

Does Political Reservation Affect Program Implementation? Evidence from India

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Abstract

Political reservation brings disadvantaged groups into leadership and can change which policies are chosen and who benefits, but less is known about how it affects program implementation. I examine how reserving village council leadership for Scheduled Castes (SCs), Other Backward Classes (OBCs), and women affects two margins of program implementation: the number of public works councils undertake and the share of those works they complete. I use administrative records that track about 10 million works across two council terms in Uttar Pradesh. The main specification exploits the rotation of reserved positions in a two-way fixed-effects design, which I complement with a fuzzy regression discontinuity design. I find that SC-reserved councils undertake about 7 percent fewer works than the same village council when its leadership position is not reserved by caste and complete a 0.8 percentage point smaller share of those works. They also generate about 11 percent fewer person-days of employment. Effects are smaller for OBC reservation, with no consistent effect for women's reservation. Under SC reservation, the implementation gap is concentrated in technically demanding community projects. The gap also narrows over time: the increase in abandonment is largest in the first year and falls by about two-thirds by the end of the term, consistent with learning..

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1 Introduction

Many countries practice political affirmative action by reserving elected offices for members of historically disadvantaged groups. India, the world’s largest democracy, reserves seats for disadvantaged castes and tribes at every level of government and for women in local councils. Such mandated representation is intended to give these groups greater influence over policy, and reserved leaders in India do shift policies and resources toward their own groups (Besley et al., 2004; Chattopadhyay and Duflo, 2004b; Pande, 2003). Whether this representation improves welfare, however, depends not only on which policies leaders choose but also on how effectively those policies are carried out. When implementation is weak, public works may be delayed or left unfinished, wasting resources and preventing citizens from receiving the intended benefits (Muralidharan et al., 2016; Rasul and Rogger, 2018; Williams, 2017). Political reservation changes who holds elected office and therefore who is responsible for delivering public programs. This raises an important question: does political reservation affect program implementation?

I study this question along two margins: the number of projects local governments undertake and the share of those projects they carry through to completion. I also examine the effects of reservation on employment and wages. The study focuses on Uttar Pradesh, India’s most populous state, whose population is comparable to that of the world’s fifth-most-populous country (Chaturvedi et al., 2025). I focus on reservation for the head of the Gram Panchayat (GP), known as the *Sarpanch*.¹ Uttar Pradesh reserves Sarpanch positions by caste and gender. Caste reservations cover Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) and are assigned using population-based rules within blocks.^{2,3} At least one-third of positions are also reserved for women, both within each caste group and overall (Chaturvedi et al., 2025).

Evidence on caste-based reservation is mixed. In state legislatures, SC reservation increased the share of government jobs reserved for SCs and STs but did not increase spending on SC welfare (Pande, 2003) or reduce poverty (Chin and Prakash, 2011). In districts with more SC-reserved assembly seats, SCs were also more likely than non-SCs to obtain public-works employment, but they experienced worse outcomes in schooling, infant mortality, and access to subsidized food (Bhat-tacharjee and Roy Chaudhuri, 2024). Similarly, SC-reserved assembly constituencies performed

¹A Gram Panchayat is an elected village council that forms the lowest tier of rural government in India. It provides local public goods and implements development programs (Besley et al., 2004).

²I do not report effects of ST reservation because ST-reserved GPs constitute a negligible share of the sample. The regressions control for it.

³A block is a subdistrict containing several GPs.

no better than comparable unreserved constituencies in literacy, employment, or village amenities after three decades (Jensenius, 2015). At the village level, however, SC leaders directed more public investment toward SC hamlets in West Bengal (Chattopadhyay and Duflo, 2004a), while SC and ST leaders increased SC/ST households’ access to housing, toilets, and utilities in three South Indian states (Besley et al., 2004). Evidence on OBC reservation also finds no adverse effect on public-works employment (Das et al., 2023a).

Evidence on women’s reservation is mixed. Women leaders invest more in public goods that women prioritize (Chattopadhyay and Duflo, 2004b) and increase women’s participation in India’s National Rural Employment Guarantee Scheme (NREGS) (Deininger et al., 2020).⁴ Other evidence points to implementation constraints. In Tamil Nadu, women-led villages built fewer schools and roads, which the authors attribute to women Sarpanches’ weaker administrative knowledge and less contact with higher-level officials (Gajwani and Zhang, 2015).

Existing studies of political reservation focus mainly on who receives public benefits, which projects are selected, and the effects on employment and broader development. Much less is known about whether reservation affects how effectively public programs are implemented. The closest evidence comes from Afridi et al. (2017), who find that women-reserved councils in Andhra Pradesh initially had more corruption and irregularities under NREGS, but that this gap narrowed with experience. My study differs in two ways. First, I examine how reservation for SCs, OBCs, and women affects the implementation of public works rather than administrative irregularities. Second, I follow more than ten million NREGS works in Uttar Pradesh from sanction to their observed implementation status and observe the employment and wages associated with each work.⁵ These data show how many projects each council undertakes and what shares are completed or abandoned. These outcomes capture a dimension of program performance not reflected in measures of spending, employment, or leakage alone.

I combine these work records, covering 49,527 GPs, with election and reservation data for the councils elected in 2015 and 2021. I exploit the rotation of reserved positions in a two-way fixed-effects design that compares the same GP across the two council terms. A remaining concern is that GPs switching reservation status may follow different implementation trends or that reservation in one term may continue to affect outcomes in the next. I therefore complement the fixed-effects

⁴NREGS guarantees rural households up to 100 days of paid unskilled work annually and finances public assets implemented largely by Gram Panchayats (Das et al., 2023b; Deininger et al., 2020).

⁵A work is sanctioned once it has received technical and financial approval from block (sub-district) and district officials.

analysis with a fuzzy regression discontinuity design that exploits the population-based rule used to assign reservation in 2015. This design compares GPs within the same administrative block that have nearly identical positions in the population ranking but sharply different probabilities of reservation. Similar estimates across the two designs strengthen confidence in the results.

I find that SC reservation reduces both the number of works councils undertake and how effectively those works are implemented. Compared with the same GP when its Sarpanch position is not reserved by caste, an SC-reserved council sanctions about 7 percent fewer works and completes about 9 percent fewer. Among sanctioned works, the share completed falls by 0.8 percentage points, while the share abandoned rises by 0.7 percentage points. The regression discontinuity design yields similar estimates, with 6.4 percent fewer works sanctioned and a 1.2 percentage point increase in abandonment at the SC cutoff. The fixed-effects estimates for OBC reservation are roughly half as large, while the discontinuity estimates are statistically insignificant. Women’s reservation, by contrast, has no meaningful effect on either margin. The estimates are small and generally insignificant across both designs, providing no consistent evidence that women’s reservation weakens implementation. These effects also have important consequences for rural employment. SC-reserved councils generate about 11 percent fewer person-days of employment, equivalent to approximately 5.4 million fewer person-days annually across all SC-reserved GPs in Uttar Pradesh.

I next examine two patterns that may help explain the SC implementation gap. First, the gap is concentrated in community projects, particularly natural resource management and rural infrastructure. In these categories, SC-reserved councils complete a smaller share of sanctioned works and abandon a larger share. The effects on individual projects, such as cattle sheds and farm ponds, are small and only marginally significant. This pattern may indicate that SC Sarpanches give greater priority to completing individual projects, which target poor and vulnerable households, many of which belong to SCs. Alternatively, caste-based resistance may make it harder for SC Sarpanches to secure cooperation from higher-level officials and residents of other castes. Such resistance would particularly hinder community projects, which require greater coordination. Second, I test whether initial inexperience contributes to the implementation gap. The abandonment gap under SC reservation is largest in the first year and declines by about two-thirds by the fifth year, consistent with leaders improving implementation as they gain experience.

I make three contributions to the literature. First, I provide new evidence on how political reservation affects performance. To my knowledge, this is the first study to examine whether reserving village council leadership changes the likelihood that sanctioned public works are carried

through to completion rather than abandoned. Second, I contribute to the mixed evidence on SC political reservation. Prior studies document gains in benefits targeted toward SCs (Besley et al., 2004; Chattopadhyay and Duflo, 2004a; Pande, 2003), but find limited or adverse effects on poverty, child health, and village infrastructure (Bhattacharjee and Roy Chaudhuri, 2024; Chin and Prakash, 2011; Jensenius, 2015). I extend this literature to the implementation of public works, showing that SC-reserved councils sanction fewer projects and complete a smaller share of them. Third, I contribute to the mixed evidence on women’s political inclusion. Although some studies find that women leaders face difficulties implementing public programs (Afridi et al., 2017; Gajwani and Zhang, 2015), I find no evidence that women’s reservation weakens the implementation of public works. This extends earlier evidence of no efficiency gap among women leaders in nine districts of Uttar Pradesh (Bose and Das, 2018) to the entire state.

These findings should not be interpreted as evidence that SC leaders are inherently less capable. If the community-project gap reflects weaker cooperation, the constraint lies in caste barriers rather than leadership ability. If it instead reflects initial inexperience, its decline over the council term suggests that the cost is temporary. Any short-run implementation costs should be weighed against the broader gains from representation. Reservation brings SCs into leadership positions they rarely win without it and has reduced dominant-caste residents’ stated intentions to discriminate (Chauchard, 2014). In Bihar, it has also narrowed SC–non-SC gaps in public goods and household assets (Sharan and Kumar, 2025). My findings therefore motivate evaluating whether targeted administrative support, particularly early in a leader’s term, can improve implementation while preserving the gains from political inclusion.

The remainder of the paper is organized as follows. Section 2 describes India’s rural employment guarantee program and the system of GP elections and political reservation. Section 3 presents the data and outcome measures. Section 4 develops the fixed-effects and fuzzy regression discontinuity designs and assesses the validity of the latter. Section 5 reports the main results and examines potential mechanisms. Section 6 concludes.

2 Background

2.1 The National Rural Employment Guarantee Scheme

The National Rural Employment Guarantee Act of 2005 legally guarantees rural households up to 100 days of paid employment annually when an adult household member volunteers to undertake

unskilled manual work.⁶ The program was introduced in three phases: the 200 poorest districts in 2006, another 130 districts in 2007, and all remaining rural districts by 2009 (Bose and Das, 2018). It has since become the world’s largest workfare program, with cumulative spending of US\$44.4 billion between 2005 and 2015 (Deininger et al., 2020). Its two central objectives are improving local public infrastructure and providing employment when agricultural labor demand is low (Bose and Das, 2018). Projects are labor-intensive by design, with materials limited to 40 percent of project costs (Afridi et al., 2017). Eligible works include water conservation, drought proofing and flood mitigation, agricultural land development, irrigation, and rural roads (Afridi et al., 2017).

The selection and implementation of these projects center on the Gram Panchayat (GP), an elected local council that may encompass more than one village. The Gram Sabha, comprising all registered voters within the GP’s jurisdiction, identifies and prioritizes works based on local needs in coordination with block- and district-level officials (Sukhtankar, 2017). The GP submits the ranked proposals to the block Programme Officer, who forwards them to the district Programme Officer for final technical and financial approval (Afridi et al., 2017). Before each financial year, officials approve a list of eligible works but do not determine when each work will begin. Instead, works are initiated as households request employment (Sukhtankar, 2017). The GP executes the works assigned to it, and the law requires at least half of all NREGS works, measured by cost, to be implemented through GPs (Afridi et al., 2017; Sukhtankar, 2017).

Final approval makes a work eligible for implementation but does not ensure that it will be started or completed. To carry out an approved work, the GP must open it, mobilize workers, maintain muster rolls, arrange materials, and resolve local disputes over land.⁷ Besides delays and funding constraints, works can therefore remain unstarted or unfinished when this local planning and coordination fails, for example if a land dispute is left unresolved or materials are never arranged.

In Uttar Pradesh, the Sarpanch is directly elected and has substantial authority over the GP’s priorities and expenditures (Chaturvedi et al., 2025). Evidence from elsewhere in India similarly shows that Sarpanches retain substantial discretion over local decisions despite requirements to consult villagers and ward members (Besley et al., 2004). Political reservation may therefore affect both which public works are selected and how effectively they are implemented.

⁶See the [National Rural Employment Guarantee Act, 2005](#).

⁷See Ministry of Rural Development, [NREGA Operational Guidelines, 2013](#).

2.2 Gram Panchayat elections and reservation

India’s 73rd constitutional amendment, adopted in 1992 and effective in 1993, established elected rural councils at the village, block, and district levels. Each council serves a five-year term (Beaman et al., 2009; Chattopadhyay and Duflo, 2004b). The Gram Panchayat (GP) forms the lowest tier. It consists of elected ward members and a chairperson. In Uttar Pradesh, GP voters elect the chairperson directly (Besley et al., 2004; Chaturvedi et al., 2025).⁸ This paper studies the councils elected in 2015 and 2021. Uttar Pradesh reserves some Sarpanch positions for Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs). Only members of the designated group may contest a caste-reserved position. Positions not reserved by caste are open to all groups (Besley et al., 2004; Pande, 2003). The caste categories are mutually exclusive, but gender reservation may overlap with any category.

For the 2015 election, caste reservations were assigned in three steps. Officials first determined the statewide number of positions for each group. The SC and ST totals were based on their population shares in the 2011 Census. The Census does not report OBC population, so officials used a 2015 caste survey and capped OBC reservation at 27 percent of all Sarpanch positions. Of the state’s 59,163 positions, 336 were reserved for STs, 12,246 for SCs, and 15,974 for OBCs. Together, caste-reserved positions accounted for 48.3 percent of the total, below the 50 percent ceiling.

Officials next divided the statewide totals among the state’s 821 blocks. ST positions were allocated according to each block’s share of the state’s ST population. For SCs, the initial quota was based on the block’s SC population share, up to the statewide share of 20.7 percent. For example, a block with an SC population share of 15 percent initially reserved about 15 percent of its positions for SCs. A block with an SC share above 20.7 percent initially reserved about 20.7 percent. This cap left some SC positions unassigned. Officials allocated them to blocks with SC shares above 20.7 percent, starting with those having the highest shares. OBC positions were based on each block’s OBC population share but were capped at 27 percent of its Sarpanch positions.

Finally, officials assigned each block’s quotas to particular GPs. They ranked eligible GPs from highest to lowest by their ST population shares and selected GPs until the block’s ST quota was filled. After removing those GPs, they ranked the remaining GPs by their SC population shares and filled the SC quota. They then repeated the procedure for OBCs using the GPs that remained.

⁸Uttar Pradesh officially calls the GP chairperson the *Pradhan*. I use *Sarpanch* throughout for consistency with the broader literature.

Thus, officials first determined how many reserved positions each block would receive and then used population rankings to determine which GPs would receive them. Reservation was therefore assigned through a population-based rule rather than a lottery.⁹

At least one-third of the positions assigned to each caste category were reserved for women from that category. Within each category, the required number of women-reserved positions was assigned to the highest-ranked GPs under the same descending population-share ranking. Among GPs not reserved by caste, additional positions were reserved for women until women accounted for at least one-third of all Sarpanch positions in the block. These positions were assigned in descending order of each GP’s population excluding SCs, STs, and OBCs. A position reserved jointly for SCs and women, for example, could be contested only by SC women, whereas a position reserved for women but not by caste was open to women of any caste ([Chattopadhyay and Duflo, 2004b](#); [Chaturvedi et al., 2025](#)).¹⁰

Reservation categories normally rotate so that, whenever possible, a GP does not receive the same category in consecutive elections. In 2015, however, the state began a new rotation cycle because a statewide reorganization had created 7,315 GPs and changed the boundaries of roughly 8,000 others. Reservation assignments from earlier elections were therefore ignored, a decision upheld by the Allahabad High Court. For the 2021 election, officials rotated reservations relative to 2015. They first assigned each category to GPs that had not received that category in 2015 and returned to previously reserved GPs only when necessary to fill the required quota. Both elections used the same population data: the 2011 Census for SCs and STs and the 2015 rapid survey for OBCs. The number of Sarpanch positions changed from 59,163 across 821 blocks in 2015 to 58,194 across 826 blocks in 2021.¹¹ I compare 49,527 GPs that can be matched across both elections.

3 Data

I use two types of data. The first consists of work-level administrative records from NREGS’s management information system (MIS).¹² The MIS lists every public work recorded in a GP since 2005, most of them under NREGS, and reports each work’s code, status, type, wage and material payments, person-days generated, and start and completion dates. I restrict the sample to works

⁹See the [Allahabad High Court judgment](#) in *Sant Ram Sharma v. State of U.P. and 5 Others* (October 9, 2015), which describes the official allocation procedure and population figures. A GP with fewer than two residents belonging to a group was ineligible for reservation for that group.

¹⁰See the [Allahabad High Court judgment \(2015\)](#) and the [2021 government order](#).

¹¹See the Government of Uttar Pradesh’s [2021 government order](#).

¹²See Ministry of Rural Development, [NREGS MIS Reports](#).

assigned to the two council terms studied: May 2016 through March 2021 for councils elected in 2015 and November 2021 through March 2026 for councils elected in 2021. The resulting sample contains about 10 million work records across 49,527 GPs.¹³

Table 1 summarizes the status of these works. Column 1 pools the two terms, and columns 2 and 3 report them separately. Panel A divides all works into three groups. New works are proposals that have not yet been approved. They account for 0.6 percent of the sample and belong almost entirely to the 2021 councils. Deleted works are records later marked for removal from the system, possibly because they were duplicates or entered by mistake. The remaining 92.6 percent are sanctioned works. These works were proposed by the GP and, after review by block and district officials, received technical approval. I restrict the main analysis to sanctioned works and exclude records marked New or Deleted because new works have not yet been sanctioned and deleted records cannot be assigned an implementation outcome.

Panel B classifies sanctioned works by their implementation status. Approved works remain open but had not started by the time of data collection, so they may still begin. Ongoing works have started but are not yet finished and include temporarily suspended works. Completed works were carried out to completion. Abandoned works were approved but closed without being carried out.¹⁴

Based on these statuses, I construct three binary outcomes for each sanctioned work:

$$\begin{aligned}\text{Ongoing}_w &= \mathbf{1}\{\text{status}_w \in \{\text{Ongoing}, \text{Suspended}\}\}, \\ \text{Completed}_w &= \mathbf{1}\{\text{status}_w \in \{\text{Physically Completed}, \text{Completed}\}\}, \\ \text{Abandoned}_w &= \mathbf{1}\{\text{status}_w = \text{Closed}\}.\end{aligned}$$

The remaining sanctioned works were approved but had not started. Each outcome equals zero or one, so its mean is the share of sanctioned works with that status. Panel B also reports the share started, which is the sum of ongoing and completed works.

Of all sanctioned works, 76.0 percent were started. This total consists of 69.8 percent that were completed and 6.2 percent that were still ongoing. Another 19.6 percent were abandoned, while the remaining 4.4 percent were approved but had not started. The share completed is lower under

¹³The sample excludes 30 GPs with no works in at least one term, since a term without works leaves no record: 23 have works in only one term and 7 have none in either. For consistency, the regression discontinuity analysis in Section 4.2 also excludes the 17 GPs with no works under the 2015 councils.

¹⁴Abandoned works carry the status “Closed” in the MIS. Of the nearly 2 million abandoned works, 99.99 percent record no payment to workers or vendors.

the 2021 councils than under the 2015 councils, at 61.4 versus 77.6 percent, because more works from the later term were still approved or ongoing. Abandonment, by contrast, is similar across the two terms, at 18.6 and 20.6 percent.

Table 2 describes the size, composition, and outcomes of works by type. The average completed work received Rs. 84,000 in wage and material payments and generated 283 person-days of employment. From the 2015 to the 2021 councils, the share of works providing individual assets fell from 44.4 to 34.4 percent, while the share devoted to natural resource management rose from 33.1 to 47.2 percent. Outcomes also differ sharply by type. Among sanctioned individual assets, 85.3 percent were completed and 9.5 percent were abandoned. Abandonment reached 25.3 percent for natural resource management and 29.3 percent for rural infrastructure. It occurs in every detailed work category, ranging from 14.0 percent for works on individual land to 43.6 percent for rural sanitation.

Figure A1 shows that abandonment also varies widely across GPs. The middle 80 percent of GPs have abandonment rates between 6 and 38 percent, whereas averages across GPs in the same block are much more concentrated. Since GPs within a block share the same block administration, this variation points to an important role for implementation at the GP level and leaves scope for the Sarpanch to influence whether sanctioned works are completed or abandoned.

The second source of data covers the 2015 and 2021 GP elections. I use the election records assembled by Narasimhan and Weaver (2024), which report the winner of each GP election, the winner’s caste, education, age, and other characteristics, and whether the Sarpanch position was reserved. I supplement these records with data from Chaturvedi et al. (2025), which combine election information with population from the 2011 Census and the 2015 caste survey for Uttar Pradesh.

Table 3 summarizes the election data. Panel A reports the share of Sarpanch positions reserved for each group, and Panel B describes the winners. Table 4 reports how reservation status changed between the two elections. Two patterns stand out. First, reservation strongly affects who holds office. Women won 98.4 percent of positions reserved for women, compared with 18.0 percent of positions not reserved for women. Similarly, SC candidates won 98.1 percent of SC-reserved positions but only 4.9 percent of positions not reserved by caste. OBC candidates won 98.8 percent of OBC-reserved positions and 39.3 percent of positions not reserved by caste. Reservation therefore changes the caste of the elected Sarpanch less sharply for OBCs than for SCs because OBC candidates frequently win positions without caste reservation.

Second, reservation rotates extensively across GPs. Among the 49,527 GPs observed in both terms, reservation status changed for 57 percent under women’s reservation, 41 percent under SC reservation, and 54 percent under OBC reservation. The numbers entering and leaving each category were nearly equal, and only 7 GPs remained SC-reserved and 18 remained OBC-reserved in both terms. This rotation provides the within-GP variation used in the main analysis, allowing me to compare the same GP under reserved and unreserved Sarpanch positions.

4 Empirical strategy

I use two complementary research designs. The main specification is a two-way fixed-effects design with GP and time fixed effects. It compares the same GP across the 2015 and 2021 council terms when its reservation status changes. This design uses both council terms and the full sample. I complement this analysis with a fuzzy regression discontinuity design that compares similar GPs that narrowly did and did not qualify for reservation in 2015.

4.1 Two-way fixed-effects design

The main analysis addresses two questions. First, does reservation change how many works a council sanctions? Second, among the works a council sanctions, does reservation change the shares that are ongoing, completed, or abandoned? The first question uses one observation per GP and council term, while the second uses one observation per sanctioned work.

For GP g in council term t , I estimate

$$N_{g,t} = \alpha_g + \delta_t + \beta \text{Women}_{g,t} + \theta_{SC} \text{SC}_{g,t} + \theta_{OBC} \text{OBC}_{g,t} + \theta_{ST} \text{ST}_{g,t} + \varepsilon_{g,t}, \quad (1)$$

where $N_{g,t}$ is the number of works per year that the council sanctioned during the term; $\text{Women}_{g,t}$, $\text{SC}_{g,t}$, $\text{OBC}_{g,t}$, and $\text{ST}_{g,t}$ are indicators equal to one if the Sarpanch seat of GP g was reserved for that group in term t ; α_g are GP fixed effects; δ_t is a term fixed effect; and $\varepsilon_{g,t}$ is an error term.¹⁵ Works are counted per year because the two terms’ windows differ in length (59 and 53 months), and the term fixed effect absorbs other differences common to a term. I report each coefficient as a percent of the mean for GP-terms not reserved by caste. Standard errors are clustered by GP.

¹⁵ Each term’s window opens six months after the new councils took office, so that works inherited from the previous Sarpanch’s pipeline are not attributed to the new one. The election month of April 2021, which also carries placeholder start dates for works that never began, is excluded.

The number of sanctioned works does not show what happened to those works after approval. I therefore ask whether reservation also affects how effectively sanctioned works are implemented, that is, whether they are completed or abandoned. To do so, I estimate a second specification using individual sanctioned works. For work w in GP g , assigned to council term $t(w)$ and with a recorded start date in financial year $y(w)$, I estimate

$$Y_w = \alpha_g + \delta_{y(w)} + \beta \text{Women}_{g,t(w)} + \theta_{SC} \text{SC}_{g,t(w)} + \theta_{OBC} \text{OBC}_{g,t(w)} + \theta_{ST} \text{ST}_{g,t(w)} + \varepsilon_w, \quad (2)$$

where Y_w is one of the three outcomes defined in Section 3: Ongoing, Completed, or Abandoned. The specification includes GP fixed effects, α_g , and work start-year fixed effects, $\delta_{y(w)}$. Since the outcomes are binary, the coefficients measure changes in the corresponding shares of sanctioned works and are reported in percentage points.

The coefficients in equations (1) and (2) are identified by GPs whose Sarpanch reservation status changed between the two council terms. GP fixed effects absorb all characteristics that remain constant over time, including caste composition and long-standing administrative capacity. In equation (1), the term fixed effect absorbs changes common to all GPs in a council term. In equation (2), the start-year fixed effects compare works with the same recorded start year, holding constant work age and shocks common to that year. The work-level specification uses all 10.1 million sanctioned works in the 49,527 GPs observed in both terms.

The assignment rule strengthens the case for this comparison. Both elections used the same population data, and changes in reservation status followed predetermined population rankings, block quotas, and previous reservation status rather than past implementation. The identifying assumption is that, after accounting for these fixed effects, changes in reservation status were not systematically related to other changes affecting implementation. All regressions control for ST reservation, but I do not report its coefficient because few GPs are reserved for STs.

Three issues affect interpretation. First, work status is observed in August 2026, so works started later have had less time to reach a final status. Start-year fixed effects address this difference by comparing works with the same recorded start year. The estimates therefore do not simply reflect the shorter follow-up period for works under the 2021 councils. Nevertheless, the outcomes describe each work’s status in August 2026 rather than its eventual status. Second, reservation may change the types of projects a GP undertakes, and abandonment rates differ widely across project types (Table 2). A higher abandonment rate could then reflect a shift toward riskier projects rather

than weaker implementation. To separate the two, I also estimate equation (2) separately within each major work category, comparing projects of the same type. Third, reservation status changes in both directions. Some GPs entered a reservation category in 2021, while others left it. If the effect of entering reservation differs from the effect of leaving it, the pooled estimate may conceal meaningful differences (de Chaisemartin and D’Haultfoeuille, 2020). I therefore also estimate the effects of entering and leaving reservation separately, comparing each group with GPs that were never reserved for that category.

4.2 Fuzzy regression discontinuity design

The fixed-effects design assumes that, after accounting for GP and time fixed effects, no other systematic changes within a GP occur at the same time as its reservation status changes and affect the outcomes. Two features of the rotation rule might raise concerns about this assumption. First, reservation is assigned using population rankings rather than randomly. Although GP fixed effects absorb population composition itself, GPs with different SC or OBC population shares may experience different changes in program implementation over time. Since population shares also influence which GPs switch reservation status, the estimates could incorrectly attribute these different trends to reservation. Second, reservation rotates across elections. A GP reserved for a group in 2015 was generally not reserved for the same group in 2021. If the effects of the 2015 reservation continued into the next term, perhaps through unfinished works, outcomes in 2021 could reflect both current and past reservation. The fixed-effects estimate might then combine the two effects.

I therefore complement the fixed-effects analysis with a fuzzy regression discontinuity design for the councils elected in 2015. The design compares GPs in the same block and council term that have nearly identical population rankings but different predicted reservation statuses. Since it relies on neither changes across terms nor the rotation of reserved positions, it provides an independent test of the main results.

I apply this design only to the 2015 election. Reservation normally rotates relative to the previous election, so a GP’s assignment depends partly on its earlier reservation status. The 2015 election was an exception. Following a statewide reorganization of GPs, reservations were assigned without regard to the 2010 assignments. A GP’s position relative to the 2015 cutoff therefore depended only on its population measure. Rotation resumed in 2021, when each category was assigned first to GPs that had not held it in 2015. A discontinuity based on the 2021 ranking would

therefore mix the effect of current reservation with the influence of previous reservation status.

As described in Section 2.2, officials ranked eligible GPs within each block by the population measure relevant to each reservation category and assigned positions from the top of the ranking until the block’s quota was filled. The lowest-ranked GP predicted to receive a reserved position and the highest-ranked GP predicted not to receive one have similar population measures but different predicted reservation statuses.

For clarity, I describe the design for one reservation category and suppress the category index. Let P_g denote the population measure used to rank GP g . For block b , I define the cutoff as the midpoint between the last GP predicted to be reserved and the first GP predicted not to be reserved:

$$c_b = \frac{P_b^{\text{last}} + P_b^{\text{first}}}{2}. \quad (3)$$

The running variable is the GP’s distance from its block-specific cutoff:

$$X_g = \frac{P_g - c_b}{\sigma}, \quad (4)$$

where σ is the standard deviation of that ranking measure among all eligible Gram Panchayats in the state. Because each reservation category is ranked on a different measure, σ is computed separately for each, so that distance from the cutoff is expressed in comparable units. Higher-ranked GPs are predicted to be reserved, so predicted assignment is

$$A_g = \mathbf{1}\{X_g \geq 0\}. \quad (5)$$

Centering the running variable at each block’s cutoff allows me to pool GPs across blocks. The RDD data cover 48,477 GPs in 810 of the state’s 821 blocks. The sample is smaller than the main sample because reconstructing the assignment rule requires linking each GP to the 2015 State Election Commission records. This additional linkage is not required for the main specification. The estimation sample also differs across reservation categories because each category ranks a different set of eligible GPs and uses a different bandwidth.

I estimate separate designs for SC, OBC, and women’s reservation. ST reservation is too rare to analyze separately, but I account for it when reconstructing the assignment process. The SC design ranks GPs remaining after the ST assignment by their SC population shares. The OBC design ranks GPs remaining after the ST and SC assignments by their OBC population shares.

For women’s reservation within a caste category, GPs are ranked by that group’s population share. GPs not reserved by caste are ranked by their population outside the SC, ST, and OBC groups.

Let Q_g denote actual reservation status. If the reconstructed assignment exactly reproduced the official allocation, Q_g would equal predicted assignment, A_g . In practice, the two do not always coincide.¹⁶ Predicted assignment matches actual reservation for 99.5 percent of GPs for SC reservation, 99.0 percent for OBC reservation, and 97.9 percent for women’s reservation. Within 0.1 standard deviations of the cutoff, the corresponding match rates are 95.5, 88.6, and 91.0 percent.

I therefore use predicted assignment as an instrument for actual reservation. The first-stage equation is

$$Q_g = \gamma A_g + \beta_1 X_g + \beta_2 A_g X_g + \eta_b + u_g, \quad (6)$$

where η_b denotes block fixed effects. The interaction between A_g and X_g allows the slope of the running variable to differ across the cutoff.

Figure 1 plots the share of GPs actually reserved against the running variable. The reserved share is close to zero below the cutoff and rises sharply at the threshold. At the bandwidths used for estimation, the first-stage discontinuity, γ , is 0.96 for SC reservation, 0.76 for OBC reservation, and 0.72 for women’s reservation. Predicted assignment therefore produces a large change in actual reservation, although compliance with the rule is not perfect.

The first outcome is the number of works the GP sanctioned per year under the 2015 councils. The remaining outcomes are the shares of its sanctioned works that were ongoing, completed, or abandoned. I estimate the following outcome equation:

$$Y_g = \tau Q_g + \pi_1 X_g + \pi_2 A_g X_g + \eta_b + \varepsilon_g, \quad (7)$$

where actual reservation, Q_g , is instrumented with predicted assignment, A_g , using equation (6). The terms $\pi_1 X_g$ and $\pi_2 A_g X_g$ allow the relationship between the outcome and the running variable to differ across the cutoff. Block fixed effects account for block-level differences and ensure that GPs are compared within the same block.

Under the standard continuity, exclusion, and monotonicity assumptions, τ identifies the local average effect of reservation for GPs whose actual reservation status changes at the predicted-assignment cutoff. Continuity requires that, without a change in reservation status, outcomes

¹⁶For SC and OBC reservation, the statutory formulas reproduce the official quotas in all 821 blocks. The remaining discrepancies concern which GPs receive those positions. One likely source is the mapping of 2011 Census population counts to GP boundaries that changed in 2014–15, since small differences can alter rankings near the cutoff.

would vary smoothly at the cutoff. Exclusion requires predicted assignment to affect the outcomes only through actual reservation. Monotonicity requires that crossing the cutoff cannot make a GP less likely to be reserved.

I estimate equation (7) on GPs within the selected bandwidth using a triangular kernel and cluster standard errors by block. For the number of works sanctioned, each GP is weighted only by the kernel. Since larger GPs undertake more works, this regression controls for GP population in the 2011 Census, which was measured before reservation was assigned (Calonico et al., 2019). I report the estimate as a percentage of the average number of works just below the cutoff.

For the three implementation shares, I multiply the kernel weight by the number of sanctioned works in the GP. This gives the same relative weight to works as a work-level regression, making the estimates comparable to equation (2). The two designs are not identical, however, because the discontinuity specification cannot include work start-year fixed effects.

The bandwidth determines which GPs enter the local comparison. Following Calonico et al. (2014), I use a mean-squared-error-optimal bandwidth, which balances the bias from a wider window against the imprecision from a narrower one. Since the optimal bandwidth is outcome specific, selecting it separately for every outcome would change the estimation sample across columns. I instead select one bandwidth for each reservation category using the abandonment rate and apply it to all outcomes, including the number of works. Every estimate for a given reservation category therefore uses the same range of the running variable. The selected bandwidths are 0.668 standard deviations for SC reservation, 0.331 for OBC reservation, and 0.318 for women’s reservation.¹⁷ I also report estimates using one-half and one-quarter of each selected bandwidth.

4.3 Validity of the discontinuity design

The discontinuity design requires that GPs just above and below the cutoff be comparable and that they could not precisely manipulate their position around the cutoff. Such manipulation is unlikely in this setting. The ranking measures come from the 2011 Census and the 2015 caste survey, both of which predate the reservation assignments. Each block’s cutoff also depends on the rankings of all GPs in that block, limiting any single GP’s ability to determine its position relative to the cutoff. Related studies similarly treat official population counts used to allocate government programs as difficult to manipulate (Asher and Novosad, 2020; Burlig and Preonas, 2024).

¹⁷Selecting the bandwidth using the completion rate instead gives 0.673 for SC reservation, 0.286 for OBC reservation, and 0.315 for women’s reservation.

Figure 2 shows no bunching just above the cutoff. If GPs could manipulate their population rankings to obtain reservation, unusually many GPs would appear immediately above the cutoff, where the assignment rule predicts reservation. Instead, the estimated density is lower immediately above the cutoff in all three designs. This decline appears to arise from how the cutoff is constructed and from the estimator using a narrower bandwidth below the cutoff.¹⁸

GPs just above and below the cutoff are also similar in characteristics measured before the 2015 councils took office (Table A1). These characteristics include population, local infrastructure recorded in the 2011 Census, and NREGS employment during 2012–2014. For SC reservation, where the main effects appear, none of the 16 differences is statistically significant. Across all three reservation categories, only 3 of the 48 differences are significant at the 10 percent level. Joint tests also fail to reject balance for every category. The most relevant difference is at the OBC cutoff, where GPs just above the threshold have about 6 percent fewer residents in total. Since larger GPs sanction more works, the regressions for the number of works control for GP population.

The predetermined ranking measures, absence of excess mass above the cutoff, and balance in pre-assignment characteristics support the continuity assumption. The cutoff has no administrative role beyond assigning reservation, which supports the exclusion restriction. Crossing the SC cutoff, however, also lowers the chance that a seat is reserved for women, since women’s seats within each caste category go to the highest-ranked GPs. Section 5.3 shows that the SC estimates hold when GPs reserved for women are dropped. The assignment rule and large positive first-stage discontinuities make violations of monotonicity unlikely.

5 Results

5.1 The number of works

SC reservation reduces the number of works a council sanctions. Figure 3 presents estimates of equation (1), while Appendix Table A2 reports the corresponding coefficients. A typical GP without caste reservation sanctions about 22.4 works a year. When its Sarpanch position is reserved for SCs, it sanctions about 1.5 fewer, a decline of 6.9 percent. OBC reservation reduces the number sanctioned by 3.6 percent, about half the SC effect. Women’s reservation has no measurable effect,

¹⁸Using the same bandwidth on both sides, the discontinuity for SC reservation is no longer statistically significant ($p = 0.47$). The corresponding p -values are 0.08 for OBC reservation and 0.05 for women’s reservation. For women’s reservation, the discontinuity is concentrated among GPs not reserved by caste, which are ranked by their population outside the SC, ST, and OBC groups. No discontinuity appears among SC- or OBC-reserved GPs.

with an estimate equal to 0.4 percent of the mean and statistically insignificant. The SC and OBC estimates remain almost unchanged when block-by-term fixed effects replace the term fixed effects and absorb shocks shared by GPs in the same block and term. Both estimates also remain significant at the 1 percent level when standard errors are clustered by block (Table A2, columns 2 and 3).

The decline in sanctioned works under caste reservation can arise at several points in the approval process. As described in Section 2.1, a work is proposed in the Gram Sabha, submitted by the GP to block and district officials, and sanctioned only after engineers approve its technical design. Since the comparison holds the GP itself fixed, the decline reflects something that changes with the leadership, and three explanations stand out. First, the GP may submit fewer proposals. Residents may bring fewer works to the Gram Sabha, perhaps because they trust the new leadership less, or the council itself may prepare fewer proposals. Second, more of the GP’s proposals may be rejected because they do not meet the program’s rules. NREGS caps material costs at 40 percent of total costs and requires that at least 60 percent of spending in a district go to works linked to agriculture and natural resources. Each work must also be technically feasible: a pond, for example, needs workable dimensions. Third, block officials or engineers may discriminate against SC or OBC Sarpanches and approve fewer of their proposals. The number of works sanctioned, however, is only part of the story. Next, I examine what happened to the works that councils did sanction.

5.2 Implementation of sanctioned works

Caste reservation also weakens the implementation of sanctioned works. Table 5 reports estimates of equation (2) for three outcomes: the shares of sanctioned works that are ongoing, completed, and abandoned. When a GP’s Sarpanch position is reserved for SCs, its sanctioned works are 0.76 percentage points less likely to be completed and 0.67 percentage points more likely to be abandoned. Relative to the sample means of 69.8 and 19.6 percent, completion falls by 1.1 percent and abandonment rises by 3.4 percent. The gap does not reflect works that are still under way: the effect on the share of ongoing works is close to zero and statistically insignificant.¹⁹ For OBC reservation, the estimates are about half as large.²⁰ Women’s reservation does not affect abandonment.

¹⁹The remaining sanctioned works have been approved but not yet started. SC reservation raises their share by 0.14 percentage points (standard error 0.04), so slower starts explain only a small part of the gap.

²⁰The SC effect is similar on seats also reserved for women. Of the 20,451 SC-reserved GP-terms, 7,236 are also reserved for women. SC reservation raises abandonment by 0.6 percentage points without women’s reservation and by 0.8 percentage points with it, and lowers completion by 0.8 and 0.6 percentage points, respectively (Table A3). Neither

Its 0.25 percentage point lower completion rate is partly matched by a 0.12 percentage point higher share of ongoing works, consistent with a small delay rather than a failure to carry out works. The SC estimates are nearly unchanged with block-by-start-year fixed effects and with standard errors clustered by block (Table A4).

The main analysis excludes works marked Deleted. These records are most likely duplicates or entries made in error (Section 3). Including them leaves the results nearly unchanged (Table A5). If anything, excluding them makes the main estimates conservative. SC and OBC reservation slightly raise the share of works deleted, so if some deleted records were in fact failed projects, the true implementation gap would be larger than the one reported here. Table A6 separates GPs that entered a reservation category in 2021 from those that left it. The SC result is driven mainly by GPs entering SC reservation, while the OBC result is driven mainly by GPs leaving OBC reservation.

Taken together, the results show that caste-reserved councils sanction fewer works and, among the works they sanction, complete a smaller share and abandon a larger share. These differences are more pronounced under SC reservation than under OBC reservation. Both effects reduce the number of completed projects in the village. An SC-reserved council completes about 1.4 fewer works a year than the same GP when its position is not reserved by caste, roughly 9 percent fewer (Table 6, column 1).

I also measure the employment forgone, since providing guaranteed employment is one of the main objectives of large-scale programs like NREGS. I find that an SC-reserved council provides about 530 fewer person-days of employment a year, roughly 11 percent fewer, and pays about Rs. 107,000 less in wages (Table 6, columns 2 and 3). Employment falls by more than the number of completed works, consistent with the gap being concentrated in large community works, which employ more workers (Section 5.4). For OBC reservation, the employment effects are about a third as large, and women’s reservation has no measurable effect. Across the roughly 10,000 SC-reserved GPs in each term, the forgone employment amounts to about 5.4 million person-days and Rs. 1.1 billion in wages a year. Thus, the implementation gap under SC reservation means not only fewer public assets but also less work and income for rural households.

5.3 Evidence from the regression discontinuity design

I complement the main estimates with the fuzzy regression discontinuity design based on the 2015 assignment rule, re-estimating the effects of reservation on both the number of works sanctioned

difference is statistically significant.

and the implementation of sanctioned works. The design compares GPs just above and below the assignment cutoff, which have similar population shares but different chances of being reserved. Since it uses only the 2015 assignment, it does not depend on how reservation rotated between the two terms.

Starting with the number of works, the discontinuity design confirms the decline under SC reservation. Panel A of Figure 4 reports the estimates, and Panel B plots the number of works sanctioned per year against the running variable. At the SC cutoff, reservation reduces the number of works sanctioned by 1.5 per year, or 6.4 percent of the mean just below the cutoff (23.2 works per year). The estimate grows somewhat as the bandwidth narrows, to 7.2 percent at half and 8.5 percent at a quarter of the MSE-optimal bandwidth, and it is 6.4 percent when the regression also controls for the number of villages, GP area, and NREGS person-days in 2012–2014 (Table A7). All of these SC estimates are significant at the 1 percent level. The OBC estimates are small and statistically insignificant at every bandwidth. For women’s reservation, the estimate suggests a decline of about 4 percent, marginally significant at the MSE-optimal bandwidth and significant with the extra controls, but it fades at narrower bandwidths and does not appear in the fixed-effects estimates.

Turning to implementation, Table 7 shows the same pattern as the fixed-effects estimates, although the effects are somewhat larger. SC reservation lowers the share of sanctioned works completed by 1.2 percentage points, from a mean of 78.0 percent just below the cutoff, and raises the share abandoned by 1.2 percentage points, from a mean of 20.2 percent. The share of ongoing works does not change. The effects grow slightly as the bandwidth narrows, to 1.4 and 1.5 percentage points at a quarter of the bandwidth, and Figure 5 shows the corresponding jumps at the cutoff. The SC estimates also hold when the GPs closest to the cutoff, where any sorting would show up, are dropped: excluding GPs within 0.02 or 0.05 standard deviations of the cutoff leaves them between 0.9 and 1.1 percentage points, all statistically significant (Table A8). For OBC and women’s reservation, the completion and abandonment estimates are smaller, none is statistically significant at any bandwidth, and the jumps in the figure are small.

The assignment rule also links women’s reservation to caste reservation, since within each caste category the seats for women go to the highest-ranked GPs. As a result, SC reservation lowers the chance that a seat is also reserved for women by 21 percentage points at the cutoff, where about a quarter of the GPs just below are reserved for women (Table A9, column 1). This link does not drive the SC estimates. When all GPs reserved for women are dropped, SC reservation still lowers

the share of sanctioned works completed by 1.0 percentage point, raises the share abandoned by 1.0 percentage point, and reduces the number of works sanctioned by 7.7 percent, all significant at the 1 percent level (Panel B). The OBC estimates remain small and statistically insignificant.

The discontinuity estimates support the main results, especially for SC reservation. The estimated decline in sanctioned works is nearly identical in the two designs, at 6.4 percent in the discontinuity design and 6.9 percent in the fixed-effects design. The implementation effects are somewhat larger in the discontinuity design, but the two designs identify different effects: the discontinuity design estimates a local effect for GPs near the assignment cutoff, whereas the fixed-effects design averages across all GPs whose reservation status changed. Nevertheless, every fixed-effects implementation estimate falls within the 95 percent confidence interval of the corresponding discontinuity estimate. Since the two designs use different sources of variation, their similar results make it unlikely that the fixed-effects estimates reflect different trends across GPs or carryover effects from earlier reservation.

5.4 Mechanisms

The two designs agree that SC reservation lowers completion and raises abandonment among sanctioned works. This gap is notable because SC-reserved councils also sanction fewer works, which might otherwise ease implementation constraints. Several mechanisms could explain the gap. SC Sarpanches may have greater difficulty mobilizing workers, arranging materials, or resolving disputes over land and project sites. Households may also be less willing to request employment or participate if they have less trust in the leadership. Caste-based resistance may further limit cooperation with SC leaders. SC leaders may also give priority to works that benefit their own constituents, such as assets for poor households. Finally, newly elected SC Sarpanches may initially be less familiar with administrative procedures. The data do not allow me to test each explanation directly. Instead, I examine two of their implications. If coordination, cooperation, or leaders' priorities drive the gap, it should be larger for community projects than for individual assets. If inexperience is the problem, the gap should narrow as Sarpanches gain experience.

Priority of SC Sarpanch

The implementation gap under SC reservation is concentrated in community projects rather than in projects for individual households. Table 8 reports separate estimates by work category for the shares of sanctioned works that were completed and abandoned. For natural resource management

projects on common land, SC reservation lowers the share of sanctioned works completed by 1.4 percentage points and raises the share abandoned by 1.0 percentage point. The effects are larger for rural infrastructure, including roads, drains, and public buildings, where completion falls by 1.8 percentage points and abandonment rises by 1.7 percentage points. For individual assets built on household land, both effects are small, at 0.3 and 0.2 percentage points, and only marginally significant. The overall implementation gap therefore arises primarily in broadly shared projects that require greater coordination and administrative effort. One reason might be that individual assets largely go to households below the poverty line, many of them SC, so SC leaders may have stronger reasons to complete them.

This distinction is consistent with earlier evidence that political reservation can produce different outcomes for targeted and broadly shared goods. [Pande \(2003\)](#) finds that SC reservation increases policies targeted directly toward SCs, particularly public-sector job quotas, without a comparable increase in general spending. [Bhattacharjee and Roy Chaudhuri \(2024\)](#) similarly find that greater SC representation improves access to targetable workfare employment but is associated with worse broad-based outcomes such as schooling, health, and subsidized food.

Inexperience

A possible explanation for the implementation gap is that newly elected SC Sarpanches are initially less familiar with administrative procedures. If so, the gap should be largest early in the council term and narrow as they gain experience. [Table 9](#) tests this prediction by interacting SC reservation with the number of years since the Sarpanch took office. In the first year, SC reservation increases abandonment by 0.9 percentage points, but this effect declines by 0.15 percentage points with each additional year. By the fifth year, roughly two-thirds of the initial gap has disappeared. This pattern is consistent with SC Sarpanches learning the administrative process as they gain experience.

6 Conclusion

Political inclusion cannot deliver its intended benefits unless public programs are implemented effectively. I examine whether political reservation affects how effectively public works are implemented at the Gram Panchayat level. I combine administrative records of about 10 million public works with election and reservation data for the councils elected in Uttar Pradesh in 2015 and 2021. The

rotation of reserved positions allows me to compare implementation within the same GP across reserved and unreserved council terms using a fixed-effects design. I complement it with a fuzzy regression discontinuity design based on the 2015 assignment rule.

Across both research designs, SC reservation reduces both the number of works councils undertake and the share they carry through to completion. SC-reserved councils sanction about 7 percent fewer works than the same GP when its position is not reserved by caste, complete about 9 percent fewer, and generate about 11 percent fewer person-days of employment. Among the works they sanction, fewer are started and completed, while more are abandoned. These differences are concentrated in community projects, particularly natural resource management and rural infrastructure, and are much smaller for public works that benefit marginal households. The implementation gap is largest early in the council term and narrows over time, consistent with a transition cost that declines as SC-reserved councils gain administrative experience. The estimates for OBC reservation are smaller, while women’s reservation has little or no effect on public-work implementation. Across the roughly 10,000 SC-reserved councils in each term, this gap in performance amounts to about 5.4 million person-days of forgone employment each year.

I do not interpret these findings as evidence that political reservation reduces welfare overall. Reservation can improve welfare by bringing disadvantaged groups into political office, directing resources toward marginalized households, and reducing caste-based discrimination. Nor does the implementation gap imply that SC leaders are inherently less capable. Instead, the findings identify a distinct challenge: political inclusion alone may not ensure that approved public works are effectively implemented.

Implementing public works is a central responsibility of village council leaders. The results therefore motivate greater attention to program delivery when designing policies that accompany political reservation. An important question for future research is whether targeted administrative support, particularly early in the terms of leaders elected to caste-reserved positions, can reduce implementation gaps while preserving the broader gains from political inclusion.

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Tables and Figures

Table 1. Work Status and Outcome Rates 

	(1) All	(2) 2015 councils	(3) 2021 councils
<i>Panel A. All works (percent)</i>			
New	0.6	0.0	1.3
Deleted	6.8	9.7	3.5
Sanctioned	92.6	90.3	95.1
<i>Panel B. Among sanctioned works (percent)</i>			
Approved	4.4	0.1	9.0
Started	76.0	79.4	72.3
Ongoing	6.2	1.8	10.9
Completed	69.8	77.6	61.4
Abandoned	19.6	20.6	18.6
Number of works	10,964,069	5,838,266	5,125,803
Number of GPs	49,527	49,527	49,527

Notes: The table shows the status of NREGS works in the 49,527 GPs observed in both council terms. Column 2 covers works dated May 2016 to March 2021, under the councils elected in 2015; column 3 covers works dated November 2021 to March 2026, under the councils elected in 2021. Panel A splits all works into new, deleted, and sanctioned works; sanctioned works are all works except new and deleted ones. Panel B splits sanctioned works into three groups: approved works, which have not started; started works, which are either ongoing or completed; and abandoned works, which were closed without being carried out. Ongoing works include suspended works, where work has been halted; these make up 0.9 percent of ongoing works. In the program records (MIS), completed works are those marked Completed or Physically Completed, and abandoned works are those marked Closed. Works under the 2015 councils have had more time to finish, so almost none is still new or approved, and few are ongoing.

Table 2. Works by Type 

	Work composition (%)		Outcomes among sanctioned works (%)		Means among completed works	
	2015 (1)	2021 (2)	Completed (3)	Abandoned (4)	Payments (Rs. '000) (5)	Employment (person-days) (6)
<i>Panel A. Master category</i>						
A. Natural resource management	33.1	47.2	59.8	25.3	118.4	526
B. Individual assets	44.4	34.4	85.3	9.5	28.1	111
C. Self-help group infrastructure	0.0	0.0	40.1	48.3	246.7	177
D. Rural infrastructure	22.5	18.4	57.5	29.3	185.1	315
<i>Panel B. Work category</i>						
Works on individual land	51.1	39.5	80.4	14.0	25.4	101
Land development	17.2	24.7	65.1	23.5	116.3	533
Rural connectivity	8.1	9.0	59.5	20.6	240.7	273
Drought proofing	5.8	7.6	42.7	28.5	28.9	109
Water conservation and harvesting	5.0	5.6	59.0	27.4	238.3	1,082
Micro irrigation	2.9	5.3	69.3	21.6	112.4	432
Flood control and protection	3.8	4.0	67.7	22.8	150.0	560
Rural sanitation	3.6	0.5	52.1	43.6	27.9	86
Anganwadi and other infrastructure	1.3	2.5	52.0	28.5	439.1	325
Renovation of water bodies	1.2	1.4	62.2	22.7	245.6	1,059
Other	0.2	0.0	75.4	22.2	83.5	219
All works	100.0	100.0	69.8	19.6	84.0	283

Notes: The sample covers NREGS works in the 49,527 GPs observed in both council terms. Columns 1 and 2 report the distribution of all works, including new and deleted ones, across categories under the councils elected in 2015 and 2021, respectively. Columns 3 to 6 pool the two terms. Columns 3 and 4 report, within each category, the percentage of sanctioned works that were completed (marked Completed or Physically Completed in the MIS) and the percentage that were abandoned (marked Closed). Column 5 reports mean wage and material payments per completed work, in thousands of rupees, and column 6 reports mean person-days of employment per completed work. Panel A classifies works by MIS master category. Individual assets are assets for vulnerable households on their own land, and self-help group infrastructure is shared infrastructure for self-help groups. Panel B uses the MIS work categories. “Other” combines other works, rural drinking water, fisheries, playgrounds, coastal-area projects, and Bharat Nirman Sewa Kendras. The two classifications are not nested: a work category may contain works from several master categories.

Table 3. Seat Reservation and Elected Sarpanches ↔

	(1) All	(2) 2015 councils	(3) 2021 councils
<i>Panel A. Seat reservation (percent of GPs)</i>			
Reserved for women	33.5	33.4	33.6
Reserved for SC	20.6	20.8	20.5
Reserved for OBC	27.0	27.2	26.9
Reserved for ST	0.5	0.5	0.5
Not reserved by caste	51.8	51.5	52.1
<i>Panel B. Elected Pradhan</i>			
Woman (percent)	44.9	43.6	46.3
On seats reserved for women	98.4	98.3	98.5
On seats not reserved for women	18.0	16.2	19.8
SC (percent)	23.2	22.3	24.1
On seats reserved for SC	98.1	98.1	98.1
On seats not reserved by caste	4.9	2.6	7.2
OBC (percent)	47.3	40.6	54.0
On seats reserved for OBC	98.8	98.6	99.0
On seats not reserved by caste	39.3	26.3	52.1
Age (years)	41.4	41.1	41.8
Education (percent)			
Below high school	58.6	63.2	53.7
High school or intermediate	25.9	22.9	29.0
Graduate or above	15.5	13.8	17.3
Number of GP-terms	99,054	49,527	49,527

Notes: Each observation is a GP-term, and the sample contains the 49,527 GPs observed in both council terms. Column 1 pools both terms, while columns 2 and 3 correspond to the councils elected in 2015 and 2021, respectively. Panel A reports the percentage of GPs whose Sarpanch position was reserved for each group. The caste categories sum to 100 percent, subject to rounding; reservation for women may overlap with any caste category. Panel B reports the characteristics of the elected Sarpanch. Below high school includes illiterate Sarpanches and those with primary or junior-high education; high school or intermediate includes diploma holders; and graduate or above includes master's and doctoral degrees. Education shares exclude Sarpanches with no recorded education, who account for 4.8 percent of GPs in 2021.

Table 4. Reservation across the Two Council Terms ↔

	(1) Women	(2) SC	(3) OBC	(4) ST
Never reserved	18,845	29,083	22,781	49,024
Gained reservation in 2021	14,121	10,137	13,286	258
Lost reservation in 2021	14,055	10,300	13,442	243
Reserved in both terms	2,506	7	18	2
GPs observed in both terms	49,527	49,527	49,527	49,527

Notes: The table classifies the GPs observed in both council terms by whether their Sarpanch position was reserved for each group in 2015 and 2021. *Gained reservation in 2021* denotes GPs not reserved in 2015 but reserved in 2021, and *lost reservation in 2021* denotes GPs reserved in 2015 but not in 2021. Each column sums to the number of GPs observed in both terms.

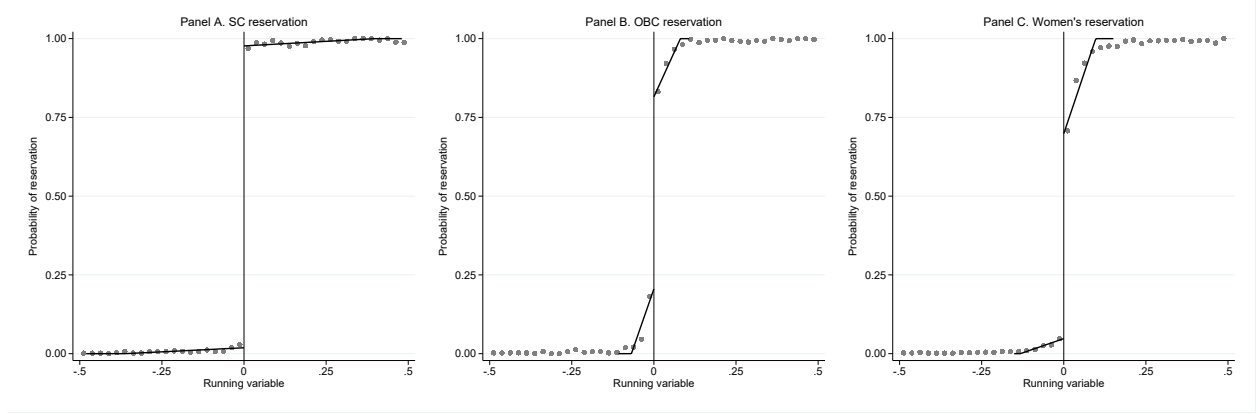


Figure 1. First Stage: Actual Reservation at the Cutoff ↩

Notes: Each panel shows how the share of Gram Panchayats reserved for the indicated group changes around the assignment cutoff. The dots report average reservation rates for groups of GPs with similar values of the running variable. The lines are fitted separately on each side of the cutoff and give greater weight to GPs closer to it. The figure is descriptive and does not account for the block fixed effects included in equation (6).

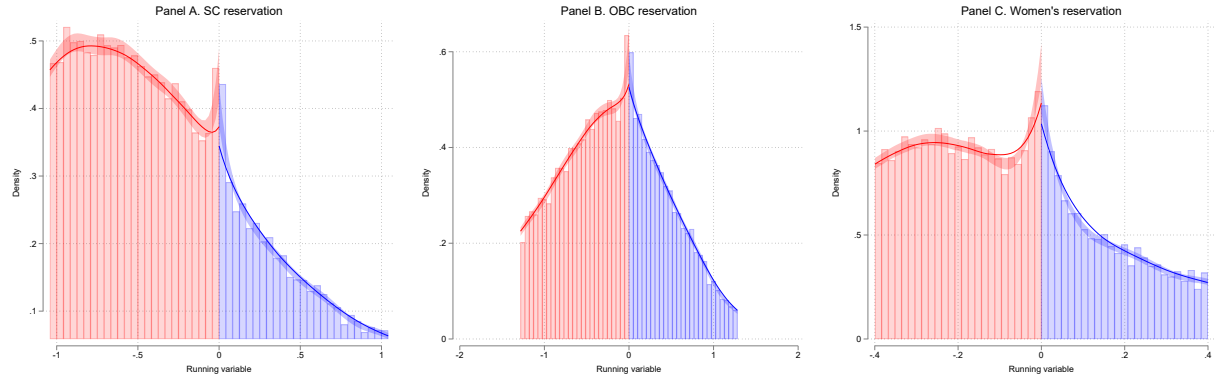


Figure 2. Density of the Running Variable at the Cutoff ↩

Notes: Each panel plots the estimated density of the running variable on either side of the cutoff, with 95 percent confidence bands, following Cattaneo et al. (2020). Bars show the distribution of Gram Panchayats. The estimated discontinuity is negative in all three cases, with p -values of 0.07 for SC, 0.09 for OBC, and 0.02 for women's reservation.

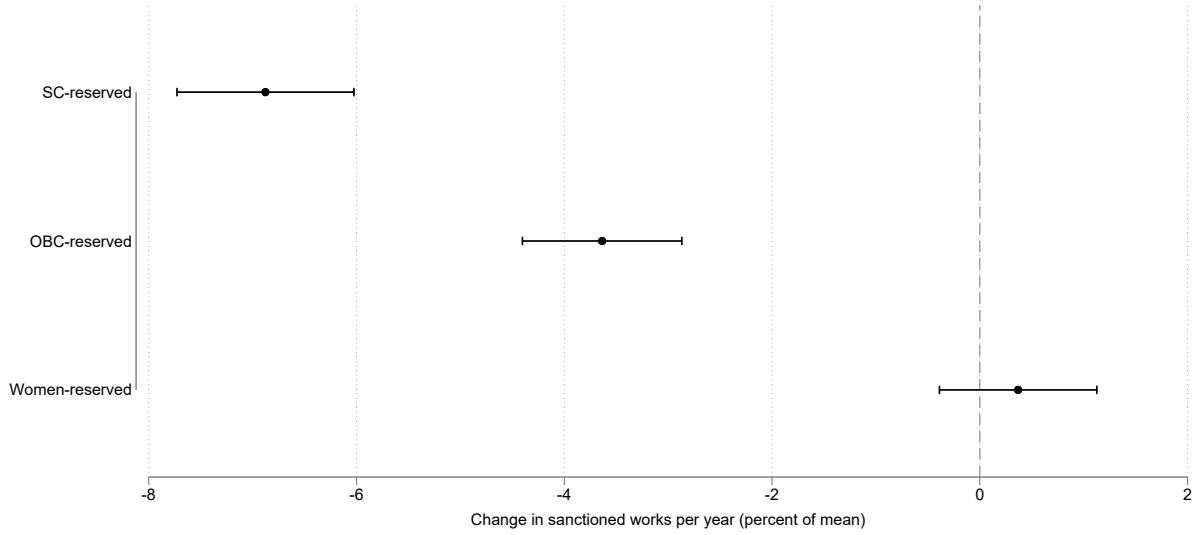


Figure 3. Effect of Reservation on the Number of Sanctioned Works ↵

Notes: The figure shows the change in the number of works a GP sanctioned per year during a council term when its Sarpanch position was reserved, as a percent of the mean for GP-terms not reserved by caste (22.4 works per year). For SC and OBC reservation, the comparison is with terms in which the position was not reserved by caste; for women's reservation, with terms in which it was not reserved for women. Estimates are from equation (1), with GP and term fixed effects; bars show 95 percent confidence intervals, with standard errors clustered by GP.

Table 5. Effect of Reservation on Work Outcomes ↵

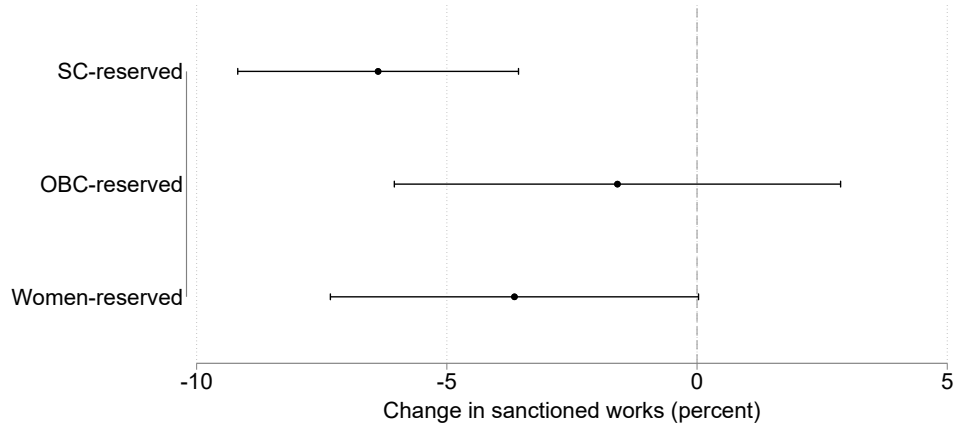
	(1) Ongoing	(2) Completed	(3) Abandoned
Women-reserved	0.0012*** (0.0004)	-0.0025** (0.0010)	0.0008 (0.0009)
OBC-reserved	0.0001 (0.0005)	-0.0043*** (0.0011)	0.0038*** (0.0009)
SC-reserved	-0.0004 (0.0005)	-0.0076*** (0.0012)	0.0067*** (0.0010)
Mean of outcome	0.062	0.698	0.196
Observations	10,149,181	10,149,181	10,149,181

Notes: The table reports estimates of equation (2). Each column is a separate regression of the indicated outcome on the reservation indicators, with GP and start-year fixed effects. All columns use sanctioned works, which are all works except those marked New or Deleted. ST reservation is included as a control but not reported. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

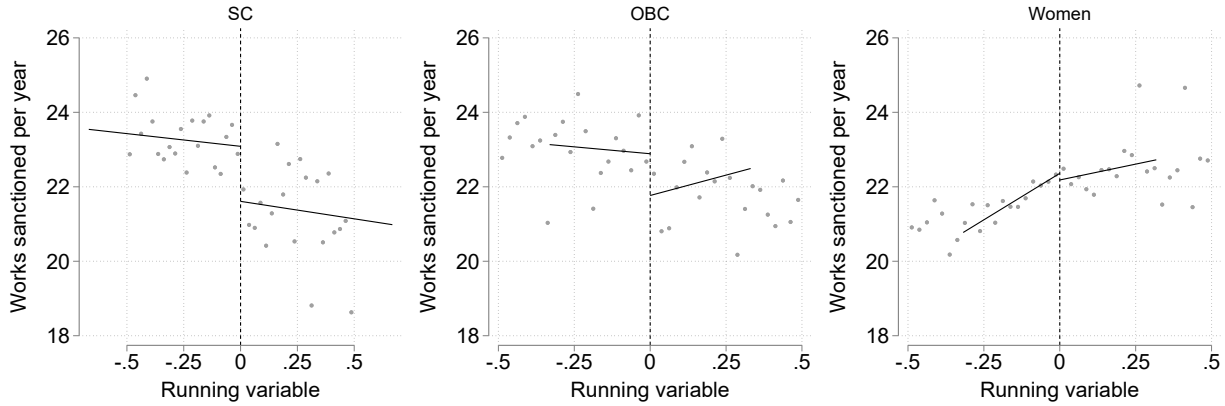
Table 6. Effect of Reservation on Completed Works, Employment, and Wages per Year $\leftrightarrow$

	(1) Completed works	(2) Person-days (thousands)	(3) Wages paid (Rs. thousands)
Women-reserved	0.11 (0.07)	0.04 (0.03)	4.15 (5.70)
OBC-reserved	-0.81*** (0.07)	-0.16*** (0.03)	-29.64*** (5.88)
SC-reserved	-1.39*** (0.08)	-0.53*** (0.03)	-106.55*** (6.49)
Mean, not reserved by caste	15.65	4.87	1020.32
GP-terms	99,054	99,054	99,054

Notes: Estimates are from equation (1), with GP and term fixed effects. All outcomes are per year. Column 1 is the number of works completed. Column 2 is the person-days of employment on all sanctioned works, in thousands. Column 3 is the wages paid for that employment, in thousands of rupees. The mean row is the average for GPs in terms when the Sarpanch position was not reserved by caste. ST reservation is included as a control but not reported. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.



Panel A. Effect of reservation on sanctioned works (percent change)



Panel B. Sanctioned works per year, by distance from the cutoff

Figure 4. Effect of Reservation on the Number of Sanctioned Works per Year: Regression Discontinuity ↩

Notes: Panel A reports fuzzy regression discontinuity estimates of the effect of reservation on the number of works a GP sanctioned per year under the 2015 councils, as percent changes from the mean just below the cutoff, with 95 percent confidence intervals. Each regression uses the category's MSE-optimal bandwidth and block fixed effects, weights each GP only by the triangular kernel, controls for GP population, and clusters standard errors by block. Panel B plots sanctioned works per year against the running variable, with binned means and local linear fits, and omits the block fixed effects and population control.

Table 7. Effect of Reservation on Work Outcomes: Regression Discontinuity Estimates $\leftrightarrow$

	(1) Ongoing	(2) Completed	(3) Abandoned
<i>Panel A. MSE-optimal bandwidth</i>			
SC-reserved	-0.0003 (0.0007)	-0.0118*** (0.0034)	0.0119*** (0.0034)
GPs	20,584	20,584	20,584
OBC-reserved	0.0004 (0.0011)	-0.0040 (0.0050)	0.0034 (0.0048)
GPs	11,978	11,978	11,978
Women-reserved	0.0007 (0.0008)	-0.0057 (0.0039)	0.0050 (0.0037)
GPs	22,450	22,450	22,450
<i>Panel B. Half the bandwidth</i>			
SC-reserved	-0.0009 (0.0009)	-0.0134*** (0.0044)	0.0141*** (0.0043)
GPs	10,654	10,654	10,654
OBC-reserved	0.0031* (0.0018)	-0.0054 (0.0080)	0.0023 (0.0076)
GPs	6,513	6,513	6,513
Women-reserved	0.0004 (0.0012)	-0.0045 (0.0058)	0.0042 (0.0055)
GPs	12,258	12,258	12,258
<i>Panel C. One-quarter of the bandwidth</i>			
SC-reserved	-0.0015 (0.0012)	-0.0139** (0.0058)	0.0154*** (0.0058)
GPs	5,569	5,569	5,569
OBC-reserved	0.0043 (0.0029)	-0.0055 (0.0121)	0.0018 (0.0115)
GPs	3,538	3,538	3,538
Women-reserved	0.0007 (0.0017)	-0.0044 (0.0088)	0.0037 (0.0084)
GPs	6,884	6,884	6,884
Mean below cutoff, SC-reserved	0.017	0.780	0.202
Mean below cutoff, OBC-reserved	0.018	0.778	0.204
Mean below cutoff, Women-reserved	0.017	0.771	0.211

Notes: The table reports fuzzy regression discontinuity estimates of equation (7) for the councils elected in 2015, instrumenting actual reservation with predicted assignment. The outcomes are the shares of a GP's sanctioned works that are ongoing, completed, or abandoned. Each regression uses a triangular kernel and block fixed effects and weights each GP by its number of sanctioned works. The MSE-optimal bandwidth (Calonico et al., 2014) is selected once for each category using the abandonment rate: 0.668 standard deviations for SC, 0.331 for OBC, and 0.318 for women's reservation. Panels B and C use half and a quarter of it. Means below the cutoff are taken at the MSE-optimal bandwidth. Standard errors, clustered by block, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

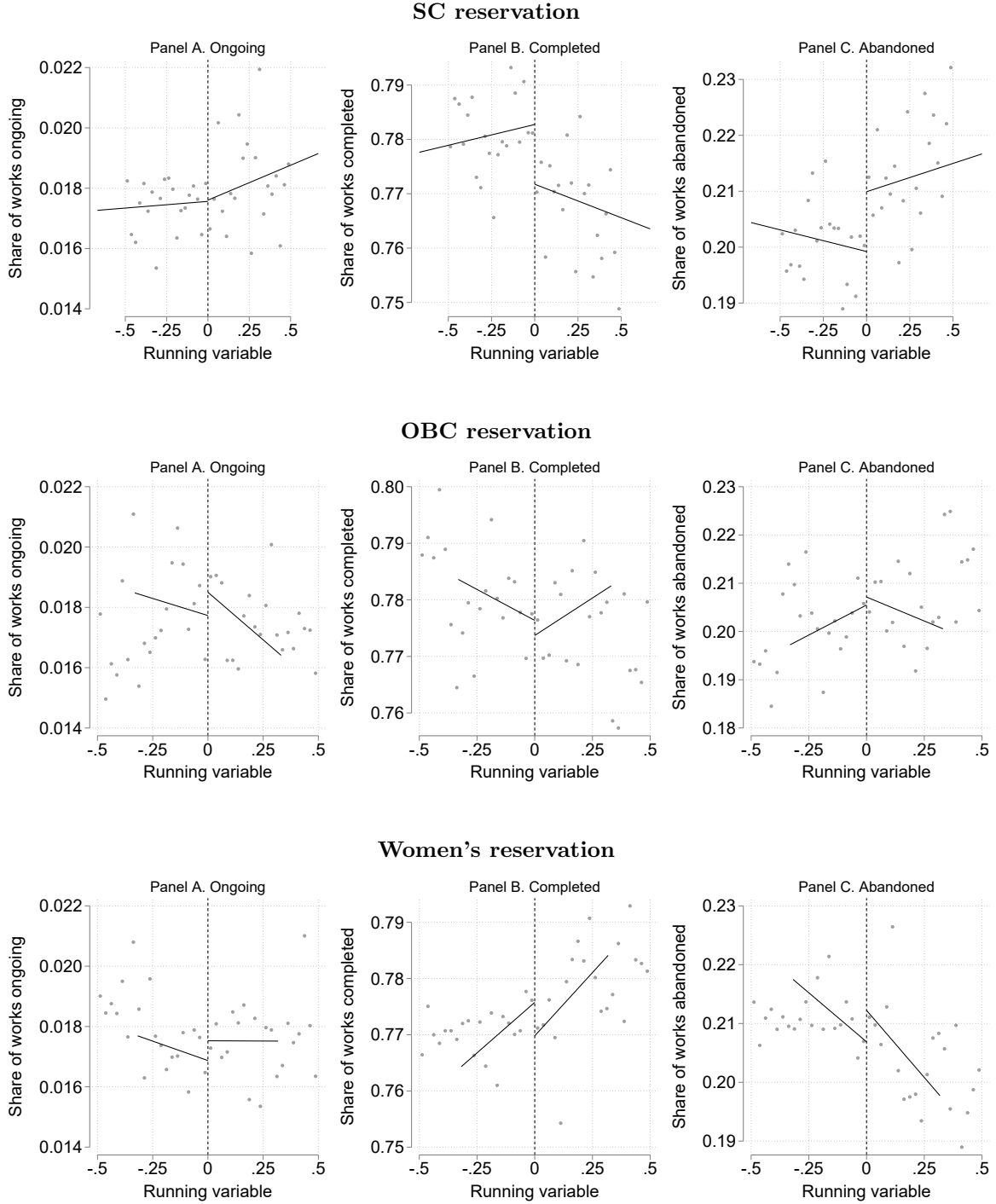


Figure 5. Effect of Reservation on Work Outcomes: Regression Discontinuity ←

Notes: The figure covers the councils elected in 2015, with one row for each reservation category. Panels A to C plot the shares of sanctioned works that are ongoing, completed, and abandoned against the running variable, which measures a GP's standardized distance from its block's reservation cutoff. Each dot is the mean outcome within a bin of 0.025 standard deviations, weighted by the number of sanctioned works. Only GPs within 0.5 standard deviations of the cutoff are shown. The lines are local linear fits estimated separately on each side of the cutoff with a triangular kernel, within each category's MSE-optimal bandwidth: 0.668 standard deviations for SC, 0.331 for OBC, and 0.318 for women's reservation. The gap between the two lines at the cutoff shows the jump in the outcome. Unlike the regressions, the figure does not include block fixed effects.

Table 8. Effect of Reservation by Type of Work $\leftrightarrow$

	Completed			Abandoned		
	(1) NRM	(2) Rural infra.	(3) Indiv. assets	(4) NRM	(5) Rural infra.	(6) Indiv. assets
Women-reserved	-0.000 (0.001)	-0.001 (0.002)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.002)	0.001 (0.001)
OBC-reserved	-0.003** (0.001)	0.000 (0.002)	-0.005*** (0.001)	0.002* (0.001)	-0.000 (0.002)	0.004*** (0.001)
SC-reserved	-0.014*** (0.002)	-0.018*** (0.002)	-0.003* (0.002)	0.010*** (0.001)	0.017*** (0.002)	0.002* (0.001)
Mean of outcome	0.598	0.575	0.853	0.253	0.293	0.095
Observations	3,971,469	2,005,742	4,168,852	3,971,469	2,005,742	4,168,852

Notes: Each column is a separate estimate of equation (2), with GP and start-year fixed effects, for sanctioned works in the indicated MIS master category. Columns 1 to 3 report the share completed and columns 4 to 6 the share abandoned. NRM is natural resource management (category A: water and land works on common land), rural infrastructure is category D (roads, drains, and buildings), and individual assets are category B (assets for vulnerable households on their own land). Self-help group infrastructure (category C) is omitted because it contains few works. ST reservation is included as a control but not reported. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 9. The SC Effect on Abandonment over the Sarpanch's Term $\leftrightarrow$

	(1) Abandoned
SC-reserved	0.0094*** (0.0014)
SC-reserved $\times$ years in term	-0.0015*** (0.0006)
Mean of outcome	0.196
Observations	10,149,181

Notes: The outcome is whether a sanctioned work was abandoned. The regression is equation (2) with an added interaction between SC reservation and years in term, which counts the full financial years since the councils took office. The SC-reserved coefficient is the effect at the start of the term, and the interaction is how much that effect changes with each additional year. Women's, OBC, and ST reservation are included as controls but not reported. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Appendix

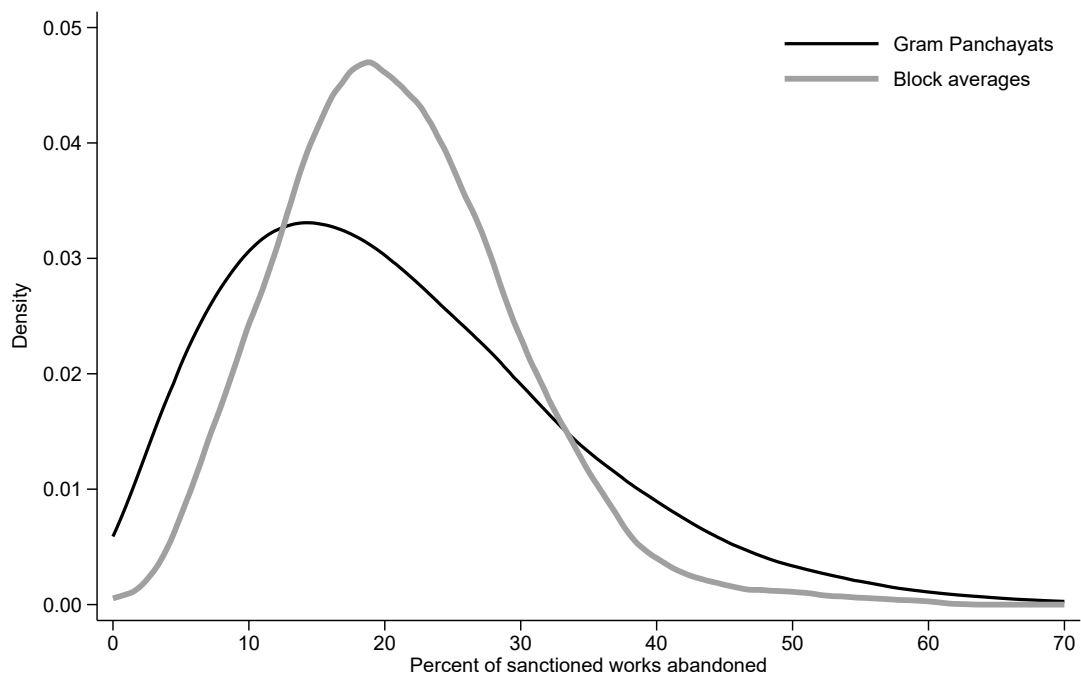


Figure A1. Abandonment Rates across GPs and Blocks ↵

Notes: The figure plots kernel densities of abandonment rates for 99,054 GP-terms (black line) and 1,620 block-terms (gray line). A GP-term's abandonment rate is the percentage of its sanctioned works that were closed without being carried out. A block-term's rate is the unweighted mean of the rates of its GPs in that term. Sanctioned works are all works except those marked New or Deleted. Both densities use an Epanechnikov kernel with a bandwidth of 2 percentage points.

Table A1. Balance of GP Characteristics at the Cutoff $\leftrightarrow$

	(1) SC	(2) OBC	(3) Women	(4) Mean
<i>Panel A. 2011 Census</i>				
Total population in the GP	8.2 (41.3)	-147.9** (64.8)	-0.3 (31.8)	2,603.9
Villages in the GP	0.012 (0.030)	0.032 (0.037)	-0.029 (0.029)	1.651
Area (hectares)	0.6 (10.3)	-20.3* (12.4)	10.7 (8.2)	383.2
Women per 1,000 men	1.0 (1.6)	-0.5 (2.3)	-0.3 (1.5)	924.2
Villages with a primary school	-0.011 (0.009)	-0.011 (0.011)	-0.003 (0.008)	0.812
Villages with a maternity centre	-0.008 (0.006)	-0.001 (0.008)	0.004 (0.006)	0.080
Villages with an anganwadi	-0.012 (0.009)	-0.006 (0.011)	0.004 (0.008)	0.845
Villages with a ration shop	-0.003 (0.011)	0.016 (0.013)	-0.000 (0.010)	0.752
Villages with tap water	0.003 (0.010)	-0.012 (0.013)	-0.018** (0.009)	0.184
Villages with an all-weather road	0.010 (0.011)	-0.003 (0.014)	-0.007 (0.010)	0.716
Villages with power for homes	0.004 (0.007)	0.009 (0.008)	0.000 (0.006)	0.913
Villages with mobile coverage	0.011 (0.011)	0.014 (0.013)	-0.001 (0.010)	0.752
Share of area irrigated	-0.006 (0.004)	0.006 (0.006)	0.005 (0.004)	0.872
<i>Panel B. NREGS per year, 2012–2014</i>				
Households that asked for work	0.3 (1.6)	-0.5 (1.9)	1.8 (1.4)	87.8
Households employed	0.5 (1.5)	-0.2 (1.8)	1.9 (1.3)	79.6
Person-days	3.5 (60.0)	46.0 (71.5)	35.2 (54.4)	2,573.3
Joint test, p -value	0.700	0.340	0.247	
GPs	20,588	11,984	22,453	

Notes: Columns 1–3 report the difference in each characteristic between GPs just above and just below the cutoff, estimated within each group’s main bandwidth (0.668 standard deviations for SC, 0.331 for OBC, and 0.318 for women’s reservation), with a triangular kernel and block fixed effects. Column 4 reports the average across all GPs. Rows starting with “Villages with” show the fraction of a GP’s villages that have that facility; for example, 0.812 in column 4 for primary schools means that, on average, 81 percent of a GP’s villages have a primary school. Data are from the 2011 Census (Panel A) and NREGS records (Panel B), compiled by [Chaturvedi et al. \(2025\)](#); Census data are missing for about 5 percent of GPs. The joint test asks whether all the differences are zero together. Standard errors, clustered by block, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A2. Effect of Reservation on the Number of Sanctioned Works: Robustness to Block-Level Shocks $\leftrightarrow$

	Sanctioned works per year		
	(1)	(2)	(3)
Women-reserved	0.08 (0.09)	0.07 (0.08)	0.08 (0.08)
OBC-reserved	-0.82*** (0.09)	-0.83*** (0.08)	-0.82*** (0.09)
SC-reserved	-1.54*** (0.10)	-1.55*** (0.09)	-1.54*** (0.10)
Mean, not reserved by caste	22.43	22.43	22.43
GP-terms	99,054	99,050	99,054
Time fixed effects	Term	Block $\times$ term	Term
Errors clustered by	GP	GP	Block

Notes: Each observation is a GP-term, and each column estimates equation (1) for the number of works sanctioned per year. Column 1 includes GP and term fixed effects. Column 2 replaces the term fixed effects with block-by-term fixed effects, comparing each GP only with GPs in the same block and term; this drops two GPs that are the only GP in their block. Column 3 repeats column 1 with standard errors clustered by block. ST reservation is included as a control but not reported. The mean row reports the average for GP-terms not reserved by caste. Standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A3. The SC Effect on Seats Also Reserved for Women $\leftrightarrow$

	(1)	(2)
	Completed	Abandoned
SC-reserved	-0.0085*** (0.0016)	0.0061*** (0.0013)
Women-reserved	-0.0029** (0.0012)	0.0005 (0.0010)
SC-reserved $\times$ women-reserved	0.0024 (0.0028)	0.0018 (0.0024)
Mean of outcome	0.698	0.196
Observations	10,149,181	10,149,181

Notes: The regression adds an interaction between SC and women's reservation to equation (2), using sanctioned works. OBC and ST reservation are included as controls. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A4. The SC Effect: Robustness to Block-Level Shocks $\leftrightarrow$

	(1) Ongoing	(2) Completed	(3) Abandoned
Baseline	-0.0004 (0.0005)	-0.0076*** (0.0012)	0.0067*** (0.0010)
Block $\times$ start-year fixed effects	-0.0002 (0.0004)	-0.0073*** (0.0010)	0.0062*** (0.0008)
Standard errors clustered by block	-0.0004 (0.0004)	-0.0076*** (0.0011)	0.0067*** (0.0009)
Mean of outcome	0.062	0.698	0.196
Works	10,149,181	10,149,181	10,149,181
Blocks	810	810	810

Notes: Each cell is the SC-reserved coefficient from a separate regression of the indicated outcome on the reservation indicators, using sanctioned works. The first row is the baseline specification of equation (2), with GP and start-year fixed effects. The second row replaces the start-year fixed effects with block-by-start-year fixed effects, so that each work is compared only with works started in the same block and year. This drops two works that are alone in their block and year. The third row repeats the baseline with standard errors clustered by block. All regressions control for women's, OBC, and ST reservation. Standard errors, in parentheses, are clustered by GP in the first two rows and by block in the third. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A5. Effect of Reservation on Deletion and Robustness to Including Deleted Works $\leftrightarrow$

	Deleted	Completed		Abandoned	
	(1)	(2)	(3)	(4)	(5)
		Incl. deleted	Excl. deleted	Incl. deleted	Excl. deleted
Women-reserved	-0.000 (0.001)	-0.002** (0.001)	-0.003** (0.001)	0.001 (0.001)	0.001 (0.001)
OBC-reserved	0.002*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	0.003*** (0.001)	0.004*** (0.001)
SC-reserved	0.003*** (0.001)	-0.009*** (0.001)	-0.008*** (0.001)	0.006*** (0.001)	0.007*** (0.001)
Mean of outcome	0.068	0.650	0.698	0.183	0.196
Observations	10,895,303	10,895,303	10,149,181	10,895,303	10,149,181

Notes: The table examines works marked Deleted, which are excluded from every outcome in the main analysis. Column 1 regresses an indicator for deletion on the reservation indicators, using all works not marked New. Columns 2 and 4 repeat the completion and abandonment regressions with deleted works kept in the sample, and columns 3 and 5 leave them out, as in the main analysis. All columns include GP and start-year fixed effects. ST reservation is included as a control but not reported. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A6. Effect on Abandonment for GPs That Gained and Lost Reservation

↩

	(1) SC	(2) OBC	(3) Women
Change after gaining reservation	0.014*** (0.002)	-0.003 (0.002)	0.003* (0.002)
Change after losing reservation	0.001 (0.002)	-0.010*** (0.002)	0.001 (0.002)
Mean of outcome	0.196	0.196	0.197
Observations	10,147,871	10,145,502	9,565,657

Notes: The outcome is whether a sanctioned work was abandoned. Each column covers one reservation group and compares GPs that gained reservation for that group in 2021 (not reserved in 2015, reserved in 2021) or lost it (reserved in 2015, not reserved in 2021) with GPs never reserved for the group. The first row is the change in abandonment between the two terms in GPs that gained reservation, minus the same change in never-reserved GPs. The second row is the same comparison for GPs that lost reservation. A positive coefficient means abandonment rose more, or fell less, than in never-reserved GPs. All regressions include GP and start-year fixed effects and control for the other reservation indicators. Standard errors, in parentheses, are clustered by GP. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A7. Regression Discontinuity Estimates of the Number of Sanctioned Works per Year ↩

	(1) MSE-optimal bandwidth	(2) Half the bandwidth	(3) Quarter of the bandwidth	(4) With extra controls
SC-reserved	-1.48*** (0.33)	-1.67*** (0.46)	-1.97*** (0.64)	-1.50*** (0.33)
Percent of mean below cutoff	-6.4	-7.2	-8.5	-6.4
Mean below cutoff	23.21	23.21	23.33	23.30
GPs	20,584	10,654	5,569	19,600
OBC-reserved	-0.37 (0.52)	-0.60 (0.89)	0.24 (1.43)	-0.49 (0.52)
Percent of mean below cutoff	-1.6	-2.6	1.1	-2.1
Mean below cutoff	23.04	23.00	23.06	23.07
GPs	11,980	6,513	3,538	11,429
Women-reserved	-0.79* (0.41)	-0.68 (0.62)	-0.09 (0.93)	-0.87** (0.42)
Percent of mean below cutoff	-3.6	-3.1	-0.4	-4.0
Mean below cutoff	21.61	21.93	22.14	21.66
GPs	22,450	12,258	6,884	21,185

Notes: Each column reports fuzzy regression discontinuity estimates of the effect of reservation on the number of works a GP sanctioned per year during the 2015 council term. All regressions include block fixed effects, control for GP population, and weight each GP by the triangular kernel. Column 1 uses the MSE-optimal bandwidth (0.668 for SC, 0.331 for OBC, and 0.318 for women's reservation); columns 2 and 3 use half and a quarter of it. Column 4 adds the number of villages, GP area, and average NREGS person-days in 2012–2014, and drops GPs missing any of these. Standard errors, clustered by block, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A8. Regression Discontinuity Estimates without GPs Closest to the Cutoff $\leftarrow$

	(1) Ongoing	(2) Completed	(3) Abandoned
<i>Panel A. All GPs within the bandwidth</i>			
SC-reserved	-0.0003 (0.0007)	-0.0118*** (0.0034)	0.0119*** (0.0034)
GPs	20,584	20,584	20,584
OBC-reserved	0.0004 (0.0011)	-0.0040 (0.0050)	0.0034 (0.0048)
GPs	11,978	11,978	11,978
Women-reserved	0.0007 (0.0008)	-0.0057 (0.0039)	0.0050 (0.0037)
GPs	22,450	22,450	22,450
<i>Panel B. GPs within 0.02 SD of the cutoff dropped</i>			
SC-reserved	0.0003 (0.0008)	-0.0108*** (0.0038)	0.0102*** (0.0037)
GPs	19,600	19,600	19,600
OBC-reserved	-0.0005 (0.0012)	-0.0055 (0.0055)	0.0055 (0.0053)
GPs	10,826	10,826	10,826
Women-reserved	0.0004 (0.0009)	-0.0071* (0.0043)	0.0068* (0.0041)
GPs	20,226	20,226	20,226
<i>Panel C. GPs within 0.05 SD of the cutoff dropped</i>			
SC-reserved	0.0004 (0.0009)	-0.0100** (0.0043)	0.0094** (0.0042)
GPs	18,515	18,515	18,515
OBC-reserved	-0.0017 (0.0015)	-0.0092 (0.0065)	0.0105* (0.0063)
GPs	9,618	9,618	9,618
Women-reserved	0.0006 (0.0010)	-0.0060 (0.0055)	0.0056 (0.0054)
GPs	17,665	17,665	17,665

Notes: The table checks whether the estimates depend on the GPs closest to the cutoff, where any sorting would show up. All estimates are fuzzy regression discontinuity estimates for the councils elected in 2015, using the category's MSE-optimal bandwidth (0.668 standard deviations for SC, 0.331 for OBC, and 0.318 for women's reservation), a triangular kernel, and block fixed effects, with each GP weighted by its number of sanctioned works. The outcomes are the shares of a GP's sanctioned works that are ongoing, completed, or abandoned. Panel A uses all GPs within the bandwidth. Panels B and C drop GPs within 0.02 and 0.05 standard deviations of the cutoff. Standard errors, clustered by block, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A9. Regression Discontinuity Estimates without GPs Reserved for Women $\leftarrow$

	(1) Reserved for women	(2) Ongoing	(3) Completed	(4) Abandoned	(5) Sanctioned works per year
<i>Panel A. All GPs</i>					
SC-reserved	-0.212*** (0.011)	-0.0003 (0.0007)	-0.0118*** (0.0034)	0.0119*** (0.0034)	-1.48*** (0.33)
Mean below the cutoff GPs	0.241 20,584	0.017 20,584	0.780 20,584	0.202 20,584	23.21 20,584
OBC-reserved	-0.106*** (0.016)	0.0004 (0.0011)	-0.0040 (0.0050)	0.0034 (0.0048)	-0.37 (0.52)
Mean below the cutoff GPs	0.151 11,978	0.018 11,978	0.778 11,978	0.204 11,978	23.04 11,980
<i>Panel B. Without women-reserved GPs</i>					
SC-reserved		-0.0005 (0.0007)	-0.0097*** (0.0036)	0.0100*** (0.0035)	-1.69*** (0.34)
Mean below the cutoff GPs		0.018 17,052	0.776 17,052	0.206 17,052	22.07 17,052
OBC-reserved		0.0001 (0.0011)	-0.0016 (0.0051)	0.0013 (0.0049)	-0.61 (0.51)
Mean below the cutoff GPs		0.018 11,196	0.773 11,196	0.208 11,196	21.85 11,198

Notes: The table reports fuzzy regression discontinuity estimates for the councils elected in 2015, at the MSE-optimal bandwidth (0.668 standard deviations for SC and 0.331 for OBC reservation). Column 1 is whether the Sarpanch position was also reserved for women. Columns 2 to 4 are the shares of a GP's sanctioned works that are ongoing, completed, or abandoned, and column 5 is the number of works the GP sanctioned per year. Columns 1 to 4 weight each GP by the triangular kernel times its number of sanctioned works. Column 5 weights each GP by the kernel only, uses GPs with at least one work, and controls for GP population. All regressions include block fixed effects. Panel A uses all GPs within the bandwidth, and Panel B drops the GPs reserved for women. Means below the cutoff are weighted as in the regressions. Standard errors, clustered by block, are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.