

# 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 increased awareness about a flagship social insurance program and the role of elected leaders in its implementation impacts citizens' motivation to run in elections. Incumbents are 69% less likely to seek re-election, an effect primarily driven by worse-performing incumbents. Individuals from historically disadvantaged population groups, particularly lower castes and women, become more likely to run for office and increase their vote share. The impact on low caste entry behavior is both immediate and long-lasting, while the effect on female candidacy only emerges in the subsequent election. Finally, a similar campaign emphasizing the role of women has weaker effects on all outcomes (including women's entry), although the differences between both types of campaigns were generally insignificant.

*Keywords:* Elections, Candidate entry, Information campaign

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# 1 Introduction

The success of democratic governance relies on the participation of capable citizens (Myerson, 2011) and the ability of voters to reward quality and performance during elections (Besley, 2007). The entrenchment of the economic elite and the entry barriers faced by candidates from historically disadvantaged groups, such as women and specific ethnic groups, often hinders political selection and electoral accountability, restricting the benefits of democratic governance (Acemoglu and Robinson, 2008). These concerns are often viewed as particularly severe in low-income contexts (Ferraz and Finan, 2026).

Sharing information on elected officials' performance in serving their constituents can influence elections, hold incumbents accountable, and motivate politicians' to perform well (Ferraz and Finan, 2008; Banerjee et al., 2024). However, for an outside group, obtaining the local information relevant for holding politicians accountable is often challenging. But citizens may already possess some of the relevant information but its importance might not be salient to them. Could prompting citizens, including potential candidates, to focus on how elected representatives impact their daily lives and the qualities needed for effective leadership improve political engagement and accountability?

In this paper, we experimentally investigate how electoral outcomes, including who people vote for and who runs for office (especially women and other socially marginal groups) change when voters are reminded of their elected leader's responsibility for delivering local public goods and implementing a crucial social protection program. Our experiment focuses on the 2010 local village council head (sarpanch) elections in Rajasthan, India. In these elections, a fraction of sarpanch position are reserved for women. Our sample only included village councils (Gram Panchayats, henceforth GPs) that were unreserved for the 2010 election. They differed in their prior history of reservation and hence in whether the current incumbent was a woman.

A pre-election voter awareness program was implemented in 119 randomly selected GPs from a sample of 382. The basic campaign, from now on *general campaign*, used door-to-door canvassing and a theatrical performance to increase awareness of the sarpanch's role in executing a large public workfare program (MGNREGS). It also provided information on average MGNREGS spending and employment provision per GP in the district. We did not disclose village- or

politician-specific information to focus on the impact of increasing the salience of sarpanch's role. Voters were urged to support the most effective politicians, irrespective of their caste or gender. In half of the treatment village, the campaign highlighted women's leadership potential. In this *gender campaign*, a female character played the role of the sarpanch in the street-play, and the district average performance of male and female sarpanches was reported separately, showcasing their equal effectiveness.

The primary outcomes of interest, as prespecified in the IRB application submitted prior to the experiment's launch, were electoral outcomes for the current incumbent, the number of candidates, the fraction of women among them, their electoral performance, and turnout.

Our first and most striking finding is that the general campaign immediately influenced incumbents' decision to run for election in 2010. On average, it reduced the probability of the incumbent running by 24 percentage points (over two thirds of the mean of 35% in control GPs), and reduced the (unconditional) vote share going to incumbents by nearly 80 percent. These effects, while statistically significant in the whole sample, are concentrated in GPs that were not previously reserved for women (and therefore had male incumbents). This concentration of effects reflects the fact that female incumbents tend not to seek reelection once their GP is unreserved. In the subsequent 2015 election, a new rule required candidates to have at least eight years of schooling, depressing the rate of incumbents' re-running. In control GPs, only 2% of incumbents re-contest elections. However, because the campaign had encouraged more educated candidates to run, more of the treated incumbents were eligible for reelection. In villages treated in 2010, incumbents are more likely to run and receive a larger vote share.

Our second finding is that the campaign altered the candidate pool with some effects immediate and others only emerging in the 2015 election. In 2010, the general campaign increased the number of challengers by 1.25 (18%) in the GPs that were not reserved in 2005 (and 0.97 on average). In these GPs, there was no impact on women running in the 2010 elections, but by the 2015 elections, they were 17 percentage points more likely to run and received an 18 percentage point higher vote share. When we expand the outcomes to beyond those prespecified, we find that the campaign increased the number and vote share of lower caste candidates (both in 2010 and 2015). Importantly, treatment-induced churn in the pool of sarpanch candidates did not come at the expense of any obvious measure of competence. Rather, the treatment increased

the number of educated candidates and candidates with previous experience as village council members. Finally the campaign had no effect on turnout (which was very high at 83%).

Interestingly, the gender campaign shows a more muted impact on nearly all outcomes (including the entry of women), although differences across the general and gender campaigns are typically insignificant.

The remainder of the paper investigates the robustness of these findings and mechanisms behind them.

First, in line with [Querubin \(2011\)](#) and [Labonne et al. \(2021\)](#), we examine if local politics is intertwined with family dynamics. In Rajasthan, wives are encouraged to take over from their incumbent spouses when a political position is reserved for women, and similarly, when the position switches from reserved to unreserved, the roles are reversed. Our data shows that in previously reserved seats, 15% of female incumbents run, whereas 33% of their husbands run. For the unit “incumbent plus spouse”, the general campaign has large effects in all GPs, reserved and unreserved. The incumbent couple is 38 percentage points (80%) less likely to run in previously reserved GPs and receives 9 percentage points fewer votes. In the overall sample, the “incumbent plus spouse” unit is 27 percentage point less likely to run and receives 7.9 percent fewer votes. As before, the gender campaign has no effect; here we can reject equality between the general and gender campaigns. To summarize, the treatment’s impacts extend beyond the incumbent and encompass the incumbent couple.

To investigate mechanisms, we first examine if the impacts on incumbents reflects their performance. We create a MGNREGS performance index using independently collected data on public employment provision, and find that the campaign’s anti-incumbent impact is more pronounced for the worst incumbents. The best incumbents (those with an index value exceeding 1 standard deviation) are mostly unaffected by campaign exposure whereas for the worst incumbents (those with an index value below -1 standard deviation) the negative impact on rerunning is twice as large as the average impact.

This result is striking because the campaign did not disclose individual performance. We use survey data to investigate why this happened. In both treatment and control GPs we observe a robust positive correlation between voters’ MGNREGS implementation rating and our performance measure, and there is no evidence that treatment GP voters had a better grasp of

the program’s rules or politicians’ role in its implementation. There is also no indication that treatment GP voters were more critical of program implementation quality. This suggests that the campaign likely prompted voters to base their vote on their existing knowledge of program implementation. It is also possible that the aggregate MGNREGS information provided by campaign helped them benchmark their incumbent’s performance. Overall, what stands out is that, even without disclosing individual performance statistics (which can be challenging to credibly deliver), the campaign raised accountability for individual performance.

Thus, emphasizing the significance of the policymakers’ choice can motivate citizens to step up as candidates and alter their voting choices. Incumbents, in turn, anticipate shifts in voters’ preferences, and respond to them, improving the selection of candidates. These findings highlight three crucial aspects of democratic local governance in settings characterized by low income and low education. First, entering politics might be more affordable than we assume, partly because only a small number of individuals hold permanent or long-term employment contracts that are costly to relinquish. They might stay out because the important role of political actors isn’t evident to them, particularly with the numerous negative stereotypes surrounding politicians. Second, even if less educated voters are not reading the news, they may possess the local insights needed to evaluate incumbents. However, they might not recognize its value. Third, due to close-knit social networks, politicians in these environments often have direct insight into voter inclinations, allowing them to react swiftly to shifts in voter preferences. Thus, electoral accountability may be more robust in settings with less educated voters than typically assumed.

A rich theoretical literature (Barro, 1973; Ferejohn, 1986; Persson et al., 1997) and multiple empirical studies highlight the electoral accountability consequences of delivering information about politicians to voters (Ferraz and Finan, 2008; Banerjee et al., 2011, 2014; Arias et al., 2022; Banerjee et al., 2024). However a multi-site randomized control trial across six countries found little evidence that providing comparable information about politician performance influenced voter behavior, on average (Dunning et al., 2019). The difference might partially reflect how salient the information is for voters.<sup>1</sup> In one study site, for example, information impacted voter behavior when its salience was enhanced by emphasizing the role of politicians’ performance on

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<sup>1</sup>It could also be because the incumbents took actions to negate the effects of the campaign: in the Philippines, Cruz et al. (2021) found that incumbents undid the negative effects of a pre-election voter campaign on elected leaders’ accountability by increasing vote-buying.

voter welfare, and the voters were told that other voters received the same information, facilitating coordination (Adida et al., 2020). This is closer to our study context, where citizens were invited to a street-play that emphasized that local leaders provide jobs and village infrastructure, and encouraged them to choose the best-qualified candidate.<sup>2</sup>

Our paper is also related to the candidate entry literature, which largely emphasizes pecuniary incentives (Keane and Merlo, 2010; Ferraz and Finan, 2009; Avis et al., 2017). In a recent experiment in Pakistan, Gulzar and Khan (2025) find that emphasizing social benefits of holding office increases candidate entry and improves public goods provision, whereas emphasizing personal benefits has no effect. Interestingly, the pro-social messaging is only effective when delivered in public, which they interpret as evidence of social influence, such as peer encouragement, on the decision to run. These findings are consistent with ours, since we found that public meetings emphasizing the social benefits from office change incumbent and challengers' entry decisions. Finally our findings on the long-term favorable impacts of female representation are similar to those found for 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 concludes.

## 2 The intervention

We briefly describe the institutional setting and then our intervention.

### 2.1 Electoral and policy context

Gram Panchayats (hereafter GPs) are the foundational tier of elected representation in Indian states, with elections every five years. Each GP is constituted of electoral wards, with each ward electing a councilor (*wardpanch*) by plurality rule. The *sarpanch*, or head councilor, also elected through a direct vote, wields significant control over council decisions (Besley et al., 2012).<sup>3</sup>

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<sup>2</sup>A related literature studies electoral debates (Bidwell et al., 2020). We focus on a pure salience effect: the campaign did not any provide incumbent-specific information, but it did provide district-level information on program performance, which the voters may have used as a benchmark. Gottlieb (2016) and Bhandari et al. (2023) find evidence of benchmarking in a setting, unlike ours, where incumbent-specific information was provided.

<sup>3</sup>The GP council decides through majority voting but the sarpanch is the only full-time council member.

Our experiment was centered around the 2010 sarpanch elections in Rajasthan, India. The intervention aimed to raise awareness about sarpanch responsibilities in providing public goods and implementing the federal government’s flagship social insurance program, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). MGNREGS provides villagers unskilled work on public works at the statutory minimum wage and, in 2010, it accounted for over half of the budget that GPs manage ([The World Bank, 2011](#)). Program administration involves registering beneficiaries, providing them employment on public works, and facilitating wage payments. Limited local employment opportunities creates high demand for MGNREGS work among women and low caste households. In a representative household survey we conducted, 51% of lower caste households participated in MGNREGS work in the previous year, compared to 38% of upper caste households. 31% of female respondents participated in MGNREGS work, significantly higher than the 19% who engaged in non-MGNREGS work outside the household or on the family farm (See Appendix Table [A.0](#)).

Local infrastructure provision (drinking water, paved streets, street lights) are additional GP responsibilities.<sup>4</sup>In our surveys, 78% of respondents cited drinking water as the most important public good, 10% cited roads and only 8% cited schools.

## **2.2 Pre-election Voter Awareness Campaign: Design**

In rural India, street theater is frequently used to raise awareness about particular issues, such as preventive health behavior. We partnered with Prayatn, a local NGO with expertise in running awareness campaigns for the government, to produce a pre-election voter awareness campaign (PEVAC). The campaign made use of calendars, door-to-door canvassing, and street theater led by a group of performers. The theatrical performance included “get-out-the-vote” songs about elections and “right to employment” songs about MGNREGS.

A first objective was to encourage voters to prioritize candidate performance on public good and MGNREGS provision, by highlighting the sarpanch’s role in providing local public goods and MGNREGS employment. The street play showed the impact of leader performance on citizen well-being by contrasting villages with well-maintained public facilities versus those with poor

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<sup>4</sup>GP officials also handle the provision of housing (Indira Awas Yojana), pensions (Indira Gandhi National Old Age Pension Scheme), and training (Swarnajayanti Gram Swarozgar Yojana).

infrastructure.<sup>5</sup> It also emphasized the leader’s role in providing MGNREGS jobs. Overall, the message was that local leaders play a significant part in the village’s life and therefore voters should choose a competent leader.

Additionally, district average statistics on MGNREGS performance were printed on a calendar that was distributed to villagers and read out during the play.<sup>6</sup> We chose not to share GP-specific MGNREGS performance statistics. Specifically, since reliable information on performance is not easily found (the number of MGNREGS jobs provided, for example, could be low because there was no demand) we preferred to prime the voters and let them use their private performance information to inform their choices.

A second objective was to encourage qualified individuals, particularly women, to run as candidates. The campaign might do this by encouraging voters to choose competent candidates. However, we wanted to test if a direct message about women’s suitability for the role encouraged more women to run. In a randomly selected half of treatment villages (*Gender Campaign*), the campaign emphasized that all adult GP residents were eligible to contest the sarpanch election in non-reserved GPs, and that women sarpanches typically performed on par with male counterparts.<sup>7</sup> The gender-specific play depicted a male candidate who attempted to stop a woman from running, but the village elder compelled him to accept her right to run, and that competence is not gendered. In those villages, MGNREGS implementation statistics in 2005 women-reserved and non-reserved GPs were displayed separately on the calendars and their similarity was discussed during the play. In the other half of the treatment villages (*General Campaign*), the campaign informed voters that all adults could run for non-reserved seats, and encouraged them to focus on electing the right candidate without emphasizing the gender dimension. The calendar presented MGNREGS implementation statistics as district averages, without distinguishing between reserved and non-reserved GPs.

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<sup>5</sup>In half of the treatment villages, the play used road quality as the example of infrastructure (a public good that we assumed was of more interest to men), whereas in the other half, the availability of hand pump for drinking water (a good assumed to be of more interest to women) was emphasized. However, [Banerjee et al. \(2025\)](#)’s TVA method for selecting treatment variations systematically suggests pooling the two public good versions of the campaign for all outcomes considered. Our analysis therefore pooled these sub-treatments.

<sup>6</sup>The statistics shown were average expenditures per GP, share of participant households and number of working days per participant household, downloaded from MGNREGS website in December 2009.

<sup>7</sup>The type of infrastructure used as an example in the play was cross-randomized with the gender message.

### 2.3 Pre-Election Voter Awareness Campaign: Implementation

Our sample spanned three relatively poor districts: Bharatpur, Dholpur and Karauli, with 741 GPs.<sup>8</sup> For the 2010 elections, a bit less than half of the GPs were randomly selected to be reserved for women, irrespective of previous reservation status; our evaluation considered the other half, or 382 GPs, that were not reserved for women.<sup>9</sup> Of our 382 study GPs, 119 were randomly assigned to a campaign using either roads or water as public good examples and either gendered or non-gendered messages. The public good examples and the gendered/non-gendered messages were cross-randomized, with the randomization stratified by district.

A typical treatment campaign unfolded like this: a team would kick things off by distributing calendars and advertising the evening show in the main village. They would then travel to each additional village in the GP with over 300 inhabitants and distribute calendars and conduct a theater show. The team would then head back to the main village and put on the evening show. A total of 472 theater performances occurred in 439 villages, with larger villages hosting two shows. On average, 234 people attended a show, and 130,000 calendars were distributed averaging one per household. 41% of show attendees were women. Appendix Figures A.1 and A.2 present the calendars and their translation, and Appendix Figures A.4 and A.5 give the detailed outline of the plays.

Prayatn ran voter awareness campaigns in the three weeks before the 2010 sarpanch elections. The average treatment village was exposed to a campaign ten days before the election (which occurred between 22nd January and 4th February 2010). This may appear as too late to change citizen incentives to run for election, but it aligns with candidate entry timing in these elections. Candidates cannot have any party affiliation, and can register up to the day before the election. Our politician survey found that a quarter of candidates made the decision to run in the three weeks before the elections.<sup>10</sup> Most candidates campaigned door-to-door (96%) just before the election. Only a quarter held meetings (29%), used posters (28%), or distributed food (23%).

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<sup>8</sup>The typical Rajasthani GP has an electorate of 3,000, spread across multiple villages.

<sup>9</sup>A third of our sample GPs had been reserved for women in 2000, and after rotation of the quota another third had been reserved in 2005. Reservation rotated again in 2015, so that only 89 GPs that were not reserved for women in 2010 were still unreserved in 2015. Half of the 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 is not randomly assigned.

<sup>10</sup>The fraction of candidates who decided to run within three weeks 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

Below we briefly describe our data sources we use (with further details in the online appendix) followed by the empirical strategy.

#### 3.1 Data sources

The program employment and wage statistics that were shared during the intervention are sourced from the MGNREGS public information database ([nrega.nic.in](http://nrega.nic.in)).

In March 2010, we conducted a household survey in 240 GPs, covering the 119 treatment GPs and a random sample of 121 control GPs. In each household, a male and a female adult member were randomly selected to participate in the survey. 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 her employment. We construct a standardized index of (past) incumbent performance 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. While the survey was conducted just after the election (at most within one month), the measure of competence largely reflects the performance of the previous incumbent, since the survey asked about work during the last 12 months. Moreover, as MGNREGS job provision is highly seasonal with February a low work provision month, we believe it is reasonable to interpret this measure as relating to the past incumbent’s performance.<sup>11</sup>

To examine how treatment effects evolve, we collated and digitized electoral data from Rajasthan’s State Election Commission for all 382 GPs for 2010 and 2015, along with reservation information for these and prior elections in 2000 and 2005. This includes the candidate’s name, caste, gender, and village, and the number of votes each candidate received. Challenger status is inferred through name matching, and verified in our candidate survey. Turnout information was available for 374 GP and candidate voteshare for 373 GP. We lack 2015 turnout information.

During September and October 2011, we surveyed 2,100 candidates and incumbents in the 240 GPs covered by the household survey. This survey covered all candidates and incumbents

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<sup>11</sup>Only 2.8% of work days reported on [nrega.nic.in](http://nrega.nic.in) between April 2009 and March 2010 for the sample districts occurred in February 2010.

from 2010, gathering information on their education, profession, wealth and political careers. We collected additional information about respondents' family members political careers in order to identify candidates who were related to the incumbent.

To recap, we have data from the 2010 GP elections on the number of candidates and challengers by gender and caste for the intervention sample of 382 GPs. We have household and politician survey data for a subset of 240 GPs. In 2010, incumbents in 64% of the sample GPs were eligible for re-election due to GP caste reservation, which cycles across GPs. 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 Using the IRB documentation to guide empirical specifications**

This experiment was conducted prior to the launch of the AEA registry for social experiments and before pre-analysis plans for field experiments became standard practice. We registered the experiment ex-post, making it accessible for the record, but it does not serve as a pre-analysis plan.

We rely on our original IRB documentation, submitted before the launch of the experiment, to discipline our analysis for main outcomes. The document is available as online Appendix [A.6](#). It describes the planned experiment, emphasizing the distinction between the “general” and the “gender” campaign: a key focus was to investigate whether demonstrating that women are as competent as men on average would lead to more female candidacies and increase their electoral success. Thus, the plan stated that we would separately evaluate the general and the gender-specific PEVACs. We do so below and also present the  $p$ -value for the hypothesis that the campaign of either type had a significant effect, on average. On the other hand the IRB does not specify that we would look separately at the effect of the two public goods mentioned in the plays, and we pool them throughout to limit the multiplicity of coefficients.

The original IRB specified several primary outcomes using administrative data: Incumbent re-contesting and their success (measured by vote share), number of challengers, number of women running and their success, and turnout. We follow the IRB plan, presenting tables with those six variables for the 2010 elections, followed by similar tables for the 2015 elections.

Prior to analysis, we amended the IRB to account for the household survey conducted immediately after the election, and for the candidate survey conducted more than a year after the election. As our IRB amendments were not as specific in how data from these surveys would be used, we consider them as secondary outcomes, to be used to understand broader impacts (for example, political strategies at the family-level), and to shed light on mechanisms. These IRB renewal forms are included as Appendix [A.7](#) and [A.8](#).

### 3.3 Empirical Strategy

We estimate the following specification for our main outcomes (and most subsequent analyses):

$$y_{ij} = \alpha + \beta_1 \text{General}_i + \beta_2 \text{Gender}_i + v_j + \varepsilon_{ij} \quad (1)$$

where  $y_{ij}$  is an outcome of interest (e.g. number of candidates in GP  $i$ , district  $j$ ),  $\text{General}_i$  is a dummy for the general campaign,  $\text{Gender}_i$  is a dummy for the gender campaign, and  $v_j$  is a district fixed effect (the randomization was stratified by district).  $\beta_1$  is the causal effect of general campaign and  $\beta_2$  is the causal effect of the gender campaign.

Due to the lack of pre-specified analyses, we had to make ex-post choices and we have sought to make the most obvious ones.

First, we do not include any control variables other than randomization strata, which seems to be most natural way to run the analysis given that none was specified. In Appendix Tables [A.2](#) and [A.3](#) we report the main specifications with control variables selected by double post selection lasso ([Belloni et al., 2014](#)), which turns out to make very little difference to the results.

Second, although not explicitly mentioned in the IRB, we predict different effects in GPs reserved for women in 2005, and so have a female incumbent, versus GPs that were not and have male incumbents. For example, female incumbents are substantially less likely to contest elections once the GP is no longer reserved. This, in turn, may also make entry by challengers more likely. Relative to the general campaign, the gender campaign may have changed this dynamic differentially. We, therefore, estimate treatment effects separately depending on whether the GP was previously unreserved (panel A), reserved for women (panel B). Panel C reports the combined effect.

Finally, the IRB did not specify how we would handle multiple hypothesis testing. We present results with  $p$ -values adjusted for multiple-hypothesis testing following [Romano and Wolf \(2005\)](#).

### 3.4 Randomization balance

Appendix Table [A.1](#) reports GP-level descriptive statistics. Reflecting the randomization of reservation policy and PEVAC treatment, 4 out of 88 treatment effects are significant at the 5% level, and 8 out of 88 are significant at the 10% level. Appendix Table [A.1](#) also reports balance tests for other subsamples: for the survey sample, for the survey sample where incumbents could run in 2010, and for the sample of GPs which were not reserved for women in 2010 and 2015. Treatment and control are comparable within these subsamples.

## 4 Results

We first present impacts on the primary electoral outcomes in 2010 and 2015. We then use the additional survey data to examine the robustness of our findings and underlying mechanisms.

### 4.1 Primary Electoral Outcomes

#### 4.1.1 2010 Impacts

Table [1](#) reports on IRB pre-specified primary outcomes: incumbent entry and electoral performance, number of challengers, entry and vote share of female candidates, and turnout.

Panel A, column (1) presents our most striking finding: in previously unreserved GPs and where the incumbent can run (given caste reservation), the general campaign significantly lowered the probability of the incumbent recontesting. Without the campaign, 46% of incumbents recontested in a previously unreserved GP. The general campaign decreased this probability by 32 percentage points (a 70% decline). The point estimate suggests a smaller impact from the gender campaign (17 percentage points), but the estimates do not differ significantly (the difference between the two is only significant with a  $p$ -value of 0.31).

Panel B demonstrates that female incumbents in GPs reserved in 2005 are substantially less likely to recontest (15% of them do so). Neither campaign influences this probability.

The full sample results in Panel C show that, on average, the campaign significantly reduced the likelihood of the incumbent recontesting.

These treatment effects, while large, occur in a context characterized by significant incumbency disadvantage. This incumbency disadvantage seen in our sample is not an anomaly but exists in Indian elections at all levels, including national, state, and GP. At the GP level, the rotation of GP reservation status across elections further contributes to the incumbency disadvantage. The smaller than anticipated incumbency preference may explain why the campaign had such a significant impact on incumbents' willingness to recontest, as anticipated declines in an already slim chance of electoral success may have dissuaded them.

Column (2) reports parallel results on the unconditional vote share for the incumbent, assigning a vote share of 0 to non-running incumbents. The incumbent vote share is notably low: 10% in previously unreserved GP (about 20% if they run).

The incumbents who reran were not very successful. Proportionally, the impact of the general campaign in previously unreserved GPs on vote share is larger than its impact on entry, resulting in a 7.8 percentage point (78%) reduction. The impact remains large (79%) and significant in the overall sample. The gender campaign point estimates are lower, but not significantly.

Column (3) considers the number of challengers.<sup>12</sup> The general campaign increased the number of challengers by 1.25 in the previously unreserved GP (18%). The impact is similar, but not significant, in the overall sample (0.97).

Female candidacy rates in our setting are low. The share of female challengers (at 13%) is well below their population share. Columns (4) and (5) show that neither campaign increased the fraction of female candidates or their success rates in either previously unreserved or reserved GPs. Specifically, we can rule out even modest effects of the gender campaign. For example, in the whole sample, we can rule out at the 5% significance level an effect of 5.5 percentage points on the entry of female candidate, and an effect of 4.6 percentage points on their vote share for the general campaign (6.7 percentage points and 4.6 percentage points respectively for the gender campaign).<sup>13</sup>

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<sup>12</sup>The sample is larger because it includes all GPs, even those where the incumbent could not run, and even those where we did not survey all candidates.

<sup>13</sup>Given the low participation of female candidates in control GP, these modest effects would still be large in relative terms (35 to 66% of the control mean).

Column (6) shows no impact on turnout. Given high turnout (83% in all panels), there was arguably little margin for the campaign to boost electoral participation. In the whole sample, the 95% confidence intervals for the general treatment (-2.2 to 1.1 percentage points) and the gender treatment (-1.6 to 1.6 percentage points) exclude the average effect of 2.5 of canvassing campaigns from the [Green et al. \(2013\)](#) meta-analysis.

At the bottom of each panel, we present the Romano-Wolf adjusted  $p$ -values for each of the six outcomes. The core finding is relatively robust: the general campaign significantly reduced the probability of an incumbent recontesting ( $p = 0.06$  in the whole sample), as well as their vote share ( $p = 0.11$  in the whole sample). The impact on the number of candidates, which was weaker to begin with, loses significance.

#### 4.1.2 Long term impacts

Table 2 presents longer-term results on electoral entry after five years, at the 2015 elections. We restrict analysis to the 89 GPs that were not reserved for women in either 2010 or 2015, and use our prior specification with the addition of 2015 caste reservation controls (OBC, SC, ST).<sup>14</sup>

Strikingly, none of the 2015 incumbents sought re-election in control GPs in 2015 (Panel A). This partly reflects the new requirement that candidates have at least eight years of education, which rendered a number of incumbents ineligible.<sup>15</sup> In this context, the campaign increased the likelihood that an incumbent stands for re-election, reflecting the fact that the marginal sarpanch elected in treated villages in 2010 was better educated hence more likely to be eligible than the average sarpanch (as discussed below).

In 2015, a notable longer-term effect is the treatment impact on female sarpanch candidacy. In GPs that were unreserved in both 2010 and 2005 (and possibly before as well), the general campaign increased the fraction of female candidates by 17 percentage points (a tripling) and increased their vote share by 18 percentage points (again, more than a tripling). The point estimate for female candidacy due to the gender campaign is similar, and the two coefficients are statistically indistinguishable, though the point estimates for the gender campaign impact are

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<sup>14</sup>Within this subsample, treatment and control groups remain balanced in terms of observable characteristics (see Appendix Table A.1).

<sup>15</sup>In our survey sample, 35% of sarpanches elected in 2010 had less than eight years of education.

somewhat smaller. These impacts are made particularly relevant by the fact that, absent the campaign, average female candidacy share is one-fifth the female population share.

While we do not see a corresponding treatment effect in GPs that were previously reserved in 2005, the latter group had a higher average number of female challengers in 2015, even absent treatment. In 2010, a similar number of women competed in GPs reserved in 2005 and those not reserved (13% of candidates are women in both sets of GPs). However, by 2015, the fraction of female candidate in GPs reserved in 2005 and subsequently unreserved in 2010 is twice that of GPs unreserved in 2005 and 2010. These findings are similar to [Beaman et al. \(2009\)](#) findings for West Bengal, where gender quotas, once lifted, have a larger impact on female candidacy for GPs with a longer history of reservations.

One important caveat is that the long-term effects of the campaign are estimated on a small sample, and none of the coefficients is significant based on  $p$ -values adjusted following [Romano and Wolf \(2005\)](#) bootstrap procedure. However, almost all panel A coefficients are individually significant, suggesting that they are not mere flukes, an intuition that is not entirely captured by the bootstrap procedure used here.

Next, we report on additional analyses that were not included in our original IRB application but were planned just after the intervention was conducted, prior to any analysis.

## 4.2 Do Incumbents and Their Spouses Trade-off Candidacy?

In India, electoral strategies are often determined at the household level, and the entry of spouses as candidates may serve as an approach to navigate the reservation policy. A wife may choose to represent the household when the husband becomes ineligible, or a husband can enter when the reserved seat his wife served on becomes unreserved, if the family decides to remain in politics. With this in mind, we now explore how family dynamics may either undo or reinforce our main results, specifically that the general campaign discouraged incumbent from seeking re-election.

Columns (3) and (4) in [Table 3](#) examine electoral outcomes for the spouse of the incumbent. In control GPs previously reserved for women, the decline in the probability of the incumbent running (15% as compared to 46% in previously unreserved GP) is almost entirely offset by an increase in the probability of her spouse running (33% as compared to 4% in previously unreserved GP). Column (5) indicates that the means for “incumbent or spouse running” are almost identical

in previously reserved and previously unreserved GP. This suggests that husbands and wives alternate candidacy depending on whether the position is reserved for women, echoing the use of family strategies to overcome term limits documented in the Philippines by [Querubin \(2016\)](#) and [Labonne et al. \(2021\)](#).

This suggests viewing the family unit (incumbent and spouse) as an entity capable of fielding a candidate, irrespective of past or present reservation status. We can therefore ask if treatment impacts the likelihood of this unit contesting elections. This outcome is clearly defined for the entire sample, unlike the incumbent only variable. In panel C, we observe a significant negative impact of the general campaign on the probability of the incumbent or the spouse running. (Column 5, the point estimate is 27 percentage points, or a reduction of more than 50%,  $p < 0.01$ .) Similar to the earlier results, the gender campaign has a smaller impact, though not significantly different. The average effect of both campaigns is significantly negative as well.

In the entire sample (panel C), the effect on the family unit is slightly larger than the effect on incumbents alone (27 percentage points compared to 24 percentage points). This results from the interplay of two effects: first, in the previously unreserved sample, the incumbent's spouse (usually a woman) is slightly more likely to run when there is a campaign, although the estimate lacks significance (column 3, panel A). Second, in the previously reserved sample, the effect is significantly negative: the general campaign caused a 100% reduction in the probability that a (male) spouse runs (Column 3, panel B: from 33 percentage points to 0!). This means that in the previously unreserved sample, the impact of the campaign on incumbent plus spouse is very significantly negative, resulting in a 37.9 percentage point reduction in the probability to run, in Panel B, column (5).

Overall, the effect of the voter awareness campaign is not undone by spouse replacing the incumbent. The incumbent's spouse is regarded similarly to the incumbent in previously reserved GP, and may be even more sensitive to the campaign.

### 4.3 Does Incumbent Performance Underlie Perceived Electoral Accountability?

Table 4 estimates if the incumbent and spouse’s candidacy selections reflect a (perceived) greater voter focus on their success:

$$y_{ij} = \alpha + \beta_1 \text{General}_i + \beta_2 \text{Gender}_i + \gamma I_i + \delta_1 \text{General}_i * I_i + \delta_2 \text{Gender}_i * I_i + v_j + \varepsilon_{ij}$$

$y_{ij}$  is the outcome in GP  $i$  in district  $j$ ,  $\text{General}_i$  and  $\text{Gender}_i$  are a treatment dummies, while  $I_i$  is the sarpanch performance measure, a standardized index of MGNREGS participation and unmet demand for MGNREGS work based on the representative household survey.<sup>16</sup> As before  $v_j$  denotes district fixed effects.

Our incumbent MGNREGS implementation performance measure is based on a household survey conducted in March 2010, one month after the elections. The survey timing raises the concern that responses may be endogenous to treatment. However, as the survey asked respondents about demand for MGNREGS work and participation during the previous 12 months, we anticipate that responses will mostly focus on MGNREGS implementation while the incumbent was in office. MGNREGS administrative data on employment generation by state and month shows that February 2010 was a low provision month, accounting for only 2.8% of total work days in Rajasthan for the financial year April 2009–March 2010. Nonetheless, it remains possible that the campaign influenced respondents’ answers to factual questions, as well as increased effort from the new sarpanch to provide more employment in the first month in office. Appendix Table A.5 shows that there is no correlation between the campaign and the performance index or any of its components. We, therefore, treat the performance index as a measure of the past incumbent behavior.

As before, Table 4 reports treatment effects separately for GPs that were not previously reserved for women (Columns 1 and 2), for those that were (Columns 3 and 4) and the whole sample (Columns 5 and 6).

Column (1) in Panel A shows that in control GPs not reserved for women in 2005, bet-

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<sup>16</sup>Although the campaign also mentioned drinking water and roads among the public goods provided by the sarpanch, the survey only measured MGNREGS employment.

ter performing incumbents were if anything less likely to declare their candidacy (insignificant negative correlation). In contrast, the sum of the performance and performance  $\times$  treatment coefficients is positive and significant at the average performance level, indicating that in treatment GPs, the best performing incumbents (as measured by the index) were more likely to run than poorly-performing ones.

In 2010, 46% of unreserved seat incumbents ran again, but only 6% were reelected, indicating a general anti-incumbency sentiment. Column (1) suggests that the general campaign increased anti-incumbency among underperforming incumbents. For example, moving from the average performance level to one standard deviation below the mean, the effect of the general campaign on the probability of running for incumbents (or their spouse) increases from 27% to 57%. This implies that none of the worst performing incumbents chose to recontest in GPs with a general campaign while the best performing incumbent were as likely to run as in control villages.<sup>17</sup> These effects continue to only be present for the general campaign, not the gender campaign. In the case of the gender campaign the sign is even negative, implying that the best performing incumbents are less likely to run in villages with gender campaign than without. In contrast, neither the incumbent nor their spouse appear impacted by incumbent performance in the previously reserved GP, even in the presence of general campaign (columns 3 and 4).<sup>18</sup>

In summary, the treatment increased accountability for badly-performing incumbents, but only in GPs that were not previously reserved for women, and only when the message was general.

#### 4.4 Did the Candidate Pool Change?

The voter awareness campaign discouraged incumbents from seeking reelection, reducing their vote share and increasing the vote share of challengers. Alongside, we observe an increase in female candidates by 2015 (but not in 2010). While female candidacy was our primary outcome of interest, it is interesting to examine if the campaign caused additional changes in the candidate pool.

We examine the treatment impact on challenger characteristics: whether they are from a low caste, their education level (specifically, whether they have less than eight years of education), and

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<sup>17</sup>To help interpreting the magnitude of the effects, Appendix Figure A.1 presents the predicted outcomes at different levels of performance.

<sup>18</sup>The gender campaign impact is even negative in this sample, for incumbent and spouse taken together.

their previous political experience, specifically whether they were previously elected to the GP council (as wardpanch). While these outcomes weren't pre-registered, they are more or less the universe of possible variables that we can evaluate using available data. For each characteristic, we evaluate the number of candidates running and their vote share.

Table 5 shows that the treatment altered the candidate pool, leading to an increase in candidates from historically disadvantaged backgrounds – Other Backward Castes, Scheduled Castes and Scheduled Tribes – participating. In the overall sample (panel C), only the general PEVAC has a significant impact, and the effects of the gender and general campaigns are different. The general campaign increased the fraction of low caste candidates by 11 percentage points, starting from an already high basis of 79 percent, and increased their vote share by the same amount. This overall effects masks some differences based on prior reservation status. In the previously unreserved GP sample, both the general and gender campaigns have quite large impacts on low caste electoral success. Specifically, the general campaign has a strong positive effect, and the gender campaign a negative (and large but insignificant) effect. (The two coefficients are statistically different).

Candidates with more education and with previous experience as wardpanch were more successful. Again, the effects are stronger for the general campaign, but not significantly different across campaigns. In the previously unreserved GP sample, the general campaign increases the vote share of educated candidates by 7.9 percentage points (on a basis of 22 percentage points in control) and of candidates with experience by 11 percent, which is almost a tripling of the control share of 6.7 percent (former wardpanches are about twice as likely to run in those villages). There are no impacts in the previously unreserved GP sample (panel B), but for previous wardpanches, the impact remains strong and significant in the overall sample (panel C)

Although the campaigns focused on the role of GP council head, or sarpanch, voters also elected council members (called wardpanch) on a separate ballot during the same election. Appendix Table A.4 examines impacts on incumbency or candidate entry at wardpanch level. We detect a negative effect on incumbents running and being elected, which is consistent with results at the sarpanch level. However, there is no evidence of increased entry of female or low caste candidates at this level. It is possible that there is some new entry but the average effect on candidacy is neutralized by the fact that others exited this race to instead run for sarpanch.

Overall, this pattern of results suggests a coherent narrative: by emphasizing the sarpanch’s role in providing local public goods and implementing MGNREGS, the voter awareness campaigns (especially the general one) reduced the likelihood of the incumbent, especially those less committed or competent, running. Simultaneously, a fresh wave of challengers emerged: better educated, more seasoned in village politics, and representative of the lower castes. This could be a direct result of the campaign emphasizing the importance of competence, or it could be an indirect effect of the incumbent’s choice to not run. The effect persists, and over time the general campaign also led to more women entering politics. From the perspective of democratic representation, this last finding is especially noteworthy: female sarpanch representation is significantly lower than that of other historically disadvantaged groups such as lower castes.

There is no noticeable effect on turnout, and the influence on vote share appears to align perfectly with the entry of challengers and the departure of incumbents: these marginal candidates received neither more nor fewer votes. This highlights the critical margin of entry, and aligns with [Gulzar and Khan \(2025\)](#) findings that candidates motivated by pro-social reasons can succeed electorally.

#### 4.5 Information or Salience?

The results we document are consistent with two interpretations. First, by sharing (new) information on average district performance the campaign might have offered the villagers new metrics for thinking about MGNREGS implementation quality. An alternative possibility is that what mattered is not the new information but rather the fact that citizens were primed to make greater use of the performance information they already had in making voting decisions and decisions about whether to enter the electoral competition

To try to distinguish between the two hypotheses, the post-election household survey assessed voters’ understanding of two important MGNREGS rules: the maximum number of days of work allowed per household and the minimum wage. It also asked about the sarpanch’s role in MGNREGS implementation: project development, worker registration, and work allocation.

Table 6 shows that 65% of survey respondents in control GPs accurately answered questions on MGNREGS rules, while 61% did so for questions on the sarpanch role. We create normalized indexes for these two sets of questions to evaluate if voters in treatment GPs were better informed.

Columns (1) and (2), Panel B show small and negative coefficients for the general campaign, about 3% of a standard deviation (with confidence intervals ranging from -12 to 7% of a standard deviation) and small and positive coefficients for the gender campaign (between 4 and 7 % of a standard deviation). They suggest that the campaign did not bring completely new information about MGNREGS rules or the Sarpanch role in implementation.

Next, the survey asked voters to rate the quality of MGNREGS implementation and public good provision in their GP. In column (3), Panel A of Table 6, we see that voters' MGNREGS implementation rating is strongly correlated with actual MGNREGS implementation. In column (3), Panel B, we examine if the campaigns influenced voters' MGNREGS implementation rating. The estimated treatment effects are small (-1.3 to -1% of a standard deviation) and insignificant. Column (3), Panel C examines if the campaign strengthened the correlation between actual implementation quality and voter opinion: the coefficient on the interaction of performance and treatment is negative and insignificant. Finally, Column (4) Panel B suggests that the campaign did not change voters' assessment of the provision of public goods in their GP.

While we cannot rule out the possibility that the campaign worked by improving voters' knowledge of MGNREGS on dimensions other than those we measure, based on these results, it appears more likely that the campaign may have made information citizens already knew more salient, causing them to connect this information to their voting decisions and their decision to run for office. Indeed, the candidate entry margin appears to be the most important: we detect no impact on turnout, and the vote share impacts are largely driven by the entry margins: they vary quite a bit since entry decisions change significantly but the changes typically remain proportional. This makes it more plausible that information salience was critical: the marginal entrant is politically experienced (either an incumbent or a former wardpanch) and likely well-informed, at least about their own performance and qualities. Once their role in providing MGNREGS work and public goods is highlighted, it is likely that their choices as citizen-candidates is directly influenced. This may have made recontesting less appealing to lower-performing incumbents who were unused to being evaluated on performance, and more appealing to politically experienced citizens interested in affecting village outcomes. In addition, the increasing importance of MGNREGS as an electoral issue may have motivated candidates from social groups that gain the most from the program.

It is reasonable to wonder why the voter awareness campaigns was needed to raise the salience of performance. Why would it not be in the interest of the challengers to do so on their own?

One possibility is that they were concerned about voters' preference for, say, ethnic identity relative to quality. It is possible that discussions in the village after the campaign caused candidates to positively update their beliefs about citizens' relative valuation of quality, enhancing their sense of their own electability. In particular, the fact that the villagers watched the show together meant that everyone present got a strong signal of the collective reaction to the show, which might explain its strong impact. While the NGO representatives were careful to avoid commenting on individual performance, they obviously had no way to control the lean of the post-show discussion.

## 5 Conclusion

In the context of local elections in Rajasthan, we evaluate the impacts of a brief pre-election awareness campaign on citizens' choices to run for office and subsequent electoral outcomes. The intervention resulted in higher rates of exit of incumbents from the political arena, with evidence that the least effective incumbents and their families chose not to rerun. On the other hand, the treatment encouraged entry by low caste candidates, more educated candidates and those with prior village council experience. Ultimately, very few of the leaders elected in 2010 ran for re-election in 2015. In this context, the marginal candidate elected in treatment GPs displayed greater resilience: they were more likely to run in 2015 and receive a higher vote share. This could be partly due to their higher likelihood of being educated, as a new law mandated eight years of schooling for candidates, and perhaps also because they were better suited for managing MGNREGS.

Our results suggest that some of the costs to candidate entry may be overcome by emphasizing the importance of elected representatives in implementing programs that benefit the community. One caveat is that our findings occur in a setting marked by considerable anti-incumbency ([Linden, 2004](#)). In contexts where incumbents are more entrenched, altering the candidate lineup through a simple pre-election awareness campaign may be harder. Additionally, the campaign we examine effectively utilized information on a program that accounted for half of

the local government budget. In different environments where elected leaders have a wider range of responsibilities, a pre-election voter awareness campaign might struggle to concentrate the attention of voters and candidates on one specific issue.

An intended objective was to investigate whether emphasizing the role of the leader and the fact that women possess the necessary skills could encourage women to enter as candidates in open elections. We, therefore, evaluated two versions of the campaign: a general version focused on roles, responsibility, and the importance of competence, and a gender-focused version that focused on the equal competence of women. This aspect of the campaign fell short: there is no evidence that emphasizing women's roles resulted in increased female participation compared to the general campaign (if anything, the opposite seems true), and overall, the gender-focused campaign appears to be less effective than the general one though the differences are often not significant. Understanding the reasons for this remains an open question for future research.

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Table 1: Effect of the campaign on incumbents, challengers, female candidates and turnout

	Incumbent		Number	Female Challengers		Turnout
	Running	% Votes	Challengers	% Cand.	% Votes	Rate
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: GP Without Gender Quota in 2005</b>						
General Campaign	-0.32** (0.12)	-7.81** (3.52)	1.25* (0.72)	0.01 (0.04)	-1.72 (3.94)	-0.00 (0.01)
Gender Campaign	-0.17 (0.12)	-1.25 (3.44)	-0.22 (0.77)	0.01 (0.04)	-3.33 (4.08)	0.01 (0.01)
RW p-val General	.1	.22	.5	1	1	1
RW p-val Gender	.73	1	1	1	.97	1
Gender=General p-value	.31	.12	.13	.98	.76	.4
Any Campaign	.09	.41	.70	.94	.73	.98
Control Mean	.46	10.1	7.14	.13	12.98	.83
Observations	92	90	254	254	248	247
<b>Panel B: GP With Gender Quota in 2005</b>						
General Campaign	-0.05 (0.13)	-1.63 (3.06)	0.28 (1.07)	-0.00 (0.05)	-2.35 (6.59)	-0.01 (0.02)
Gender Campaign	0.11 (0.11)	3.12 (2.54)	-1.47 (0.91)	0.02 (0.04)	-0.42 (5.45)	-0.01 (0.01)
RW p-val General	.99	.99	.99	1	.99	.99
RW p-val Gender	.92	.8	.55	.99	1	.99
Gender=General p-value	.25	.14	.16	.71	.8	.98
Any Campaign	.91	.89	.78	.91	.91	.89
Control Mean	.15	2.5	8.19	.13	16.33	.83
Observations	60	59	128	128	125	127
<b>Panel C: All GP</b>						
General Campaign	-0.24*** (0.09)	-5.91** (2.48)	0.97 (0.60)	0.00 (0.03)	-2.07 (3.39)	-0.01 (0.01)
Gender Campaign	-0.08 (0.09)	-0.20 (2.27)	-0.63 (0.58)	0.01 (0.03)	-1.72 (3.23)	0.00 (0.01)
RW p-val General	.06	.11	.51	1	.97	.97
RW p-val Gender	.92	1	.88	.98	.98	1
Gender=General p-value	.12	.04	.03	.81	.93	.58
Any Campaign	.14	.51	.97	.97	.84	.97
Control Mean	.35	7.47	7.48	.13	14.03	.83
Observations	152	149	382	382	373	374

Notes: 1. In Column 1 the sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. In Column 2 to 6 the sample includes all 240 GPs which were surveyed. 2. These samples are split between GP that were not reserved for women in 2005 (Panel A) and GP that were reserved (Panel B). Panel C presents results for the entire sample. 3. Columns 2 and 5 have fewer observations because voting information is missing in three GPs where the incumbent could run and in three where they could not run. Column 6 also has fewer observations because turnout data was not available in two GP. 4. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 5. All specifications include district fixed effects. 6. RW  $p$ -values are  $p$ -values corrected for multiple-hypothesis testing using the Romano-Wolf stepdown procedure (Romano and Wolf, 2005).

Table 2: Incumbents, Challengers and Female Candidates in the next election

	Incumbent		Number	Female Challengers	
	Running	% Votes	Challengers	% Candidates	% Votes
	(1)	(2)	(3)	(4)	(5)
<b>Panel A: GP Without Gender Quota in 2005</b>					
General Campaign	0.109** (0.052)	3.945** (1.881)	-0.321 (1.278)	0.168* (0.090)	18.349* (9.712)
Gender Campaign	0.009 (0.062)	0.343 (2.238)	0.353 (1.520)	0.157 (0.107)	10.994 (11.555)
RW p-val General	.4	.4	.97	.43	.43
RW p-val Gender	.97	.97	.97	.47	.78
Gender=General p-value	.19	.19	.72	.93	.6
Any Campaign	.21	.21	.96	.18	.21
Control Mean	0	0	7.83	.08	8.1
Observations	51	51	51	51	51
<b>Panel B: GP With Gender Quota in 2005</b>					
General Campaign	-0.044 (0.076)	-0.286 (0.498)	-2.809 (1.916)	0.047 (0.126)	-1.927 (14.174)
Gender Campaign	-0.045 (0.078)	-0.296 (0.509)	-1.098 (1.958)	0.070 (0.129)	2.642 (14.485)
RW p-val General	.95	.95	.42	.95	.97
RW p-val Gender	.95	.95	.95	.95	.97
Gender=General p-value	.99	.99	.49	.88	.8
Any Campaign	.62	.62	.34	.63	.98
Control Mean	.04	.25	8.31	.16	20.24
Observations	38	38	38	38	38
<b>Panel C: All GP</b>					
General Campaign	0.051 (0.043)	2.275** (1.114)	-1.225 (1.066)	0.119 (0.072)	10.280 (8.067)
Gender Campaign	-0.019 (0.048)	-0.090 (1.227)	-0.233 (1.175)	0.116 (0.080)	7.284 (8.888)
RW p-val General	.81	.55	.81	.65	.81
RW p-val Gender	.81	.89	.89	.74	.81
Gender=General p-value	.23	.12	.5	.97	.79
Any Campaign	.68	.59	.66	.42	.59
Control Mean	.02	.11	8.02	.11	13.19
Observations	89	89	89	89	89

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. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 4. The specification is described in Section 3.3, it includes districts fixed effects. 5. RW  $p$ -values are  $p$ -values corrected for multiple-hypothesis testing using the Romano-Wolf stepdown procedure (Romano and Wolf, 2005).

Table 3: Incumbent and incumbent's family entry

	Incumbent		Spouse		Inc. or Spouse	
	Running (1)	% Votes (2)	Running (3)	% Votes (4)	Running (5)	% Votes (6)
<b>Panel A: GP Without Gender Quota in 2005</b>						
General Campaign	-0.319** (0.125)	-7.814** (3.516)	0.057 (0.061)	0.455 (1.276)	-0.222* (0.129)	-7.363** (3.558)
Gender Campaign	-0.166 (0.124)	-1.250 (3.443)	0.009 (0.061)	-0.094 (1.250)	-0.117 (0.129)	-1.088 (3.548)
Gender=General p-value	.31	.12	.51	.72	.5	.15
Any Campaign p-value	.03	.09	.64	.92	.21	.12
Control Mean	.46	10.1	.04	.73	.46	10.62
Observations	92	90	92	90	92	92
<b>Panel B: GP With Gender Quota in 2005</b>						
General Campaign	-0.054 (0.131)	-1.629 (3.060)	-0.335** (0.142)	-7.671* (3.832)	-0.379** (0.168)	-9.360** (4.326)
Gender Campaign	0.107 (0.112)	3.124 (2.542)	-0.143 (0.120)	-1.341 (3.183)	-0.085 (0.142)	1.783 (3.680)
Gender=General p-value	.25	.14	.2	.12	.1	.02
Any Campaign p-value	.46	.28	.07	.14	.08	.04
Control Mean	.15	2.5	.33	6.15	.48	8.65
Observations	60	59	60	59	60	60
<b>Panel C: All GP</b>						
General Campaign	-0.242*** (0.093)	-5.914** (2.484)	-0.058 (0.069)	-1.958 (1.710)	-0.270*** (0.100)	-7.924*** (2.703)
Gender Campaign	-0.079 (0.086)	-0.200 (2.269)	-0.016 (0.064)	0.231 (1.562)	-0.094 (0.093)	0.179 (2.520)
Gender=General p-value	.12	.04	.59	.26	.12	.01
Any Campaign p-value	.04	.05	.70	.45	.03	.01
Control Mean	.35	7.47	.14	2.6	.47	9.95
Observations	152	149	152	149	152	152

Notes: 1. The sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. 2. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 3. All specifications include district fixed effects.

Table 4: Incumbent and incumbent's family entry depending on incumbent's performance in MGNREGS work provision

	GP without GQ in 2005		GP with GQ in 2005		All GP	
	Inc. or Spouse Running (1)	% Votes (2)	Inc. or Spouse Running (3)	% Votes (4)	Inc. or Spouse Running (5)	% Votes (6)
<b>Panel A: INC only</b>						
General Campaign	-0.273** (0.126)	-6.528* (3.583)	-0.070 (0.135)	-1.986 (3.142)	-0.235** (0.092)	-5.534** (2.485)
Gender Campaign	-0.154 (0.122)	-0.929 (3.359)	0.140 (0.118)	3.978 (2.696)	-0.042 (0.087)	0.787 (2.277)
Performance	-0.105 (0.070)	-3.359* (1.913)	0.054 (0.101)	0.428 (2.326)	-0.041 (0.057)	-1.827 (1.494)
Genl. Camp. x Perf.	0.296** (0.140)	7.978** (3.917)	-0.133 (0.167)	-1.106 (3.950)	0.118 (0.107)	4.177 (2.859)
Gend. Camp. x Perf.	-0.141 (0.160)	-3.841 (4.402)	-0.217 (0.153)	-3.890 (3.502)	-0.158 (0.108)	-3.378 (2.813)
Control Mean	.46	10.1	.15	2.5	.35	7.47
Observations	92	90	60	59	152	149
<b>Panel B: INC or Spouse</b>						
General Campaign	-0.171 (0.130)	-6.503* (3.574)	-0.427** (0.170)	-10.671** (4.382)	-0.262** (0.100)	-7.789*** (2.710)
Gender Campaign	-0.101 (0.126)	-0.710 (3.451)	-0.080 (0.148)	1.847 (3.828)	-0.060 (0.095)	1.086 (2.555)
Performance	-0.105 (0.072)	-3.771* (1.971)	0.201 (0.128)	5.389 (3.303)	-0.037 (0.062)	-1.531 (1.680)
Genl. Camp. x Perf.	0.310** (0.144)	7.656* (3.964)	-0.269 (0.211)	-6.698 (5.437)	0.123 (0.116)	2.956 (3.133)
Gend. Camp. x Perf.	-0.188 (0.165)	-4.368 (4.536)	-0.371* (0.193)	-9.671* (4.972)	-0.148 (0.117)	-3.270 (3.163)
Control Mean	.46	10.62	.48	8.65	.47	9.95
Observations	92	92	60	60	152	152

Notes: 1. The sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. 2. Treatment is a dummy equal to one for GPs where the PEVAC took place. 3. 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. 4. All specifications include district fixed effects.

Table 5: Challenger entry: Proportion of candidates and voteshare

	Low Caste		Lower Education		Ex-Wardpanch	
	% Cand. (1)	% Votes (2)	% Cand. (3)	% Votes (4)	% Cand. (5)	% Votes (6)
<b>Panel A: GP Without Gender Quota in 2005</b>						
General Campaign	0.109** (0.049)	11.966** (5.184)	-0.059 (0.041)	-7.585* (4.533)	0.063*** (0.020)	10.938*** (2.870)
Gender Campaign	0.092* (0.052)	7.895 (5.364)	0.004 (0.043)	-1.143 (4.661)	0.032 (0.021)	3.120 (2.952)
Gender=General p-value	.8	.55	.21	.24	.21	.02
Any Campaign p-value	.03	.04	.31	.24	.01	0
Control Mean	.79	78.7	.24	22.63	.06	6.7
Observations	254	248	157	153	157	153
<b>Panel B: GP With Gender Quota in 2005</b>						
General Campaign	0.121 (0.080)	10.525 (8.410)	0.015 (0.052)	0.698 (5.700)	-0.004 (0.043)	2.895 (5.000)
Gender Campaign	-0.068 (0.067)	-6.758 (6.964)	0.041 (0.045)	-0.939 (4.888)	0.033 (0.037)	4.828 (4.288)
Gender=General p-value	.04	.08	.63	.78	.42	.71
Any Campaign p-value	.13	.21	.66	.96	.61	.53
Control Mean	.78	77.1	.16	14.66	.09	5.98
Observations	128	125	83	81	83	81
<b>Panel C: All GP</b>						
General Campaign	0.113*** (0.042)	11.643*** (4.423)	-0.034 (0.032)	-5.021 (3.559)	0.042** (0.019)	8.605*** (2.512)
Gender Campaign	0.022 (0.041)	1.354 (4.208)	0.013 (0.032)	-1.970 (3.416)	0.037* (0.019)	4.022* (2.411)
Gender=General p-value	.09	.06	.2	.45	.81	.11
Any Campaign p-value	.03	.03	.41	.37	.04	0
Control Mean	.79	78.2	.21	20.15	.07	6.48
Observations	382	373	240	234	240	234

Notes: 1. The sample includes all 240 GPs that were not reserved for women in the 2010 elections and were surveyed. 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 selected by double post-selection lasso (Belloni et al., 2014). 4. RW  $p$ -values are  $p$ -values corrected for multiple-hypothesis testing using the Romano-Wolf stepdown procedure (Romano and Wolf, 2005).

Table 6: Knowledge and Perceptions of MGNREGS

	Knowledge of		Rating of	
	MGNREGS	Sarpanch	MGNREGS	Public Good
	Rules	Role	Implementation	Provision
	(1)	(2)	(3)	(4)
<b>Panel A: Correlation with Performance</b>				
Performance	0.102*** (0.016)	-0.079*** (0.021)	0.148*** (0.021)	0.059** (0.023)
Observations	9788	9788	9783	9770
<b>Panel B: Effect of the Campaign</b>				
General Campaign	-0.031 (0.035)	-0.026 (0.051)	-0.010 (0.050)	0.012 (0.054)
Gender Campaign	0.068* (0.037)	0.043 (0.048)	-0.013 (0.052)	0.078 (0.055)
Observations	9788	9788	9783	9770
<b>Panel C: Interaction with Performance</b>				
General Campaign	-0.012 (0.032)	-0.044 (0.049)	0.007 (0.048)	0.024 (0.054)
Gender Campaign	0.064* (0.035)	0.049 (0.046)	-0.019 (0.046)	0.073 (0.054)
Performance	0.082*** (0.022)	-0.039 (0.030)	0.163*** (0.035)	0.028 (0.035)
Genl. Camp. x Perf.	0.040 (0.034)	-0.082 (0.053)	-0.074 (0.047)	0.047 (0.059)
Gend. Camp. x Perf.	0.030 (0.044)	-0.082* (0.049)	0.018 (0.048)	0.072 (0.052)
Control Mean				
Observations	9788	9788	9783	9770

Notes: 1. The dependent variables are described below. In Columns 1 to 4 they are  $z$ -score standardized to have mean zero and standard deviation one in control GP not WR in 2005. 2. All specifications include district fixed effects.

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, schools and roads.

# FOR ONLINE PUBLICATION ONLY

## 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.0: MGNREGS participation in the survey sample

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Panel A: Household participation in MGNREGS in the last year	
All	0.49
General Caste	0.38
Lower Caste	0.51

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Panel B: Individual participation in MGNREGS in the last year	
All	0.33
Male	0.35
Female	0.31

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Panel C: Non-MGNREGS outside household or own farm	
All	0.34
Male	0.50
Female	0.19

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Table A.1: Summary Statistics (whole sample)

	Without Gender Quota in 2005			With Gender Quota in 2005		
	General (1)	Gender (2)	Control (3)	General (4)	Gender (5)	Control (6)
Number of villages in the GP	-0.028 (0.380)	0.437 (0.406)	4.328 (2.242)	0.422 (0.491)	0.552 (0.419)	3.855 (1.951)
Total population in the GP	76.542 (349.507)	379.017 (373.888)	5631.483 (1958.416)	82.785 (432.488)	-147.678 (368.523)	5549.048 (1788.379)
Share of SC in 2011	-0.006 (0.021)	0.045** (0.023)	0.222 (0.121)	-0.039 (0.028)	-0.015 (0.024)	0.224 (0.110)
Share of ST in 2011	0.038 (0.033)	-0.002 (0.036)	0.105 (0.188)	-0.089* (0.050)	0.011 (0.043)	0.132 (0.208)
Literacy rate in 2011	0.011 (0.011)	0.009 (0.012)	0.551 (0.065)	-0.007 (0.017)	-0.019 (0.014)	0.554 (0.061)
Share of cultivators in 2011	0.002 (0.010)	-0.017 (0.011)	0.180 (0.061)	-0.009 (0.015)	-0.007 (0.013)	0.184 (0.060)
Share of ag. laborers in 2011	-0.008 (0.007)	0.008 (0.008)	0.062 (0.042)	0.002 (0.009)	0.011 (0.008)	0.052 (0.034)
Frac. villages with drinking water	0.017 (0.025)	0.021 (0.027)	0.931 (0.151)	0.031 (0.048)	-0.041 (0.041)	0.895 (0.190)
Frac. villages with paved access	-0.045 (0.053)	-0.027 (0.057)	0.414 (0.319)	-0.024 (0.079)	-0.063 (0.068)	0.445 (0.337)
Frac. villages with power supply	0.008 (0.026)	0.023 (0.028)	0.930 (0.151)	0.047 (0.053)	-0.010 (0.045)	0.890 (0.219)
Total number of registered voters in 2010	17.019 (178.592)	199.094 (191.051)	2913.406 (1035.923)	282.531 (216.785)	-222.636 (184.722)	3016.747 (852.205)
Women reservation status in 2000	-0.019 (0.087)	0.203** (0.093)	0.444 (0.498)	0.031 (0.055)	0.087* (0.047)	0.024 (0.154)
OBC Caste reservation in 2000	-0.044 (0.058)	-0.086 (0.062)	0.144 (0.353)	0.184* (0.109)	-0.020 (0.093)	0.205 (0.406)
SC Caste reservation in 2000	-0.103 (0.070)	-0.081 (0.075)	0.228 (0.421)	-0.106 (0.107)	0.042 (0.091)	0.217 (0.415)
ST Caste reservation in 2000	0.108** (0.052)	0.110** (0.055)	0.067 (0.250)	-0.108 (0.083)	0.114 (0.071)	0.108 (0.313)
OBC Caste reservation in 2005	-0.067 (0.053)	-0.028 (0.057)	0.117 (0.322)	0.046 (0.084)	-0.046 (0.072)	0.120 (0.328)
SC Caste reservation in 2005	0.092 (0.076)	0.061 (0.082)	0.233 (0.424)	0.073 (0.103)	-0.094 (0.088)	0.205 (0.406)
ST Caste reservation in 2005	0.031 (0.052)	-0.006 (0.056)	0.094 (0.293)	-0.009 (0.082)	-0.046 (0.070)	0.120 (0.328)
OBC Caste reservation in 2010	0.039 (0.067)	0.104 (0.072)	0.161 (0.369)	-0.033 (0.084)	-0.108 (0.071)	0.145 (0.354)
SC Caste reservation in 2010	0.025 (0.077)	0.015 (0.082)	0.250 (0.434)	0.121 (0.100)	0.029 (0.086)	0.157 (0.366)
ST Caste reservation in 2010	-0.000 (0.052)	-0.012 (0.056)	0.100 (0.301)	-0.157* (0.088)	-0.008 (0.075)	0.157 (0.366)
Incumbent can run in 2010	-0.133 (0.085)	-0.045 (0.091)	0.633 (0.483)	0.023 (0.119)	0.042 (0.102)	0.699 (0.462)

Table A.1: Summary Statistics (survey sample only)

	Without Gender Quota in 2005			With Gender Quota in 2005		
	General (1)	Gender (2)	Control (3)	General (4)	Gender (5)	Control (6)
Number of villages in the GP	-0.278 (0.409)	0.186 (0.432)	4.578 (2.237)	-0.249 (0.517)	-0.119 (0.455)	4.526 (1.856)
Total population in the GP	-166.577 (420.438)	135.898 (444.767)	5874.602 (2257.422)	-1.614 (447.437)	-232.077 (393.594)	5633.447 (1740.103)
Share of SC in 2011	-0.008 (0.022)	0.043* (0.024)	0.224 (0.112)	-0.040 (0.032)	-0.016 (0.028)	0.226 (0.116)
Share of ST in 2011	0.029 (0.037)	-0.011 (0.039)	0.115 (0.186)	-0.086 (0.053)	0.014 (0.047)	0.129 (0.215)
Literacy rate in 2011	0.013 (0.013)	0.011 (0.013)	0.549 (0.070)	-0.013 (0.019)	-0.024 (0.017)	0.560 (0.058)
Share of cultivators in 2011	0.007 (0.011)	-0.012 (0.012)	0.175 (0.056)	-0.004 (0.016)	-0.002 (0.014)	0.179 (0.063)
Share of ag. laborers in 2011	-0.013 (0.008)	0.002 (0.009)	0.068 (0.043)	0.007 (0.010)	0.016* (0.009)	0.047 (0.032)
Frac. villages with drinking water	0.018 (0.026)	0.023 (0.028)	0.929 (0.145)	0.039 (0.054)	-0.033 (0.047)	0.887 (0.200)
Frac. villages with paved access	-0.016 (0.054)	0.002 (0.057)	0.385 (0.292)	0.063 (0.075)	0.025 (0.066)	0.357 (0.289)
Frac. villages with power supply	0.013 (0.028)	0.028 (0.030)	0.926 (0.152)	0.030 (0.053)	-0.027 (0.047)	0.907 (0.201)
Total number of registered voters in 2010	-175.226 (186.092)	6.849 (196.860)	3105.651 (950.201)	240.278 (224.718)	-264.889 (197.676)	3059.000 (771.118)
Women reservation status in 2000	0.039 (0.095)	0.262*** (0.100)	0.386 (0.490)	0.029 (0.068)	0.085 (0.060)	0.026 (0.162)
OBC Caste reservation in 2000	-0.033 (0.060)	-0.074 (0.064)	0.133 (0.341)	0.205* (0.120)	0.001 (0.106)	0.184 (0.393)
SC Caste reservation in 2000	-0.128* (0.077)	-0.106 (0.081)	0.253 (0.437)	-0.099 (0.117)	0.049 (0.103)	0.211 (0.413)
ST Caste reservation in 2000	0.091 (0.064)	0.092 (0.068)	0.084 (0.280)	-0.132 (0.096)	0.091 (0.084)	0.132 (0.343)
OBC Caste reservation in 2005	-0.083 (0.058)	-0.044 (0.062)	0.133 (0.341)	-0.018 (0.101)	-0.110 (0.089)	0.184 (0.393)
SC Caste reservation in 2005	0.108 (0.085)	0.077 (0.090)	0.217 (0.415)	0.120 (0.108)	-0.047 (0.095)	0.158 (0.370)
ST Caste reservation in 2005	0.041 (0.057)	0.004 (0.060)	0.084 (0.280)	-0.020 (0.090)	-0.058 (0.079)	0.132 (0.343)
OBC Caste reservation in 2010	0.043 (0.076)	0.108 (0.080)	0.157 (0.366)	0.032 (0.075)	-0.042 (0.066)	0.079 (0.273)
SC Caste reservation in 2010	0.010 (0.086)	-0.000 (0.091)	0.265 (0.444)	0.094 (0.117)	0.001 (0.103)	0.184 (0.393)
ST Caste reservation in 2010	0.016 (0.055)	0.004 (0.059)	0.084 (0.280)	-0.132 (0.089)	0.017 (0.078)	0.132 (0.343)
Incumbent can run in 2010	-0.127 (0.095)	-0.038 (0.101)	0.627 (0.487)	0.012 (0.130)	0.030 (0.115)	0.711 (0.460)

Table A.1: Summary Statistics (survey sample where 2010 incumbents could run)

	Without Gender Quota in 2005			With Gender Quota in 2005		
	General (1)	Gender (2)	Control (3)	General (4)	Gender (5)	Control (6)
Number of villages in the GP	-0.665 (0.529)	-0.265 (0.529)	4.615 (2.171)	-0.165 (0.619)	-0.154 (0.541)	4.704 (1.857)
Total population in the GP	44.073 (446.725)	376.873 (446.725)	5642.577 (1522.115)	40.610 (496.264)	-411.202 (433.699)	5933.852 (1720.514)
Share of SC in 2011	-0.033 (0.032)	0.048 (0.032)	0.233 (0.123)	-0.033 (0.035)	0.006 (0.031)	0.217 (0.087)
Share of ST in 2011	-0.004 (0.042)	-0.029 (0.042)	0.101 (0.174)	-0.060 (0.049)	0.040 (0.043)	0.083 (0.161)
Literacy rate in 2011	0.010 (0.020)	0.024 (0.020)	0.538 (0.078)	-0.000 (0.025)	-0.022 (0.021)	0.558 (0.065)
Share of cultivators in 2011	0.006 (0.015)	-0.017 (0.015)	0.177 (0.054)	-0.011 (0.018)	-0.003 (0.016)	0.174 (0.068)
Share of ag. laborers in 2011	-0.010 (0.012)	0.005 (0.012)	0.070 (0.041)	0.007 (0.013)	0.012 (0.012)	0.052 (0.036)
Frac. villages with drinking water	0.034 (0.029)	0.010 (0.029)	0.941 (0.125)	0.046 (0.064)	-0.032 (0.056)	0.878 (0.196)
Frac. villages with paved access	0.038 (0.073)	0.038 (0.073)	0.382 (0.290)	0.108 (0.090)	0.032 (0.078)	0.353 (0.288)
Frac. villages with power supply	0.043 (0.028)	0.043 (0.028)	0.942 (0.134)	0.033 (0.067)	-0.043 (0.058)	0.899 (0.204)
Total number of registered voters in 2010	23.996 (196.350)	126.746 (196.350)	2990.404 (655.918)	132.450 (253.104)	-339.854 (221.194)	3195.704 (798.822)
Women reservation status in 2000	0.192 (0.122)	0.492*** (0.122)	0.308 (0.466)	0.077 (0.061)	0.050 (0.053)	0.000 (0.000)
OBC Caste reservation in 2000	0.054 (0.074)	-0.096 (0.074)	0.096 (0.298)	0.202 (0.156)	-0.009 (0.136)	0.259 (0.447)
SC Caste reservation in 2000	-0.146 (0.117)	-0.196* (0.117)	0.346 (0.480)	-0.105 (0.146)	-0.009 (0.127)	0.259 (0.447)
ST Caste reservation in 2000	0.035 (0.097)	0.185* (0.097)	0.115 (0.323)	-0.111 (0.108)	0.089 (0.095)	0.111 (0.320)
OBC Caste reservation in 2005	-0.154* (0.082)	-0.054 (0.082)	0.154 (0.364)	-0.108 (0.117)	-0.085 (0.102)	0.185 (0.396)
SC Caste reservation in 2005	0.119 (0.117)	0.019 (0.117)	0.231 (0.425)	0.236* (0.134)	0.002 (0.117)	0.148 (0.362)
ST Caste reservation in 2005	0.004 (0.070)	-0.096 (0.070)	0.096 (0.298)	-0.034 (0.085)	-0.111 (0.074)	0.111 (0.320)
OBC Caste reservation in 2010	-0.004 (0.101)	0.096 (0.101)	0.154 (0.364)	0.080 (0.084)	-0.074 (0.074)	0.074 (0.267)
SC Caste reservation in 2010	-0.019 (0.039)	0.031 (0.039)	0.019 (0.139)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
ST Caste reservation in 2010	-0.038 (0.047)	0.012 (0.047)	0.038 (0.194)	-0.074 (0.094)	0.076 (0.082)	0.074 (0.267)
Incumbent can run in 2010	0.000 (0.000)	0.000 (0.000)	1.000 (0.000)	0.000 (0.000)	0.000 (0.000)	1.000 (0.000)

Table A.1: Summary Statistics (GP not reserved for women in 2010 and 2015 only)

	Without Gender Quota in 2005			With Gender Quota in 2005		
	General (1)	Gender (2)	Control (3)	General (4)	Gender (5)	Control (6)
Number of villages in the GP	-0.083 (0.718)	0.417 (0.850)	4.083 (1.948)	0.974 (0.813)	-0.692 (0.813)	3.692 (1.850)
Total population in the GP	-311.389 (628.770)	800.056 (743.971)	5326.611 (1435.759)	-275.282 (960.696)	-946.449 (960.696)	5348.615 (2175.873)
Share of SC in 2011	-0.042 (0.038)	0.032 (0.045)	0.236 (0.100)	-0.032 (0.051)	-0.143*** (0.051)	0.254 (0.122)
Share of ST in 2011	0.095 (0.068)	-0.044 (0.081)	0.113 (0.172)	-0.064 (0.111)	0.078 (0.111)	0.166 (0.248)
Literacy rate in 2011	0.007 (0.018)	0.040* (0.021)	0.549 (0.048)	-0.021 (0.027)	-0.031 (0.027)	0.568 (0.056)
Share of cultivators in 2011	-0.000 (0.023)	-0.011 (0.027)	0.196 (0.057)	-0.004 (0.024)	0.011 (0.024)	0.179 (0.054)
Share of ag. laborers in 2011	-0.014 (0.011)	-0.001 (0.013)	0.052 (0.029)	-0.009 (0.011)	-0.007 (0.011)	0.046 (0.026)
Frac. villages with drinking water	-0.109** (0.049)	0.005 (0.058)	0.961 (0.096)	-0.022 (0.073)	-0.193** (0.073)	0.926 (0.130)
Frac. villages with paved access	-0.038 (0.121)	-0.046 (0.143)	0.410 (0.340)	-0.234 (0.141)	0.052 (0.141)	0.501 (0.341)
Frac. villages with power supply	-0.006 (0.055)	0.060 (0.065)	0.940 (0.165)	-0.020 (0.083)	-0.024 (0.083)	0.924 (0.180)
Total number of registered voters in 2010	-43.611 (386.764)	681.889 (457.625)	2663.944 (1054.452)	428.436 (502.657)	-701.564 (502.657)	2925.731 (1125.351)
Women reservation status in 2000	0.083 (0.187)	0.361 (0.221)	0.472 (0.506)	0.090 (0.157)	0.423** (0.157)	0.077 (0.272)
OBC Caste reservation in 2000	0.056 (0.102)	0.111 (0.121)	0.056 (0.232)	0.256 (0.153)	0.090 (0.153)	0.077 (0.272)
SC Caste reservation in 2000	-0.028 (0.155)	-0.250 (0.183)	0.250 (0.439)	0.026 (0.201)	-0.308 (0.201)	0.308 (0.471)
ST Caste reservation in 2000	-0.000 (0.129)	0.222 (0.153)	0.111 (0.319)	-0.077 (0.125)	0.090 (0.125)	0.077 (0.272)
OBC Caste reservation in 2005	-0.056 (0.074)	-0.056 (0.087)	0.056 (0.232)	0.090 (0.125)	-0.077 (0.125)	0.077 (0.272)
SC Caste reservation in 2005	0.028 (0.178)	0.361* (0.211)	0.306 (0.467)	0.051 (0.143)	-0.115 (0.143)	0.115 (0.326)
ST Caste reservation in 2005	0.250** (0.117)	-0.083 (0.139)	0.083 (0.280)	0.103 (0.199)	-0.064 (0.199)	0.231 (0.430)
OBC Caste reservation in 2010	-0.056 (0.145)	0.167 (0.171)	0.167 (0.378)	-0.115 (0.125)	-0.115 (0.125)	0.115 (0.326)
SC Caste reservation in 2010	-0.083 (0.137)	-0.194 (0.163)	0.194 (0.401)	0.103 (0.209)	0.269 (0.209)	0.231 (0.430)
ST Caste reservation in 2010	0.056 (0.102)	0.111 (0.121)	0.056 (0.232)	-0.077 (0.125)	0.090 (0.125)	0.077 (0.272)
Incumbent can run in 2010	-0.028 (0.178)	-0.028 (0.211)	0.694 (0.467)	0.013 (0.226)	-0.154 (0.226)	0.654 (0.485)

Table A.2: Effect of the campaign on incumbents, challengers, female candidates and turnout with controls

	Incumbent		Number	Female Challengers		Turnout
	Running	% Votes	Challengers	% Cand.	% Votes	Rate
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: GP Without Gender Quota in 2005</b>						
General Campaign	-0.26** (0.12)	-7.84** (3.05)	1.22* (0.70)	0.01 (0.04)	-0.91 (3.83)	-0.01 (0.01)
Gender Campaign	-0.25* (0.13)	-4.52 (3.47)	-0.45 (0.75)	-0.00 (0.04)	-3.93 (4.00)	0.00 (0.01)
RW p-val General	.24	.13	.43	1	1	.96
RW p-val Gender	.38	.74	.98	1	.9	1
Gender=General p-value	.95	.39	.07	.84	.55	.5
Any Campaign	.07	.07	.85	.9	.85	.9
Control Mean	.46	10.1	7.14	.13	12.98	.83
Observations	92	90	254	254	248	247
<b>Panel B: GP With Gender Quota in 2005</b>						
General Campaign	-0.05 (0.13)	-1.63 (3.06)	0.00 (1.06)	0.00 (0.05)	-1.85 (6.22)	0.01 (0.02)
Gender Campaign	0.11 (0.11)	3.12 (2.54)	-1.26 (0.90)	0.01 (0.04)	-0.37 (5.12)	-0.01 (0.01)
RW p-val General	1	1	1	1	1	1
RW p-val Gender	.92	.81	.72	1	1	.97
Gender=General p-value	.25	.14	.32	.89	.84	.32
Any Campaign	.96	.93	.82	.99	.99	.99
Control Mean	.15	2.5	8.19	.13	16.33	.83
Observations	60	59	128	128	125	127
<b>Panel C: All GP</b>						
General Campaign	-0.19** (0.09)	-4.66** (2.31)	1.03* (0.58)	0.00 (0.03)	-1.76 (3.32)	-0.00 (0.01)
Gender Campaign	-0.11 (0.08)	-1.62 (2.20)	-0.58 (0.57)	0.01 (0.03)	-2.06 (3.19)	-0.00 (0.01)
RW p-val General	.21	.27	.42	.99	.98	.99
RW p-val Gender	.62	.98	.88	.99	.98	.99
Gender=General p-value	.47	.26	.03	.84	.94	.95
Any Campaign	.12	.29	.95	.95	.86	.95
Control Mean	.35	7.47	7.48	.13	14.03	.83
Observations	152	149	382	382	373	374

Notes: 1. In Column 1 the sample includes all 152 GPs which were surveyed and where the incumbent could re-run in 2010. In Column 2 to 6 the sample includes all 240 GPs which were surveyed. 2. These samples are split between GP that were not reserved for women in 2005 (Panel A) and GP that were reserved (Panel B). Panel C presents results for the entire sample. 3. Columns 2 and 5 have fewer observations because voting information is missing in three GPs where the incumbent could run and in three where they could not run. Column 6 also has fewer observations because turnout data was not available in two GP. 4. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 4. All specifications include district fixed effects and GP controls are selected by double post-selection lasso (Belloni et al., 2014). 4. RW *p*-values are *p*-values corrected for multiple-hypothesis testing using the Romano-Wolf stepdown procedure (Romano and Wolf, 2005).

Table A.3: Incumbents, Challengers and Female Candidates in the next election with controls

	Incumbent		Number	Female Challengers	
	Running	% Votes	Challengers	% Candidates	% Votes
	(1)	(2)	(3)	(4)	(5)
<b>Panel A: GP Without Gender Quota in 2005</b>					
General Campaign	0.109** (0.052)	3.945** (1.881)	-0.343 (1.129)	0.119 (0.077)	13.444* (7.206)
Gender Campaign	0.009 (0.062)	0.343 (2.238)	-0.001 (1.344)	0.166* (0.089)	13.260 (8.214)
RW p-val General	.43	.43	.96	.57	.48
RW p-val Gender	.96	.96	1	.48	.57
Gender=General p-value	.19	.19	.84	.67	.99
Any Campaign	.3	.3	.86	.22	.22
Control Mean	0	0	7.83	.08	8.1
Observations	51	51	51	51	51
<b>Panel B: GP With Gender Quota in 2005</b>					
General Campaign	-0.048 (0.080)	-0.313 (0.527)	-2.870 (2.030)	0.047 (0.126)	13.659 (10.654)
Gender Campaign	-0.056 (0.109)	-0.364 (0.715)	-1.542 (2.754)	0.070 (0.129)	5.498 (12.205)
RW p-val General	.96	.96	.58	.97	.63
RW p-val Gender	.97	.97	.97	.97	.97
Gender=General p-value	.95	.95	.66	.88	.58
Any Campaign	.6	.6	.38	.6	.42
Control Mean	.04	.25	8.31	.16	20.24
Observations	38	38	38	38	38
<b>Panel C: All GP</b>					
General Campaign	0.051 (0.043)	2.275** (1.114)	-1.231 (0.990)	0.119 (0.072)	10.280 (8.067)
Gender Campaign	-0.019 (0.048)	-0.090 (1.227)	-0.640 (1.076)	0.116 (0.080)	7.284 (8.888)
RW p-val General	.82	.57	.82	.67	.82
RW p-val Gender	.82	.82	.82	.75	.82
Gender=General p-value	.23	.12	.66	.97	.79
Any Campaign	.68	.61	.61	.43	.61
Control Mean	.02	.11	8.02	.11	13.19
Observations	89	89	89	89	89

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. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 4. The specification is described in Section 3.3, it includes districts fixed effects and GP controls are selected by double post-selection lasso (Belloni et al., 2014). 5. RW  $p$ -values are  $p$ -values corrected for multiple-hypothesis testing using the Romano-Wolf stepdown procedure (Romano and Wolf, 2005).

Table A.4: Effect on lower level (wardpanch) elections

	Incumbent		Female		Low Caste	
	% Running. (1)	% Elected (2)	% Cand. (3)	% Elected (4)	% Cand. (5)	% Elected (6)
<b>Panel A: GP Without Gender Quota in 2005</b>						
General Campaign	-0.068 (0.061)	-0.006 (0.007)	0.041 (0.026)	0.028 (0.019)	0.015 (0.035)	-0.002 (0.033)
Gender Campaign	-0.141** (0.067)	-0.017** (0.008)	0.062** (0.028)	0.017 (0.020)	-0.028 (0.038)	-0.022 (0.036)
Gender=General p-value	0.38	0.25	0.56	0.66	0.37	0.65
Any Campaign p-value	0.08	0.09	0.04	0.29	0.66	0.82
Control Mean	.17	.02	.43	.46	.85	.85
Observations	251	251	251	251	251	251
<b>Panel B: GP With Gender Quota in 2005</b>						
General Campaign	0.033 (0.086)	0.005 (0.007)	0.032 (0.038)	0.022 (0.029)	-0.027 (0.043)	-0.050 (0.046)
Gender Campaign	-0.107 (0.073)	-0.006 (0.006)	-0.043 (0.032)	-0.002 (0.024)	-0.028 (0.036)	-0.029 (0.039)
Gender=General p-value	0.16	0.20	0.09	0.47	0.99	0.69
Any Campaign p-value	0.26	0.42	0.21	0.72	0.66	0.49
Control Mean	.14	.01	.45	.45	.87	.86
Observations	128	128	128	128	128	128
<b>Panel C: All GP</b>						
General Campaign	-0.044 (0.050)	-0.003 (0.005)	0.035* (0.021)	0.025 (0.016)	-0.001 (0.027)	-0.019 (0.026)
Gender Campaign	-0.130*** (0.049)	-0.013** (0.005)	0.014 (0.021)	0.007 (0.015)	-0.027 (0.027)	-0.026 (0.026)
Gender=General p-value	0.17	0.16	0.43	0.36	0.45	0.84
Any Campaign p-value	0.03	0.06	0.23	0.27	0.60	0.54
Control Mean	.16	.02	.44	.46	.85	.85
Observations	379	379	379	379	379	379

Notes: 1. The sample includes 379 GPs from the 382 GPs that were not reserved for women in the 2010 elections. For three GPs we were unable to collect data on wardpanch races. 2. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 3. The specification is described in Section 3.3, it includes districts fixed effects.

Table A.5: Effect of the campaign on MGNREGS performance in the last year reported immediately after the elections

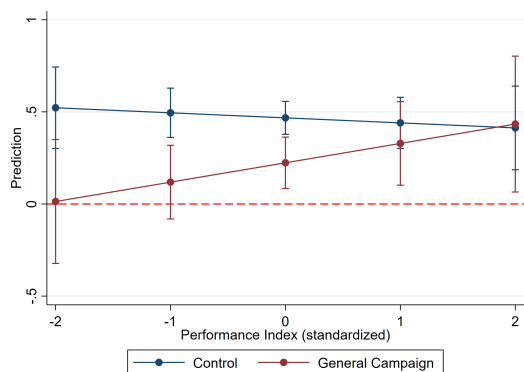
	Performance Index (1)	Household Participation (2)	Unmet Demand (Male Workers) (3)	Unmet Demand (Male Workers) (4)
<b>Panel A: GP Without Gender Quota in 2005</b>				
General Campaign	-0.224 (0.164)	-0.034 (0.040)	0.025 (0.030)	0.054* (0.028)
Gender Campaign	-0.045 (0.173)	-0.019 (0.043)	-0.003 (0.032)	0.010 (0.030)
Gender=General p-value	0.37	0.77	0.44	0.20
Any Campaign p-value	0.39	0.70	0.67	0.15
Control Mean	.08	.49	.39	.28
Observations	157	157	157	157
<b>Panel B: GP With Gender Quota in 2005</b>				
General Campaign	-0.043 (0.243)	-0.042 (0.063)	0.006 (0.045)	-0.016 (0.041)
Gender Campaign	0.268 (0.211)	0.079 (0.055)	-0.044 (0.039)	-0.022 (0.036)
Gender=General p-value	0.23	0.07	0.29	0.89
Any Campaign p-value	0.36	0.16	0.44	0.81
Control Mean	-.11	.48	.42	.33
Observations	83	83	83	83
<b>Panel C: All GP</b>				
General Campaign	-0.167 (0.134)	-0.037 (0.034)	0.018 (0.025)	0.032 (0.023)
Gender Campaign	0.069 (0.132)	0.021 (0.033)	-0.019 (0.024)	0.001 (0.023)
Gender=General p-value	0.13	0.14	0.19	0.25
Any Campaign p-value	0.28	0.32	0.42	0.36
Control Mean	.02	.49	.4	.3
Observations	240	240	240	240

Notes: 1. The sample includes all 240 GPs that were not reserved for women in the 2010 elections and where we carried out the household survey. 2. In Column 2 the outcome is the household participation rate in MGNREGS. In Column 3 it is the share of male respondents who could not do MGNREGS work among those who wanted to work. In Column 4 it is the same indicator for female respondents. In Column 1 the outcome is the MGNREGS performance index, a the standardized index of the three outcomes presented in Columns 2-4, with participation entering positively and unmet demand (for men or women) negatively. 3. General Campaign is a dummy equal to one for GPs where the non-gendered PEVAC took place. Gender Campaign is a dummy equal to one for GPs where the gendered version of the PEVAC took place. 4. The specification is described in Section 3.3, it includes districts fixed effects.

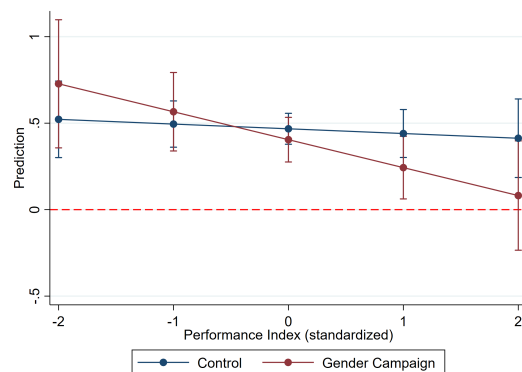
## C Appendix Figures

Figure A.1: Predicted outcomes at different levels of performance

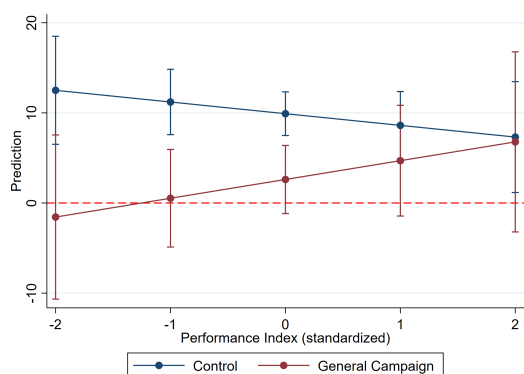
(a) General Campaign and probability that incumbent or spouse is running



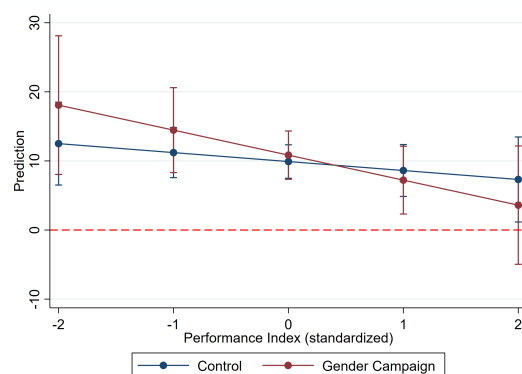
(b) Gender Campaign and probability that incumbent or spouse is running



(c) General Campaign and incumbent or spouse vote-share



(d) Gender Campaign and incumbent or spouse vote-share



Each figure presents predicted outcomes at different levels of incumbent performance, based on linear coefficients presented in Table A.5. Figure (a) and (b) present predicted probability that the incumbent or their spouse run in control GPs, GPs with general campaign (Figure a) or GPs with gender campaign (Figure b). Figure (c) and (d) present the predicted voteshare for the incumbent or their spouse in control GPs, GPs with general campaign (Figure c) or gender campaign (Figure d).

Figure A.1: Sample of Calendar from the General Campaign (Roads Version)

**2010**

शिक्षा, पंचायत चुनाव 2010, स्वास्थ्य, रोजगार, पेव्हाण, सड़क

**नरेगा में सरपंच की जिम्मेदारी क्या ?**

1. जो भी मांगे, उसे 15 दिन में मजदूरी दिलाना ।  
 2. हर परिवार को साल में 100 दिन मजदूरी दिलाना ।  
 3. मजदूरी का पैसा समय पर व पूरा दिलाना ।

**महिला हो या पुरुष**  
 अच्छे उम्मीदवार को ही वोट दीजिए

**नरेगा के आंकड़ों के अनुसार आपके जिले के औसत ग्राम पंचायत की स्थिति**

	औसत पंचायत
कुल सालाना खर्च	39 लाख रु.
ग्र.प. में मजदूरी पाने वाले परिवारों का प्रतिशत	72%
मजदूरी के दिन (प्रति नरेगा परिवार )	46 दिन

**अच्छा सरपंच, विकसित गाँव**

शौकतुय ये प्रयत्न संस्था

D-A-R

जनवरी, फरवरी, मार्च, अप्रैल, मई, जून, जुलाई, अगस्त, सितम्बर, अक्टूबर, नवम्बर, दिसम्बर

Description: In the circle, on the ballot box “Panchayat elections 2010”. Around it: “Education, Employment, Health, Water, Roads”. On the report card left page “What are the responsibilities of the sarpanch under NREGA? 1. Provide work within 15 days to anyone who demands it. 2. Guarantee 100 days of work per family. 3. Ensure timely and full payment of wages. Whether Woman or Man? Vote for the Best Candidate!” On the report card right page “According to official NREGA numbers, in the average GP: Total expenditures 39 lakhs (3.9M) rupees. Proportion of households participating in NREGA 72%. Number of days of work per participating household: 46 days.” Bottom Slogan “A good sarpanch, a developed village” Bottom Right Presented by: PRAYATN Organization

Figure A.2: Sample of Calendar from the Gender Campaign (Roads Version)

# 2010

शिक्षा, स्वास्थ्य, पेव्हान, सड़क

## अगली सरपंच... एक महिला ?

**नरेगा में सरपंच की जिम्मेदारी क्या ?**

- जो भी मांगे, उसे 15 दिन में मजदूरी दिलाना ।
- हर परिवार को साल में 100 दिन मजदूरी दिलाना ।
- मजदूरी का पैसा समय पर व पूरा दिलाना ।

**महिला हो या पुरुष**  
अच्छे उम्मीदवार को ही वोट दीजिए

**2010 पंचायत चुनाव : महिला सरपंच क्यों नहीं ?**  
महिला अनारक्षित सीटों में भी चुनाव लड़ सकती है ।  
क्या एक महिला अच्छी सरपंच साबित हो सकती है ?  
नरेगा के आंकड़ों के अनुसार महिला सरपंच पुरुष से पीछे नहीं !  
आपके जिले के औसत ग्राम पंचायत की स्थिति

	महिला आरक्षित	अन्य पंचायत
कुल सालाना खर्च	31 लाख रु.	34 लाख रु.
घ.प. में मजदूरी पाने वाले परिवारों का प्रतिशत	73%	76%
मजदूरी के दिन (प्रति नरेगा परिवार)	51 दिन	54 दिन

**अच्छा सरपंच, विकसित गाँव**

सौजन्य से प्रयत्न संस्था

PRAYATN K-W-R

**जनवरी**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**फरवरी**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

**मार्च**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**अप्रैल**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

**मई**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**जून**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

**जुलाई**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**अगस्त**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**सितम्बर**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

**अक्टूबर**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

**नवम्बर**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

**दिसम्बर**  
शु. सो. म. बु. उ. रा. मी.  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

● शुक्र वसन्त तिथि  
● शुक्र वसन्त तिथि

Description: In the circle, on the ballot box “Panchayat elections 2010”. Around it: “Education, Employment, Health, Water, Roads”. Middle Slogan “Next sarpanch... a Woman?”. On the report card left page “What are the responsibilities of the sarpanch under NREGA? 1. Provide work within 15 days to anyone who demands it. 2. Guarantee 100 days of work per family. 3. Ensure timely and full payment of wages. Whether Woman or Man? Vote for the Best Candidate!” On the report card right page “Why not a woman sarpanch in the 2010 Panchayat elections? Women can run in unreserved seats. Can a woman be an effective sarpanch? According to official NREGA numbers, female sarpanch are not worse than male sarpanch. Here are the average numbers in your district: Total expenditures 31 lakhs (3.1M) rupees for GP reserved for women vs 34 lakhs (3.4M) rupees in other GP. Proportion of households participating in NREGA: 73% in women reserved GP vs 76% in other GP. Number of days of work per participating household: 51 days for women reserved GP vs 54 days in other GP.” Bottom Slogan “A good sarpanch, a developed village” Bottom Right Presented by: PRAYATN Organization


Figure A.4: Outline of the Play for the General Campaign (Roads Version)

Section of Show	Subsections	Message	Duration	Cum. Time
Muppet show		Raising awareness about upcoming Panchayat election	3	3
Paisa song		Do not take bribes during elections but vote with your mind	4	7
Play - mngmnt role and importance Sarpanch and so doing				
	Roads	Sarpanch provides good roads – skit that contrasts between bad sarpanch and good sarpanch	6	13
Role of Sarpanch in NREGA		1 Giving job cards to those who need	1	19
		2 Give jobs when they ask for it	1	
		3 Planning of works according to situation in village	2	
		4 Paying workers fairly and timely	2	
Mobilizer intervention		<ol style="list-style-type: none"> <li>1. Importance of Sarpanch - Repeat briefly what has been said in show</li> <li>2. Therefore, anyone who has good leadership skills and potential should contest, no matter your caste or gender</li> <li>3. But for good leaders to be elected, you need to go vote               <ol style="list-style-type: none"> <li>a. Voter Awareness - Anyone above 18 can and should vote</li> <li>b. Your vote is private and others should not influence you</li> <li>c. Your vote determines your future and is important</li> <li>d. You should vote for a leader who has can do good work</li> </ol> </li> </ol>	4	23
Bad Sarpanch v/s good Sarpanch - Vote for a good sarpanch	Male bad Sarpanch	Bad male sarpanch asking people to vote for him	3	26
	Good female Sarpanch and good male sarpanch candidates	Campaigning	3	29
General Skit +				
Incorporating NREGA Statistics		A group of people think that why is the Sarpanch important for NREGA implementation – the “mate” oversees the work, the post office gives out the money, the gram sabha makes the decision about infrastructures. But the main character says that the entire thing flows through the Sarpanch. So if we elect a good Sarpanch, the money sanctioned by the government will actually reach the villagers. Give NREGA average stats as evidence in detail.	3	32
Ending Song		Give your vote and vote for best candidate	4	37
Mobilizer post-show discussion		Interactive session – Q&A with crowd	5 to 10	47

Figure A.5: Outline of the Play for the Gender Campaign (Roads Version)

Section of Show	Subsections	Message	Duration	Cum. Time
Muppet show		Raising awareness about upcoming Panchayat election	3	3
Paisa song		Do not take bribes during elections but vote with your mind	4	7
Play - highlight role and importance Sarpanch and so, doing, highlights the importance of the upcoming elections.	Roads	Sarpanch provides good roads – skit that contrasts between bad sarpanch and good sarpanch	6	13
Role of Sarpanch in NREGA		1 Giving job cards to those who need	1	19
		2 Give jobs when they ask for it	1	
		3 Planning of works according to situation in village	2	
		4 Paying workers fairly and timely	2	
Mobilizer intervention		<ol style="list-style-type: none"> <li>1. Importance of Sarpanch - Repeat briefly what has been said in show</li> <li>2. Therefore, anyone who has good leadership skills and potential should contest, no matter your caste or gender</li> <li>3. But for good leaders to be elected, you need to go vote <ol style="list-style-type: none"> <li>a. Voter Awareness - Anyone above 18 can and should vote</li> <li>b. Your vote is private and others should not influence you</li> <li>c. Your vote determines your future and is important</li> <li>d. You should vote for a leader who has can do good work</li> </ol> </li> <li>4. Remember that a good leader can be a man or a woman... (this leads into the next section of show)</li> </ol>	4	23
Bad Sarpanch v/s good Sarpanch - Vote for a good sarpanch	Male bad Sarpanch	Bad male sarpanch asking people to vote for him	3	26
	Good female Sarpanch and good male sarpanch candidates	campaigning	3	29
Gender Skit + Incorporating NREGA Statistics		A group of people think that they should vote for the male candidate because a woman cannot be a good sarpanch. But main actor convinces them that the woman is a better candidate and we should not look at gender: Despite suffering from prejudice, lack of education, not being given the chance to lead, women perform similarly to men - Give NREGA stats as evidence	3	32
Ending Song		Give your vote and vote for best candidate	4	37
Mobilizer post-show discussion		Interactive session – Q&A with crowd	5 to 10	47

Figure A.6: Original IRB for experiment and administrative data

	<b>Massachusetts Institute of Technology</b> Committee on the Use of Humans as Experimental Subjects	<b>Application #</b> (assigned by COUHES)	
		<b>Date</b>	<b>11/3/09</b>

**APPLICATION FOR APPROVAL TO USE HUMANS AS EXPERIMENTAL SUBJECTS (STANDARD FORM)**

*Please answer every question. Positive answers should be amplified with details. You must mark N/A where the question does not pertain to your application. Any incomplete application will be rejected and returned for completion. A completed CHECKLIST FOR STANDARD APPLICATION FORM must accompany this application.*

**I. BASIC INFORMATION**

<b>1. Title of Study</b>			
Empowering Female Leaders and Voters in India: A Randomized Experiment using Voter Information Campaigns			
<b>2. Principal Investigator</b>			
Name: Esther Duflou		Building and Room #: E60-275	
Title: Professor		Email: eduflo@mit.edu	
Department: Economics		Phone: 617-258-7013	
<b>3. Study Personnel</b>			
<i>All key personnel<sup>1</sup> including the PI must be listed below, with a brief statement of qualifications and study role(s).</i> <b>Important Note:</b> all key personnel are required to complete Human Subject training before work begins on the project.			
<i>Investigators and other personnel [and institution(s)]:</i>	<i>Qualifications: Describe briefly</i>	<i>Study role(s): (Check box to the right if person will be obtaining consent.)</i>	
<b>Abhijit Banerjee</b>	<b>Professor of Economics at MIT</b>	<b>Co-PI</b>	<input type="checkbox"/>
<b>Rohini Pande</b>	<b>Professor of Economics, Harvard Kennedy School</b>	<b>Co-PI</b>	<input type="checkbox"/>
<b>Clement Imbert</b>	<b>PhD Student, Paris School of Economics</b>	<b>Co-PI</b>	<input type="checkbox"/>
<b>4. Collaborating Institutions.</b> <i>If you are collaborating with another institution(s) then you must obtain approval from that institution's institutional review board, and forward copies of the approval to COUHES)</i>			
This project is a joint project with Harvard. Harvard has already given IRB approval for this study.			

<sup>1</sup> MIT key personnel all individuals who contribute in a substantive way to the execution and monitoring of the study at or on behalf of MIT or affiliated institutions. Typically, these individuals have doctoral or other professional degrees, although other individuals may be included. In particular, investigators and staff involved in obtaining informed consent are considered key personnel.

Figure A.6: Original IRB for experiment and administrative data (Continued)

<b>5. Location of Research.</b> <i>If at MIT please indicate where on campus. If you plan to use the facilities of the Clinical Research Center you will need to obtain the approval of the CRC Advisory Committee. You may use this form for simultaneous submission to the CRC Advisory Committee.</i>	
Rajasthan, India	
<b>6. Funding.</b> <i>If the research is funded by an outside sponsor, please enclose one copy of the research proposal with your application. A draft of the research proposal is acceptable.</i>	
<b>A. Type of funding:</b>	<b>B. Source of funding</b>
<input type="checkbox"/> Contract/Grant <input type="checkbox"/> Subcontract <input type="checkbox"/> Departmental <input type="checkbox"/> Gift <input type="checkbox"/> Other: <input checked="" type="checkbox"/> No Funding	<input type="checkbox"/> Federal Government <input checked="" type="checkbox"/> Other Gov. (e.g. State, local) <input type="checkbox"/> Industry <input type="checkbox"/> Other Private <input type="checkbox"/> Departmental Funds <input type="checkbox"/> Other:
Have funds been awarded? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Pending <input type="checkbox"/> No <i>Award #, if known</i>	<b>Specify name of source designated above:          Proposals from Harvard are pending with          UNDP and UNIFEM.</b>
<b>C. If Contract or Grant</b>	
Name of Contract or Grant:	Contract or Grant Title:
Contract or Grant Number:	OSP#:
<b>7. Statement of Financial Interest</b>	
Does the principal investigator or any <u>key personnel</u> involved in the study have any <u>financial interest</u> in the research?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes then attach a <b>Supplement for Disclosure of Financial Interest</b> for each individual with an interest. <i>This supplement, together with detailed guidance on this subject and definitions of the highlighted terms, is available on the COUHES web.</i>	
<b>8. Human Subjects Training.</b> <i>All study personnel MUST take and pass a training course on human subjects research. MIT has a web-based course that can be accessed from the main menu of the COUHES web site. COUHES may accept proof of training from some other institutions. List the names of all study personnel and indicate if they have taken a human subjects training course.</i>	
Esther Duflo – yes; Abhijit Banerjee – yes; Rohini Pande – yes; Clement Imbert – yes.	
<b>9. Anticipated Dates of Research</b>	
Start Date: November 2009	Completion Date: November 2011

## II. STUDY INFORMATION

**1. Purpose of Study.** *Please provide a concise statement of the background, nature and reasons for the proposed study. Use non-technical language that can be understood by non-scientist members of COUHES.*

Gender quotas for elected positions have been widely adopted; furthermore, there is evidence (Beaman, Chattopadhyay, Duflo, Pande, forthcoming) that they are sufficient for empowering female leaders over the longer term or help overcome voters' prejudices against women by demonstrating the capability of female leaders. In this context, complementing gender quotas with pro-active information campaigns that provide voters objective and verifiable information about the performance of elected male and female leaders may both help change voter stereotypes and enhance electoral accountability. In India, a third of the village council heads have been reserved for women since 1993 and

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Figure A.6: Original IRB for experiment and administrative data (Continued)

<p>the government recently committed to increase this proportion to half. The objective of this research is to empower female leadership at the grassroots by providing rigorous evidence through a randomized evaluation of a report-card based information campaign in the run up to village council elections to be held in early 2010 in the state of Rajasthan in India.</p>
<p><b>2. Study Protocol.</b> <i>For biomedical, engineering and related research, please provide an outline of the actual experiments to be performed. Where applicable, provide a detailed description of the experimental devices or procedures to be used, detailed information on the exact dosages of drugs or chemicals to be used, total quantity of blood samples to be used, and descriptions of special diets.</i></p> <p><i>For applications in the social sciences, management and other non-biomedical disciplines please provide a detailed description of your proposed study. Where applicable, include copies of any questionnaires or standardized tests you plan to incorporate into your study. If your study involves interviews please submit an outline indicating the types of questions you will include.</i></p> <p><i>You should provide sufficient information for effective review by non-scientist members of COUHES. Define all abbreviations and use simple words. Unless justification is provided this part of the application must not exceed 5 pages.</i></p> <p><i>Attaching sections of a grant application is not an acceptable substitute.</i></p>
<p>The proposed field experiment consists of a report-card based pre-election information campaign focusing on the role and performance of the AVERAGE elected village council leaders (not the particular representative of this village) in implementing public works programs, including one of the largest employment generation schemes in India called the National Rural Employment Guarantee Scheme (NREGS). The information campaign would be run by a local non-governmental organization (NGO) in 2-3 weeks preceding the village council elections in the state of Rajasthan in western India (expected to be held in January 2010). It will use only publicly available information (all the information on employment and wages under the NREGS scheme is available on the internet), but it will package this information and make it available to villages who do not have easy access to the internet.</p> <p>The intervention will follow a randomized experiment design. From the group of village councils not reserved for women in the 2010 village council elections, one half of the village councils will be selected via lottery to receive the information campaign. The other half of village councils will be left for control. The campaign consists of a report card providing information on the role and performance of village council leaders and will be run by the collaborating NGO partner using a variety of means such as village meetings, puppet shows, and other forms of campaigning.</p> <p>The report card consists of 2 components:</p> <ol style="list-style-type: none"> <li>1) The first will give general information on the role of elected village leaders in provision of public goods. In order to test how constituents react to different messages, we will randomly divide the treatment sample into two subgroups and vary the message across them. In one subgroup we will motivate the importance of electing effective leaders by explaining that they are responsible for public good provision including drinking water and ration cards (which previous research has shown is valued more by women). In the second subgroup we will motivate the same principle using examples of road construction and irrigation facilities (valued more by men).</li> <li>2) The second component focuses on key performance indicators of village leaders in implementing NREGS (such as average wage, total number of man-days of work generated, and expenditure on materials for projects), generated from the public NREGS</li> </ol>

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Figure A.6: Original IRB for experiment and administrative data (Continued)

<p>website. In one set on report cards, only district averages will be publicized. In the remaining, figures will be disaggregated by village councils where the leadership position is reserved for women leaders and unreserved village councils. This will allow villagers to evaluate the effectiveness of female leaders (relative to male leaders).</p> <p>The information campaign will take place in the 2-3 weeks preceding village council elections in January 2010. The only data collection will be use of polling station data, which will be collected during the elections. This information is also publicly available in principle, we will just need to gather it. Outcomes of interest include the number of women candidates, electoral successes for women, voter turnout, and incumbency patterns in these councils. These outcomes would be measured by collecting basic electoral data from polling stations on number of candidates (male and female), voter turnout (male and female), etc.</p> <p>A key partner in implementing the intervention on the ground is our collaborating partner, Prayatn, a highly credible NGO with an established presence in Rajasthan, working on gender and political empowerment interventions in the selected districts of this study. Prayatn has been very active in the past decade to increase people's participation in local political offices and has undertaken several pre-election campaigns in Rajasthan to create awareness and encourage voters to choose candidates based on objective measures. In addition, Prayatn has undertaken community-level initiatives to encourage dialogue among candidates from different political parties prior to elections to discuss their policies, with a particular focus on women's empowerment.</p>
<p><b>3. Drugs and Devices.</b> <i>If the study involves the administration of an investigational drug that is not approved by the Food and Drug Administration (FDA) for the use outlined in the protocol, then the principal investigator (or sponsor) must obtain an Investigational New Drug (IND) number from the FDA. If the study involves the use of an approved drug in an unapproved way the investigator (or sponsor) must submit an application for an IND number. Please attach a copy of the IND approval (new drug), or application (new use).</i></p> <p><i>If the study involves the use of an investigational medical device and COUHES determines the device poses significant risk to human subjects, the investigator (or sponsor) must obtain an Investigational Device and Equipment (IDE) number from the FDA.</i></p>
<p><b>Will drugs or biological agents requiring an IND be used?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/></p> <p><i>If yes, please provide details:</i></p>
<p><b>Will an investigational medical device be used?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/></p> <p><i>If yes, please provide details:</i></p>
<p><b>4. Radiation</b> <i>If the study uses radiation or radioactive materials it may also have to be approved by the Committee on Radiation Exposure to Human Subjects (COREHS). COUHES will determine if you need COREHS approval.</i></p>
<p><b>Will radiation or radioactive materials be used?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/></p> <p><i>If yes, please provide details:</i></p>
<p><b>5. Diets</b></p>
<p><b>Will special diets be used?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/></p> <p><i>If yes, please provide details:</i></p>

### III. HUMAN SUBJECTS

#### 1. Subjects

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Figure A.6: Original IRB for experiment and administrative data (Continued)

<b>A. Estimated number:</b> 400,000 people	<b>B. Age(s):</b> 18+
<b>C. Inclusion/exclusion criteria</b>	
<p><b>i. What are the criteria for inclusion or exclusion?</b></p> <p>Our intervention will focus on three districts of eastern Rajasthan: Bharatpur, Dholpur and Karauli. Within these districts, we will randomly select 400 of a total of 748 Gram Panchayats (village councils, aka “GPs”) that do not reserve posts for women to receive the information campaign. In the other 348 GPs, election data will be collected but the intervention will not be conducted. In the 400 GPs, the intervention will take place in an estimated 2 villages per GP. In study villages, all adults of voting age will be included in our study. Assuming an average of 500 adults per village, 400,000 individuals are potentially affected, though they will not all be present at the intervention. The intervention involves both men and women as voters and as potential candidates who will be encouraged to contest the village elections.</p>	
<p><b>ii. Are any inclusion or exclusion criteria based on age, gender, or race/ethnic origin? If so, please explain and justify</b></p> <p>Yes. Since this is a study on voting behavior, only subjects who are of voting age will be included in the study.</p>	
<b>D. Please explain the inclusion of any vulnerable population (e.g. children, cognitively impaired persons, non-English speakers, MIT students), and why that population is being studied.</b>	
<p>The population is non-English speaking, since this study is taking place in rural Rajasthan, India. Lying on the arid Northwest border between India and Pakistan, Rajasthan is geographically the largest State in India. However, 66% of its geographical area is desert and it contains only 1% of India’s water resources owing to recurrent droughts, which severely affect the 66% of its population. Given the poverty, the droughts and the over-dependence on agriculture, the inception of NREGS was particularly important in Rajasthan, which ranks first across the country in terms of demand of labor under NREGS. Not surprisingly, this employment program has become central to the economic and political spheres of rural Rajasthan.</p>	
<p><b>2. Subject recruitment</b> <i>Identification and recruitment of subjects must be ethically and legally acceptable and free of coercion. Describe below what methods will be used to identify and recruit subjects</i></p>	
<p>The NGO, Prayatn, will follow its normal practice in conducting election campaigns. Campaign teams of 4-6 community mobilizers will tour the villages (selected to receive the intervention) during the day to announce a village meeting to be held at the village in the evening. Participation is voluntary and no inducements or payments will be offered. They will also distribute report cards to a random sub-sample of households in these villages.</p>	
<p><b>Please attach a copy of any advertisements/ notices and letters to potential subjects</b></p>	
<p><b>3. Subject compensation</b> <i>Payment must be reasonable in relation to the time and trouble associated with participating in the study. It cannot constitute an undue inducement to participate</i></p>	
<p><b>Describe all plans to pay subjects in cash or other form of payment (i.e. gift certificate)</b></p> <p>Subjects will not be paid in any way.</p>	
<p><b>Will subjects be reimbursed for travel and expenses?</b></p>	

Figure A.6: Original IRB for experiment and administrative data (Continued)

No.
<p><b>4. Potential risks.</b> <i>A risk is a potential harm that a reasonable person would consider important in deciding whether to participate in research. Risks can be categorized as physical, psychological, sociological, economic and legal, and include pain, stress, invasion of privacy, embarrassment or exposure of sensitive or confidential data. All potential risks and discomforts must be minimized to the greatest extent possible by using e.g. appropriate monitoring, safety devices and withdrawal of a subject if there is evidence of a specific adverse event.</i></p> <p><b>What are the risks / discomforts associated with each intervention or procedure in the study?</b></p> <p>There is only one possible risk which is opposition by local political elites. However, we believe this risk to be minimal for two reasons. First, the data being provided is publicly available on the NREGS website. As we are only providing district aggregates and no village-specific information, the campaign should not be viewed as partisan or directed against any local leader. Second, the NGO Prayatn is explicitly non-partisan and has been working in these areas since more than a decade and has built up substantial experience and credibility among the people. It has also conducted information campaigns in the past without any issues arising.</p> <p>Otherwise, we do not anticipate any other risks to the participants.</p> <p><b>What procedures will be in place to prevent / minimize potential risks or discomfort?</b></p> <p>Not applicable</p>
<p><b>5. Potential benefits</b></p> <p><b>What potential benefits may subjects receive from participating in the study?</b></p> <p>The research is expected to benefit the target population in a number of ways. It is expected that public disclosure of information about performance will result in reduced negative biases about women leaders, and thus a greater number of women candidates and leaders, which in turn results in greater participation and representation of women's needs in local decision making authorities. In general and in the long-term this leads to greater political accountability and better implementation of programs and policies relevant to the needs of the people.</p> <p><b>What potential benefits can society expect from the study?</b></p> <p>This research may lead to new knowledge about how to change voter stereotypes and how to enhance electoral accountability. It may also help India develop a national action plan for proactive information disclosures on performance of elected representatives, separated by gender.</p>
<p><b>6. Data collection, storage, and confidentiality</b></p> <p><b>How will data be collected?</b></p> <p>The only data collected will be polling station data, which will be collected during the elections.</p> <p><b>Is there audio or videotaping?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>Explain the procedures you plan to follow.</i></p> <p><b>Will data be associated with personal identifiers or will it be coded?</b></p> <p>Personal identifiers <input type="checkbox"/> Coded <input type="checkbox"/> <i>Explain the procedures you plan to follow.</i></p> <p>Not applicable. Subjects will not participate in any interviews or surveys as part of this study. The data for this project is aggregate polling station data which is publicly</p>

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(STANDARD FORM) – revised 10/22/2009

Figure A.6: Original IRB for experiment and administrative data (Continued)

<p>available. As it is aggregated to the polling booth level and anonymized, no individual can be identified.</p> <p><b>Where will the data be stored and how will it be secured?</b> Not applicable, as the data is public data.</p> <p><b>What will happen to the data when the study is completed?</b> Not applicable, as the data is public data.</p> <p><b>Can data acquired in the study affect a subject's relationship with other individuals (e.g. employee-supervisor, patient –physician, student-teacher, family relationships)?</b> Not applicable.</p>
<p><b>7. Deception</b> <i>Investigators must not exclude information from a subject that a reasonable person would want to know in deciding whether to participate in a study.</i></p>
<p><b>Will information about the research purpose and design be withheld from subjects?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>If so, explain and justify.</i></p>
<p><b>8. Adverse effects.</b> <i>Serious or unexpected adverse reactions or injuries must be reported to COUHES within 48 hours. Other adverse events should be reported within 10 working days.</i></p>
<p><b>What follow-up efforts will be made to detect any harm to subjects and how will COUHES be kept informed?</b> If anything unusual results from the village meetings, Prayatn will inform the investigators immediately, who will inform COUHES.</p>
<p><b>9. Informed consent.</b> <i>Documented informed consent must be obtained from all participants in studies that involve human subjects. You must use the templates available on the COUHES web-site to prepare these forms. Draft informed consent forms must be returned with this application. Under certain circumstances COUHES may waive the requirement for informed consent.</i></p> <p>Subjects will be informed about the details of the village meetings to be held in their villages. Their participation is entirely voluntary. Meetings will not be held if there is substantial resistance in the village. It will not be possible to obtain written consent for the intervention (which should be perceived as a regular pre-election information campaign). Given that we are only distributing and collecting public information, we would like to request a waiver of the informed consent requirement. Consent for data collection is unnecessary, as only publicly available polling station data will be used.</p>
<p><b>10. The HIPAA Privacy Rule.</b> <i>If your study involves disclosing identifiable health information about a subject outside of M.I.T., then you must conform to the HIPAA Privacy Rule and complete the questions below. Please refer to the HIPAA section, and to the definitions of protected health information, de-identified data and limited data set on the COUHES web-site.</i></p>
<p><b>Do you plan to use or disclose identifiable health information outside M.I.T.?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>If YES, then the subject must complete an Authorization for Release of Protected Health Information Form. Please attach a copy of this draft form. You must use the <u>template</u> available on the COUHES web-site.</i></p> <p><i>Alternatively, COUHES may grant a Waiver of Authorization if the disclosure meets criteria outlined on the COUHES web-site.</i></p>
<p><b>Are you requesting a Waiver of Authorization?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>If YES, explain and justify.</i></p>

Figure A.6: Original IRB for experiment and administrative data (Continued)

<p><b>Will the health information you plan to use or disclose be de-identified?</b> YES <input type="checkbox"/>      NO <input checked="" type="checkbox"/></p> <p><b>Will you be using or disclosing a limited data set?</b> YES <input type="checkbox"/>      NO <input checked="" type="checkbox"/></p> <p><i>If YES, then COUHES will send you a formal data use agreement that you must complete in order for your application to be approved</i></p>
---

**IV. INVESTIGATOR'S ASSURANCE**

<p><b>I certify the information provided in this application is complete and correct</b></p> <p><b>I understand that I have ultimate responsibility for the conduct of the study, the ethical performance of the project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by COUHES</b></p> <p><b>I agree to comply with all MIT policies, as well all federal, state and local laws on the protection of human subjects in research, including:</b></p> <ul style="list-style-type: none"><li>• ensuring all study personnel satisfactorily complete human subjects training</li><li>• performing the study according to the approved protocol</li><li>• implementing no changes in the approved study without COUHES approval</li><li>• obtaining informed consent from subjects using only the currently approved consent form</li><li>• protecting identifiable health information in accord with the HIPAA Privacy Rule</li><li>• promptly reporting significant or untoward adverse effects</li></ul>
--

Signature of Principal Investigator \_\_\_\_\_ Date \_\_\_\_\_

Print Full Name and Title \_\_\_\_\_

Signature of Department Head \_\_\_\_\_ Date \_\_\_\_\_

Print Full Name and Title \_\_\_\_\_

*Please return 3 hard copies of this application (1 with original signatures) to the COUHES office E25-143b.*

Figure A.7: IRB Amendment for household survey

**HARVARD UNIVERSITY  
COMMITTEE ON THE USE OF HUMAN SUBJECTS  
Request for Approval of Human Subjects Research**

**INVESTIGATOR:** *(name, campus address)*      **Additional Contact Person:** *(if any)*

**Professor Rohini Pande**  
Kennedy School of Government  
Mailbox 46  
79 JFK Street  
Cambridge, MA 02138-5801

Deanna Ford  
Kennedy School of Government  
Mailbox 46  
79 JFK Street  
Cambridge, MA 02138-5801

**TELEPHONE:** 617-384-5267

617-495-7638

**E-MAIL:**    rohini\_pande@harvard.edu

deanna\_ford@hks.harvard.edu

**PROJECT TITLE:**    Empowering Female Leaders and Voters in India: A Randomized Experiment using Voter Information Campaigns

**ANTICIPATED FUNDING SOURCE:** *(for sponsored funding, add name of grant recipient):*

*Received funding:*

United Nations Development Program (UNDP) "Provision of Support to Enhance the Quality of Implementation of NREGA"

Center for Public Leadership, HKS

*We have also applied to the following sources of funding:*

Ministry of Panchayati Raj, Government of India (applied October 2009)

Initiative for Impact Evaluation (applied November 2009)

National Science Foundation – Economics (applied January 2010)

The Edmond J. Safra Foundation Center for Ethics (applied January 2010)

**FACULTY SPONSOR'S NAME** *(for non-faculty applicants):*

**Supervising lecturer, instructor, or graduate student** *(if applicable):*

**SPONSOR'S E-MAIL ADDRESS:**

**DURATION OF ENTIRE PROJECT:**

**from** November 2009 to January 2011.

**APPROVAL REQUESTED FOR** *(maximum one year; must be renewed annually):*

**from** February 2010 to January 2011.

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**1. Please give a brief summary of the purpose of the research in non-technical language. Be sure to include a statement of the research problem, its importance, and how your project will address it. Cite two or three references directly relevant to the proposed inquiry.**

Figure A.7: IRB Amendment for household survey (Continued)

Purpose:

Gender quotas for elected positions have been widely adopted; however there is little evidence that they are sufficient for empowering female leaders over the longer term or help overcome voters' prejudices against women by demonstrating the capability of female leaders. Complementing gender quotas with pro-active information campaigns that provide voters objective and verifiable information about the performance of elected male and female leaders can both help change voter stereotypes and enhance electoral accountability. In India, a third of the village council heads have been reserved for women since 1993 and the government recently committed to increase this proportion to half. The objective of this research is to empower female leadership at the grassroots by providing rigorous evidence through a randomized evaluation of a report-card based information campaign in the run up to village council elections to be held in early 2010 in the state of Rajasthan in India. It is also proposed to develop a national action plan for proactive information disclosures on performance of elected representatives, separated by gender.

Proposed Research

The proposed field experiment consists of a report-card based pre-election information campaign focusing on the role and performance of elected village council leaders in implementing public works programs, including one of the largest employment generation schemes in India called the National Rural Employment Guarantee Scheme (NREGS). The information campaign is being implemented by a local non-governmental organization (NGO) in the 2-3 weeks preceding the village council elections in the state of Rajasthan in western India (in January 2010).

The intervention is being implemented in three districts (an administrative sub-unit under the state) in Rajasthan and will follow a randomized experiment design. For the purposes of this intervention, one half of the village councils will be selected via lottery from the group of village councils not reserved for women in the upcoming elections, to receive the information campaign. The other half of village councils will be left for control. The campaign consists of a report card providing information on the role and performance of village council leaders and will be disseminated by the collaborating NGO partner using a variety of means such as village meetings, printed calendars, street theater performances, and other forms of campaigning.

The report card consists of 2 components:

- 1) The first concerns the role of elected village leaders in provision of public goods. In order to test how constituents react to different messages, we will randomly divide the treatment sample into two subgroups and vary the message across them. In one subgroup we will motivate the importance of electing effective leaders by explaining that they are responsible for public good provision including drinking water (which previous research has shown is valued more by women). In the second subgroup we will motivate the same principle using the example of road construction (valued more by men).
- 2) The second component focuses on key performance indicators of village leaders in implementing NREGS (such as average wage, total number of man-days of work generated, and expenditure on materials for projects), generated from the public NREGS website. In one set of report cards, only district averages will be publicized. In the remaining, figures will be disaggregated by village councils where the leadership position is reserved for women

Figure A.7: Original IRB for survey data (Continued)

leaders and unreserved village councils. This will allow villagers to evaluate the effectiveness of female leaders (relative to male leaders).

This intervention will be carried out only in village councils that are not reserved for women specifically in the 2010 election. Outcomes of interest include the number of women candidates, electoral successes for women, voter turnout, and incumbency patterns in these councils. These outcomes would be measured by collecting basic electoral data from polling stations on number of candidates (male and female), voter turnout (male and female), etc.

We will also conduct two household surveys in order to further measure the impact of this intervention. The first will be a short survey conducted within one month of the election (February-March 2010). The second survey will be a longer household survey fielded roughly one year after the election (December 2010-January 2011). More detail is provided on the surveys in section 2d below.

Location and Partner:

Lying on the arid Northwest border between India and Pakistan, Rajasthan is geographically the largest State in the country. However, 66% of its geographical area is desert and it contains only 1% of India's water resources owing to recurrent droughts, which severely affect the 66% of its population. Given the poverty, the droughts and the over-dependence on agriculture, the inception of NREGS was particularly important in Rajasthan, which ranks first across the country in terms of demand of labor under NREGS. Not surprisingly, this employment program has become central to the economic and political spheres of rural Rajasthan. Our intervention will focus on three districts of eastern Rajasthan: Bharatpur, Dholpur and Karauli.

A key partner in implementing the intervention on the ground is our collaborating partner, Prayatn, a highly credible NGO with an established presence in Rajasthan, working on gender and political empowerment interventions in the selected districts of this study. Prayatn has been very active in the past decade to increase people's participation in local political offices and has undertaken several pre-election campaigns in Rajasthan to create awareness and encourage voters to choose candidates based on objective measures. In addition, Prayatn has undertaken community-level initiatives to encourage dialogue among candidates from different political parties prior to elections to discuss their policies, with a particular focus on women's empowerment.

Significance:

Existing evidence (Chattopadhyay and Duflo, 2004) suggests that female leaders are at least as good as their male counterparts in implementing public works and are typically less corrupt. Despite this, opinion surveys show that voters typically state a preference for male leaders and are less satisfied with female leaders (Duflo and Topalova 2004). One important reason is widespread stereotypes and cultural practices that suggest that leadership is a male domain. While gender quotas in politics bring some gains for women's empowerment, they typically affect a minority of jurisdictions and evidence suggests they may be insufficient to overturn these stereotypes in the wider population (Beaman, Chattopadhyay, Duflo, Pande, and Topalova, 2009). Thus, an important finding, which prompts the proposed program, is that gender quotas are likely to be necessary but not sufficient to enable sustainable political empowerment of women. In addition, there is a real concern that forced gender requirements in electoral

Figure A.7: IRB Amendment for household survey (Continued)

processes can engender a negative backlash against female leaders. The type of information-based voter education campaign presented in this proposal may help create long-term gains for female political empowerment through gender quotas and ease this potential negative backlash.

**2. Give details of procedures that relate to subjects' participation.**

**(a) How are subjects recruited? What inducement is offered? If participants are paid, what amount and when are they paid? Is there partial pay for partial completion?** *(Append copy of letter or advertisement or poster, if any.)*

The NGO, Prayatn will follow its normal practice in conducting election campaigns. Campaign teams of 3-6 community mobilizers will tour the villages (selected to receive the intervention) during the day to announce a village meeting to be held at the village in the evening. Participation is voluntary and no inducements or payments will be offered. They will also distribute printed report cards (on colorful wall-hang calendars) to all households in these villages.

The surveys will be conducted in 5000 households, across 250 village councils. We will randomly sample 20 households in each village council and approach them to request their participation in the survey. No inducement will be offered for either survey, and we will make it clear to all individuals approached that their participation in the survey will not affect their access to NREGS services.

**(b) Salient characteristics of subjects--number who will participate, age range, sex, institutional affiliation, other special inclusion and exclusion criteria** *(if children, prisoners or other vulnerable subjects are recruited, explain why their inclusion is necessary):*

Each village meeting conducted will target 200-500 participants, depending on village size. Report cards will be distributed to an estimated 200 households in every village, on average. The campaign targets everybody in a village eligible to vote (18 and older.). The campaign also focuses on women both as voters and potential candidates who will be encouraged to contest the village elections.

In the first survey, two adults, one man and one woman will also be randomly selected from each household to answer the voter perceptions section of the survey. All subjects for the household survey will be 18 and older. General information regarding the household will be obtained by asking the household head.

**(c) Describe how permission has been obtained from cooperating institution(s)--school, hospital, corporation, prison, or other relevant organization.** *(Append letters.)* **Is the approval of other research compliance committees or another Institutional Review Board required?**

This project is a joint project with the Abdul Latif Jameel Poverty Action Lab (J-PAL) at MIT. Institutional Review Board approval for the initial phase of the project (the campaign intervention, without the household surveys) was received at both MIT and Harvard (Application Number: F18334-101). The certifications for both these approvals are attached to this application. This current application incorporates the expanded project, as described above (i.e. including the household surveys). An application for the updated project will also

Figure A.7: IRB Amendment for household survey (Continued)

be submitted to the IRB at MIT. Documentation of acceptance will be remitted once received.

**(d) What do subjects do, or what is done to them, or what information is gathered?** (*Append copies of instructions, tests, questionnaires, or interview guides to be used.*) **How many times will observations, tests, etc., be conducted? How long will their participation take? Are interviews to be tape recorded or videotaped?**

Under the campaign, subjects are expected to participate in the village meetings conducted by the NGO and receive and read the report cards distributed to them.

For the household surveys, subjects will be asked to provide information on household characteristics, personal behavior and preferences, and village level characteristics. The first survey will collect information on each household and then randomly select two adult household member to provide additional information on his/her individual political participation, voting behavior (not including the candidate/party for which the subject voted), participation in NREGS and assets/facilities provided to the village through NREGS. Vignette survey questions will also be included which will capture information on voter preferences. More specifically, we will describe two hypothetical politicians and randomly vary their characteristics. We then ask the respondent to choose between them and thereby directly identify voter preferences. This allows us to test the theory that when voters vote for candidates while knowing very little about these candidates' characteristics, they decide based mainly on gender and ethnicity. (On the use of vignette surveys, see Alexander and Becker, 1978). Systematically varying characteristics in the vignette provides a precise estimate of the effects of changes in both the combinations of variables as well as individual variables on corresponding changes in respondent judgment. Each survey will last little less than one hour. A draft copy of the survey is included.

The second survey will be among the same households and consist of a longer household survey fielded roughly one year after the election (December 2010-January 2011). The same households will be surveyed in the 250 GPs (125 each in treatment and control groups). The survey will collect information on households' experience with NREGS. We will ask respondents about NREGS employment outcomes (starting from their ability to get a job card to the number of days worked), wages and worksite facilities. By matching survey responses to official information for the household we will obtain an independent measure of potential corruption. This survey has not yet been compiled but will be submitted once it is available.

### **3. Describe your research experience and your research ethics training.**

**(a) Cite your experience with this kind of research and/or this population. List any assistants who will be working with you and cite their experience also.**

Professor Rohini Pande has been involved in a number of survey research and experiments in India and elsewhere. She also conducted a similar intervention in 2008 in Delhi, India which tested the effect of report card-based information campaigns to encourage voting based on issues and performance rather than along caste or gender lines.

Figure A.7: IRB Amendment for household survey (Continued)

The co-principal investigators on this research are from MIT - Professors Esther Duflo and Abhijit Banerjee; and from the Paris School of Economics - Clément Imbert, a Ph.D. student.

Professors Esther Duflo and Abhijit Banerjee are founding members of MIT's Poverty Action Lab, and have extensive experience conducting randomized evaluations in India. Esther Duflo and Rohini Pande have collaborated on research in West Bengal, another state in India to assess the effects of the women's reservation policy. Abhijit Banerjee was a part of the 2008 Delhi intervention. Clément Imbert has worked in Rajasthan, India for the past 3 years on projects with the Poverty Action Lab. All three co-PIs have received research ethics training.

**(b) Where have you received research ethics training? (check boxes)** (Note for NIH funded projects, only (i), (ii), or (iv) satisfy training requirements.)

- (i) HETHR  (iv) NIH (<http://phrp.nihtraining.com>)  
 (ii) CITI  (v) Research methods course (specify) \_\_\_\_\_  
 (iii) CUHS-led training course  (vi) Other (specify) Yale University, accepted by Harvard  
 (vii) CUHS website PowerPoint presentation for undergraduates

**4. How do you inform subjects about your research and then obtain their consent?** (For an explanation of the elements of informed consent and documenting it, please see Appendix A, *Intelligent Scholar's Guide* <http://cuhs.harvard.edu/ISG.html> or <http://cuhs.harvard.edu/#Samples>)

**(a) Do subjects sign a written consent form and receive a copy for their records? If not, do they receive an information sheet that provides what they need to know before deciding to participate?** (In addition to answering parts a. – e., append a copy of consent form, information sheet, or script for oral explanation to subject.)

For the campaign, subjects will be informed about the details of the village meetings to be held in their villages. Their participation is entirely voluntary. While report cards will be distributed to them at their households, reading it would be at their discretion.

For the household surveys, all subjects will be asked to give their consent orally since the subject population is predominantly illiterate. This is the script that will be used:

I have come from XXXXX, a survey research company.

We have randomly selected your name and address from the electoral roll. The findings of this interview will be used for writing academic articles. The name of the respondents interviewed in this survey will be kept strictly confidential. This survey is completely voluntary; you can withdraw from the survey at any time without penalty. You may also skip questions and be able to participate in the rest of the survey.

Figure A.7: IRB Amendment for household survey (Continued)

The survey is an independent study and is not linked with any political party or government agency. It won't improve or deteriorate service delivery to you and your household. It is part of a research project on the 2010 Panchayat elections.

This survey is going to take 30 minutes to one hour. Kindly spare some time for this interview and answer my questions, because your active cooperation will help make this study successful.

Would you be willing to participate?

Do you have any questions for me before we start?

If you would like more information about this research, please contact:

Avnish Gungadardoss, JPAL Research Associate (mobile phone number XXXXXX)

Aparna Krishnan, JPAL Team Leader (mobile phone number XXXXXXX)

**(b) Where (*In a lab? Online?*) , when (*immediately before participation, e.g.*), and by whom (*anyone other than investigator?*) is consent obtained?**

For the campaign, consent is implicit if subjects choose to attend the information campaign meetings in their village.

For the household surveys, our surveyors will ask for subjects' consent at the start of the survey, which is conducted in the home of the client. Should they not agree to participate, the survey will be terminated.

**(c) Are subjects children, mentally infirm, or otherwise not legally competent to consent? If so, how is their assent obtained, and who consents on their behalf?**

Not Applicable.

**(d) If subjects are vulnerable due, e.g., to legal status, economic status, illiteracy, or other circumstance, describe steps to minimize the risk of coercion or undue influence. Include in your answer how you ensure subjects understand that participation is voluntary.**

For the campaign, such meetings are held regularly in all villages in India, typically in a public place, and villagers are used to attend or not attend them based on their interest. However, to prevent any risk of undue influence from community mobilization teams, the entire campaign will be monitored by supervisors from the NGO as well as the JPAL research team.

For the household surveys, the surveyors will obtain verbal consent for survey participation in order to eliminate the risk due to illiteracy. The participants will also be told that they can skip any questions they do not want to answer or terminate the survey at any moment, if they so desire. They will also be assured that the results of their surveys will be absolutely confidential and that their names will never appear in any of the research presented.

**(e) Is there any language barrier that could affect the consent process (*your explanation of the research and the subject's agreement to participate*)? If so, please provide details, such as plans for use of translators or translating documents.**

Figure A.7: IRB Amendment for household survey (Continued)

No, the campaign surveys will be conducted in the native language of the participants since the surveyors will be residents from a nearby state (Uttar Pradesh) and hence speak the same language (Hindi).

**5. Give details of possible risks of harm to participants.**

**(a) What are the possible risks—physical, psychological, legal, social?**

There is only one possible risk which is opposition by local political elites. However, we believe this risk to be minimal for two reasons. First, the data being provided is publicly available on the NREGS website. As we are only providing district aggregates and no village-specific information, the campaign should not be viewed as partisan or directed against any local leader. Second, the NGO Prayati is explicitly non-partisan and has been working in these areas since more than a decade and has built up substantial experience and credibility among the people. It has also conducted information campaigns in the past without any issues arising.

Otherwise, we do not anticipate any other risks to the participants.

We don't anticipate any risks to the subjects due to the household survey.

**(b) If there are any risks, why are they necessary? Is there any other way to conduct the research that would reduce the risk to subjects, and, if so, why have you not chosen that alternative?**

Not Applicable

**(c) What steps will be taken to minimize the risk? (If the research may involve greater than minimal risk to participants, describe provisions for monitoring data to ensure participant safety.)**

Not Applicable

**(d) Should a subject be injured or otherwise harmed, or experience significant distress, what are your plans for addressing the problem? (e.g., emergency care training for lab staff if physical harm is a risk; referral for evaluation or treatment if there are significant psychological risks)**

Not Applicable

**If risks are anticipated to be no more than minimal, please state so here and in the consent form, if used.**

There are no risks anticipated in this research

**6. Are subjects deliberately deceived in any way? If so, what is the nature of the deception? Is it likely to be significant to subjects? Is there any other way to conduct the research that would not involve deception, and, if so, why have you not chosen that alternative? What explanation for the deception do you give to subjects following their participation?**

No, subjects are not deceived in any way.

Figure A.7: IRB Amendment for household survey (Continued)

**7. How will participation in this research benefit subjects? If subjects will be "debriefed" or receive information about the research project following its conclusion, how do you ensure the educational value of the process? (Append copies of any debriefing or educational materials.)**

The research is expected to benefit the target population in a number of ways. It is expected that public disclosure of information about performance will result in reduced negative biases about women leaders, and thus a greater number of women candidates and leaders, which in turn results in greater participation and representation of women's needs in local decision making authorities. In general and in the long-term this leads to greater political accountability and better implementation of programs and policies relevant to the needs of the people.

**8. How are confidentiality and/or anonymity assured? For online studies, will IP addresses or other potentially identifying information be collected? What host site will be used (i.e. SurveyMonkey, iCommons, etc.)? Will identifiers be removed from the data? If so, at what point, and if not, please explain why identifiers must be retained.**

Part of the data for this project is aggregate polling station data, which is publicly available. As it is aggregated to the polling booth level and anonymized, no individual can be identified.

In regards to the survey data, the hard copy of surveys will contain personal identifiers, mainly for checking data entry. Data will be entered in India. Survey forms will be stored in a secure office of JPAL South Asia in Delhi, India. In the electronic files, individuals will be identified only by a coded ID number. The file linking the ID to the individual identifiers (names) will be kept on password-protected computers in a locked room in at the JPAL South Asia office in Chennai, India.

The PIs will only be involved in the analysis of de-identified survey data. The analysis data (stripped of identifying information) will be stored on the password-protected computers of PIs Rohini Pande, Esther Duflo, Abhijit Banerjee and Clément Imbert.

**9. How is the privacy of subjects protected? (e.g., are questions tailored to the research question so subjects are not asked to provide unnecessary information?)**

The subjects' names will be replaced with individual identifiers so no personal information about the subjects will be divulged at any point. The study will ask each subject the same questions so no unnecessary information will be collected.

**10. Will research data (written or otherwise recorded) be destroyed at the end of the study? If not, where and in what format and for how long will they be stored? To what uses--research, demonstration, public performance, archiving--might they be put in future? How will subjects' permission for further use of their data be obtained? If there is a key code connecting subjects' data to their identity, when will the link be destroyed? (Include this information in the consent form, information sheet, or consent script.)**

The survey data will be made public five years after the survey has been conducted. The names and personal information that could identify the participants will be removed and

Figure A.8: IRB Amendment for candidate survey

**HARVARD UNIVERSITY  
COMMITTEE ON THE USE OF HUMAN SUBJECTS  
Request for Renewal of Approval\***

**DIRECTIONS:**

1. Download this form into Microsoft Word. Place cursor on the gray boxes and type. Box size will expand as you type.
2. **FOR STUDENTS:** You must have your faculty sponsor sign a paper copy of the application or email a note that s/he has reviewed the completed application and is satisfied with the adequacy of the proposed research design and the measures proposed for the protection of human subjects.
3. Return the completed application as an attachment to: [cuhs@fas.harvard.edu](mailto:cuhs@fas.harvard.edu) or mail to:

Committee on the Use of Human Subjects  
FAS Research Administration Services  
1414 Massachusetts Avenue, Room 241  
Cambridge, Massachusetts 02138

Telephone: (617) 496-CUHS (2847); Fax: (617) 496-7400.

**Any of the required attachments not available electronically must be sent or delivered to the Committee Office.**

Thank you!

\* **Note:** There are three IRBs at Harvard University. If in doubt as to the proper Committee to review your project, please ask. The Committee on the Use of Human Subjects reviews projects for the University area (The Faculty of Arts and Sciences, including Harvard College, GSAS, and the Division of Continuing Education; Radcliffe Institute; and all the non-medical professional schools). The other two IRB offices are:

Office for Research Subject Protection  
Harvard Medical School  
Gordon Hall, 25 Shattuck Street  
Boston, MA 02115  
Phone: (617) 432-3192  
Fax: (617) 432-3169  
Email: [orsp@hms.harvard.edu](mailto:orsp@hms.harvard.edu)

Human Subjects Committee  
Harvard School of Public Health  
1552 Tremont Street  
Boston, MA 02120  
Phone: (617) 384-5480  
Fax: (617) 384-5484  
Email: [hsc@hsph.harvard.edu](mailto:hsc@hsph.harvard.edu)

Figure A.8: IRB Amendment for candidate survey (Continued)

**1. Please summarize--briefly--your research procedures. What do subjects do, or what is done to them? What information is gathered? (Use additional pages if necessary.)**

Purpose:

Gender quotas for elected positions have been widely adopted; however there is little evidence that they are sufficient for empowering female leaders over the longer term or help overcome voters' prejudices against women by demonstrating the capability of female leaders. Complementing gender quotas with pro-active information campaigns that provide voters objective and verifiable information about the performance of elected male and female leaders can both help change voter stereotypes and enhance electoral accountability. In India, a third of the village council heads have been reserved for women since 1993 and the government recently committed to increase this proportion to half. The objective of this research is to empower female leadership at the grassroots by providing rigorous evidence through a randomized evaluation of a report-card based information campaign in the run up to village council elections that were held in early 2010 in the state of Rajasthan in India. It is also proposed to develop a national action plan for proactive information disclosures on performance of elected representatives, separated by gender.

Proposed Research

The proposed field experiment consisted of a report-card based pre-election information campaign focusing on the role and performance of elected village council leaders in implementing public works programs, including one of the largest employment generation schemes in India called the National Rural Employment Guarantee Scheme (NREGS). The information campaign was implemented by a local non-governmental organization (NGO) in the 2-3 weeks preceding the village council elections in the state of Rajasthan in western India (in January 2010).

The intervention was implemented in three districts (an administrative sub-unit under the state) in Rajasthan and will follow a randomized experiment design. For the purposes of this intervention, one half of the village councils was selected via lottery from the group of village councils not reserved for women in the upcoming elections, to receive the information campaign. The other half of village councils was left for control. The campaign consisted of a report card providing information on the role and performance of village council leaders and was disseminated by the collaborating NGO partner using a variety of means such as village meetings, printed calendars, street theater performances, and other forms of campaigning.

The report card consisted of 2 components:

- 1) The first concerns the role of elected village leaders in provision of public goods. In order to test how constituents react to different messages, we randomly divided the treatment sample into two subgroups and varied the message across them. In one subgroup we motivated the importance of electing effective leaders by explaining that they are responsible for public good provision including drinking water (which previous research has shown is valued more by women). In the second subgroup we motivated the same principle using the example of road construction (valued more by men).
- 2) The second component focused on key performance indicators of village leaders in implementing NREGS (such as average wage, total number of man-days of work generated, and expenditure on materials for projects), generated from the public NREGS website. In one

Figure A.8: Original IRB for candidate data (Continued)

set of report cards, only district averages was publicized. In the remaining, figures were disaggregated by village councils where the leadership position was reserved for women leaders and unreserved village councils. This will allow villagers to evaluate the effectiveness of female leaders (relative to male leaders).

This intervention was carried out only in village councils that were not reserved for women specifically in the 2010 election. Outcomes of interest included the number of women candidates, electoral successes for women, voter turnout, and incumbency patterns in these councils. These outcomes are measured by collecting basic electoral data from polling stations on number of candidates (male and female), voter turnout (male and female), etc.

We have completed one household survey within one month of the election (February-March 2010) in order to further measure the impact of this intervention. Members of randomly selected households were asked about their perception of female and male candidates, their opinion on public goods provision in their village, and their knowledge of elected representatives' responsibilities in implementing NREGS.

We are now preparing for a survey of candidates who ran in 2010 elections (15th September-15th October 2011). They will be asked about their political experience, their aspirations and motivations to run for a local mandate. Information about their campaign, the support they received and the methods they used will also be collected. We will also ask them to describe their activity in village politics after the elections. Finally, we are also planning to collect data on their social background, and about the possible involvement of family members in politics.

**2. How many subjects have completed participation in the study? 0**

**How many are currently participating?** .0

**How many have withdrawn?** 0

**Provide the reason for withdrawal.** NA

**How many have yet to be recruited?** 1750 respondents to be surveyed in September 2011.

**3. Have procedures described in your original human subjects application changed? If so, how? (Append copies of any new instructions, tests or questionnaires. List any new assistants or other investigators and their qualifications.)**

Together with this application, we would like to submit the questionnaire that will be used in September 2011. Shweta Radjwade and Jeff Mc Manus will also join the team for the survey.

**4. Since the last CUHS review, have there been any interim findings? If so, please attach a summary of the interim findings.**

No new finding.

**5. Describe any new, unanticipated risks that arose during the course of the research. What precautions have you taken to minimize the risk to subjects?**

No other risks have arisen.

Figure A.8: Original IRB for candidate data (Continued)

**6. Describe any harm (physical, psychological, social) experienced by subjects and any complaints received. What happened? How was the problem resolved? What measures have you taken to guard against similar occurrences?**

No harm was experienced by subjects.

**7. Since the last CUHS review, have there been any publications in the literature relevant to this research that contain findings that could affect subjects' willingness to participate? If so, please attach copies and a summary of the findings.**

There have been no publications in the literature since the last review.

**8. Since the last CUHS review, has there been any change in your assessment of the risk-potential benefit profile of the study, based on results to date? If so, please explain.**

No.

**9. Please attach to this application the current consent form, information sheet, or script for informing subjects about the study.**

Attached in the survey.

**10. If this study is conducted at multiple sites, please attach any reports or communications from sites that contain information about subjects' experiences, unanticipated problems, or potential risk to subjects.**

N/A

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**APPLICANT'S SIGNATURE:** \_\_\_\_\_

**DATE:**

*(For non-faculty applicants)*

**I have reviewed this completed application and I am satisfied with the adequacy of the proposed research design and the measures proposed for the protection of human subjects.**

**FACULTY SPONSOR'S SIGNATURE:** \_\_\_\_\_