.0833	0.861	0	0 111
Gender Treat = General Treat (without GO)	-	0.0330	0.480	0.850	0	0.0100
Gender Treat = General Treat (with GQ)	-	0.410	0.520	0.500	0	0.960

Table A.12: Effect of the two versions of the campaign on candidate entry in 2015

NOTES: 1. We restrict the sample to GP not reserved for women in 2010 nor in 2015. The total number of candidates by caste, gender, and experience as sarpanch is available for 89 GPs. Candidate education is only available for 81 GP. 2. Gender Treatment is a dummy equal to one for GPs where the PEVAC with a gender message took place. General Treatment is a dummy equal to one for the other treatment GPs. Reserved 05 is a dummy equal to one for GP reserved for women in 2005. 3.The specification is described in Section 3.3. It includes district fixed effects and GP controls: GP population, literacy rate, number of registered voters, Caste (OBC SC and ST) reservation status for 2010 and 2015. 5. Gender = General Treatment gives the p-value of the f-test that the effect of the two PEVACs is the same.

	Incumbent	Candidate in 2010	Female	Low Caste
	1	2	3	4
Panel A: Average Effects				
Treatment (Treat.)	0	0.00	0.10	0.11
	(0)	(0.07)	(0.12)	(0.09)
Gender Quota (GQ) 2005	0	-0.06	0.15	-0.14*
	(0)	(0.06)	(0.10)	(0.08)
Treat x GQ 2005	0	0.11	-0.09	0.06
	(0)	(0.11)	(0.18)	(0.15)
Observations	89	89	89	89
Mean in Control without GQ	0	0.0600	0.0800	0.860
Treat. with GQ = Treat without GQ		0.550	0.670	0.510
Panel B: Effects by Type of Campaign				
Gender Treatment	0	0.08	0.18	0.03
	(0)	(0.10)	(0.18)	(0.16)
General Treatment	0	-0.06	0.15	0.12
	(0)	(0.08)	(0.14)	(0.12)
Gender Quota (GQ) 2005	0	-0.11*	0.04	-0.07
	(0)	(0.06)	(0.11)	(0.10)
Gender Treat x GQ 2005	0	0.25*	-0.17	-0.09
	(0)	(0.13)	(0.22)	(0.19)
General Treat x GQ 2005	0	0.03	-0.12	0.20
	(0)	(0.15)	(0.26)	(0.23)
Observations	89	89	89	89
Mean in Control without GQ	0	0.0600	0.0800	0.860
Gender Treat = General Treat (without GQ)		0.260	0.870	0.650
Gender Treat = General Treat (with GQ)		0.560	0.710	0.290

Table A.13: Effect on the identity of the elected leader in 2015

NOTES: 1. We restrict the sample to GP not reserved for women in 2010 nor in 2015. The total number of candidates by caste, gender, and experience as sarpanch is available for 89 GPs. Candidate education is only available for 81 GP. 2. Gender Treatment is a dummy equal to one for GPs where the PEVAC with a gender message took place. General Treatment is a dummy equal to one for the other treatment GPs. Reserved 05 is a dummy equal to one for GP reserved for women in 2005. 3.The specification is described in Section 3.3. It includes district fixed effects and GP controls: GP population, literacy rate, number of registered voters, Caste (OBC SC and ST) reservation status for 2010 and 2015. 5. Gender = General Treatment gives the p-value of the f-test that the effect of the two PEVACs is the same.

C Appendix Figures



Figure A.1: Sample of Calendar from the General Campaign



Figure A.2: Sample of Calendar from the Gender Campaign

Figure A.3: Picture of the Theater Play

