Do Elected Leaders Add Value? Evidence from a Natural Experiment in India*

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August 2026

Abstract

We compare how elected and appointed leaders govern, exploiting a natural experiment in Karnataka, India, that generated quasi-random variation in whether a village was governed by local politicians or appointed bureaucrats during 2020-21. We find that elected leaders are more accountable to citizens: politician-run villages align public spending more closely with citizens' preferences and deliver more social assistance during a period of economic distress. These gains are experienced by all social groups but accrue particularly to local elites. Administrative efficacy is similar under both forms of government: politician- and bureaucrat-run villages perform similarly at controlling corruption, implementing development projects, and managing the COVID crisis. Consistent with this, most citizens prefer to be governed by elected leaders.

JEL codes: O12, H11, H70, D72

Keywords: Politicians, Bureaucrats, Democracy, Decentralisation, Local Government, India

*We are grateful for valuable comments from seminar participants at Ashoka University, ISEC, NUS and Oxford University, and Berk Ozler. We thank the World Bank's Research Support Budget for financial support. We are also grateful for the support of Uma Mahadevan, Priyanka Mary Francis, Shilpa Nag and other colleagues in the Government of Karnataka's Rural Development Panchayati Raj Department for their feedback on the paper, data access, and for granting permission for our online and phone surveys. Manasi Rao, Sudarshan Aittreya, Aryan Koganti, Bhoumik Mhatre and especially Anirvin Narayan provided excellent research assistance.

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1 Introduction

Effective governments are both accountable to citizens and well-administered. Who is better placed to achieve these twin governance goals: elected politicians or appointed bureaucrats? Political economists have long compared these two forms of governance, highlighting a potential tradeoff between democratic accountability and bureaucratic competence (Besley and Case, 2003; Besley et al., 2022). In principle, elected leaders have stronger incentives to represent citizens' preferences and respond to their needs. Yet electoral incentives may also lead politicians to prioritise the interests of powerful elites or narrow constituencies (Bardhan and Mookherjee, 2000). Appointed bureaucrats, by contrast, bring valuable expertise but are not directly accountable to citizens. The tradeoffs between both forms of government are acute in local polities, where leaders must both understand citizens' concerns and deliver public services.

Influential economic theories predict that politicians and bureaucrats will govern differently (Maskin and Tirole, 2004; Alesina and Tabellini, 2007, 2008). Yet comparing how elected and appointed officials govern in practice is empirically challenging, as it requires exogenous variation in who governs and reliable measures of performance across domains. Such variation is rare, however, because institutional reforms that reallocate authority between politicians and bureaucrats typically bundle multiple policy changes. Decentralisation, for instance, often empowers elected leaders while shrinking political units (Mookherjee et al., 2015; Narasimhan and Weaver, 2024), making it difficult to isolate the effects of politician rule.

In this paper, we compare how elected and appointed leaders govern. We analyse a natural experiment in the Indian state of Karnataka that generated plausibly exogenous variation in whether villages were governed by an elected politician or an appointed bureaucrat. Leveraging rich data from nearly 6,000 village governments, we evaluate governance along two broad dimensions: accountability to citizens and administrative efficacy. To capture accountability, we measure how well village governments represent citizens' preferences and respond to their needs. To evaluate administrative efficacy, we examine how local governments implement development projects, control corruption, and manage crises.

Villages in India are grouped into Gram Panchayats (GPs), which are normally governed by an elected president. In Karnataka, GPs follow different election schedules due to historical disruptions that delayed or advanced prior elections. For example, some GPs were shifted onto different electoral cycles due to incorrectly printed ballot papers, election month floods in 2005, or the deaths of incumbent presidents that triggered by-elections. Before 2020, these calendar differences had little consequence: once the five-year electoral term ended, fresh elections would soon be held to select new leaders.

The COVID-19 pandemic disrupted this arrangement. In 2020, the state government postponed GP elections across Karnataka, citing safety concerns. Following state law, local bureaucrats were temporarily appointed to run GPs whose elected leaders had completed their terms.[1] These GP administrators were experienced officers drawn from a range of government departments. Most were reasonably familiar with

[1] Karnataka's Gram Swaraj and Panchayat Raj Act, 1993, Section 8(4), states that, once a GP elected leaders complete their term, "The Administrative Committee or Administrator shall be deemed to be the duly constituted Grama Panchayat".

the GPs they governed, and many had served as administrators before or been trained for the role. Administrators governed for about 9-10 months, until elections could be safely held and the new elected leaders took office in Mar-Apr 2021. Meanwhile, GPs where the electoral term was still ongoing remained governed by their elected president. The prior variation in electoral calendars thus produced a time-bound distinction in forms of governance: from June 2020 to March 2021, most (5,831) GPs were run by appointed bureaucrats, while a minority (162) were under elected leaders.

We show that this variation enables a clean comparison of how elected and appointed leaders govern. Politician- and bureaucrat-run GPs are observably similar on a wide range of pre-treatment characteristics, and exhibit parallel pre-trends in local economic activity and welfare program implementation. In addition, the *de jure* change in governance form led to a genuine shift in who exercised decision-making power in the GP. Drawing on a primary survey of village secretaries—a key member of GP staff—we find that administrators were significantly more likely to lead COVID management once they were appointed, while elected leaders had a diminished role. The village secretary's own role remains unchanged, suggesting that the natural experiment did not alter the job scopes of GP staff, but rather changed to whom they reported. We now compare how accountable politician- and bureaucrat-run GPs are to citizens.

We examine whether GPs' collective choices reflect what citizens want—a key indicator of a healthy democracy (Besley and Coate, 1997; Gulzar and Khan, 2025). To capture this, we measure the alignment between public spending and citizens' preferences. We surveyed citizens in 819 GPs to identify the public goods they wanted their GP to prioritise, and compare these preferences against actual GP budget allocations, using detailed administrative data on public spending during the 2020-21 fiscal year. We find that GPs generally spend more on citizens' priority areas, but this alignment is stronger in politician-run GPs. Better alignment is not due to elected leaders spending more or less on any particular public good. Rather, elected leaders spend less on public goods that few citizens want and more on those with broad support. When all citizens desire a public good, bureaucrat-run GPs spend 5.9% more on it, while politician-run GPs spend 9.4% more. The coefficient on citizen preferences is thus 59% larger in politician-run GPs, implying that elected leaders better reflect citizens' priorities in public spending.

But whose preferences shape public spending? A common concern is that elected leaders may cater to local elites at the expense of ordinary citizens (Bardhan and Mookherjee, 2006a; Mookherjee et al., 2015). In both politician- and bureaucrat-run GPs, spending is more closely aligned with the preferences of advantaged groups—men, upper-caste households, and residents of the GP's main village. For instance, bureaucrat-run GPs spend 5.4% more on a public good when all male citizens value it, but only 2.1% more when all female citizens do. We find that elected leadership weakly improves representation for every group: in politician-run GPs, spending is equally or better aligned with the preferences of men and women, upper and lower castes, and residents of both the main and peripheral villages.

However, representational gains are skewed towards advantaged groups. Under elected leaders, alignment with men's preferences improves significantly, but alignment with women's preferences changes marginally. Similarly, politician-run GPs spend substantially more on public goods valued by upper-caste

and main village citizens, but only marginally more on those desired by lower-caste and peripheral village citizens. Elected leaders also attach greater weight to the priorities of numerically larger groups. Representation gaps therefore widen under elected leaders, even as everyone weakly gains. Overall, elected leaders better represent citizens' preferences, but these gains accrue primarily to advantaged and more populous groups—the citizens most influential in local politics.

Why do elected leaders better represent citizens' preferences? Standard models identify two broad channels: selection and incentives. On selection, politicians might simply know their villages better, since—unlike administrators—they come from the GPs they govern. Yet if information about local priorities were the main explanation, politician-run GPs ought to represent all groups more effectively, not primarily elites. Moreover, administrators are not complete outsiders: their native village is, on average, just 20km away from their assigned GP, and most had worked with the GP and personally knew some of its citizens before taking charge. We find that public spending is no better aligned with citizen preferences when administrators know the GP well, suggesting that information is not the primary constraint. More broadly, administrators' demographic characteristics and stated governance priorities are weakly correlated with spending alignment, which is hard to reconcile with a purely selection-based explanation.

Spending patterns are better explained by elected and appointed leaders' different accountability structures. Administrators are accountable upwards within the bureaucracy, yet administrators who perceive stronger career incentives do not represent citizens better. Instead, administrators spend more on public goods related to their expertise and home department. Elected leaders, by contrast, are accountable downward to citizens. We find that they engage more with citizens: politician-run GPs hold 22% more public meetings, driven by general body and standing committee meetings, forums typically attended by influential citizens rather than the general public. Taken together, our results suggest that the direction of accountability shapes governance: elected leaders engage more with—and direct spending towards—citizens whose political support is important.

A second test of leaders' responsiveness to citizens' concerns comes from the COVID crisis. Widespread urban job losses and large-scale return migration to villages doubled demand for workfare benefits under the National Rural Employment Guarantee Scheme (NREGS), India's most important rural social protection program (Afridi et al., 2022). Implementing NREGS is the task of GP governments, who must register beneficiaries and organise workfare projects (Muralidharan et al., 2016). Using a difference-in-differences strategy, we find that GPs led by elected officials provided more NREGS employment during the COVID crisis. Politician-run GPs delivered 84 more person-days of work each month, a 0.11 standard deviation (SD) increase, and registered 1.8 more new beneficiaries per village (a 0.17 SD rise). Trends are parallel in prior years, and the gap appears shortly after administrators take charge and remains stable throughout their tenure, indicating that the shift in governance form drove the change. As with public spending, elected leaders deliver weakly more NREGS assistance to all groups, but gains are largest for influential citizens, such as upper caste and main-village households.

How did politician-run GPs deliver more social assistance? Prior work suggests that NREGS implemen-

tation relies heavily on the efforts of frontline GP staff (Chopra, 2016). We measure GP staff effort using a simple proxy: how often they show up to the office. Drawing on weekly attendance records over two years, we observe that staff are present on 42% of days when administrators are in charge. Using within-GP variation, we estimate that attendance rates are 4.2 pp (10%) higher when elected leaders govern. These improvements are concentrated in the lower tail, consistent with elected leaders pushing frontline bureaucrats to exert greater effort in order to be more responsive to citizens.

Our results so far indicate that elected leaders are more accountable to citizens. Yet they may be less effective administrators than bureaucrats. Electoral concerns could even distort governance. For example, increased NREGS social assistance may create opportunities for corruption (Niehaus and Sukhtankar, 2013). Following Jeong et al. (2023), we exploit detailed beneficiary records to test whether elected leaders appropriate NREGS benefits. We find no evidence that village politicians or their families extract more welfare payments when they are formally in power. Survey data on bribes for other social benefits show if anything marginally lower rent-seeking in politician-run GPs. While both measures have limitations, neither indicates that corruption is higher under elected leaders.

Electoral incentives could also induce politicians to favour projects that benefit their own narrow constituencies over public works with broader spillovers (Lizzeri and Persico, 2005). This risk is particularly salient in Karnataka, where the GP president is indirectly elected by councillors who each represent a small ward. To test for such distortions, we analyse administrative records on all 1.4 million GP development projects in Karnataka and classify each project's intended scope based on its description. We then track each project's progress using the dates of project milestones. We find no evidence that politician-run GPs undertake fewer GP-wide projects, or implement them more slowly, than bureaucrat-run GPs. These null effects are precisely estimated: with 95% confidence, we can rule out differences larger than 0.03 SD.

More broadly, we do not find evidence that elected leaders are less effective administrators. On average, development projects progress at similar rates in politician- and bureaucrat-run GPs, and we can rule out progress rate differences greater than 0.02 SD. Likewise, COVID-19 was managed equally well by elected and appointed leaders: GPs show similar mortality, illness, economic well-being, and citizen evaluations of COVID management under both forms of government, and we can generally rule out effect sizes larger than 0.1 SD. The fact that COVID severity and management were similar under elected and appointed leaders also suggests that differential exposure to the pandemic cannot explain our findings.

Our findings show that elected leaders are more accountable to citizens without sacrificing administrative efficacy. However, this does not imply that elected officials should perform every task in local government. Indeed, economic theory predicts that bureaucrats are better suited to specialised tasks where expertise matters more than responsiveness (Alesina and Tabellini, 2007, 2008). To test this prediction, we match each administrator's prior experience to the expertise required by each ongoing development project in the GP. While elected and appointed leaders perform similarly on average, projects are 4 pp (62%) more likely to progress within a period when managed by an administrator from the implementing department. Probing what underlies this advantage, we find limited returns to generic human capital but high

returns to specific domain knowledge and professional networks: progress is 24% faster when administrators have expertise in the project's domain, and 12% faster when they previously worked in the same block. However, such expertise is rare—on average, the administrator's expertise is relevant to only 5% of ongoing GP projects—which is why bureaucrats hold no advantage overall. Thus, while elected leaders perform better when local engagement and downward accountability matter, appointed officials outperform on the narrow set of tasks requiring their specialised knowledge or experience.

Our findings highlight the benefits and limitations of democratic and technocratic governance in our context. Expertise can improve project implementation, but does not ensure that public resources are aligned with citizens' priorities. Citizens' own attitudes echo this view: 77% would rather be governed by an elected politician than an appointed bureaucrat, and most have higher trust in elected leaders. This preference reflects a belief in the legitimacy of the democratic process: 86% believe that elections are the best way to select their village leader. Taken together, our evidence suggests a model where elected representatives lead and answer to citizens, while appointed officials handle tasks that demand specific expertise.

Several robustness checks support the internal validity of our findings. Our results are not driven by outliers: patterns are similar across most districts, politician- and bureaucrat-run GPs have visibly different outcome distributions, and estimates are stable whether we compare GPs within the same block or omit geographic fixed effects. We also evaluate several alternative explanations arising from features of our natural experiment. Although elected and appointed leaders differ in on-job tenure, prior experience, bandwidth, time horizons, and demographic characteristics, we find little evidence that the governance gap between them varies along these dimensions. These factors therefore appear unlikely to drive our results, which are better explained by the different accountability structures in both forms of government.

Our natural experiment offers a rare opportunity to compare how elected and appointed leaders govern in the same context. Yet two features may limit its external validity. First, the study occurred during COVID, which may have changed GPs' responsibilities and officials' behaviour. Using time-use data, we show that GPs remained focused on their regular functions: village secretaries spent only 6 hours a week—10% of their time—on COVID management, with the rest devoted to the business-as-usual governance tasks that our primary outcomes are based on. Moreover, COVID had similar impacts and was managed similarly in politician- and bureaucrat-run GPs, so it is unlikely to drive our results. The pandemic may have even strengthened external validity along one dimension: with elections postponed in 97% of GPs, many eligible block-level officers were enlisted as administrators, leaving little room for fine-grained selection.

Second, neither the politicians nor the bureaucrats in our setting are textbook archetypes of their form of government. We regard this as both a feature and a limitation. Most GP elected leaders are part-time officials, which is not unusual for local politicians (Gagliarducci et al., 2010; Bamezai et al., 2025). Likewise, GP administrators were appointed temporarily for 9-10 months, often alongside their departmental duties, so they may behave differently from permanent, embedded local bureaucrats. Yet short postings and double-hatting are common in many developing country bureaucracies. Indian Administrative Service officers, for example, spend just 16 months in a post on average (Iyer and Mani, 2012), and 86% of GP

administrators have previously juggled multiple assignments. We argue that the administrators in our sample offer a realistic counterfactual to politician rule: they were experienced local bureaucrats; many had served as GP administrators before and received specific training for the job; most were familiar with the GPs they governed; and nearly all believed their performance was monitored by senior officials. In some respects, they compare favourably with the other bureaucrats, with more education and experience than the average Indian or global public servant (Baig et al., 2021).

Our natural experiment thus compares downwardly accountable, part-time, low-capacity elected leaders against upwardly accountable, short-horizon, multi-tasking bureaucrats—the types of actors who run local governments across much of the developing world. Despite its particularities, we believe our setting provides a rare opportunity to compare these two different forms of government, offering potentially generalisable insights.

Contribution to Literature. Our paper relates to a long-standing research program in political economy that compares different forms of government (Besley and Case, 2003; Persson and Tabellini, 2005; Acemoglu et al., 2019). Influential theories argue that bureaucrats are better suited to technical tasks, while politicians should manage redistributive tasks (Maskin and Tirole, 2004; Alesina and Tabellini, 2007, 2008). Our findings support these predictions: politicians are more accountable to citizens, especially influential ones, and govern as effectively as bureaucrats except on tasks that require specific expertise. Existing work on elected and appointed officials focuses on specialised tasks, such as judicial decision-making (Lim, 2013), electricity regulation (Besley and Coate, 2003), central banking (Ehrmann and Fratzscher, 2011), budget management (Whalley, 2013) and investment applications (Hessami, 2018). In these contexts, appointed officials generally make higher-quality decisions (Choi et al., 2010), while elected leaders are influenced by political cycles and partisan motives (Ash and MacLeod, 2021). Yet these conclusions may reflect the technical nature of the tasks examined. To compare both forms of government holistically and assess the theoretical predictions, we need to evaluate how elected and appointed leaders perform the varied duties of government in the same setting. To our knowledge, ours is the first paper to do so.

Our findings also shed light on the impacts of local democracy. Several prominent papers examine the impacts of local democracy in autocratic and transition regimes—in China (Martinez-Bravo et al., 2022; Mu and Zhang, 2014; Wong et al., 2017), Indonesia (Martinez-Bravo, 2014; Martinez-Bravo et al., 2017), and Chile (González et al., 2021). Elected leaders typically improve public good provision and are less likely to enforce unpopular top-down directives (e.g., the one-child policy). Local democracy may play a different role in democratic regimes, where electoral pressures already dissuade upper-level leaders from imposing unpopular policies. Yet there is surprisingly little evidence on the effects of local democracy in democracies. We find that elected leaders are more accountable to citizens without weakening efficiency. Reflecting this, most citizens prefer to be governed by elected rather than by appointed leaders.

Finally, we add to the literature on decentralisation. Many developing countries have devolved power to local governments, with mixed results (Mookherjee et al., 2015; Mansuri and Rao, 2013). Decentralisation improved public service delivery in some cases (Narasimhan and Weaver, 2024; Dahis and Sz-

erman, 2024) but worsened it in others (Mergele and Weber, 2020), due to greater elite capture (Jacoby et al., 2021) and negative cross-jurisdiction spillovers (Burgess et al., 2012; Lipscomb and Mobarak, 2016). These mixed findings may reflect the bundled nature of decentralisation reforms. An important recent paper (Narasimhan and Weaver, 2024) shows that elected leaders govern better in smaller polities. Our paper is complementary: we show that, holding polity size fixed, transferring power from bureaucrats to elected leaders improves accountability. Our findings thus broadly support the thrust toward democratic decentralisation in the developing world, while highlighting the value of bureaucrats in specialised roles (Casey et al., 2023) and the risk of elite capture (Bardhan and Mookherjee, 2006b).

The rest of the paper is organised as follows. Section 2 describes the context and data. Section 3 explains the empirical strategy. Section 4 and Section 5 compare elected and appointed leaders' performance on accountability and administrative efficacy. Section 6 discusses alternative explanations and external validity. Section 7 concludes.

2 Context & Data

2.1 Local Governance in India

2.1.1 Gram Panchayats: History and Responsibilities

Village democracy has a rich history in India (George et al., 2024). Writing in 200 BCE, Kautilya described a decentralised system of villages led by headmen (Venkatarangaiya and Pattabhiram, 1969). Despite this, India's independence leaders had competing views about the role of elected leaders in local government (Ambedkar, 1948). While Mahatma Gandhi saw elected village leaders as the foundation of Indian democracy (Gandhi, 1962; Jodhka, 2002), B.R. Ambedkar, the constitution's chief drafter, was concerned that village democracy could entrench elite dominance (Ambedkar, 1948), and Jawaharlal Nehru, the country's first prime minister, placed greater faith in top-down, bureaucrat-run development (Jodhka, 2002). Reflecting these views, the framers of India's constitution wrestled with the tension between democratic accountability and bureaucratic competence. Eventually, the constitution did not mandate the creation of local democratic institutions, but suggested that regional governments consider establishing them.

In 1992, the pendulum swung towards decentralisation. India's constitution was amended and power devolved to over 250,000 newly-created local governments called Gram Panchayats (GPs). GPs are the lowest tier of government in rural India, and combine democratic and administrative functions. Each GP is normally governed by an elected council and president, and has a small staff to implement their decisions and administer public services. As elected bodies, GPs are expected to represent citizens' preferences, organise meetings to deliberate local priorities, and respond to citizens' needs. At the same time, GPs are responsible for delivering public services and implementing government policy. They manage local

funds, maintain public amenities, and implement welfare schemes, development programs and public works. This dual role—representing citizens while implementing policy on the ground—makes GPs a valuable setting to compare how elected and appointed officials govern.

2.1.2 Village Governance in Karnataka

Structure of Government. Karnataka is India's 9th most populous state, and 61.4% of its 69 million inhabitants live in rural areas. The state is divided into 31 districts, each comprising roughly 8 blocks; each block, in turn, contains about 25 GPs. The elected president is the political head of each GP, and is ultimately accountable to citizens for representing their concerns, determining local priorities, allocating public funds, and ensuring local staff do their jobs. Day-to-day administration is handled by a village secretary, who manages a small staff responsible for maintaining public facilities and delivering basic public services such as sanitation and streetlighting. Some schemes, such as the National Rural Employment Guarantee Scheme (NREGS), require both the GP president and staff to run effectively. The president sets political direction, responding to citizens' demand for work and prioritising projects, while GP staff translate these decisions into action, by registering beneficiaries, preparing project plans, organising worksites, and ensuring payments.

GPs in Karnataka operate broadly like those in other Indian states, but have several distinctive features relevant for our study. Karnataka is among a minority of states where GPs follow a parliamentary system, where citizens elect council members, who then choose the president. In most states, by contrast, the president is directly elected. Indirect elections may give local elites greater influence over the president. Karnataka also has a longer history of local democracy than many other states. It introduced local elections in the 1980s, about a decade before other states were mandated to do so, and some regions—such as the erstwhile Mysore princely state—had participatory local government even during the colonial period (Ananthapur and Moore, 2010).[2] Most important for our study, Karnataka is one of several states where bureaucrats are regularly appointed to govern GPs where the electoral term is complete but elections cannot yet be held.[3] This provision, inherited from Karnataka's prior local government legislation, was a settled and unremarkable feature until COVID-induced election disruptions made it empirically relevant.

GP administrators. Karnataka's GP legislation provides for appointed administrators to govern GPs when elected leaders are unable to discharge their responsibilities because of difficulties in holding elections or other reasons.[4] Administrators assume the powers and responsibilities of the elected president, effectively serving as a substitute until elected leaders return. In practice, administrators are usually block-level bureaucrats deputed to run GPs. These officials come from a range of government departments and

[2]Mysore introduced elected local councils with the Mysore Local Boards Act of 1902, while other regions of Karnataka, which were carved out of other historical states, such as the British-ruled Madras Presidency and the Hyderabad princely state, only experienced local democracy in the 1980s.

[3]Several other Indian states appoint administrators to run GPs, including Himachal Pradesh, Maharashtra and Haryana.

[4]Karnataka's Gram Swaraj and Panchayat Raj Act, 1993, Section 8(4), states that, once a GP council completes its term, "The Administrative Committee or Administrator shall be deemed to be the duly constituted Grama Panchayat".

specialise in their department's domain (e.g. roads, water supply, sanitation, agriculture).

We surveyed GP administrators to better understand their background, governance priorities and incentives. Table A.1 presents results. Administrators were experienced officials, with an average of 19 years in government service. Many also had direct experience with the post: 54% had served as GP administrators before, and 47% had received specific training for the role. At the same time, the position was typically an additional charge: most administrators held the role alongside their regular departmental duties. Even so, they devoted substantial time to the role, visiting their assigned GP about 12 times per month and spending roughly 39% of their working time on administrator responsibilities. Elected leaders are no different: most serve part-time while also farming or running a small business. Moreover, this kind of double-hatting is common in the Karnataka bureaucracy: apart from their administrator role, 86% of respondents had previously handled multiple assignments at once.

Similar to regular postings, administrators had little discretion over whether or where they served. Nearly everyone was assigned by the district collector, the most important bureaucrat in the district, or a senior official in their line department. The average administrator managed 1.8 GPs and most expected to be in charge for at least 6 months. Attitudes toward the role varied: some administrators were willing or even happy to serve again, while others would prefer to avoid it.

Administrators were generally quite familiar with their assigned GPs. While fewer than 5% came from the GP they governed, many had local ties. On average, the administrator's native village was only 19 km away from their assigned GP. Most administrators were also professionally familiar with their GPs: 71% were already posted in the same district and 56% in the same block. About 70% had previously visited their assigned GP, 51% had directly worked with it before, and 66% personally knew some households there.

Administrators brought relevant administrative experience and priorities. A majority (56%) reported expertise in executing village development works, but their specific expertise varied with their prior career experience. When asked about their governance priorities, 35% mentioned encouraging citizen participation, 28% highlighted delivering social assistance, and 25% described empowering disadvantaged groups such as marginalised castes.

At the same time, administrators were primarily concerned about upward accountability. Almost all administrators believed their performance was being monitored by the Rural Development and Panchayat Raj Department, which oversees GPs. A significant minority (39%) believed there would be career rewards (e.g. better postings) for good performance, while a majority (62%) perceived career consequences for poor performance. Only a minority (32%) perceived strong performance incentives—both rewards for good, and consequences for inadequate, performance.

Overall, the administrators who governed in place of elected leaders were highly experienced bureaucrats who had received training for the role and were reasonably familiar with their assigned GPs. They offer a realistic counterfactual to elected local leadership in India and, more broadly, in many low-capacity states in the developing world.

2.2 Data

Our analysis draws on rich survey, administrative and satellite data that allow us to measure local government performance across multiple domains, capturing both accountability to citizens and administrative efficacy. Table A.33 summarises all data sources and how they are used in the analysis.

2.2.1 Survey data

Citizen survey. We conducted a phone survey of citizens in August-September 2021, covering 11,810 respondents across 819 GPs. The sample included all politician-run GPs and a random sample of bureaucrat-run GPs. The survey measured citizens' participation in GP activities, assessments of COVID management and public service delivery, perceptions of corruption, and preferences over form of government. Importantly, we elicited citizens' preferences over public spending. Specifically, we asked respondents to identify the two most important categories of public goods (out of 12) to which they would allocate GP funds if given the opportunity. The options were *roads*, *piped water*, *housing*, *toilets*, *streetlights*, *library*, *education*, *healthcare*, *anganwadi* (*rural child care centre*), *tube wells*, *drainage* and *temples*. For each GP, we calculate the share of citizens prioritising each category, both overall and within demographic subgroups. Appendix A.1 describes the sampling procedure and survey instrument in more detail. The full questionnaire is available at this link.

Administrator survey. In July 2025, we surveyed 526 bureaucrats who had served as GP administrators during our study period. The survey collected information on administrators' backgrounds, prior experience, role-specific training, governance expertise and priorities, familiarity with their assigned GPs, selection into the role, expected tenure, and perceived career incentives. We use these data to describe the selection, information and incentives of administrators, and to probe the external validity of our findings. The full questionnaire is available here.

Village secretary survey. In partnership with the Karnataka government, we fielded an online survey of village secretaries in September 2021, yielding 4,322 responses, a 70% completion rate.[5] The survey asked secretaries who was responsible for key decisions in the GP and recorded how they allocated their time. The complete instrument is available here.[6]

2.2.2 Administrative data

Personnel data. We compile data on each GP's electoral term—when the elected leaders took office and completed their term. This enables us to identify each GP's treatment status. We observe the assigned

[5] Specifically, we surveyed Panchayat Development Officers, a position in Karnataka that refers to the chief of staff of each GP. This position is often called Panchayat Secretary or village secretary in other Indian states.

[6] Response rates were similar in politician- and bureaucrat-run GPs and generally uncorrelated with GP characteristics but more engaged secretaries—with higher attendance—were slightly more likely to participate.

GP(s), prior department, and job title of each administrator, which allows us to characterise their expertise. As a proxy for GP staff effort, we compiled attendance records for a random sample of working days: one day per week from April 2019 to March 2021. This yields weekly panel data on attendance for over 78,000 GP staff across all 6,000 GPs.[7]

Public expenditure. Financial statements allow us to track GP expenditures at a granular, line-item level. Typical expenditures include the construction and maintenance of local public amenities such as roads, bridges, streetlights, and water supply systems. Where possible, we map each expenditure line item into one of the 12 categories used in the citizen survey. We then construct category-level expenditures for each GP. For example, spending on piped water includes transactions related to water supply, pipe maintenance and water-related schemes.[8] Combining this expenditure data with citizens' stated priorities allows us to measure how closely public spending reflects citizen preferences—our primary measure of the quality of representation.

Social protection. We compile data on GPs' implementation of the National Rural Employment Guarantee Scheme (NREGS), India's largest social protection program. Registered households are guaranteed up to 100 days of unskilled wage employment each fiscal year. To access these benefits, households must register for a job card and request work through their GP office. We scraped the universe of job cards and employment records for Karnataka from the NREGS portal between 2017-21. We observe each beneficiary's demographics, when their job card was registered, and the number and dates of days worked. These data allow us to measure how responsive GPs were in providing workfare during the COVID period. The resulting village-month panel includes 99 million days worked by 8.6 million registered workers from over 4 million households.

Local development projects. We collected detailed information on all 1.4 million local development projects across GPs in Karnataka between 2014-21. Our data capture each project's description, location, the implementing agency, and the dates of key milestones. Although projects differ in substance, they follow a standard administrative process: each project begins with a proposal that receives technical sanction before work begins, and ends when the work is physically completed and financially settled. These distinct stages allow us to measure each project's progress in a given period. We also measure how narrowly targeted each project is by training language-model classifiers on project descriptions (see section A.4 for details). We classify projects according to whether their likely beneficiaries are specific households, a neighbourhood, or residents across the GP.

GP meetings. We compiled data on all public meetings organised by the GP during fiscal year 2020-21. These include broad participatory forums, such as constitutionally mandated *Gram Sabhas* and ward-level

[7] For our analysis, we identify the staff roster on a rolling basis — all officers that were present at least once in a 3-month window prior to the week (t). Next, we construct the mean attendance for all "regular" GP staff.

[8] We also examine GP revenues, including taxes, rental income, and user fees. However, for most GPs, the single largest revenue source is funds devolved from the state and central governments.

Ward Sabhas, which are open to all citizens[9]; and more restricted forums, such as General Body Meetings of elected representatives and meetings of Standing Committees, which are constituted to address specific issuesand are typically attended by GP officials and influential citizens.

Pre-treatment GP characteristics. To assess balance on pre-treatment characteristics, we compile measures of economic development and public good provision from the 1991, 2001, and 2011 Census and the 2011 Socioeconomic and Caste Census.

2.2.3 Satellite data

Night-time luminosity. We processed night-time light data from the Visible and Infrared Imaging Suite (VIIRS) of the Earth Observation Group. We compile monthly night-time light data for 2019-21, and construct a GP-month panel. Our primary outcome is a GP's average night-time lights, which is the area-weighted average for cells within each GP. Details are in appendix A.2.

Agricultural productivity. We use the Normalized Difference Vegetation Index (NDVI), which is sensitive to chlorophyll levels and has been used to proxy village-level agricultural productivity (Asher and Novosad, 2020). We construct a village-season-year NDVI measure for the period 2015-2021. Details are in appendix A.2.

3 Empirical Strategy

3.1 The Natural Experiment

Our empirical strategy exploits quasi-random variation in whether a GP was governed by elected or appointed leaders. This variation arises from the interaction between two forces: the COVID pandemic, which led Karnataka's state government to indefinitely postpone elections scheduled for 2020, and Karnataka's longstanding practice of appointing administrators to govern GPs when elections are delayed.

The electoral terms of 5,831 GPs—approximately 97% of the total—ended in 2020 (Table A.2). Administrators took charge of these GPs in June 2020 and governed for 9-10 months, throughout most of the 2020-21 fiscal year, until elections were held and the new elected leaders took office in March-April 2021. We refer to these as bureaucrat-run GPs. Meanwhile, in the remaining 162 GPs, whose electoral terms ended in later years (2021-25), elected leaders remained in charge. We refer to these as politician-run GPs. Thus, the natural experiment generated variation in forms of local governance during the 2020-21 fiscal year: most GPs were run by appointed bureaucrats, but a minority of GPs with different pre-existing electoral schedules were governed by elected leaders.

[9] Each GP is divided into 12–15 wards. Each GP council member is elected from, and represents, a particular ward.

The key threat to identification is that GPs on alternative electoral schedules (i.e., our politician-run GPs) differ systematically from the rest in ways that affect governance. We first analyse why GPs came to have different electoral schedules. Although the reasons vary, we argue that they are generally idiosyncratic. Consistent with this, we document that politician- and bureaucrat-run GPs are balanced on predetermined characteristics and follow parallel pre-trends in scheme implementation.

3.2 Historical Reasons for Differences in GP Electoral Cycles

We reviewed administrative circulars and historical reports on local elections in Karnataka to understand why some GPs follow different electoral cycles. These sources highlight a series of disruptions in the late 1990s and 2000s that delayed or advanced elections in particular GPs. Although we cannot identify the precise reason why each GP moved onto a different electoral cycle, the causes we can document appear idiosyncratic and unrelated to underlying governance capacity.

In 2000, some GPs in Belgaum, Davanagere, and Bellary districts had elections postponed because of ballot paper problems, including errors in serial numbers and confusion over candidate symbols (Mathew, 2000; Mohanty et al., 2007). In 2005, GP elections were postponed in 14 GPs in Gulbarga district because of torn nomination papers. Polling was delayed in two other GPs due to court orders and in several others due to inclement weather (Mathew and Jain, 2005). There are also cases where the death in office of an incumbent leader triggered by-elections, shifting the affected GPs onto a new electoral cycle.[10]

These events are unlikely to be systematically related to governance and development outcomes. Election administration issues reflect mistakes by the State Election Commission, which conducts local elections, and say little about the quality of local GP staff.[11] Even when we cannot trace why a GP went off-cycle, we verify that they have been on their alternative electoral cycle for at least 10-15 years. Thus, the shocks that moved them off-cycle occurred long before treatment. If these events reflect underlying GP attributes or have lasting effects on development and governance, we should observe differences between politician- and bureaucrat-run GPs in pre-treatment characteristics and trends. We now test this directly.

3.3 Assessing Validity of Natural Experiment

To assess the validity of our natural experiment, we compare politician- and bureaucrat-run GPs on a wide range of pre-treatment characteristics and governance outcomes. Table 1 reports summary statistics for the key variables. We then implement balance tests by estimating our baseline specifications using predetermined characteristics as outcomes. For cross-sectional outcomes, we estimate

$$Y_{ij} = \alpha_j + \beta Elected_i + \epsilon_{ij}, \tag{1}$$

[10] For example, after the death of the president of Kadabagere GP, the authorities scheduled an election to fill the vacant post.

[11] Unlike their national counterpart, which was formed in the 1950s, state election commissions were only established in the 1990s. This may explain why there were more administrative issues with elections in the late 1990s and early 2000s than in subsequent years.

where Y_{ij} is a pre-determined characteristic of GP i in block j, $Elected_i$ indicates whether GP i was governed by an elected leader during the 2020-21 financial year, and α_j denotes block fixed effects (FEs). Standard errors are clustered at the GP level. For panel data outcomes, we restrict attention to the pre-2020 period and estimate

$$Y_{it} = \alpha_j + \rho_t + \beta \cdot Elected_i + \epsilon_{it} \tag{2}$$

where Y_{it} is the governance outcome for GP i in period t, α_j are block FEs, and ρ_t denote time FEs.[12]

Figure 1 presents estimates from these specifications. Politician- and bureaucrat-run GPs are *ex ante* similar on a wide range of pre-determined characteristics, including demographics, household consumption, occupational composition, public good availability, and satellite-based proxies for local economic growth such as night-time luminosity and agricultural productivity. More importantly, before 2020, the two groups have similar governance outcomes, with no systematic differences in NREGS delivery, GP staff attendance, or the pace of implementing local development projects. Only 2 of the 39 variables we examine differ significantly between the two groups (Table A.3). Politician- and bureaucrat-run GPs also have very similar trends in governance outcomes (Figure A.4). If GPs sorted into different electoral schedules, or if the shocks that shifted GPs off cycle had lasting effects, we would expect to governance outcomes to differ before 2020. They do not, supporting our identifying assumption.

Our preferred specification includes block FEs, thus exploiting only highly local variation in governance form. This allows us to control for confounding factors that vary across administrative units in Karnataka, such as geographic and cultural differences and differences in the local bureaucracy. The identifying variation comes from 78 blocks—about 35% of the state's 222 blocks—that contain at least one politician-run and one bureaucrat-run GP. On average, each of these blocks contains 2 politician-run GPs and 28 bureaucrat-run GPs, and they are broadly representative of Karnataka as a whole, boosting the external validity of the within-block comparison (Figure A.1). However, our balance results are not sensitive to the choice of fixed effects: patterns remain very similar when we include district fixed effects instead (Figure A.2) or omit geographic fixed effects altogether (Figure A.3).

Together, this evidence suggests that our empirical strategy identifies quasi-random variation in governance form during the COVID period. Idiosyncratic events pushed a small number of GPs onto different electoral cycles in the 1990s and 2000s. These GPs remained on a different calendar during the COVID period and thus continued to be governed by elected leaders in 2020–21, while most GPs were governed by appointed administrators.

3.4 First Stage: Governance Authority

Next, we show that the *de jure* change in governance form led to a genuine shift in who exercised decision-making power within the GP. We asked village secretaries—key members of GP staff—who was in charge

[12] In some specifications, we additionally control for month-of-year or day-of-week fixed effects to capture forces like seasonality.

of the GP and who made important governance decisions during the COVID-19 period.

Administrators were to take charge of GPs whose electoral terms ended in 2020. In 87% of these GPs, the village secretary reported that an administrator was indeed in charge, indicating strong, though imperfect, compliance with the institutional arrangement.

We then examine whether this formal change affected *de facto* authority. We asked secretaries who led COVID management, an important governance task during the study period. Table A.4 presents results. Administrators were 12 pp, or 98% , more likely to lead COVID management in bureaucrat-run GPs (column 1), while elected leaders were 8 pp (64%) less likely to play an important role (column 2).

Village secretaries often emphasized their own role: 79% reported being responsible for COVID management. However, this share is similar across politician- and bureaucrat-run GPs (Table A.4, column 3). These results suggest that the natural experiment did not substantially alter the responsibilities of GP staff; rather, it changed whether they answered to an elected politician or an appointed bureaucrat. Data from our GP administrator survey supports this interpretation: only 4% consult the former elected leaders on governance matters (Table A.1, panel C). Taken together, the evidence indicates that the natural experiment was not merely a formal change, but rather changed whether elected or appointed leaders exercised decision-making power within the GP.

4 Results: Accountability

We first compare how accountable politician- and bureaucrat-run GPs are to citizens. To capture accountability, we measure how local governments represent citizens and respond to their needs.

4.1 Representation

Our measure of representation captures how well GP spending reflects citizen preferences. We surveyed citizens in 819 GPs to identify the public goods they wanted their GP to prioritise. Then, we compare these preferences against actual GP budget allocations, using detailed administrative data on public spending during the 2020-21 fiscal year. Specifically, we estimate

$$y_{ij} = \alpha + \beta_1 Elected_i + \beta_2 CitizenPref_{ij} + \beta_3 Elected_i \times CitizenPref_{ij} + \epsilon_{ij} \tag{3}$$

where y_{ij} is the log amount GP i spends on category j and $Elected_i$ denotes whether GP i is governed by an elected politician (as opposed to an appointed bureaucrat). $CitizenPref_{ij}$ is the share of citizens in GP i who listed j among the two most important categories for GP expenditure.[13] The coefficient β_2

[13]Citizens were given a list of the following 12 public goods categories and asked to select up to two which they considered important and believed the GP should spend public funds on: roads, piped water, housing, toilets, streetlights, library, education, healthcare, anganwadi (rural child care centre), tube wells, drainage and temples.

indicates the association between citizen preferences and spending in bureaucrat-run GPs, while β_3, our coefficient of interest, captures how this alignment differs under elected leaders.

4.1.1 Overall Representation

We find that GP spending is generally correlated with citizens' preferences (Table 2). When all citizens in a GP value a particular public good, the average GP spends 6.3% more on it (column 1). The association between citizens' priorities and public spending is robust to controlling for GP characteristics, including total expenditure (column 2), and appears in nearly all 25 districts in our sample (Figure A.5, top panel). Thus, spending in both politician- and bureaucrat-run GPs at least partly reflects citizens' concerns.

However, public spending is significantly more aligned with citizen preferences under elected leaders. The interaction between citizen preferences and elected leadership is positive and statistically significant (Table 2, column 3), indicating that politician-run GPs spend more on public goods that citizens value. When all citizens desire a public good, bureaucrat-run GPs spend 5.9% more on it while politician-run GPs spend 9.4% more. The coefficient on citizen preferences is therefore 59% larger in politician-run GPs.

This stronger alignment is not explained by elected leaders spending more or less on particular public goods (Table A.5) or by citizens in politician-run GPs having different preferences (Table A.6). Instead, elected leaders appear better able to identify citizens' priorities and translate them into policy choices. We show that politician-run GPs spend less on categories few citizens want and more on categories with broad support (Figure A.6(a)). Moreover, this pattern is robust to how we define low- and high-priority public goods (Figure A.6(b) and Figure A.6(c)).

Robustness. We conduct several checks to assess the robustness of this finding. Our results remain similar when we condition on district rather than block fixed effects, omit fixed effects altogether or include Conley standard errors to account for spatial correlation (Table A.7). The result is also not driven by outliers: in most districts, spending in politician-run GPs is more closely aligned with citizens' priorities (Figure A.5, bottom panel). Furthermore, we plot the spending-preference correlation and show that the distribution for politician-run GPs lies distinctly to the right of that for bureaucrat-run GPs (Figure A.7). Our average effects thus reflect a broad shift rather than a few influential observations.

4.1.2 Unequal Representation

Our results show that, on average, elected politicians represent citizen preferences better than appointed bureaucrats. But whose preferences do they represent? A central concern, especially in local politics, is that elected leaders may cater not to politically influential groups at the expense of the median voter (Bardhan and Mookherjee, 2006b; Olken, 2007; Mookherjee et al., 2015).

We compare how public spending aligns with the preferences of different groups of citizens. Re-estimating Equation 3, we find that spending under both elected and appointed leaders is more closely aligned with

the preferences of advantaged groups—such as men, upper caste households, and residents of the GP's main village—than with those of disadvantaged groups (Table 3). For example, when all male citizens value a public good, the average GP spends 5.4% more on it (column 1); however, when all women do, spending is only 2.1% higher (column 2). The coefficient on women's preferences is 62% smaller than that on men's preferences, implying a significant representation gap. Similar representation gaps exist along caste lines and between the GP's main and peripheral villages.[14]

Elected leaders weakly improve representation for all social groups. The interaction between preferences and elected leadership is positive for both advantaged and disadvantaged groups, though not always significant (Table 3). Public spending in politician-run GPs is thus equally or better aligned with the preferences of men and women, upper and Scheduled castes, and residents of both main and peripheral villages (Figure 2).

However, the gains of better representation are unequally distributed. Under elected leaders, spending becomes even more aligned with the preferences of influential groups (Figure 2). Politician-run GPs spend more on the priorities of advantaged groups but not on those of disadvantaged groups (Figure A.8). When all male citizens value a public good, bureaucrat-run GPs spend 5.4% more on it, while politician-run GPs spend 8.9% more (Table 3, column 1). By contrast, spending on women's priorities remains relatively unchanged under elected leaders (column 2). We find similar patterns by caste and geography: elected leaders direct significantly more spending toward the priorities of upper castes and main village residents (columns 3 and 6), but only marginally more toward those of Scheduled Castes and peripheral village residents (columns 5 and 7).

The representational gains under elected leadership accrue primarily to the most influential citizens: men and upper-caste households in the GP's main village.[15] Spending does not even become more aligned with the priorities of peripheral village men or upper castes or those of main village women and Scheduled Castes (Figure A.9). As a result, elected leaders widen representation gaps. The gender representation gap rises from 62% to 71% , the caste gap grows from 26% to 49% , and the main-peripheral village gap from 52% to 64% . These patterns are robust to including alternative fixed effects and Conley standard errors (Table A.8). Moreover, they are not driven by outliers but rather are present throughout the distribution (Figure A.10).

Overall, elected leaders represent citizens' preferences more effectively than appointed bureaucrats primarily because they are more attentive to the concerns of local elites. Bureaucrat-run GPs also cater to elites, but politicians amplify this bias, spending more on elites' priorities while disadvantaged groups see modest gains. This pattern does not imply that political responsiveness is undesirable: appointed bureaucrats are less responsive to all groups—and spend more on categories that almost no citizens value—so even skewed responsiveness may result in improved representation. But it underscores that democratic

[14] The main village—after which the GP is typically named—is the GP's natural geographic locus of influence: it is usually far larger than the GP's peripheral villages, hosts the GP office where meetings are held and staff sit, and is home to local elites and usually the GP president (Besley et al., 2007). Thus, it often draws a disproportionate share of GP resources (Besley et al., 2004).

[15] When we speak of local elites, we typically refer to upper-caste men in the GP's main village—the intersection of the advantaged groups we study.

accountability operates through local power structures. These findings resonate with a long tradition of research on village politics in India, which emphasizes the influence of landed and socially dominant groups in local decision-making (Bardhan and Mookherjee, 2006b; Besley et al., 2012; Anderson et al., 2015).

4.1.3 Mechanisms: Selection vs Accountability Incentives

Why are elected leaders more attentive to citizens' preferences, especially those of advantaged groups? We consider two broad explanations. The first is that elected and appointed leaders have different characteristics: politicians may be more locally embedded or drawn from different social groups. Alternatively, both types of leaders face different accountability structures: politicians must maintain support from citizens and local power brokers, while administrators answer to bureaucratic superiors. We examine both mechanisms below.

Selection: Local Embeddedness. One of the most salient differences between elected and appointed leaders is their local embeddedness. Elected politicians come from the GPs they govern, whereas administrators rarely do. Better knowledge of local priorities, which vary considerably across GPs (Table A.9), may enable politicians to reflect citizens' concerns more effectively in public spending.

Yet if better information were the primary difference between elected and appointed leaders, we would expect spending in politician-run GPs to be more aligned with the concerns of all groups, not just elites. Moreover, administrators are not complete outsiders: their native village is on average only 19 km away from their assigned GP; 56% were already working in the same block; and 66% personally knew some households from the GP before taking charge.

Measuring administrators' embeddedness using these and other variables, we find that spending alignment does not improve when administrators are more familiar with their GP. If anything, embedded administrators appear slightly less responsive to citizen preferences (Figure A.11). Thus, the stronger representational performance of elected leaders is unlikely to stem solely from their local roots.

Selection: Leader Background, Priorities and Expertise. Beyond local embeddedness, elected and appointed leaders typically come from different socioeconomic backgrounds and have different experience, expertise and governance priorities. Gender is a stark example: 91% of administrators are male, whereas a much higher share of elected leaders are female, due to political reservations. Yet differences in leaders' gender do not explain the difference in spending alignment between politician- and bureaucrat-run GPs; if anything, spending alignment is slightly lower under female leaders (Table A.10). Administrators' age and religion also do not predict how well they represent citizens (Figure A.12).

Administrators tend to have substantially more formal education and government experience. Although we lack data on education for elected leaders in our sample, prior work finds that only about 2% of GP elected leaders have a college degree (Narasimhan and Weaver, 2026), compared to 62% of administrators

(Table A.1). The average administrator also has 19 years of experience in government service and nearly half received training specific to the role. Yet here too, we find that more educated, experienced or trained administrators do not improve spending alignment or close the gap with elected leaders (Figure A.12).

Elected leaders and administrators may also differ in their governance priorities. We elicited administrators' priorities and found that some emphasized engaging citizens or empowering disadvantaged groups such as women and Scheduled Castes. Yet these stated priorities do not translate into stronger representation (Table A.11). Administrators do not even represent the preferences of the specific disadvantaged groups they were keen to empower better than elected leaders. This is striking: even though elected leaders are most responsive to local elites, they represent disadvantaged citizens just as well as appointed leaders, including those administrators who prioritise empowering disadvantaged groups.

Incentives: Downward Accountability of Elected Leaders. Having argued that differences in elected and appointed leaders' characteristics cannot explain the performance gap, we now consider their incentives. GP presidents and administrators have fundamentally different accountability structures. Presidents are indirectly elected—citizens elect GP council members, who in turn choose a president—and must therefore maintain support from citizens and local power brokers.

Consistent with electoral incentives, we find that elected leaders place more weight on the preferences of numerically larger groups in their GP (Table A.12). Even among the peripheral villages within their GP, elected leaders spend more on the priorities of more populous peripheral villages (columns 4 and 5). Together with the elite bias we documented earlier, this suggests that politicians are especially attentive to politically influential citizens—local elites and electorally significant groups.

The need to sustain public support may motivate politicians to engage more actively with citizens. To test this, we compare how frequently elected and appointed leaders hold deliberative meetings with citizens. GPs are required to convene regular village assemblies where citizens discuss issues like the allocation of public spending (Sanyal and Rao, 2018), and these forums have been described as "the fulcrum of the Panchayat system" (Aiyar, 2002). Yet compliance with these statutory requirements is weak, and organisation of GP meetings is often patchy (Narasimhan and Weaver, 2026).

We find that politician-run GPs hold 22% more public meetings than bureaucrat-run GPs, a 0.11 SD increase (Table A.13). This difference is driven mainly by general body meetings (0.87 more, a 0.37 SD increase) and standing committee meetings (0.10 more, a 0.25 SD increase), forums typically attended by GP council members and influential citizens. By contrast, we see no significant increase in the frequency of broad-based assemblies: politician-run GPs do not convene more *gram sabhas* or *ward sabhas*, the most inclusive forums for citizen participation.[16] Consistent with this, we find that citizens from more advantaged social groups, especially men and upper castes, are more likely to participate in village meetings in politician-run GPs, but effects are not significant for disadvantaged groups (Table A.14).

[16] We rule out the possibility that these effects reflect greater engagement by the village secretary. Our survey of village secretaries shows no difference in how much time secretaries spend in meetings or engaging citizens in politician- versus bureaucrat-run GPs (Table A.18).

Elected leaders engage citizens more actively, but mainly through deliberative forums attended by elites. This helps explain why politician-run GPs align spending with elites' preferences. Our findings suggest that downward accountability improves representation by amplifying the voice of influential groups.

Incentives: Upward Accountability of Administrators. Administrators enter government service through competitive exams and are appointed to a GP by a senior official—typically their departmental supervisor or the district collector, the senior-most bureaucrat in their district. Unlike elected presidents, they are primarily accountable upward within the bureaucracy rather than downward to citizens.

Yet government bureaucracies rarely have high-powered performance incentives (Besley et al., 2022; Finan et al., 2017). Indeed, only 39% of administrators believed that good performance would yield career rewards, while 62% expected consequences for poor performance. Only about one-third perceive strong incentives—rewards for good, and consequences for inadequate, performance (Table A.1, panel F). We find that representation does not improve when administrators perceive stronger career concerns: spending alignment is uncorrelated with administrators' perceived incentives (Figure A.12).

While this could potentially reflect the coarseness of our proxy for incentives, we believe it also highlights a key difference between upward and downward accountability. Downward political accountability seems to make elected leaders more attentive to citizens, especially elites, but upward bureaucratic accountability appears to have little impact on how administrators reflect citizens' priorities in policy.

What, then, shapes administrators' spending choices? Using data on administrators' areas of expertise, we find that bureaucrat-run GPs spend more on public goods related to their administrator's stated expertise (Table A.15, columns 1-2). In fact, administrators only spend more on citizens' concerns when it overlaps with their own expertise (column 3). Administrators also spend more on public goods under the purview of their home department (columns 4-6). This suggests that administrators' allocations are influenced by what they know. While such expertise may aid program implementation, as we document in section 5.3.3, it does not enable better representation of citizens' concerns.

4.2 Responsiveness

Accountable governments do not just develop policies that reflect citizens' priorities; they also respond effectively when citizens face urgent needs. Reflecting this, several well-known studies use the implementation of social protection programs to measure government responsiveness (Besley and Burgess, 2002; Muralidharan et al., 2016; Narasimhan and Weaver, 2026).

The COVID-19 crisis triggered significant economic distress in rural India. When lockdowns were imposed in cities, millions of migrants lost their jobs and were forced to return home to their villages. Demand for rural welfare schemes surged. In particular, the 2020-21 fiscal year saw unprecedented demand for workfare via the NREGS, India's flagship rural social protection program (Figure A.4, panel A).[17]

[17] According to some newspaper articles, NREGS demand in 2020 was at "an all-time high...since the inception of the scheme in

We compare how politician- and bureaucrat-run GPs responded to this surge in NREGS demand. We measure the responsiveness of NREGS delivery in three ways: the number of workfare days delivered, workfare payments earned by beneficiaries, and the number of new beneficiaries registered. Analysing NREGS panel data, we estimate the difference-in-difference regression:

$$y_{it} = \alpha_i + \alpha_t + \beta_1 Elected_i + \beta_2 Post_t + \beta_3 Elected_i * Post_t + \gamma X_{it} + \epsilon_{it} \quad (4)$$

where y_{it} is the NREGS outcome in village i in month t, $Elected_i$ denotes whether village i is in a politician-run GP, and $Post_t$ is a dummy indicating whether the month is in FY2020-21, the peak of the COVID-19 crisis and the period during which GPs have different forms of government. Our coefficient of interest is β_3, which captures the effect of elected leadership. Our preferred specification includes village and month fixed effects and controls for seasonality and demand shocks. Standard errors are clustered at the GP level.

Panel A of Figure A.4 presents raw data on NREGS delivery and offers strong support for the parallel trends assumption. Before 2020, when both groups were governed by elected leaders, NREGS outcomes track each other very closely. By contrast, dynamic difference-in-differences estimates show that politician-run GPs were more responsive in delivering NREGS workfare during the COVID period. The gap in workfare days and payments appears after administrators take charge, and remains roughly constant over time, with no evidence that bureaucrat-run GPs catch up even after 6 months (Figure 3). The pooled difference-in-difference estimates in Table 4 show a similar picture: politician-run GPs register more new beneficiaries (columns 1-3), provide more workfare days (columns 4-6), and deliver more NREGS payments (columns 7-9). Controlling for seasonality and demand shocks through the inclusion of block-month fixed effects improves precision and statistical significance. These results are not driven by outliers: the distribution of NREGS outcomes for politician-run GPs lies to the right of that for bureaucrat-run GPs (Figure A.14). The difference in responsiveness is meaningful. Each month, villages run by elected leaders register 1.8 more beneficiaries (a 0.17 SD increase), organise 84 more workdays (a 0.11 SD increase), and deliver Rs 23,343 more in NREGS benefits to citizens (a 0.12 SD increase).

Politician-run GPs are weakly more responsive to all social groups (Figure 4). However, as with spending alignment, elected leaders are disproportionately responsive to elites: advantaged castes in the main village receive 23% higher workfare payments (a 0.12 SD increase), while gains for disadvantaged castes and peripheral village citizens are much smaller and statistically insignificant (Figures A.15 and A.16). Unlike with public spending, we see no gender difference in elected leaders' responsiveness: men and women have similar gains in workfare benefits, which likely reflect women's high NREGS participation.

These effects do not reflect greater economic need in politician-run GPs: as we show in section 5.2, politician- and bureaucrat-run GPs were similarly affected by COVID-19. The persistent increase in NREGS delivery also weighs against a learning interpretation, since bureaucrat-run GPs do not appear to catch up over time. We also find limited evidence that the NREGS delivery gap changes after the election timeline is

2006." Afridi et al. (2022) document the important role NREGS played in mitigating employment losses.

announced and it is clear that administrators' terms will be coming to an end (Table A.16). Instead, our findings suggest that elected leaders were more responsive in delivering social protection to citizens during a period of acute economic distress, and were again disproportionately responsive to local elites.

4.2.1 Mechanism: Bureaucrat Effort

How do politician-run GPs manage to deliver social assistance more effectively? We show that local GP staff exert greater effort when elected leaders are in charge. While the (elected or appointed) GP leader makes key decisions like allocating public expenditure and approving NREGS projects, the projects themselves are ultimately implemented by GP staff. The work of implementing an NREGS project—which involves making a detailed work plan, getting necessary permissions from block-level officials, registering and mobilising workers, preparing the worksite and required materials, paying workers for their labour, and ensuring the project is completed—falls almost entirely on GP staff. Given this, it is unsurprising that the capacity and effort of GP staff is a key determinant of, and often the binding constraint to, the successful delivery of NREGS projects (Chopra, 2016).

We measure GP staff effort using a simple proxy: how often they show up to the office. Absenteeism among frontline workers is a first-order problem in many developing country governments (Chaudhury et al., 2006), and is a concern in Karnataka too (Dhaliwal and Hanna, 2017). We compare the attendance rates of GP staff in politician- and bureaucrat-run GPs. Analysing attendance rates at the GP-Week level, where each week represented a randomly sampled working day, we estimate a regression analogous to Equation 4. In addition, we include GP, week and day-of-week fixed effects to control for weekly variation in attendance patterns.

Figure A.4 plots trends using raw data. We see that, prior to 2020, attendance rates are very similar in politician- and bureaucrat-run GPs, reinforcing the parallel trends assumption. Event study estimates show that once administrators are appointed, we begin to see higher attendance in politician-run GPs (Figure A.17, top panel). These results are not driven by outliers: the attendance rate distribution for politician-run GPs is shifted to the right relative to bureaucrat-run GPs (Figure A.17, bottom panel), with gains concentrated in the lower tail.

Turning to magnitudes, we find that GP staff are 4.2 pp more likely to be at work when an elected leader governs their GP—a 10% increase over the baseline attendance rate (Table 5). These results are robust to controlling for the share of officers registered to use the e-attendance system (column 2), day-of-week fixed effects (column 3), and officer category (column 4).

Our results indicate that GP staff exert greater effort in politician-run GPs. We interpret this as a consequence of political accountability: because elected leaders feel greater pressure to respond to citizens' urgent needs, they push frontline staff to show up and do their jobs, so that social assistance such as NREGS work can be effectively delivered. However, our results are also consistent with a bottom-up channel, where citizens feel more empowered to demand accountability when an elected leader is in charge. Ei-

ther way, the evidence indicates that politician-run governments are more responsive to citizens, partly through mobilising greater effort from frontline bureaucrats.

An alternative explanation is that staff attendance is lower under appointed leaders because administrators, unlike elected leaders, rarely live in their assigned GP and visit only periodically. Exploiting variation in how often administrators visit their assigned GP, we find little evidence that staff attend more when the administrator is more present (Table A.17), which weighs against a mechanical physical presence explanation. The second is that NREGS delivery improves under elected leaders not because staff work harder but because they reallocate time from other tasks. Contrary to this, Table A.18 shows that village secretaries' time use is broadly similar under both forms of government.[18]

Taken together, our finding that elected leaders are more accountable supports some of the theoretical predictions of canonical models (Maskin and Tirole, 2004; Alesina and Tabellini, 2007, 2008).

5 Results: Administrative Efficacy

Our findings thus far show that elected leaders are more accountable to citizens: they represent citizens' preferences better and are more responsive to their needs. Yet good local governments are not just accountable; they also provide clean and competent administration of programs and public services. Despite their weaker accountability, appointed bureaucrats might administer their GPs more effectively, because they have relevant expertise or because electoral incentives distort politicians' behaviour (Alesina and Tabellini, 2008). We compare politician- and bureaucrat-run GPs on three metrics of administrative efficacy: corruption, crisis management, and the implementation of development projects.

5.1 Corruption

Elected leaders are more responsive in delivering social assistance to citizens. But doing so also creates more opportunities for corruption (Niehaus and Sukhtankar, 2013). We construct two proxy measures of corruption and assess whether politician-run GPs are more corrupt.

We begin by testing for self-dealing in NREGS. Prior work shows that GP leaders tend to capture welfare benefits for their own households (Besley et al., 2012), including NREGS payments (Jeong et al., 2023). Using beneficiary records, we identify whether elected leaders appropriate NREGS benefits for themselves and their families.

We then test whether GP politicians' households receive more NREGS work days and payments when

[18] One category that does differ is public service delivery, which secretaries spend more time on in politician-run GPs. While this category is distinct from NREGS and so cannot explain the delivery gap, it reinforces our interpretation that elected leaders direct staff effort toward citizen-facing work.

they hold formal authority, estimating the regression

$$y_{ijt} = \alpha_j + \alpha_t + \beta_1 Elected_i * Post_t + \\ \beta_2 Politician_j * Post_t + \beta_3 Elected_i * Politician_j * Post_t + \gamma X_{it} + \epsilon_{it} \quad (5)$$

where y_{ijt} is the NREGS benefits received by household j in village i in half-year t. $Elected_i$ indicates whether village i is in a politician-run GP, $Politician_j$ denotes whether a member of the elected GP council resides in household j, and $Post_t$ denotes fiscal year 2020-21. We are interested in β_3, which captures whether politicians' households receive more NREGS benefits when elected leaders are in power.

We find limited evidence that elected leaders extract more welfare benefits when they hold formal political power: coefficient β_3 is positive but statistically insignificant for both workdays and payment received (Table A.19, columns 1-6). We complement this administrative data-based measure of self-dealing with a survey-based measure by asking citizens whether they experienced corruption while accessing public services. If anything, our evidence suggests that citizens were slightly less likely to pay bribes in politician-run GPs (Table A.19, columns 7 and 8).

While self-dealing in wage payments is a common proxy for corruption (Jeong et al., 2023), it is only one form of leakage in NREGS. We are unable to capture other margins, such as misappropriation of materials expenditure (Niehaus and Sukhtankar, 2013). Survey-based measures could also face reporting bias. These caveats notwithstanding, we find limited evidence that politician-run GPs are more corrupt across the measures we observe.

5.2 Crisis Management

Next, we compare politicians' and bureaucrats' ability to manage crises. During our study period, a key task of local government was containing COVID-19. We measure the quality of COVID management using data from our citizen survey and estimate the regression

$$y_{ij} = \alpha + \beta Elected_i + \gamma X_i + \theta X_j + \epsilon_{ij} \quad (6)$$

where y_{ij} is citizen j's perception of the quality of COVID management in village i, and X_i, X_j denote village- and household-level controls. Table 7 presents results.

We find that politician- and bureaucrat-run GPs perform similarly across a range of COVID management outcomes. We first examine specific COVID-mitigation activities under the charge of GPs. Each GP was supposed to organise a COVID task force to raise awareness about the pandemic and encourage precautionary health behaviours. We find awareness is no different under elected and appointed leaders (column 1). Citizens' subjective evaluation of their GP's management of COVID is also similar in politician- and bureaucrat-run GPs (column 2).

Consistent with this, we find that the health and economic impacts of COVID were similar in the two groups of GPs. Since Indian administrative data under-counted COVID mortality (Malani and Ramachandran, 2022; Jha et al., 2022; Anand et al., 2021), we measure mortality by asking citizens whether anyone in their village died over the past year. Reported mortality rates are similar in politician- and bureaucrat-run GPs (column 3). We also construct indices of household health and economic well-being during the pandemic, combining objective measures such as morbidity and food insufficiency with subjective assessments of households' health and financial situation.[19] These outcomes also do not differ across governance forms (columns 4 and 5).

These null effects are precisely estimated: for the outcomes in columns 1-5, we are able to reject effects greater than 0.10 SD. They are also robust to alternative fixed effects or standard errors (Table A.20). These results indicate that COVID severity and the quality of crisis management were similar in politician- and bureaucrat-run GPs. They also suggest that our findings on representation and responsiveness are unlikely to be driven by differential exposure to, or management of, the pandemic.

5.3 Project Implementation

5.3.1 Overall

The preceding results suggest that administrators are no better than elected leaders at curbing corruption or managing health crises. But these are not tasks for which administrators are specifically trained. Implementing development projects, by contrast, falls squarely within their experience: 56% of administrators list public works as an area of expertise (Table A.1). Development projects are also among the most complex and skill-intensive tasks GPs manage, making them an excellent laboratory to test the hypothesis that bureaucratic expertise improves administrative efficacy.

Our primary performance measure is the pace at which development projects progress. Drawing on data covering the universe of development projects since 2015, we track how many and which project milestones were achieved in a given period. Section 2.2.2 describes these outcomes in more detail. We compare project implementation in politician- and bureaucrat-run GPs, estimating the regression

$$y_{ijt} = \alpha_{ij} + \alpha_t + \beta_1 Elected_i * Post_t + \gamma X_{it} + \epsilon_{it} \tag{7}$$

where y_{ijt} measures progress on project j in GP i during period t (two periods per year: January-May and June-December), $Elected_i$ denotes GPs where elected leaders were in charge during our study period, and $Post_t$ is an indicator for fiscal year 2020-21. Our empirical strategy identifies within-project variation due to shifts in governance form: project fixed effects absorb time-invariant project and GP characteristics that affect progress, while time fixed effects absorb shocks common to all GPs. The coefficient of interest, β_1, captures whether projects progressed faster under elected leaders. Standard errors are clustered at

[19] Details are in the notes below Table 7.

the GP level. We find that politician- and bureaucrat-run GPs have similar levels and trends in project progress before 2020 (Figure A.4, panel C), supporting the validity of our research design.

On average, projects in politician- and bureaucrat-run GPs progress at similar rates (Table 6, panel A). The probability that a project makes any progress in a period is very similar (column 1), as is the total number of milestones achieved (column 2). There is no difference in the odds of completing any of the five key project milestones (columns 3-7). Moreover, these null effects are precisely estimated: with 95% confidence, we can rule out progress rate differences greater than 0.02 SD. Even when projects are in public goods categories that citizens value, we find limited evidence that progress rates differ under elected and appointed leaders (Table A.21).[20]

This evidence goes against the argument that bureaucrats consistently outperform politicians at skill-intensive tasks such as implementing development projects.

5.3.2 Internalising Externalities

Even if administrators do not implement projects more efficiently, they may select projects that yield wider social benefits. Electoral considerations may encourage politicians to prioritise projects that deliver visible benefits to narrow constituencies at the expense of public goods with broader spillovers (Lizzeri and Persico, 2005). This concern is especially relevant in Karnataka, where GP presidents are indirectly elected by a council comprising 12-15 members who each represent a ward of about 400 citizens. Elected leaders may favour projects that benefit specific households (e.g. tap water connections) or neighbourhoods (e.g. streetlights) over development works with significant externalities (e.g. inter-village roads). Prior work has noted that decentralisation can lead to such distortions (Lipscomb and Mobarak, 2016).

We compare the scope of projects undertaken and progressed by elected and appointed leaders. We measure each project's scope based on its text descriptions, classifying whether it is likely to benefit specific households, a neighbourhood, or multiple wards in the GP. We train a classification algorithm on a human-annotated sample of project descriptions, fine-tuning a multilingual BERT model (*bert-base-multilingual-cased*) via the LinkTransformer framework (Arora and Dell, 2023).[21] On average, 53% of development projects are narrowly targeted at specific households and neighbourhoods, while the remaining 47% are broad-based projects that benefit citizens across the GP.

We find that elected leaders are no more likely to undertake narrow projects that benefit specific households or neighbourhoods. The number and share of such projects is similar in politician- and bureaucrat-run GPs (Table A.22). Progress rates on both narrow and broad-based projects are also similar under both governance forms (Table 6, panel B). These null effects are precisely estimated: with 95% confidence, we can rule out differences larger than 0.03 SD. These results provide little evidence that politicians neglect broader public goods in favour of narrowly targeted projects.

[20] An important limitation is that we do not directly observe citizens' preference over development projects, only preferences over GPs' spending. However, some projects are funded by higher levels of government and only implemented by the GP.

[21] Model performance is strong, with F1-scores above 90% for each classifier. Please see Appendix A.4 for details.

5.3.3 Expertise

Our findings thus far offer little support for the view that bureaucrats have a general administrative advantage over politicians. Development projects progress at similar rates under elected and appointed leaders, and politician-run GPs do not appear to neglect projects with broader spillovers. But these average effects may mask the value of task-specific expertise. Administrators come from a range of government departments and have varied professional backgrounds. A fairer test of the expertise hypothesis would be to assess whether bureaucrats outperform elected leaders when implementing projects that require their particular skills.

We identify bureaucrats' expertise from the department they worked in prior to becoming GP administrator, and classify each project's domain based on the government department responsible for implementing it. By this definition, task-specific expertise is uncommon: administrators have relevant domain expertise for only 5% of ongoing GP projects. Only 15% of administrators have expertise relevant to even one ongoing project in their assigned GP.[22] We estimate the return to task-specific expertise by estimating a slightly modified version of Equation 7:

$$y_{ijt} = \alpha_{ij} + \alpha_t + \beta_1 Elected_i * Post_t + \beta_2 Admin_i * Post_t * Expertise_{ij} + \gamma X_{it} + \epsilon_{it} \quad (8)$$

where, $Admin_i$ denotes bureaucrat-run GPs; $Expertise_{ij}$ indicates that GP i's administrator has expertise relevant to project j. The coefficient β_1 captures the average difference in project progress between elected and appointed leaders, while β_2 captures the differential effect of the administrator having relevant expertise.

We find that development projects progress significantly faster when the appointed administrator has relevant domain expertise (Table 6, panel C). Projects overseen by an administrator from the implementing agency are 4 pp (or 62%) more likely to progress during the period (column 1) and complete 77% more milestones (column 2). Progress is faster at all stages, but effect sizes are largest for the approval and work order stages (columns 3 and 4), which require knowledge of government processes and sound judgement about technical feasibility and cost-effectiveness.

We then ask what kinds of expertise drive this result. Figure A.18 presents results. General human capital does not appear to be the key margin: more educated and experienced administrators do not achieve faster progress. Prior experience as a GP administrator and role-specific training also have limited value. If anything, administrators who claim generic public works expertise achieve slightly slower progress.

Instead, we find that domain-specific expertise and bureaucratic networks are important. Administrators who previously worked in the same block make 12% faster progress, highlighting the value of networks. By contrast, administrators native to the block do not progress faster, indicating that it is professional ties to implementing officials rather than local familiarity that matters (Figure A.18). Most strikingly, we

[22] Specifically, among the 497,022 projects managed by appointed bureaucrats, the administrator has domain expertise for 24,699 projects.

find that administrators with stated expertise in the project's specific domain, such as sanitation or roads, achieve 24% faster progress. Comparing these two channels, we find that domain knowledge is more valuable. Administrators who are domain experts but outsiders to the block make twice as much progress as block insiders who lack domain knowledge. This also helps reconcile the large returns to expertise with the average null effect of appointed administration: given the diversity of ongoing development projects in the GP, most administrators simply do not have the relevant expertise for most projects they oversee. Indeed, the average administrator's expertise is relevant to only 5% of ongoing projects.

Overall, our results show that bureaucratic expertise can be very valuable for skill-intensive activities, but only when it is closely matched to the governance task.

6 Discussion

Our evidence thus far indicates that elected leaders are more accountable to citizens and administer their GPs no less efficiently than appointed bureaucrats. Next, we examine citizens' preferences over forms of government.

6.1 Citizens' Preference over Governance Form

In our survey, we elicit citizens' preferred form of government. When asked, 77% say they would rather be governed by an elected leader than a bureaucrat appointed by the state government (Figure 5). The preference for elected leadership falls by 9 pp when citizens are asked who should govern during a crisis, but remains high at 68% .

Citizens' preferences appear to reflect both trust in elected leaders and support for the democratic process. We find that 85% of citizens have high or very high trust in elected leaders, about 6 pp higher than for appointed leaders. In addition, 86% of citizens believe elections are the best way to select their village leader. Notably, these positive attitudes towards elected leaders and local democracy are shared by citizens from both advantaged and disadvantaged groups (Table A.23). Being governed by an elected or appointed leader during the 2020-21 fiscal year has no impact on citizens' preferred form of government, trust in elected leaders, or beliefs about elections (Table A.24, row 1).

These findings are consistent with the paper's main results. Elected leaders are more accountable to citizens and weakly more responsive to all groups while performing no worse on day-to-day administration. Consistent with this, most citizens prefer elected leaders, even during a crisis and despite the unequal distribution of representational gains.

6.2 Alternative Explanations

We argue that elected and appointed leaders govern differently because they face different accountability mechanisms. Downward political accountability pushes elected leaders to represent citizens better and be more responsive to their needs: they engage citizens more actively and are especially attentive to advantaged and numerically large groups. In this subsection, we consider alternative explanations—differences between elected and appointed leaders arising from particular features of our natural experiment rather than their accountability structures.

Tenure and Prior Experience. Administrators were newer to the GPs they governed: they took charge at the start of the COVID period, while elected leaders were already 1-4 years into their term. If there is substantial on-job learning, leaders may perform better over time. For example, elected leaders might have used their longer tenure to learn about citizens' preferences and build rapport with GP staff, enabling faster NREGS delivery. We find limited support for this explanation. There is no clear relationship between on-job tenure and governance outcomes: we find little correlation between NREGS delivery (Figure A.19) or staff attendance (Figure A.20) for both elected leaders and administrators. The gap in NREGS delivery between politician- and bureaucrat-run GPs does not narrow over time, consistent with weak tenure effects (Figure 3). More generally, elected leaders who are further along in their term do not govern consistently better nor are our results driven by high-tenure elected leaders (Table A.25).

Elected and appointed leaders also vary in governance experience prior to taking office. However, the difference here cuts in the opposite direction: administrators are generally more experienced than elected leaders. The average administrator has 19 years of government service, whereas 47% of elected leaders are first-time GP presidents. Yet there is significant variation among both administrators and elected leaders. We find no evidence that more experienced administrators perform significantly better on either accountability or administrative efficacy (Table A.26, row 2). Prior experience as a GP administrator also yields limited gains and does not close the gap with elected leaders (row 3). Prior experience for elected leaders has mixed effects, and is associated with slightly better aligned spending and development project implementation but worse NREGS delivery (row 4).

These results suggest that differences in tenure and prior experience cannot account for our findings.

Leader Bandwidth. Another difference between elected and appointed leaders in our setting is bandwidth. Nearly all GP administrators held the post as an additional assignment alongside their regular duties, spending about 40% of their time on their administrator role. In addition, the average administrator was assigned 1.8 GPs. Although most elected leaders are also part-time officials who farm, run small businesses or hold other occupations, they likely have more bandwidth to govern than the average administrator.

Table A.27 shows how governance outcomes vary with administrator bandwidth. We find little evidence that administrators performed better when they had more time or fewer competing responsibilities. Gov-

ernance outcomes vary little with the number of GPs assigned to an administrator (row 1), whether departmental colleagues absorbed some of the administrator's regular duties (row 2), or how much time administrators devoted to their role (row 3).

Elected presidents may also benefit from a form of team governance, as they preside over a council of ward members who may share some of the governing load. By contrast, nearly all bureaucrat-run GPs had a single administrator. Exploiting variation in the size of the GP council, we again find limited evidence that additional councillors improve governance (row 4). Together, these results suggest that bandwidth differences, while real, are unlikely to be the primary driver of our findings.

Time Horizon and Incentives. In our setting, administrators generally face a different time horizon from elected leaders. Administrators knew their appointment was temporary and would end once GP elections resumed, whereas elected leaders could seek re-election (though rotating gender and caste reservations leave many *de facto* term limited). Short horizons could lead administrators to invest less effort in understanding citizens' concerns and governing well. We find that administrators did not perceive their tenure to be very short: a majority expected to serve at least 6 months. Moreover, governance performance does not vary substantially with the administrator's perceived time horizon. Although there is suggestive evidence of improved spending alignment, we see no change in NREGS responsiveness, COVID management and marginally worse project progress (Table A.28, row 1).

The temporary, out-of-department nature of the posting may also have weakened bureaucrats' incentives, if they believed their performance as administrators had little career implications. Yet nearly all administrators believed their performance was monitored by the Rural Development and Panchayat Raj Department, which oversees GPs. Over 39% perceived career rewards for good performance and 62% perceived career consequences for poor performance. We find little evidence that the strength of these upward accountability incentives influenced governance outcomes: administrators who expect greater rewards or penalties from higher-ups do not perform very differently when in office (Table A.28, rows 3-5). If anything, administrators who perceive the strongest career concerns perform slightly worse.

While these patterns may reflect the cheap-talk nature of our self-reported incentives measure, they could also capture how upward and downward accountability incentives have different governance implications.

Leader Demographics. As previously discussed, elected and appointed leaders come from very different social backgrounds. Most starkly, a majority of elected leaders are women—largely due to political reservations—against only 9% of administrators. Administrators are also significantly more educated and less locally embedded than elected leaders. However, we do not think of these factors as confounders, since they are characteristic of how elected and appointed officials differ in most contexts. Instead, we ask whether such differences in leader identity, rather than accountability, can explain our results (Chattopadhyay and Duflo, 2004; Clots-Figueras, 2012).

Examining heterogeneity by leader gender, education and local embeddedness, we find limited effects

(Table A.29). These results suggest that the stark observable differences between elected and appointed leaders do not explain the governance gap, consistent with our argument that it stems instead from elected and appointed leaders' different accountability structures.

6.3 External Validity

Our natural experiment offers a unique opportunity to compare governance by elected and appointed leaders in the same setting. Yet at least three contextual factors could limit the external validity of our findings: the COVID pandemic, the non-ideal forms of elected and appointed government we study, and distinctive features of Karnataka's system of local governance.

COVID-19. The pandemic undoubtedly affected governance priorities and development outcomes, raising the question of whether it drives our results. Yet even as GPs took on new responsibilities, they continued their routine governance functions. Time-use data indicate that village secretaries spent only about 6 hours a week, roughly 10% of their time, on COVID management, and this share is similar under elected and appointed leaders (Table A.18). Most of their time was still devoted to business-as-usual governance tasks such as delivering social protection programmes and maintaining public infrastructure. Moreover, as section 5.2 shows, politician- and bureaucrat-run GPs were similarly affected by COVID, and managed the pandemic in similar ways. Our results are therefore unlikely to be driven by pandemic-specific changes to governance.

The pandemic may even strengthen external validity along one dimension. Because elections were postponed in 97% of GPs, the state needed to appoint thousands of administrators simultaneously. A significant share of eligible block-level officers were thus pressed into service, leaving little room for fine-grained selection of particular officers into the role. The administrators in our study may therefore be more representative of the officials available to govern if all GPs were bureaucrat-run.

Non-Ideal Forms of Elected and Appointed Leadership. While we aim to draw broader lessons about elected and appointed governance, the politicians and bureaucrats in our setting are far from ideal archetypes of their respective forms of government.

GP elected leaders are not full-time or professional politicians. Although we lack comparable data from Karnataka, evidence from other Indian states indicates that nearly all serve part-time while continuing to farm, run a small business or hold other occupations (George et al., 2024). Many elected leaders are first-time officeholders and have limited prior knowledge of how government works (Bamezai et al., 2025).

The administrators in our setting were likewise not idealised technocrats. They were temporarily appointed and often held their role alongside their regular departmental duties. Even though we find that administrators with slightly longer time horizons governed no differently, it is possible that permanent, full-time, locally embedded bureaucrats with stronger career concerns would behave differently. Yet short postings, double-hatting and relatively flat performance incentives are common features—or bugs—of

bureaucracies in developing countries (Besley et al., 2022). Indian Administrative Service officers, for example, spend only 16 months in a post on average, and only 56% of district collectors remain in a position for more than a year (Iyer and Mani, 2012). Nearly a third of administrators in our sample had previously served postings shorter than a year. Double hatting is also very common: 86% of administrators had previously juggled multiple assignments apart from their administrator role. Flat performance incentives are also a well-documented feature of bureaucratic organisations (Dixit, 1997, 2002).

In some respects, our administrators compare favourably against Indian or global public servants. They are significantly more educated and experienced than the average public sector employee in India or worldwide (Table A.30). They are less likely to hold postgraduate qualifications than Indian Administrative Service officers, the elite cadre of the Indian bureaucracy, but are more experienced, since IAS officers serve in local government early in their careers. Unsurprisingly, our administrators resemble India's block development officers, the influential nodal officials who oversee local development programs (Dasgupta and Kapur, 2020).

The administrators in our study thus offer a realistic counterfactual to elected leadership: they were highly experienced bureaucrats with an average of 19 years of government service, and many had specific experience with and received training for the administrator role. Most were familiar with their assigned GPs but less locally embedded than elected leaders. Many brought local government networks and domain-specific expertise that let them excel at particular tasks. Nearly all believed their performance was monitored by senior officials, but only a minority perceived strong career incentives for good performance (Table A.1).

In short, although we do not study textbook archetypes of politicians and bureaucrats, we see this as a feature as well as a limitation. Our natural experiment allows us to compare the kinds of elected and appointed leaders who commonly run local governments in practice both in India and elsewhere in the developing world.

Political Institutions and Culture. Several distinctive features of Karnataka's system of local government may shape how elected leaders govern, potentially affecting the generalisability of our findings. As elsewhere in India, village political offices are subject to extensive reservations for women and disadvantaged caste groups (Chattopadhyay and Duflo, 2004). These reservations make local politicians more representative, but also create *de facto* term limits that shorten leaders' horizons and reduce electoral incentives (Genicot et al., 2021). Limited pathways from village to higher-level politics may have a similar effect. If shorter horizons dampen accountability, elected leadership would have even stronger effects absent these features.

Karnataka's parliamentary GP system, in which presidents are chosen indirectly by elected councillors rather than directly by voters, may diffuse accountability and amplify the influence of local elites. Limited party involvement in local politics may reduce ideological polarisation and keep elections focused on local issues, while also decreasing the organisational support and expertise available to elected leaders. Our findings on elected leaders' greater sensitivity to advantaged groups may partly reflect these features.

Karnataka also has a relatively mature tradition of local democracy. Prior work argues that local democracy is least effective in poor, unequal and diverse communities with no tradition of participatory government (Mansuri and Rao, 2013). We find little evidence that elected leaders' governance varies along these dimensions (Table A.31).

Karnataka comprises territories that belonged to five distinct colonial-era polities. Villages in the erstwhile state of Mysore first experienced elected local councils in 1902, decades before other parts of present-day Karnataka (Ananthapur and Moore, 2010; Sanyal and Rao, 2018).[23] If historical experience with local democracy matters, we would expect stronger effects in the former Mysore region. Yet, again, we find that the effects of politician leadership differ little between Mysore and the rest of Karnataka (Table A.31).

Our natural experiment offers a rare opportunity to compare how elected and appointed leaders govern in the same setting. Moreover, we believe its distinctive features do not drive the results or overly limit the generalisability of our findings.

7 Conclusion

In this paper, we compare how elected and appointed leaders govern. We analyse a natural experiment in the Indian state of Karnataka that generated quasi-random variation in whether elected politicians or appointed bureaucrats were in charge of villages during the 2020-21 fiscal year.

We find that elected leaders are more accountable to citizens. They align public spending more closely with citizens' preferences and were more responsive in delivering social assistance during a period of acute economic distress. While politicians are weakly more responsive to all groups, they are particularly attentive to the concerns of advantaged and electorally important citizens. Elected leaders achieve these representational gains by engaging more actively with citizens and eliciting greater effort from frontline staff.

At the same time, politician- and bureaucrat-run governments are similarly efficient: we find no differences in corruption, the quality of COVID management, or the effectiveness of development project implementation. Bureaucrats bring valuable networks and expertise, but these confer task-specific rather than general administrative gains. Consistent with this, most citizens prefer to be governed by and have greater trust in elected leaders.

Our findings highlight the value of decentralising political power to elected leaders. These local politicians are best placed to set priorities, represent citizens, and remain accountable for local governance, while specialised technocrats could manage tasks that require domain expertise. Better task allocation within government could improve governance and raise trust in both politicians and experts, which is declining in many societies.

[23] By contrast, the other regions, formerly parts of the Madras Presidency and the more extractive Hyderabad princely state, introduced local democracy only in the 1980s.

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8 Tables

Table 1: Summary Statistics

	Mean	SD
Panel A: Pre-treatment characteristics		
Rural population	1,521.47	1,687.46
Households	318.47	342.95
Literate (share)	0.62	0.11
Primary schools	1.76	1.59
Primary Health Sub-centres	0.31	0.51
All weather road (0/1)	0.93	0.25
Service sector employees 2013 (share of non-farm)	0.80	0.21
Manufacturing sector employees 2013 (share of non-farm)	0.19	0.20
Households with main income from cultivation (share)	0.54	0.29
Rural per capita consumption (mean)	19,046.48	6,035.89
Panel B: Main outcomes		
***GP Expenditure* (*Rs lakhs*)**		
Total Expenditure	277.60	176.99
On roads	8.95	22.54
On toilets	7.22	12.15
On water	20.72	27.81
GP Meetings		
Total Meetings	5.22	4.11
General Body	2.30	2.33
Gram Sabhas	1.30	1.16
NREGS delivery		
Days Requested	340.55	768.99
Days Worked	305.35	695.93
Total New Cards	2.23	8.21
Payment Earned	75,012.36	171,597.16
***GP Staff Attendance* (%)**		
All Staff	41.82	38.12
PDO	9.72	29.54
Data Staff	34.07	46.00
Accounts Staff	32.10	42.94
Implementation of Development Projects		
Any Progress	0.09	0.28
Administrative/Technical progress	0.08	0.27
Completion	0.02	0.13
***Agricultural productivity* (*NDVI*)**		
Kharif	0.28	0.13
Rabi	0.04	0.03
Summer	0.03	0.03
Night Lights		
Mean Night lights (log)	-0.52	0.81
Cumulative Night lights (log)	2.40	1.11

Notes: This table reports summary statistics for pre-treatment village characteristics and our key outcome variables. Data in Panel A comes from the Population Census 2011 and Socio-Economic and Caste Census 2011-12. The outcome variables in Panel B are described in more detail in section 2.2. Discussed in Section 3.3.

Table 2: **Representation** — Alignment of Public Spending with Citizen Preferences

	(1)	(2)	(3)
Citizen Priority (share)	0.063***	0.064***	0.059***
	(0.004)	(0.004)	(0.004)
Citizen Priority x Elected			0.035***
			(0.011)
Total expenditure (log)		1.533***	1.549***
		(0.146)	(0.147)
Observations	7084	7084	7084
Adjusted R^2	0.032	0.085	0.087
Block FE	No	Yes	Yes
Controls	No	Yes	Yes
Gram Panchayats	644	644	644

Notes: This table presents results from estimating equation (3). The dependent variable is the log of GP i's expenditure in category j. $CitizenPriority$ is the share of citizens in GP i who list category j among the two most important public goods they want the GP to spend on. The estimation covers the eleven survey categories that correspond to GP expenditure heads; the twelfth (temple) is not a GP budget line and so has no expenditure counterpart. $Elected$ is a dummy variable that takes value 1 if GP i is governed by an elected politician and 0 if the GP is governed by an appointed bureaucrat. Column 1 reports the raw correlation. Columns 2 and 3 include block fixed effects and controls. In all regressions, standard errors, shown in parentheses, are clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.

Table 3: **Representation** — Unequal Alignment between Public Spending and Preferences of Different Groups

	(1) Male	(2) Female	(3) General	(4) OBC	(5) SC/ST	(6) Main Villages	(7) Sub Villages
Citizen priority (share)	0.054***	0.021***	0.032***	0.031***	0.024***	0.045***	0.022***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)
Citizen Priority × Elected	0.035***	0.005	0.032***	0.019**	0.009	0.030***	0.005
	(0.011)	(0.009)	(0.009)	(0.009)	(0.008)	(0.011)	(0.006)
Observations	7051	4851	6699	5544	5467	6457	11803
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gram Panchayats	644	644	644	644	644	638	638

Notes: Dependent variable is log GP expenditure in category *j*. In columns 1–5, *Citizen Priority* is the share of the sub-group named in the column header who name category *j* as a top-two priority, aggregated at the GP level. In columns 6–7, preferences are aggregated from citizens in main and sub villages respectively. All columns include block fixed effects and control for log total GP expenditure. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.2.

Table 4: **Responsiveness** — Effect of Elected Leaders on Delivery of NREGS Workfare Benefits

	New Job Cards			Days worked			Payment Earned (INR)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Elected x Post	1.521*	1.519*	1.773**	45.729	49.567*	83.695***	12813.467	13887.030*	23343.376***
	(0.864)	(0.870)	(0.796)	(28.828)	(28.790)	(23.204)	(8188.371)	(8156.480)	(6422.288)
Observations	419376	419376	419376	419376	419376	419376	419376	419376	419376
Adjusted R^2	0.465	0.464	0.496	0.362	0.405	0.456	0.360	0.402	0.454
Mean Y Admin	2.73	2.73	2.73	337.30	337.30	337.30	85,614.59	85,614.59	85,614.59
SD Y	10.16	10.16	10.16	766.19	766.19	766.19	196407.56	196407.56	196407.56
Village FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month-Year FE	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
Block x Month FE	No	Yes	No	No	Yes	No	No	Yes	No
Block x Month-Year FE	No	No	Yes	No	No	Yes	No	No	Yes

Notes: This table presents results from estimating equation (4). Each observation is a NREGS service delivery outcome of village i in month m of year t. We have three primary outcomes: (i) the number of new job cards which indicate the number of new beneficiaries; (ii) the number of work days provided to beneficiaries in the village in that month; (iii) the total workfare payments (in Rs) earned by beneficiaries. $Elected$ is a dummy variable indicating whether village i is in a politician-run GP. $Post$ is a dummy indicating whether the month is after June 2020, the period during which our natural experiment leads to variation in governance regimes across GPs. Village and month-year fixed effects are included in all regressions. In addition, columns 2, 5 and 8 include block x month-of-year fixed effects to capture seasonality and columns 3, 6 and 9 include block-month-year to capture local demand shocks. Standard errors are clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.2.

Table 5: **Effort** — Effect of Elected Leaders on Attendance of Frontline Staff

	(1)	(2)	(3)	(4)	(5)
Elected x Post	4.157***	4.056***	4.058***	4.176***	4.087***
	(1.501)	(1.500)	(1.499)	(1.509)	(1.495)
Registration % (mean)		0.303***	0.302***		0.316***
		(0.016)	(0.016)		(0.017)
PDO (share)				0.037	-0.028
				(0.028)	(0.028)
Data-staff (share)				0.133***	0.055**
				(0.026)	(0.026)
Senior-staff (share)				-0.075	-0.101**
				(0.047)	(0.049)
Secretary (share)				0.114***	0.050
				(0.033)	(0.032)
Assistants (share)				0.085	-0.029
				(0.101)	(0.100)
Accounts-staff (share)				0.185***	0.119***
				(0.028)	(0.027)
Project-coord (share)				-0.237	-0.326
				(0.339)	(0.328)
Tech-staff (share)				-0.176***	-0.187***
				(0.063)	(0.062)
Facilities-staff (share)				0.120***	0.087***
				(0.024)	(0.023)
Constant	42.059***	12.764***	12.863***	29.183***	3.721
	(0.031)	(1.577)	(1.574)	(2.398)	(2.947)
Observations	160345	160345	160345	160345	160345
Adjusted R^2	0.408	0.412	0.412	0.410	0.414
Mean Y Admin	42.13	42.13	42.13	42.13	42.13
SD Y	38.23	38.23	38.23	38.23	38.23
Week FE	Yes	Yes	Yes	Yes	Yes
Weekday FE	No	No	Yes	Yes	Yes
GP FE	Yes	Yes	Yes	Yes	Yes

Notes: This table presents results from estimating equation (4). The unit of analysis is the GP-week, and the dependent variable is the average attendance rate (in %) of all active frontline staff officers in GP j during week-year t. $Elected$ is a dummy indicating whether the GP is governed by an elected politician (rather than an appointed bureaucrat) during the 2020-21 financial year. $Post$ is a dummy indicating whether the week is after June 2020, the period during which we observe variation in governance regimes across GPs. The variable of interest is the diff-in-diff coefficient on $Elected{*}Post$. All specifications include GP and week-year fixed effects. In column 2, we add controls for the share of officers who registered to use the e-attendance registration system. Column 3 adds day-of-week fixed effects while column 4 includes controls for the share of each officer type. Column 5 includes both the controls used in columns 3 and 4. Standard errors are clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.2.1.

Table 6: **Development Project Implementation** under Elected vs Appointed Leaders

	(1) Any Progress	(2) Milestones completed	(3) Approval Prog	(4) Workorder Prog	(5) Tender Prog	(6) Monetary Prog	(7) Completion Prog
Panel A: Full Sample							
Elected x Post	0.001	0.002	0.001	0.000	-0.007	0.002	0.001
	(0.002)	(0.004)	(0.002)	(0.002)	(0.008)	(0.002)	(0.001)
Panel B: Externalities							
Elected x Post	0.001	0.003	-0.002	0.002	0.020	-0.002	0.001
	(0.004)	(0.007)	(0.003)	(0.003)	(0.027)	(0.002)	(0.001)
Elected x Post x Externalities	0.001	-0.001	0.004	-0.002	-0.027	0.005*	-0.001
	(0.004)	(0.006)	(0.003)	(0.002)	(0.028)	(0.003)	(0.001)
Panel C: Effect of administrator expertise							
Elected x Post	0.002	0.003	0.001	0.000	-0.007	0.002	0.001
	(0.002)	(0.004)	(0.002)	(0.002)	(0.008)	(0.002)	(0.001)
Admin x Post x Same-Dept	0.040***	0.080***	0.033***	0.029***	0.023	0.009***	0.002**
	(0.004)	(0.005)	(0.003)	(0.002)	(0.014)	(0.003)	(0.001)
Work ID FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Period-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Y Admin	0.06	0.10	0.06	0.04	0.06	0.02	0.01
SD Y Admin	0.25	0.42	0.24	0.20	0.24	0.15	0.11
Adjusted R^2	0.09	0.08	0.20	0.03	0.05	0.22	0.13
Observations	6808895	6808895	4793926	6389575	250741	1750205	6808895

Notes: The unit of analysis is a public-works project i in GP j during period y (two periods per year: January–May and June–December; Post = 1 from June 2020). Column 1 is an indicator for any progress in that period; column 2 counts milestones completed (0–5); columns 3–7 are indicators for specific milestones. *Elected* equals one for politician-run GPs; *Externalities* equals one if the project is classified as non-local (serves beyond a household/neighborhood); *Same-Dept* equals one when the administrator's mother department matches the project's implementing office. Panel A reports the Elected × Post effect; Panel B adds the Elected × Post × Externalities interaction; Panel C adds the Admin × Post × Same-Dept expertise interaction (all lower-order terms included but not shown). *Mean Y Admin / SD Y Admin* are the mean and standard deviation of the outcome among administrator-run (appointed) projects; the adjusted R^2 accounts for the absorbed fixed effects. The three panels share the same outcomes and estimation sample and differ only in the interaction terms shown, so the fixed-effect indicators, admin mean/SD, adjusted R^2 and observation counts are reported once at the foot of the table. All regressions include project (work ID) and period-year fixed effects; standard errors clustered at the GP level. Significant at *10%, **5%, ***1%. Discussed in Section 5.3.

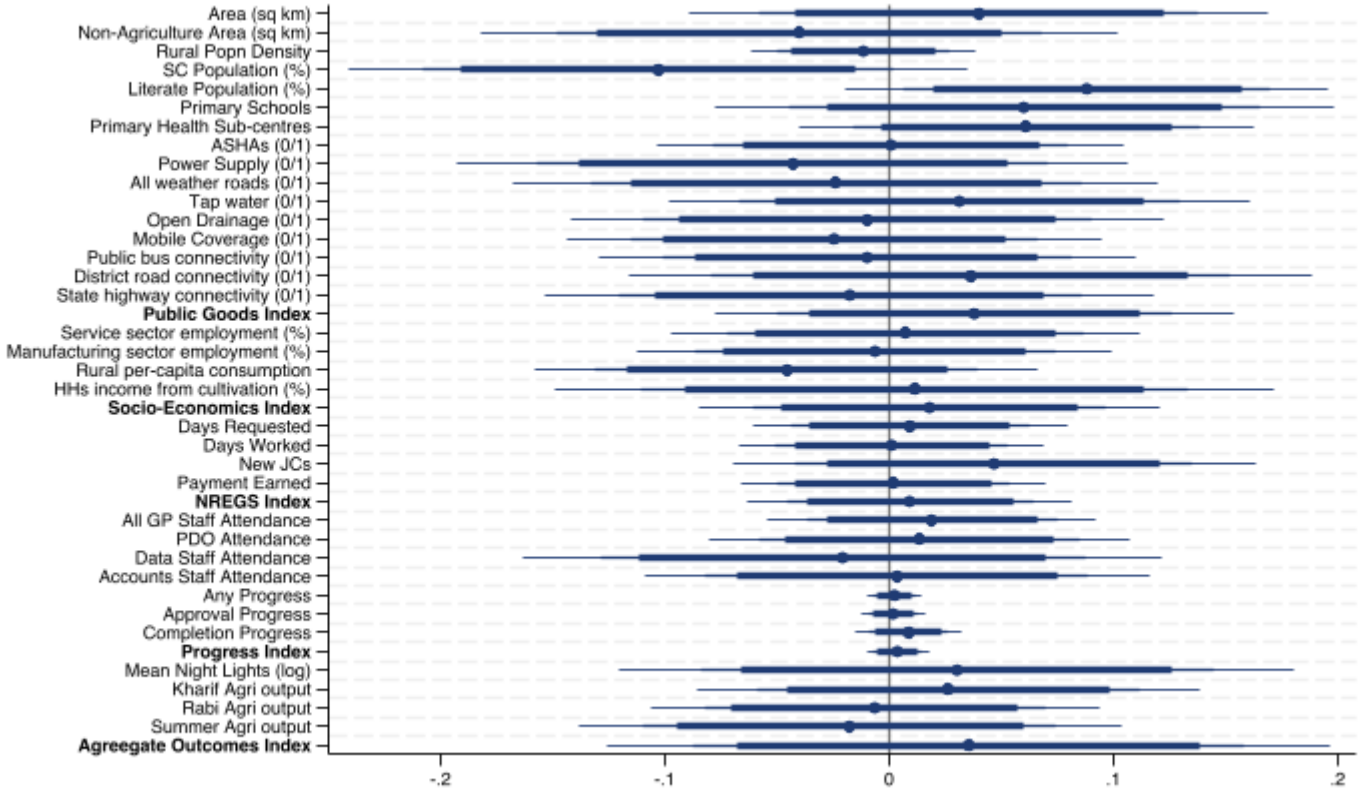
Table 7: **Crisis Management**—Comparing Politicians' and Bureaucrats' Quality of COVID Management

	Task force (W1) (1)	GP Covid Rating (W1) (2)	Covid Mortality (W1) (3)	Covid Well-Being (4)	Economic Well-Being (5)
Elected	-0.033	-0.027	0.013	0.022	0.031
	(0.035)	(0.031)	(0.023)	(0.026)	(0.034)
Observations	8170	8662	8162	7652	8737
Adjusted R^2	0.056	0.038	-0.001	0.017	0.036
SD Y	0.43	1.00	11.62	1.19	1.05

Notes: Each column regresses a z-standardised COVID-management outcome from the citizen survey on *Elected* (de jure politician-run GP), controlling for household and village characteristics, with block and surveyor fixed effects. The outcomes are citizen responses about COVID Wave 1 (W1) period. Column 1 is an indicator of awareness of GP Task Force set up to manage COVID. Column 2, is an evaluation of the GP's management of COVID (1-4 scale). Column 3, a COVID well-being index created using, number of COVID patients and deaths in the respondent's village and household, and the overall health of their household (1-4 scale). Column 4 an economic well-being index created using assessment of respondent household's economic and employment situation (1-4 scale) and food sufficiency. The responses range from 1 = very poor to 4 = excellent. Standard errors clustered at the GP level. *SD Y* is the standard deviation of the raw outcome. Significant at 10%, **5%, **1%. Discussed in Section 5.2.

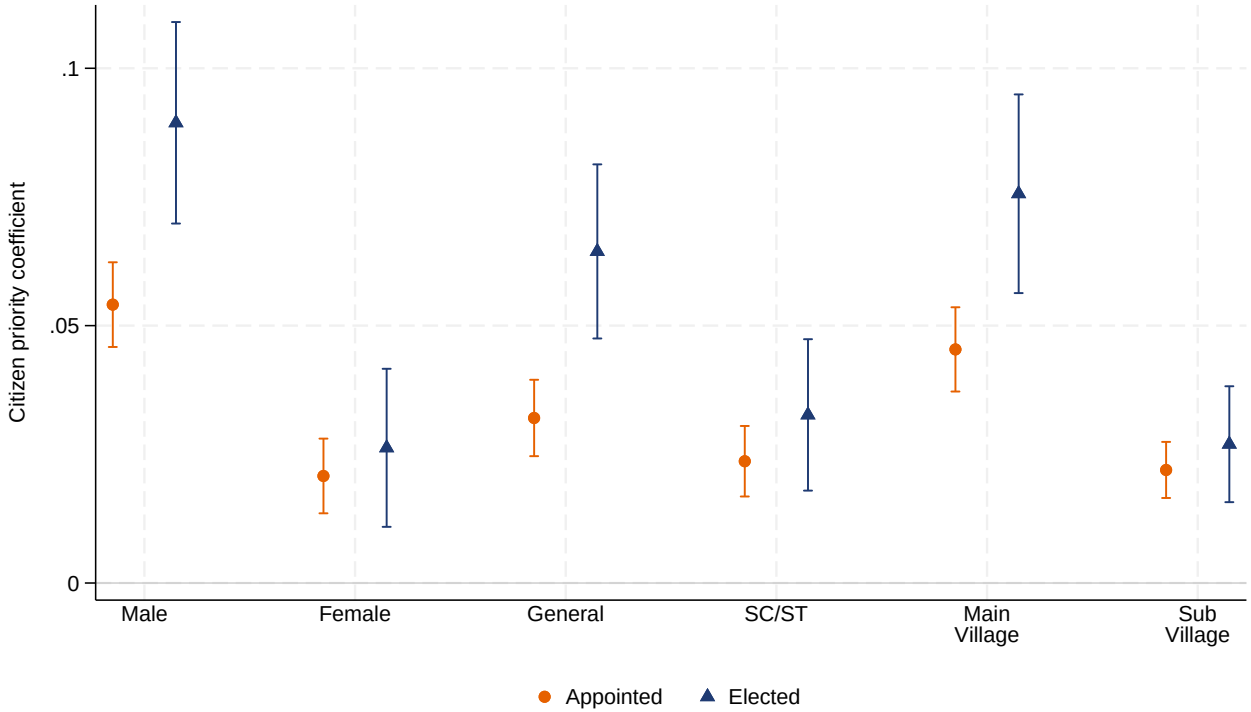
9 Figures

Figure 1: Covariate Balance between Politician- and Bureaucrat-run Villages



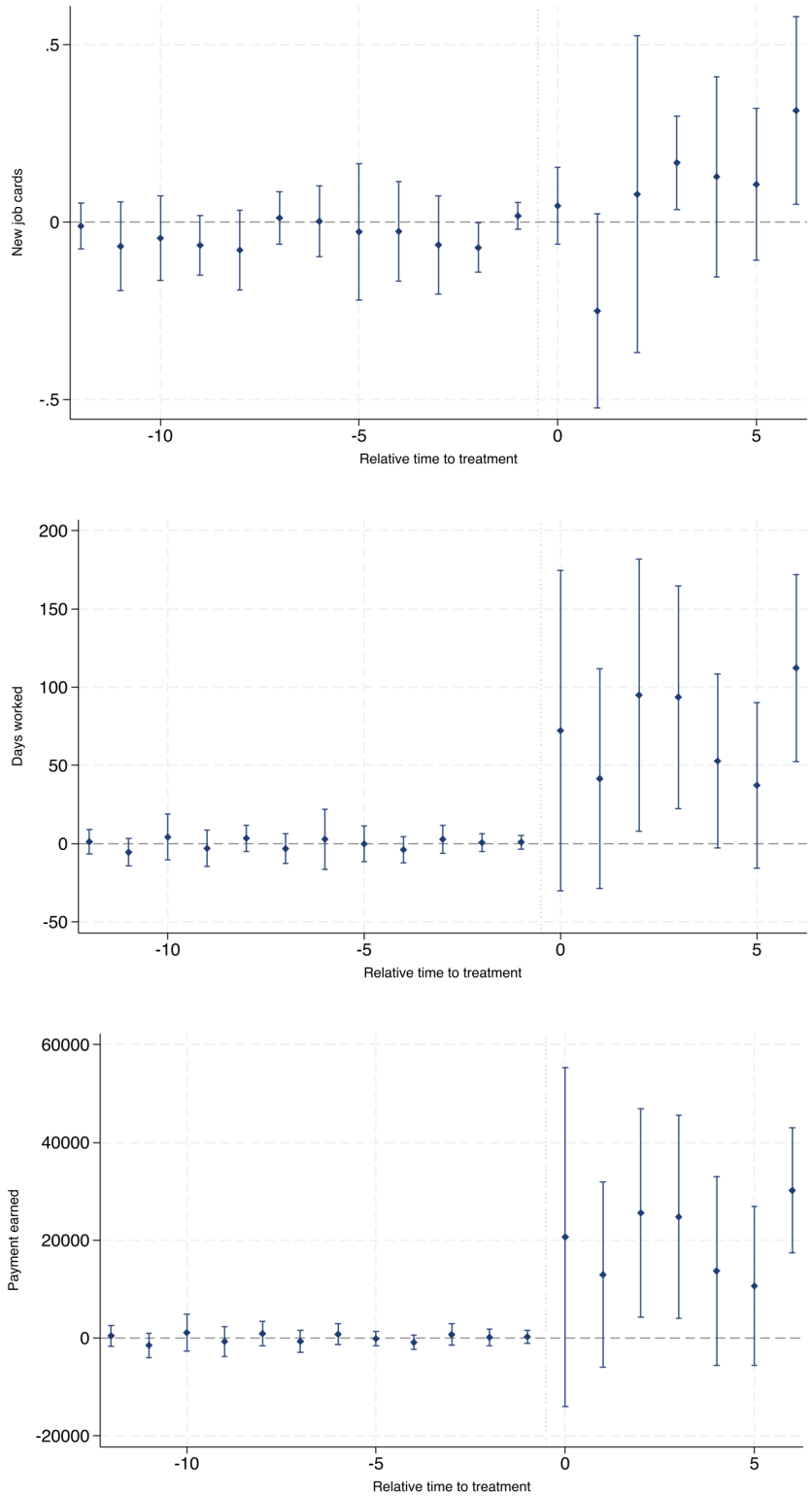
Notes: This figure plots coefficients from estimating balance regressions (1) and (2). All regressions include block fixed effects and standard errors are clustered at the GP level Geographic, demographic and public goods variables come from the 2011 Population Census. Details on the underlying variables used are in section 2.2 and details on the index construction are in section A.3. Discussed in Section 3.3.

Figure 2: **Representation**—Alignment between Citizen Preferences and Spending by Subgroup under Elected vs Appointed Leaders



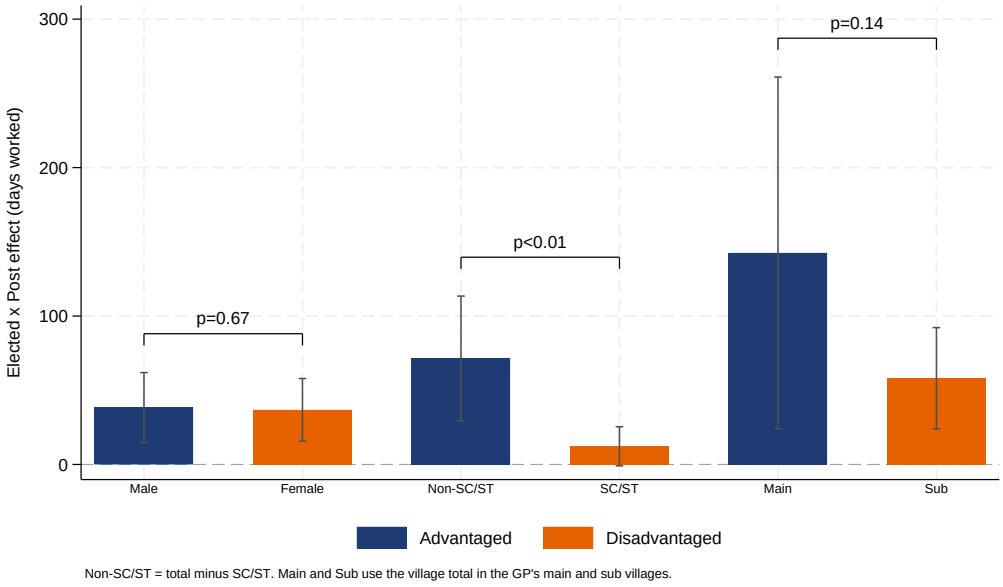
Notes: Each point is the estimated coefficient on citizen priority from a regression of log GP expenditure on citizen priority, *Elected*, their interaction, and log total expenditure, with block fixed effects and standard errors clustered at the GP level. Orange circles show the coefficient for appointed GPs (the main effect); navy triangles show the sum of the main effect and the interaction, giving the coefficient for elected GPs. Citizen priority is aggregated from the sub-group named on the x-axis. For Main and Sub Villages, preferences are aggregated from citizens in main and sub villages of each GP respectively. Whiskers denote 95% confidence intervals. Discussed in Section 4.1.2.

Figure 3: **Responsiveness**—Effect of Elected Leaders on NREGS workfare delivery (Dynamic Difference-in-Differences Estimates

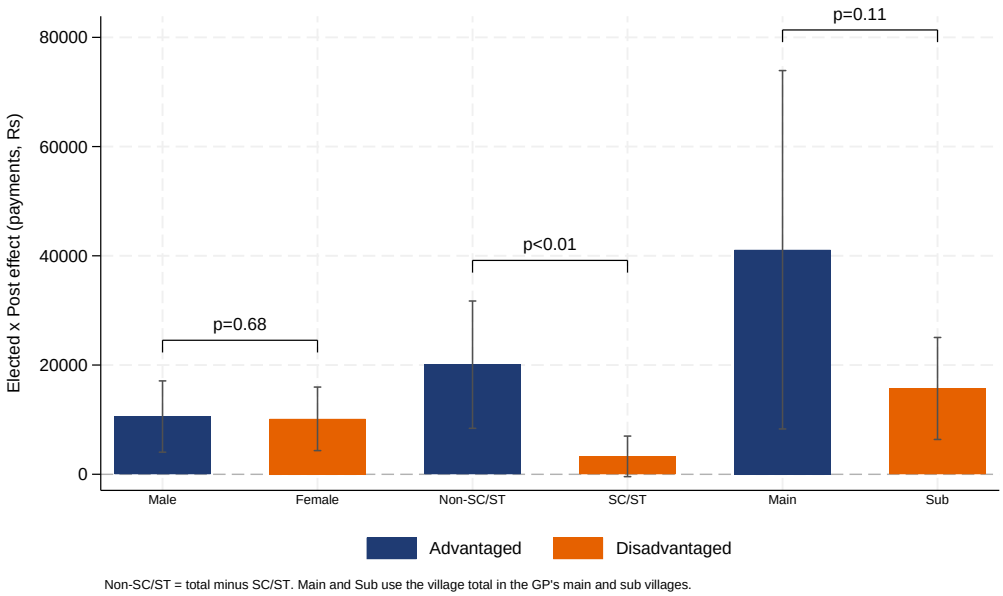


Notes: Each panel plots a synthetic difference-in-differences event study for one NREGS delivery outcome — new job cards registered (top), person-days of work (middle), and wage payments (bottom). Estimates are from `sdid_event` after partialling out block × month-year fixed effects (specification 3); markers are the dynamic effect of elected leadership relative to the June 2020 governance transition, with 95% confidence intervals from bootstrap. The gap in workfare days and payments emerges after administrators take charge and persists, with no sign that bureaucrat-run GPs catch up. Discussed in Section 4.2.

Figure 4: **Responsiveness**—Effect of Elected Leadership on NREGS Delivery by Social Group



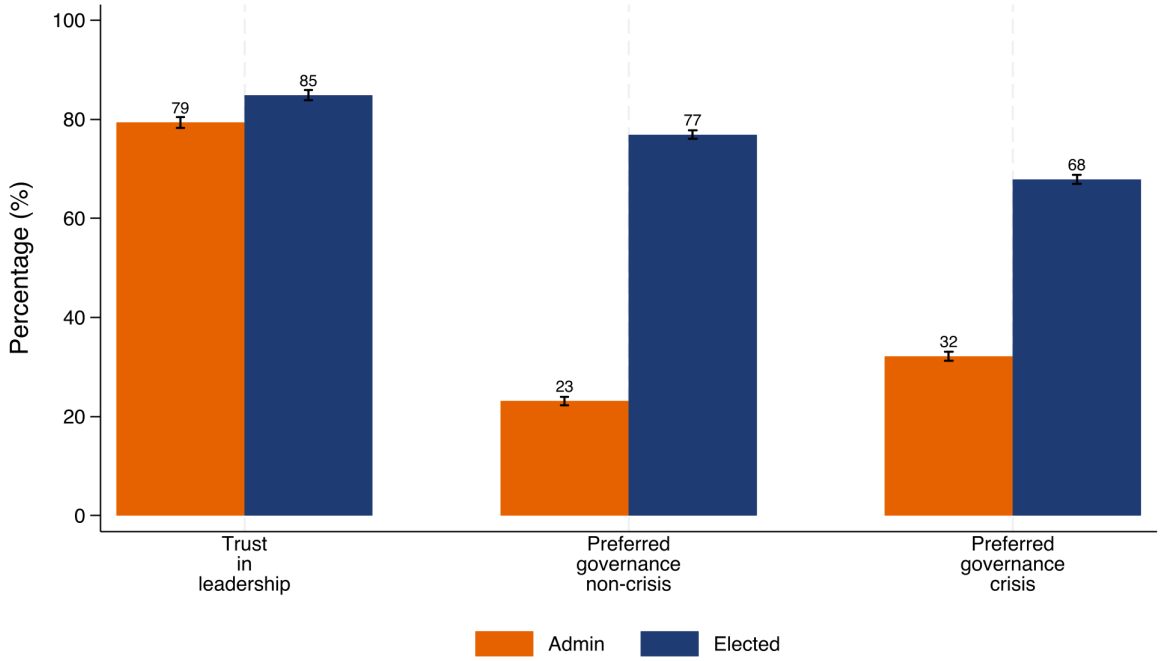
(a) Days worked (levels)



(b) Payments (Rs)

Notes: Bars are the *Elected* × *Post* coefficient from the by-group difference-in-differences (panel (a): level, person-days/month; panel (b): payments, Rs); whiskers are 95% CIs (GP-clustered). Advantaged groups (Male, Non-SC/ST, Main) are navy; disadvantaged (Female, SC/ST, Sub) are orange. Brackets report the p-value that the two groups' effects are equal, from a seemingly-unrelated (`suest`) test with the village/month/block×month fixed effects partialled out and standard errors clustered at the GP level. Non-SC/ST = total minus SC/ST; Main and Sub use the village total in the GP's main and sub villages. Discussed in Section 4.2.

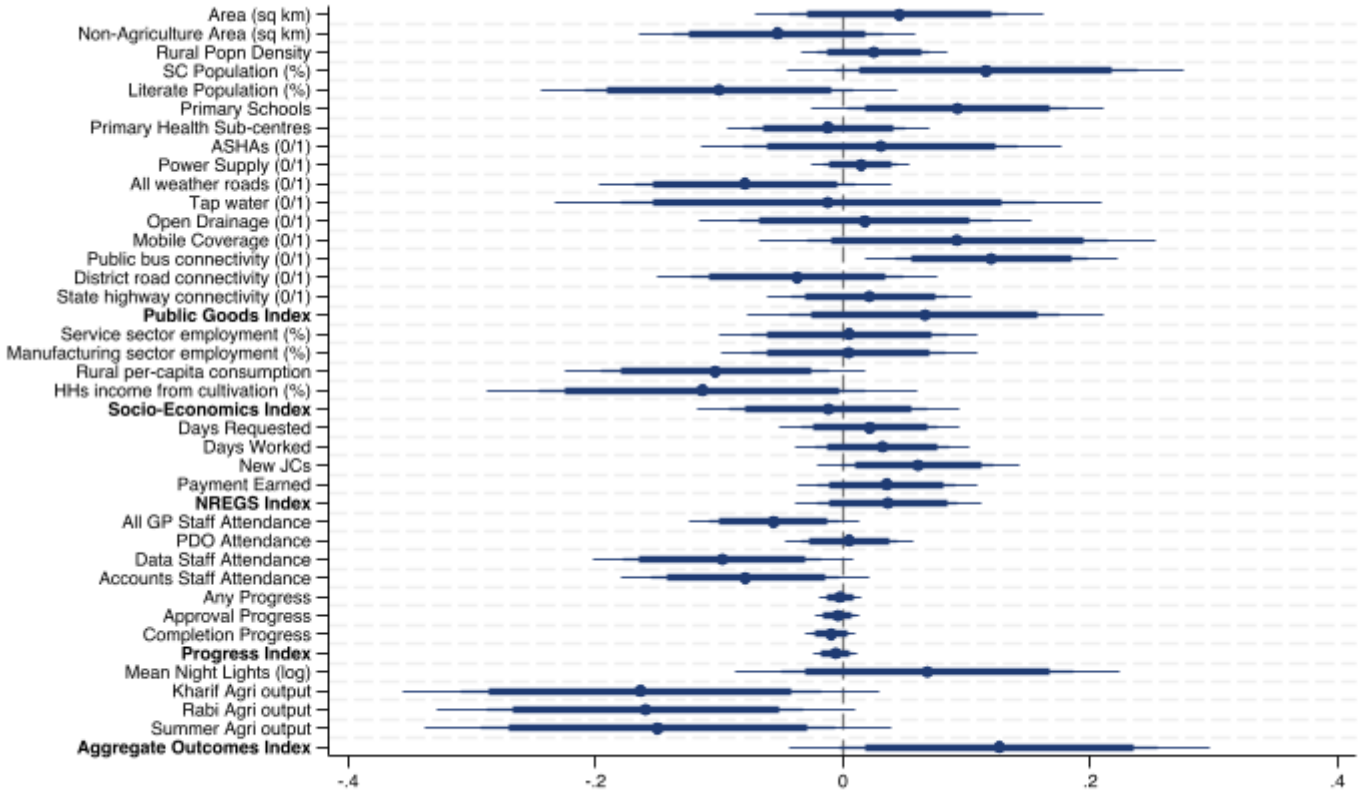
Figure 5: Citizens' Preferred Form of Government & Trust in Elected vs Appointed Leaders



Notes: This figure showcases citizens' evaluation of governance in their GP and their preferred form of government. These outcomes come from the citizen survey. The first group of bars reports the percentage of citizens who have high trust in their GP leadership. The last two groups of bars indicate the percentage of citizens who prefer to be governed by an elected politician or an appointed bureaucrat in normal and crisis times, respectively. Discussed in Section 6.1.

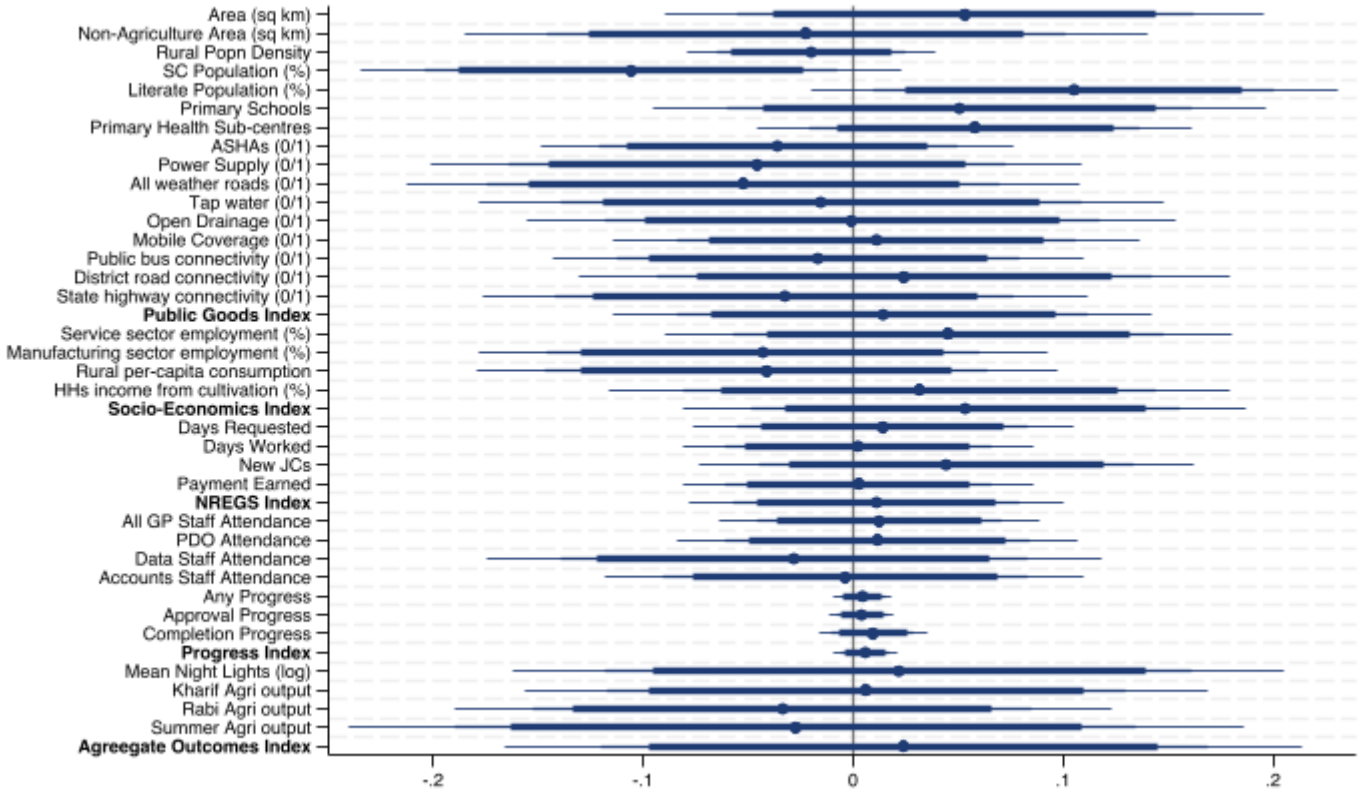
Appendix Figures

Figure A.1: Similarity between GPs in Natural Experiment Blocks and Rest of Karnataka



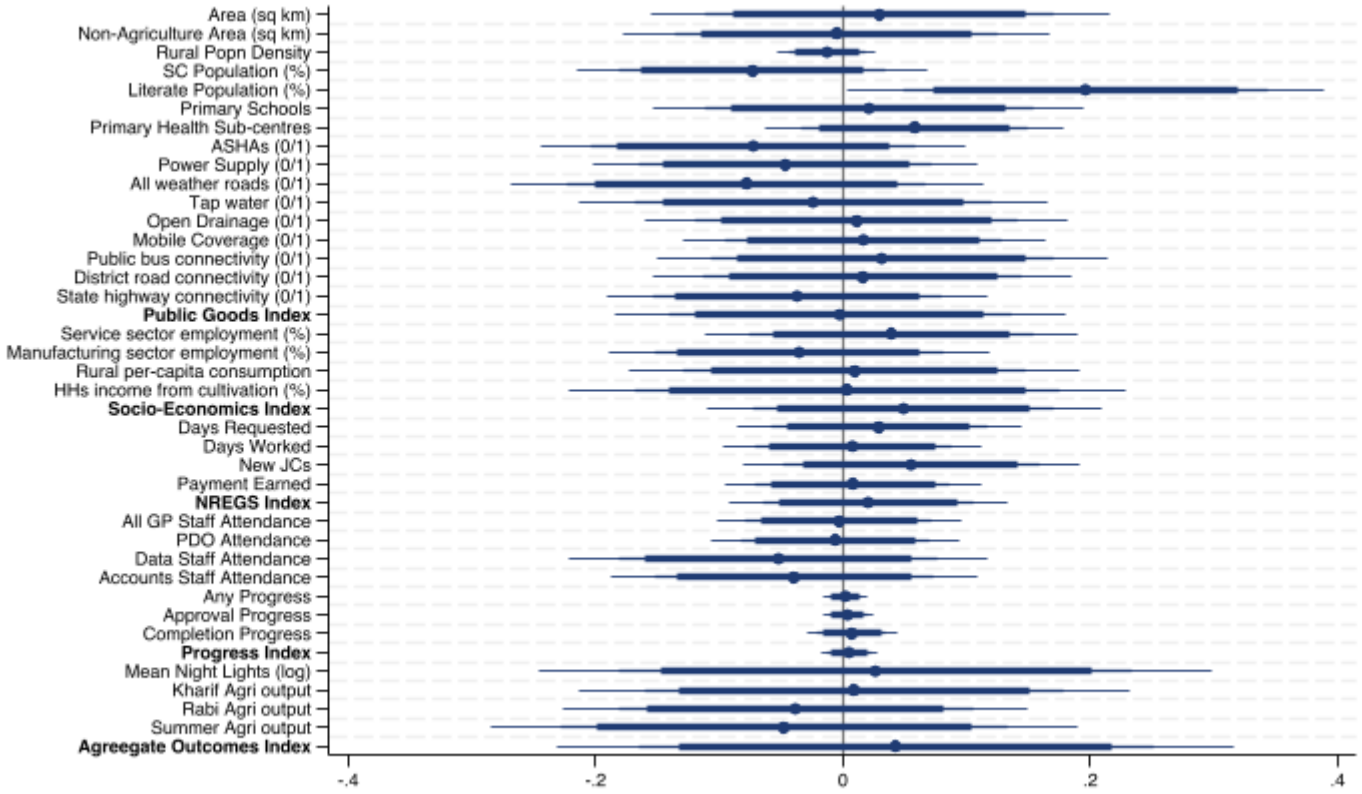
Notes: This figure compares characteristics of natural experiment blocks—which include at least one politician-run and at least one bureaucrat-run GP—and blocks where there is no variation in governance regimes across GPs. We estimate the regression $Y_{ij} = \alpha + \beta NaturalExperimentBlock_j + \epsilon_{ij}$, and plot the coefficients in this figure. All specifications include district fixed effects, time fixed effects for panel outcomes and standard errors are clustered at the block-level. Detailed information on the construction of key variables is described in section A.3. Discussed in Section 3.3.

Figure A.2: **Covariate Balance** between Politician- and Bureaucrat-run Villages (District Fixed Effects)



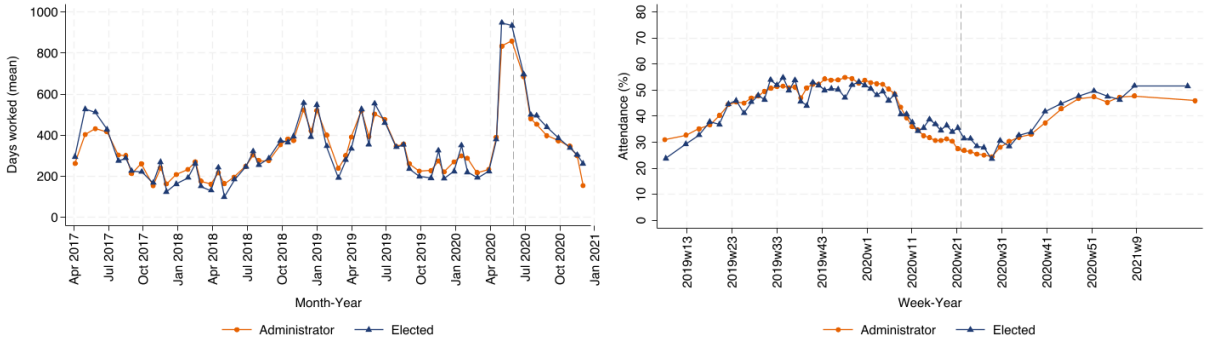
Notes: This figure plots coefficients from estimating balance regressions (1) and (2), comparing baseline characteristics of elected- and appointed-run GPs in our sample of blocks. For each characteristic, we estimate $Y_{ij} = \alpha + \beta Elected_i + \epsilon_{ij}$ and plot the coefficient β. All regressions include district fixed effects, time fixed effects for panel outcomes, and standard errors are clustered at the GP level. Geographic, demographic and public goods variables come from the 2011 Population Census. Details on the underlying variables used are in section 2.2 and details on the index construction are in section A.3. Discussed in Section 3.3.

Figure A.3: **Covariate Balance** between Politician- and Bureaucrat-run Villages (No Geographic Fixed Effects)



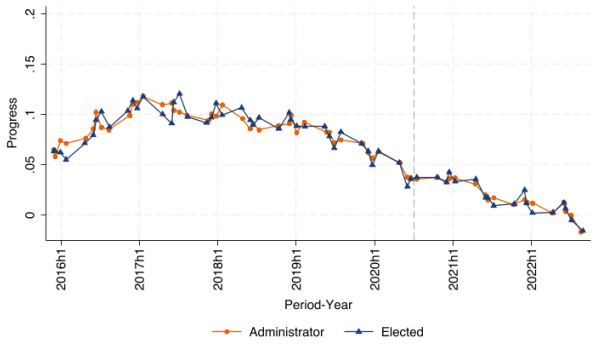
Notes: This figure plots coefficients from estimating balance regressions (1) and (2), comparing baseline characteristics of elected- and appointed-run GPs in our sample of blocks. For each characteristic, we estimate $Y_{ij} = \alpha + \beta Elected_i + \epsilon_{ij}$ and plot the coefficient β. These regressions include no fixed effects (other than time fixed effects for panel outcomes), and standard errors are clustered at the GP level. Geographic, demographic and public goods variables come from the 2011 Population Census. Details on the underlying variables used are in section 2.2 and details on the index construction are in section A.3. Discussed in Section 3.3.

Figure A.4: **Parallel trends for panel outcomes**

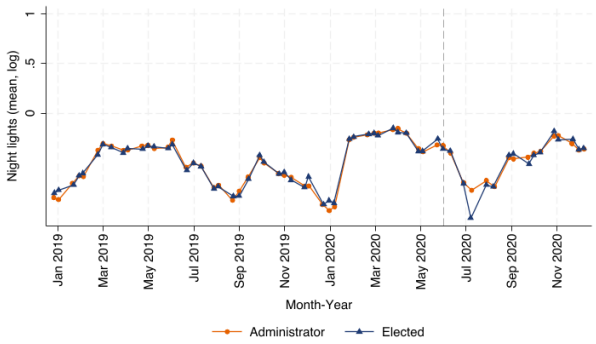


(a) NREGS days delivered

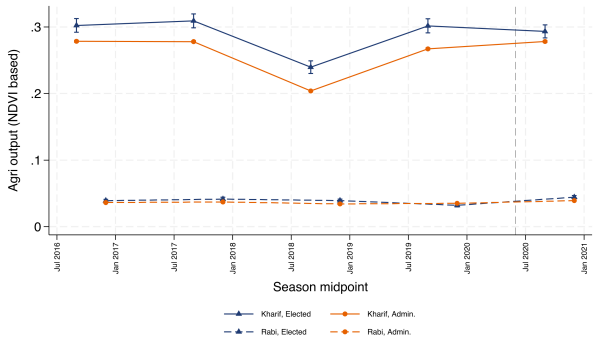
(b) Attendance (%, mean)



(c) Development progress



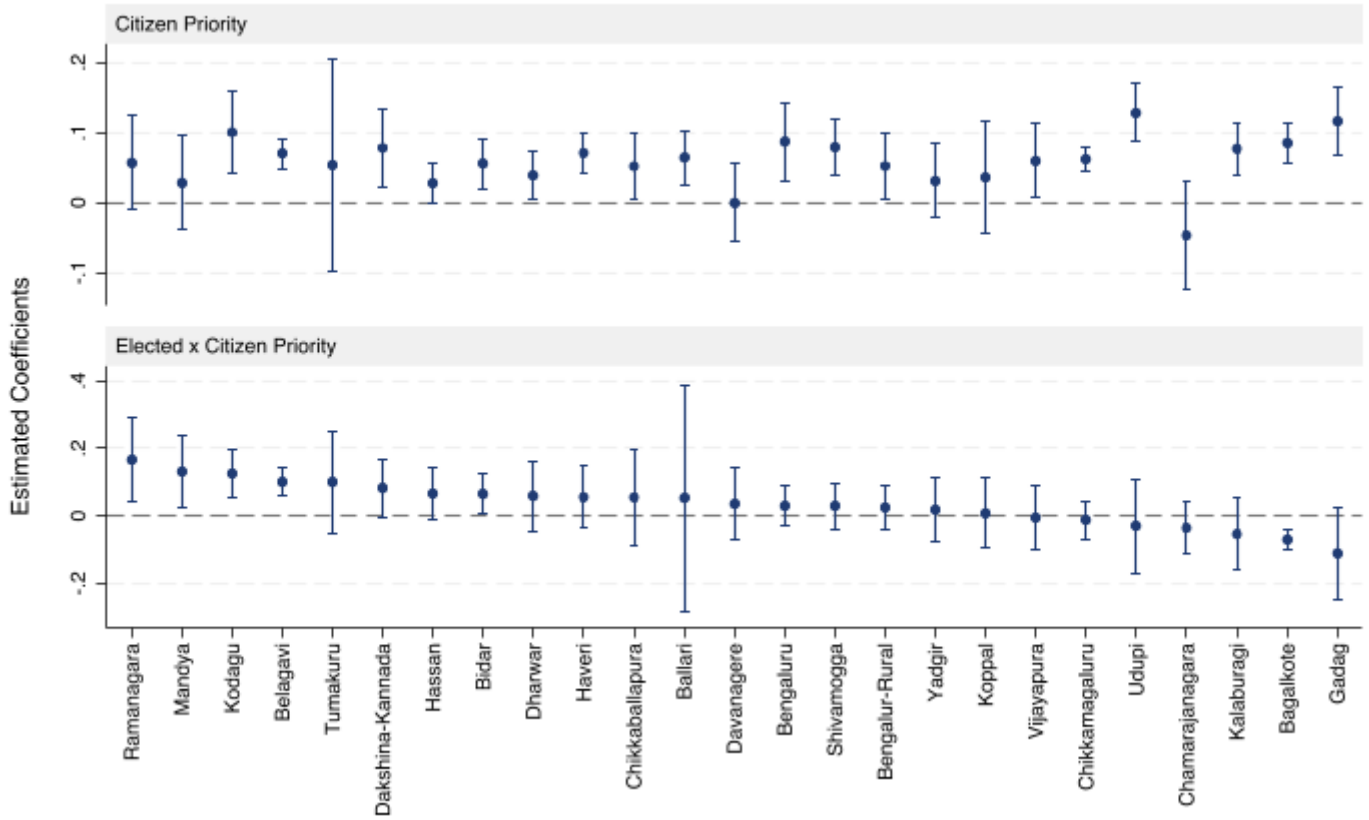
(d) Night-time lights (log, mean)



(e) Agricultural productivity

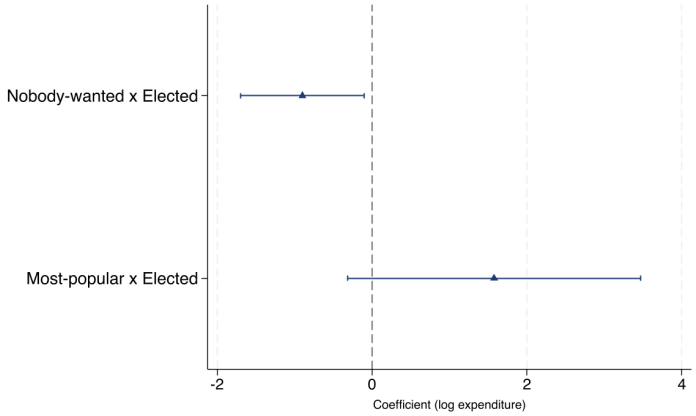
Notes: Sub-figures (a)–(d) depict binscatter-plot of the mean of the stated outcome within each bin ($n = 60$ bins) over the period for which data is available. Controls and fixed effects are included as stated in the main regression specification for each outcome. Sub-figure (e) shows unconditional season means of the difference between peak and early season NDVI, with kharif season means (solid line) and rabi season means (dashed line) shown separately. The dashed vertical line indicates the onset of treatment period. Discussed in Section 3.3.

Figure A.5: Alignment between Citizen Preferences and Public Spending

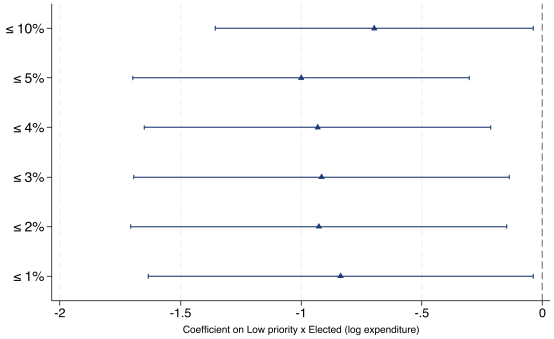


Notes: This figure presents the correlation between citizen preferences and public spending (and the impact of elected leaders on this correlation) by district. We estimate regression equation (3) separately by district and plot coefficients β_2 and β_3. All regressions include block fixed effects, controls for the total GP expenditure. Standard errors are clustered GP level. Discussed in Section 4.1.

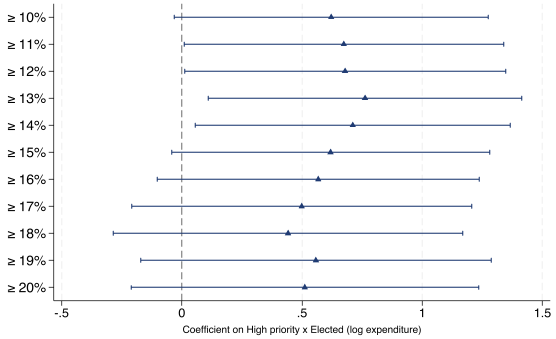
Figure A.6: Public Spending on Low- and High-Priority Public Goods—Elected vs Appointed Leaders



(a) Spending on Extreme-Preference Categories



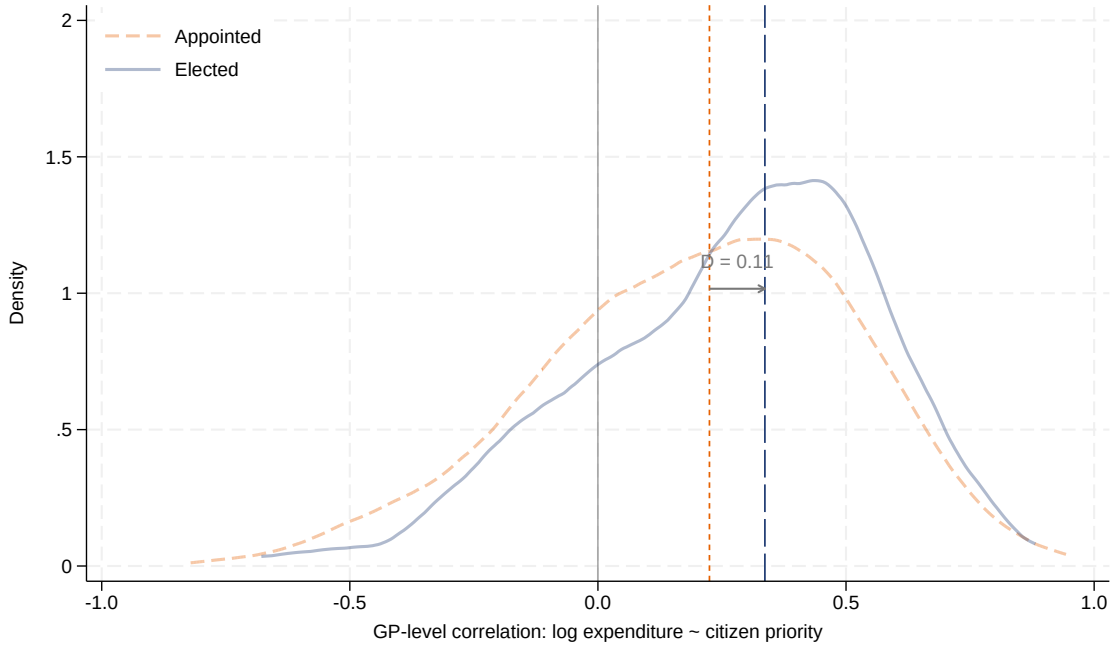
(b) Low-Priority Categories (Sensitivity)



(c) High-Priority Categories (Sensitivity)

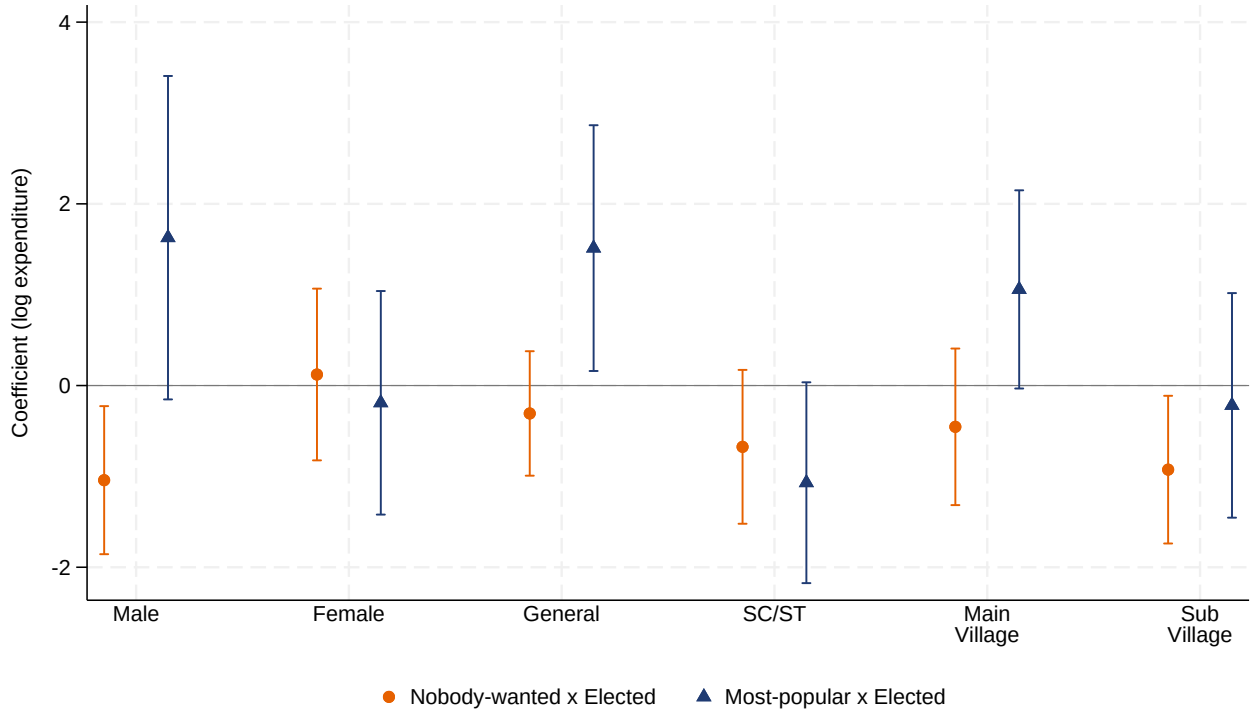
Notes: Panel (a) plots coefficients on (Nobody-wanted $\times$ Elected) and (Most-popular $\times$ Elected) from a single regression of log category-level expenditure on both extreme-preference indicators, elected, their interactions, and log total expenditure, with block fixed effects. "Nobody-wanted" flags categories with a citizen-preference share of zero in the GP; "Most-popular" flags the peak-preference category within each GP. The two indicators are mutually exclusive by construction, so the reference category is the middle of the within-GP preference distribution (neither extreme). Panels (b) and (c) plot the coefficient on (Low/High priority $\times$ Elected) from separate regressions of log category-level expenditure on a priority indicator, elected, their interaction, and log total expenditure, with block fixed effects. In panel (b) a category is flagged as low-priority if its citizen-preference share is at or below the labelled cutoff ($\leq 10\%$ down to $\leq 1\%$); in panel (c) it is flagged as high-priority if its share is at or above the cutoff ($\geq 10\%$ up to $\geq 20\%$). The sample is the GP $\times$ expenditure-category panel for the "overall" beneficiary group. Standard errors are clustered at the GP level; bars are 95% confidence intervals. Discussed in Section 4.1.1.

Figure A.7: Spending Alignment—Distribution under Elected and Appointed Leaders



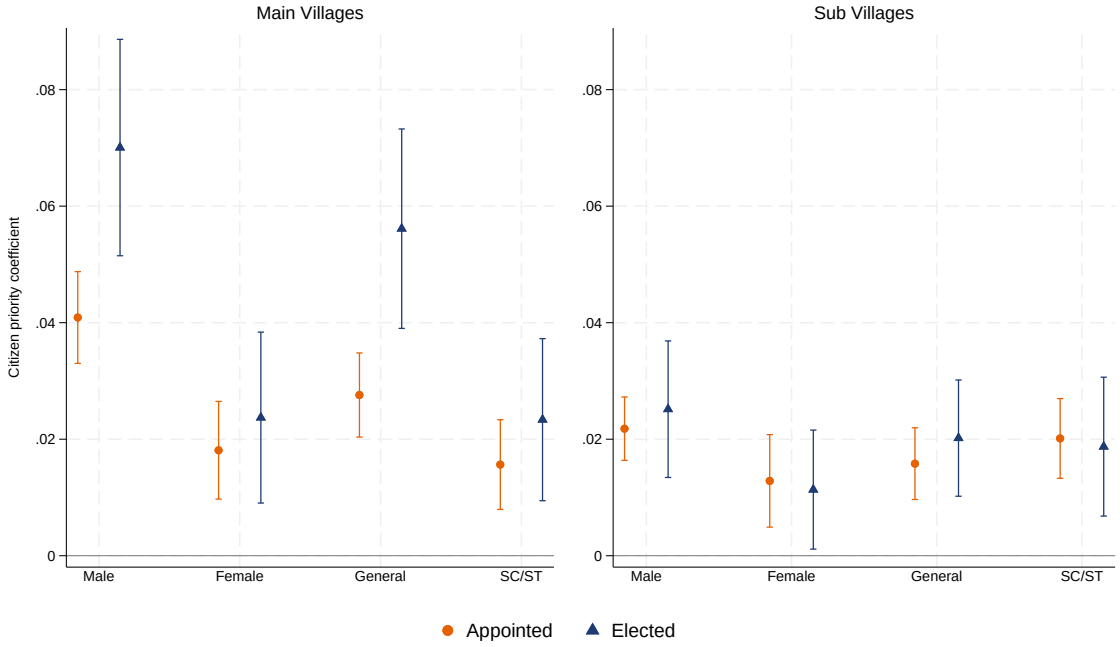
Notes: For each GP we compute the within-GP correlation, across the eleven public-good categories that correspond to GP expenditure heads, between the share of citizens prioritising a category and the GP's (log) expenditure on it; this measures how closely spending tracks citizen preferences. The figure plots kernel densities of this alignment measure separately for politician-run (elected, solid) and bureaucrat-run (appointed, dashed) GPs. The elected distribution lies to the right, indicating that spending is more closely aligned with citizen priorities under elected leaders. Discussed in Section 4.1.1.

Figure A.8: Elected vs. Appointed: Spending on Extreme-Preference Categories



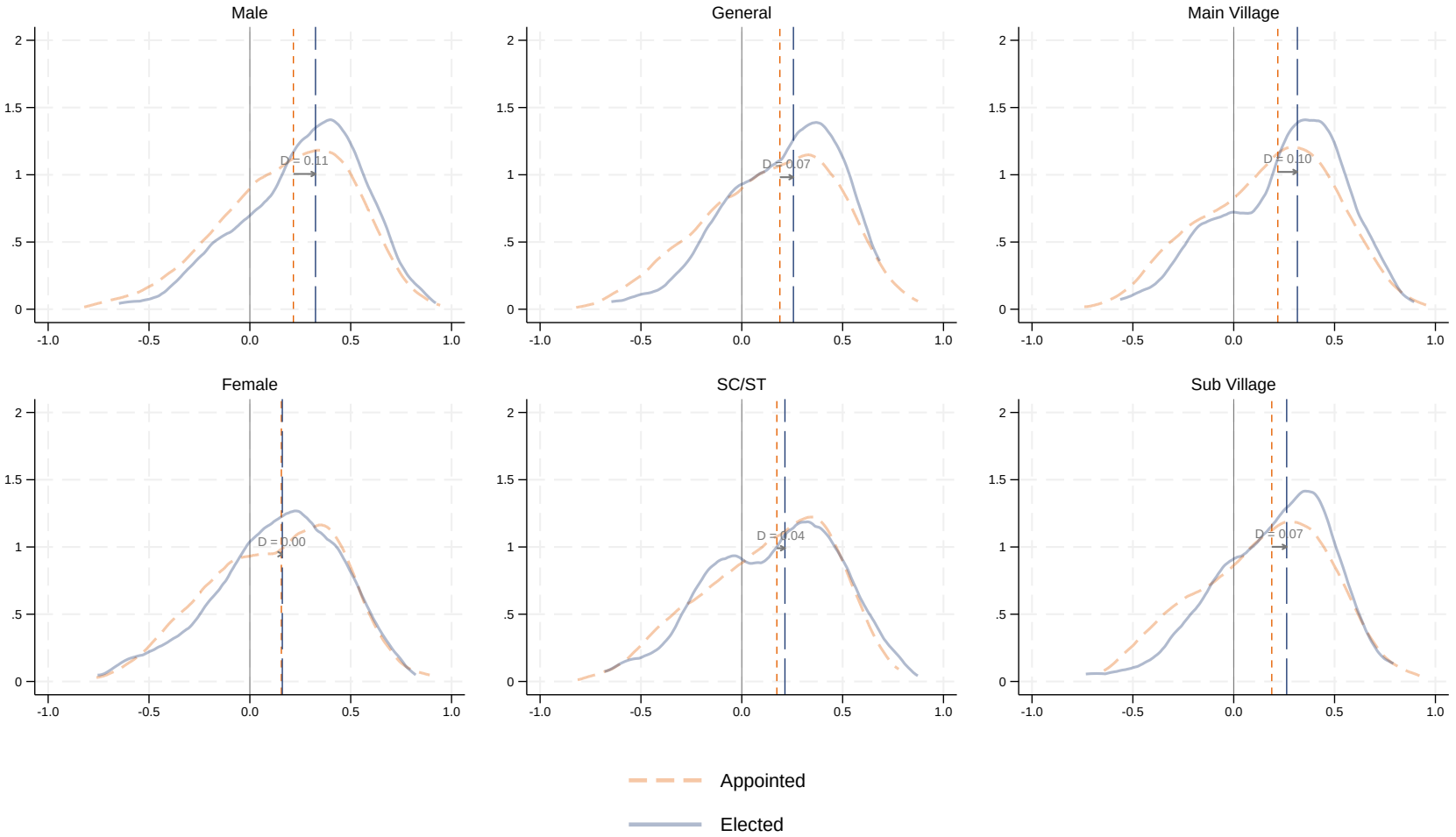
Notes: Each marker is the coefficient on an interaction term from a separate regression of log category-level GP expenditure on two extreme-preference indicators (*Nobody-wanted* and *Most-popular*) *Elected*, both interactions with *Elected*, and log total GP expenditure, with block fixed effects. Orange circles plot *Nobody-wanted* × *Elected* and navy triangles plot *Most-popular* × *Elected*. Within each GP, *Nobody-wanted* flags spending categories with a citizen-preference share of zero, and *Most-popular* flags the peak-preference category; the two indicators are mutually exclusive by construction, so the omitted reference is the middle of the within-GP preference distribution (neither extreme). The coefficients therefore measure how the elected–appointed gap in spending differs for zero-preference and peak-preference categories relative to middle ones. The six positions on the horizontal axis differ only in whose preferences define the within-GP distribution: male vs. female citizens (Gender), general-caste vs. SC/ST citizens (Caste), and main-village vs. sub-village citizens (Village type). Standard errors are clustered at the GP level; bars are 95% confidence intervals. Discussed in Section 4.1.

Figure A.9: Alignment between Citizen Preferences and Spending by Social Group and Village Status



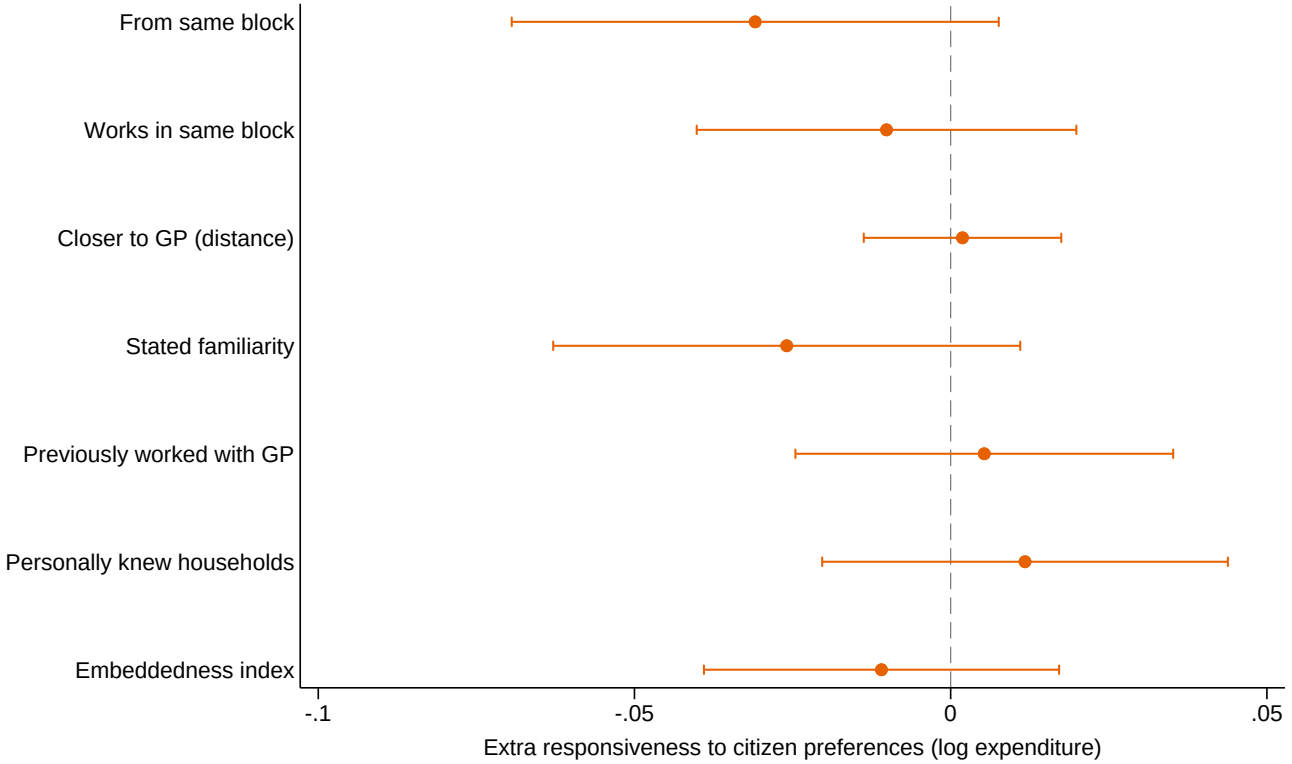
Notes: Each point is the estimated coefficient on citizen priority from a regression of log GP expenditure on citizen priority, *Elected*, their interaction, and log total expenditure, with block fixed effects and standard errors clustered at the GP level. Citizen priority is aggregated from the demographic sub-group named on the x-axis, separately for main-village citizens (circles) and sub-village citizens (diamonds). Orange markers show the coefficient for appointed GPs; navy markers show the coefficient for elected GPs. Whiskers denote 95% confidence intervals. Discussed in Section 4.1.2.

Figure A.10: Spending Alignment for Different Social Groups—Distribution under Elected and Appointed Leaders



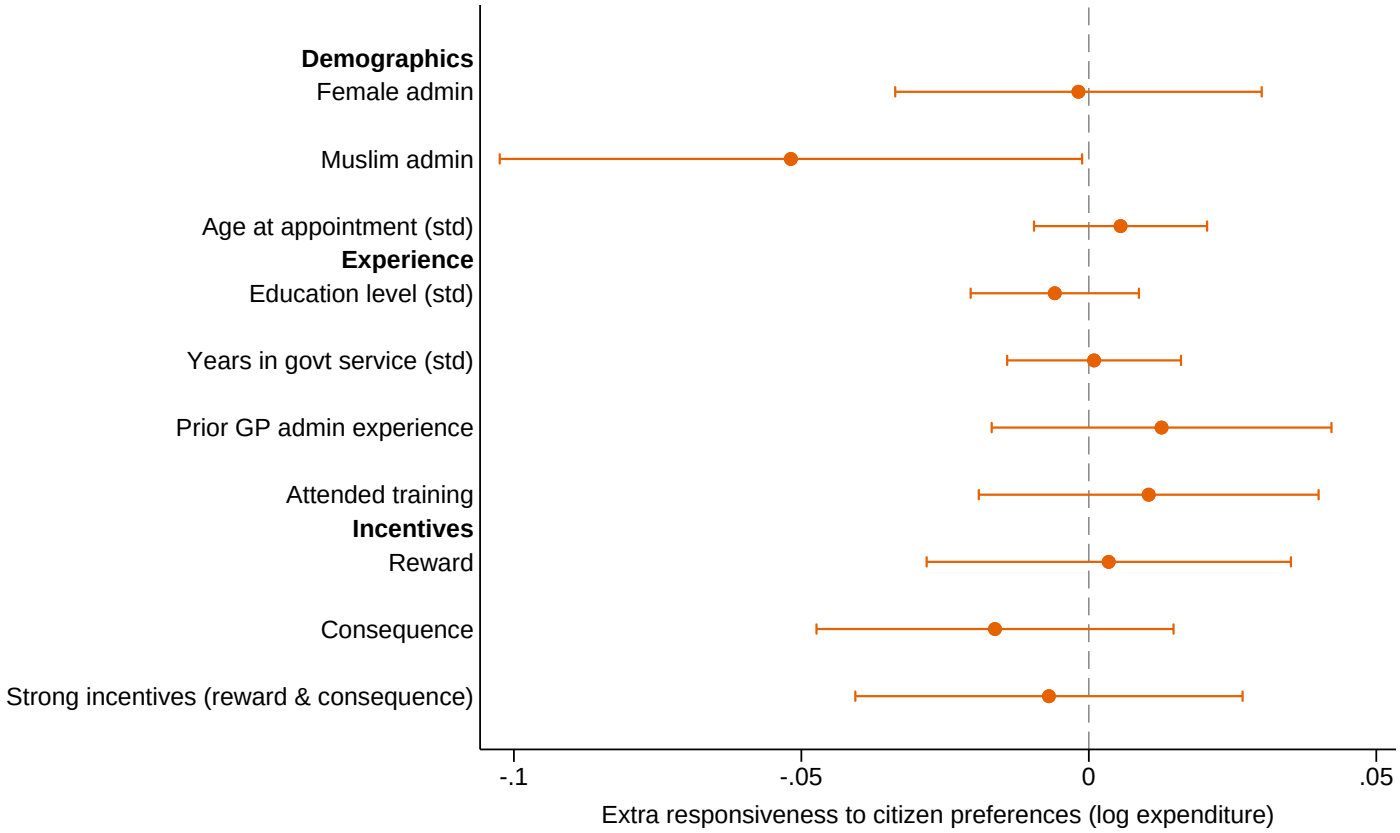
Notes: As in Figure A.7, but the within-GP alignment measure is recomputed from the spending priorities of specific citizen subgroups. Each panel plots, for one subgroup (by gender, caste category, and village type), the kernel density of the correlation between that subgroup's category priorities and GP spending, separately for politician-run (elected) and bureaucrat-run (appointed) GPs. Discussed in Section 4.1.2.

Figure A.11: Alignment between Public Spending and Citizen Preferences: Heterogeneity by Administrator Embeddedness



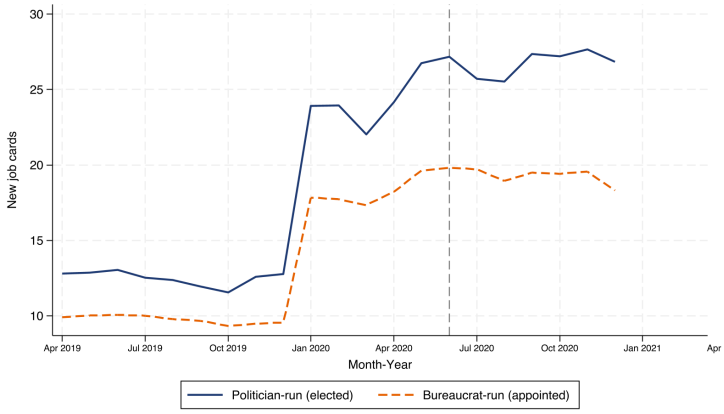
Notes: Each point is the coefficient on a *Citizen priority* $\times$ X interaction from a regression of log GP expenditure on citizen priority, X, their interaction, and log total expenditure, with block fixed effects. All rows use the appointed-GP sample only; X is an embeddedness measure as labelled. Distance is sign-flipped so that higher values indicate closer proximity. The index is a standardised average of all embeddedness variables. Whiskers are 95% confidence intervals; standard errors clustered at the GP level. Discussed in Section 4.1.3.

Figure A.12: Alignment between Public Spending and Citizen Preferences—Heterogeneity by Administrator Demographics, Experience and Incentives

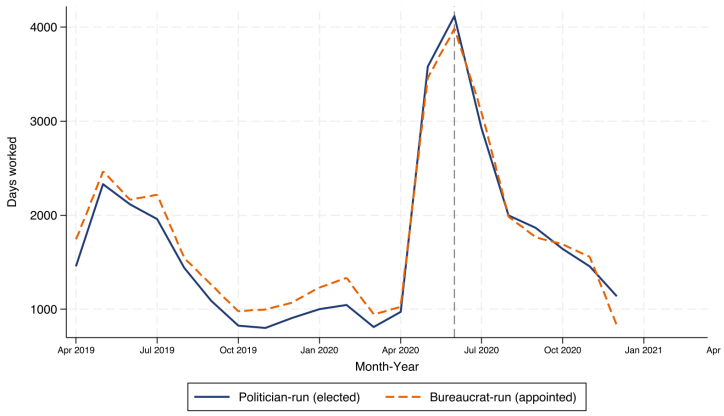


Notes: Each marker is the coefficient on *Citizen priority* $\times$ X from a regression of log GP expenditure on citizen priority, an administrator characteristic X, their interaction, and log total expenditure, with block fixed effects, estimated on the sample of bureaucrat-run (appointed) GPs. The characteristic X is grouped into demographics (female, Muslim, age at appointment), education and experience (education, years in government service, prior GP-administrator experience, training), and incentives (reward, consequence, and strong incentives combining both). Each coefficient shows how an appointed administrator's responsiveness to citizen priorities varies with that characteristic; whiskers are 95% confidence intervals, with standard errors clustered at the GP level. Discussed in Section 4.1.3.

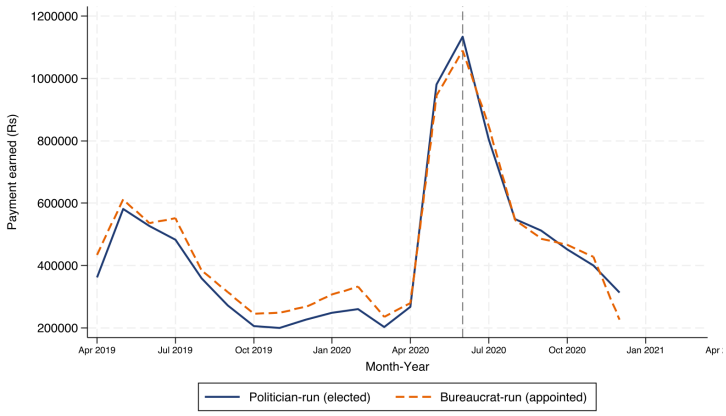
Figure A.13: Raw NREGS Delivery Trends, by Governance Regime



(a) New job cards



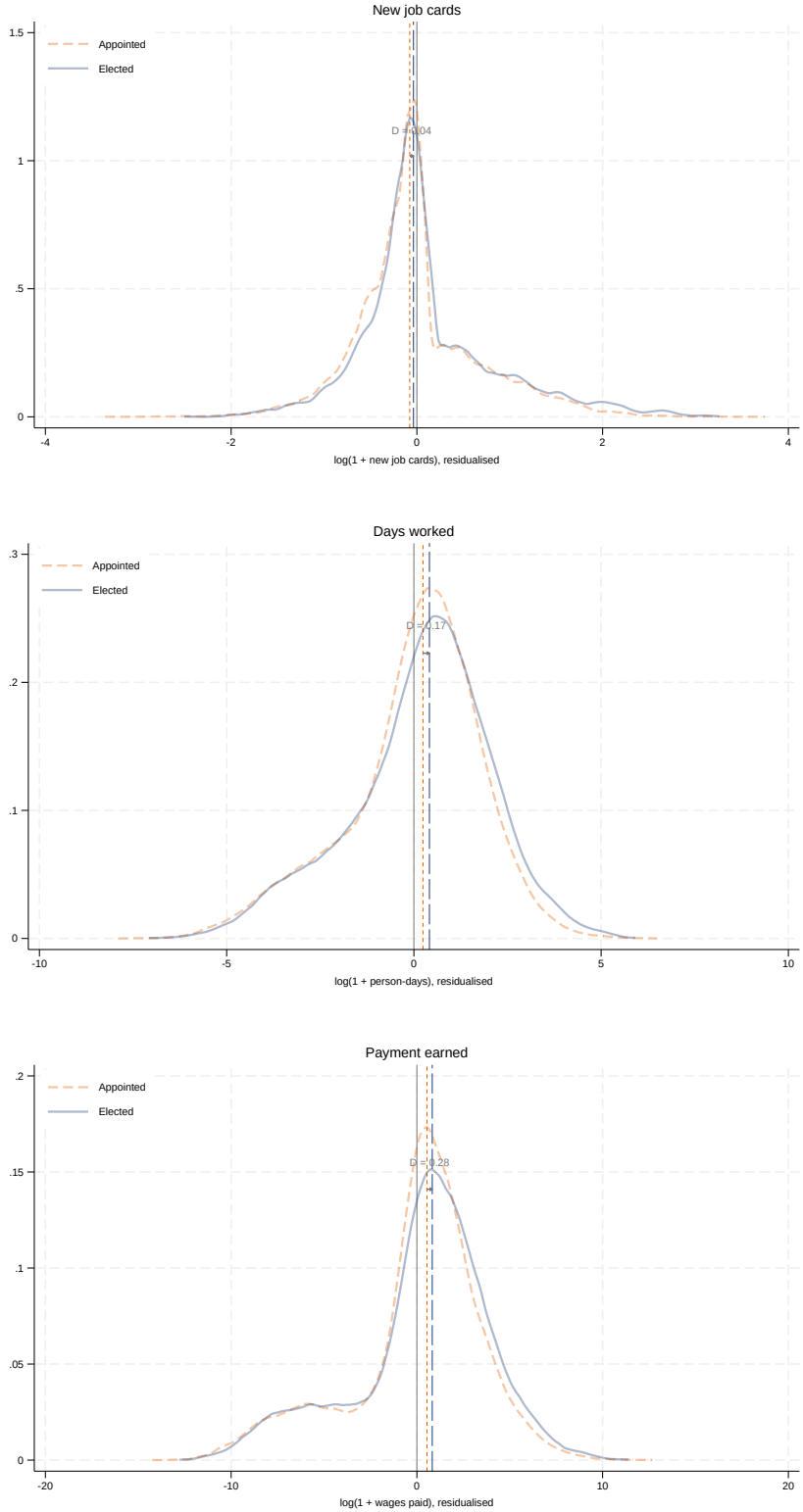
(b) Days worked



(c) Payment earned

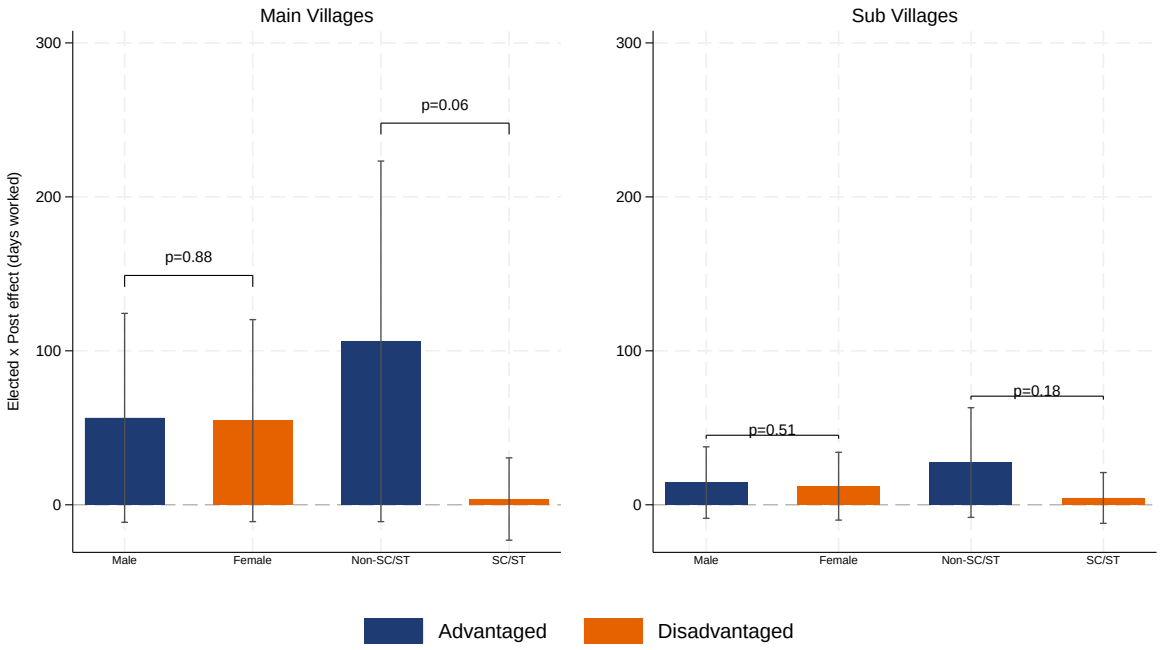
Notes: Each panel plots the raw monthly mean of one NREGS delivery outcome — new job cards registered, person-days of work, and wage payments — separately for politician-run (elected, solid) and bureaucrat-run (appointed, dashed) GPs, using the special-block sample. The vertical dotted line marks the June 2020 transition, after which most GPs moved from elected to appointed governance. The two series track each other closely before the transition, supporting the parallel-trends assumption, and diverge afterwards as elected GPs deliver more. Discussed in Section 4.2.

Figure A.14: Delivery of NREGS Benefits: Distribution of Outcomes under Elected and Appointed Leaders



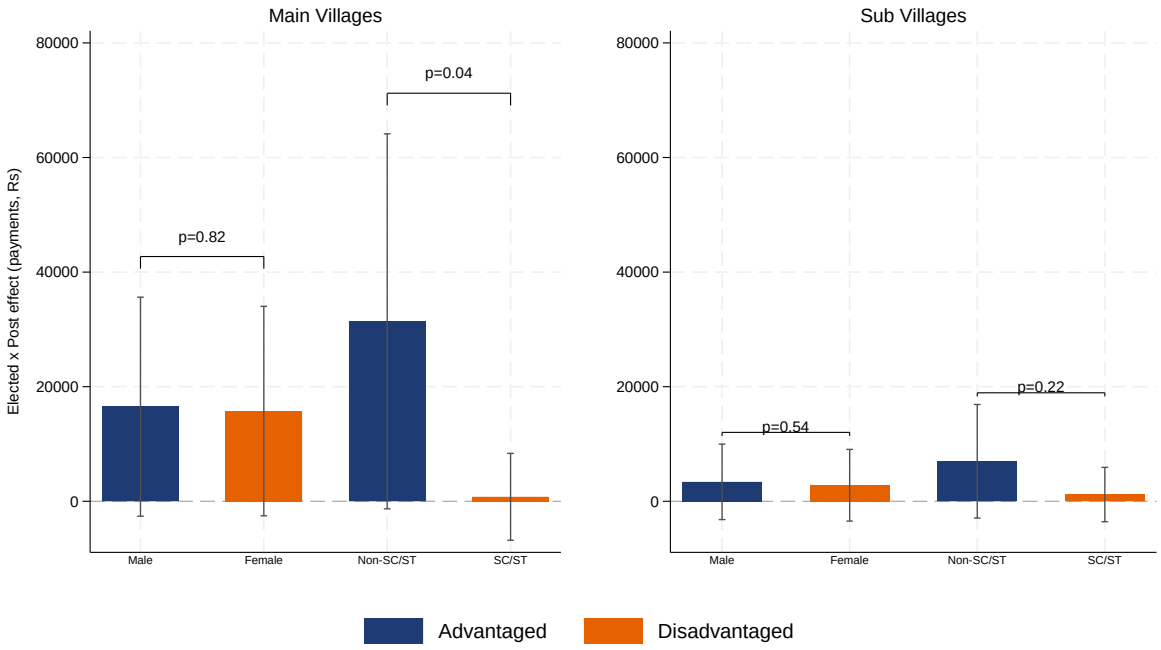
Notes: Kernel densities of three NREGS delivery outcomes — new job cards, person-days, and wage payments — after residualising each on village and block × month-year fixed effects (specification 3) and restricting to the post-June-2020 treatment period. Each panel plots the residualised outcome separately for bureaucrat-run (appointed, dashed) and politician-run (elected, solid) GPs; the vertical lines mark the group medians and Δ reports the elected–appointed median gap. The elected distributions lie to the right, showing the responsiveness gap is not driven by outliers. Discussed in Section 4.2.

Figure A.15: Effect of Elected Leaders on NREGS Workfare Days provided, by Village Status & Social Group



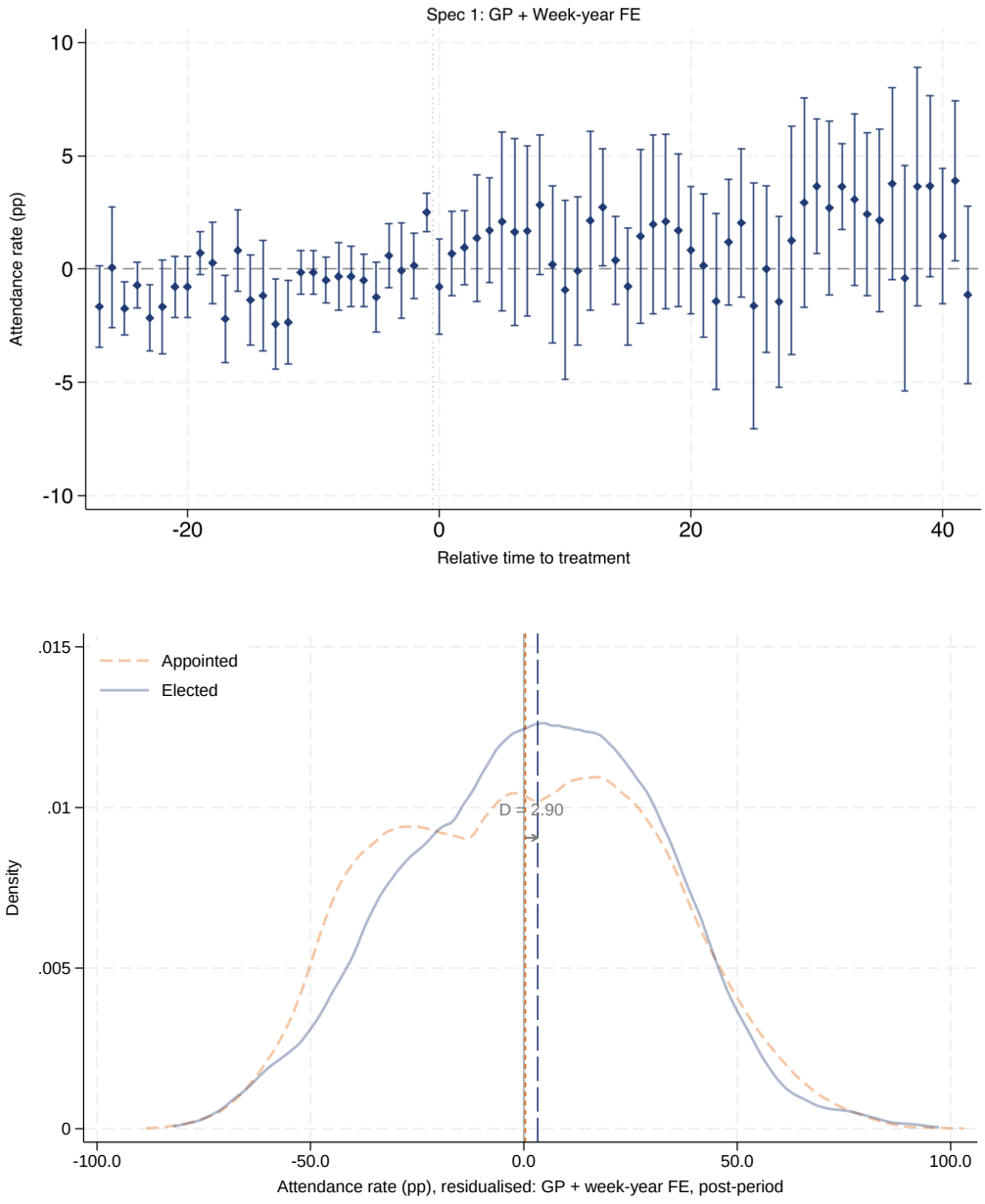
Notes: As in Figure 4(a), but split by village type (main vs peripheral). Each panel shows the *Elected* × *Post* effect (level) for Male, Female, Non-SC/ST and SC/ST households; brackets report the within-panel `suest` p-value of the gender (Male vs Female) and caste (Non-SC/ST vs SC/ST) gaps. The caste gap is concentrated in main villages. Non-SC/ST = total minus SC/ST. Discussed in Section 4.2.

Figure A.16: Effect of Elected Leaders on NREGS Benefits delivered, by Village Status & Social Group



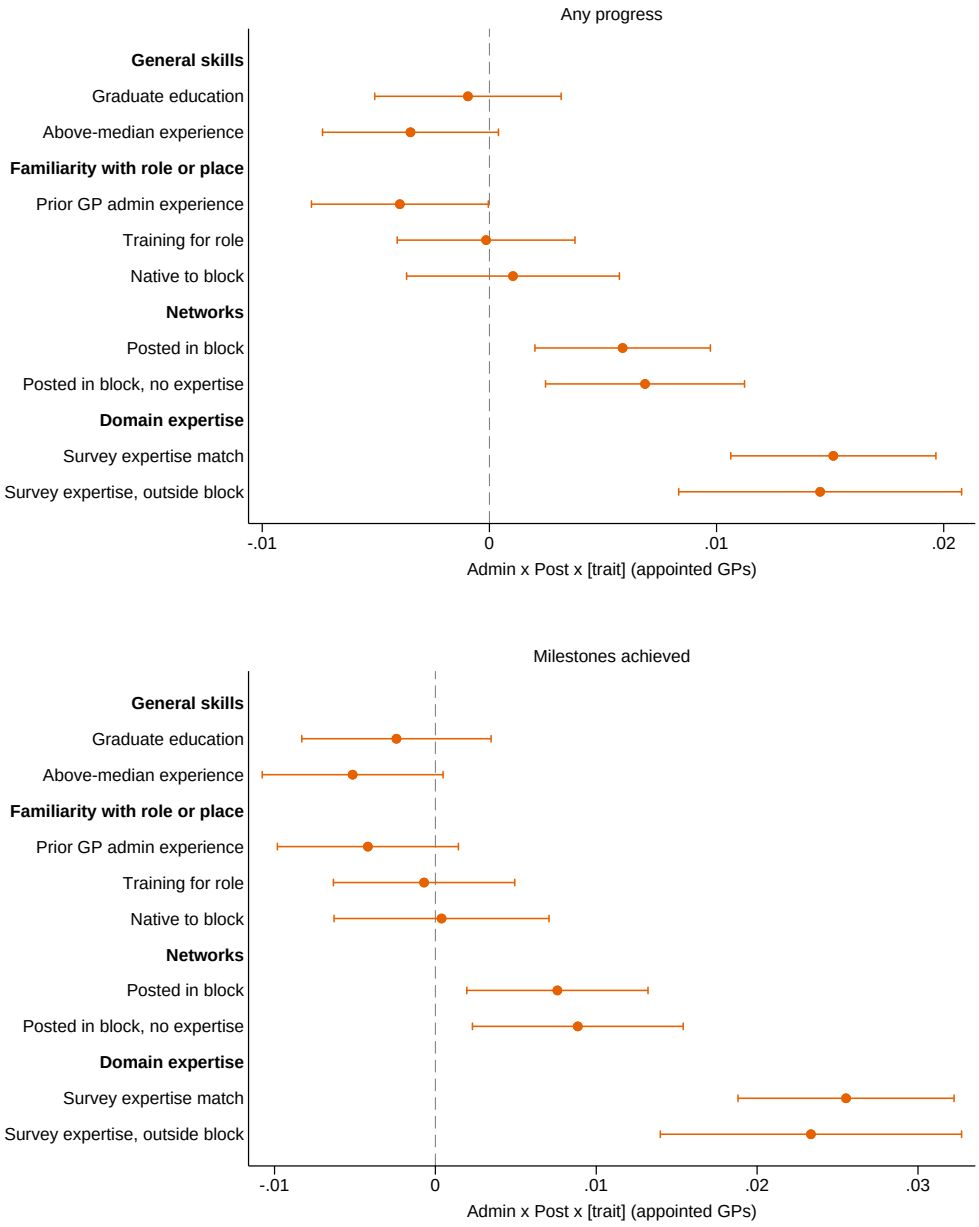
Notes: As in Figure 4(b), but split by village type (main vs peripheral). Each panel shows the *Elected* × *Post* effect (level) for Male, Female, Non-SC/ST and SC/ST households; brackets report the within-panel `suest` p-value of the gender (Male vs Female) and caste (Non-SC/ST vs SC/ST) gaps. The caste gap is concentrated in main villages. Non-SC/ST = total minus SC/ST. Discussed in Section 4.2.

Figure A.17: Effect of Elected Leaders on GP Staff Attendance: Dynamic Difference-in-Differences Estimates and Distribution of Outcomes



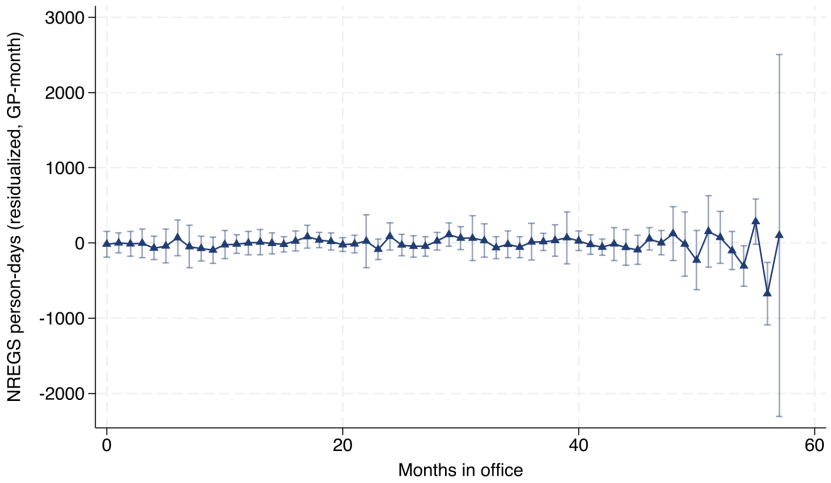
Notes: The top panel is a synthetic difference-in-differences event study of GP staff attendance (specification 1: GP and week-year fixed effects), plotting the dynamic effect of elected leadership on the attendance rate around the June 2020 governance transition, with 95% bootstrap confidence intervals. The bottom panel plots kernel densities of the attendance rate after residualising on GP and week-year fixed effects over the post-transition period, separately for politician-run (elected, solid) and bureaucrat-run (appointed, dashed) GPs. Discussed in Section 4.2.1.

Figure A.18: **Expertise**—Heterogeneity in Development Project Progress Rates by Administrative Expertise & Characteristics

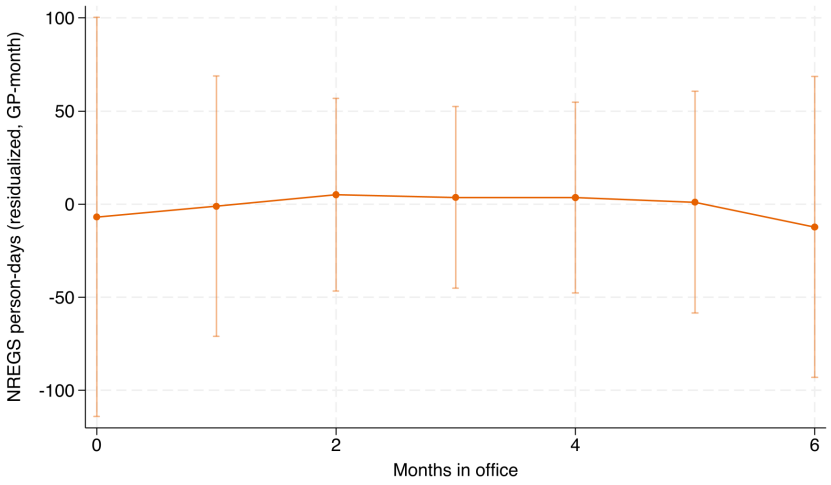


Notes: Each marker is the coefficient on *Admin* × *Post* × *trait* from a regression of a project-implementation outcome on the triple interaction and its lower-order terms, with project (work-ID) and period-year fixed effects, estimated on bureaucrat-run (appointed) projects. The top panel uses an indicator for any progress in the period; the bottom panel uses the count of milestones achieved (0–5). Administrator traits are grouped into general skills (graduate education, above-median experience), familiarity with the role or place (prior GP-admin experience, training, native to block), networks (posted in block), and domain expertise (survey expertise match). Whiskers are 95% confidence intervals, with standard errors clustered at the GP level. Discussed in Section 5.3.3.

Figure A.19: Relationship between NREGA Delivery and Tenure in Office



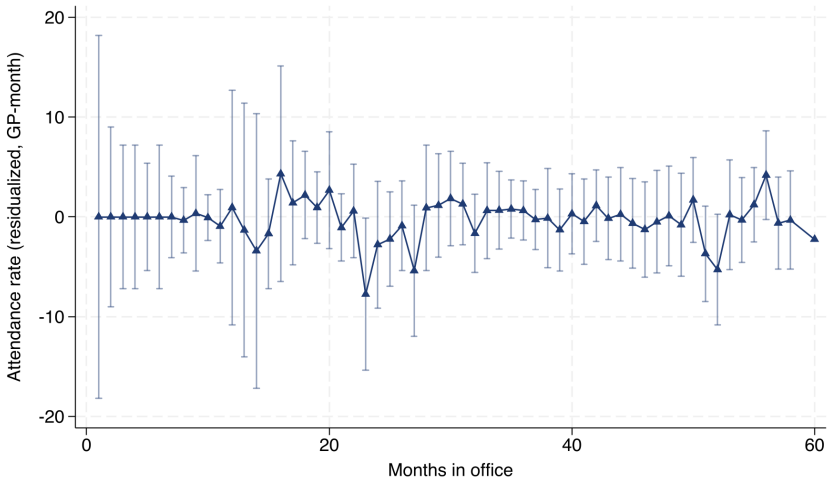
(a) Elected



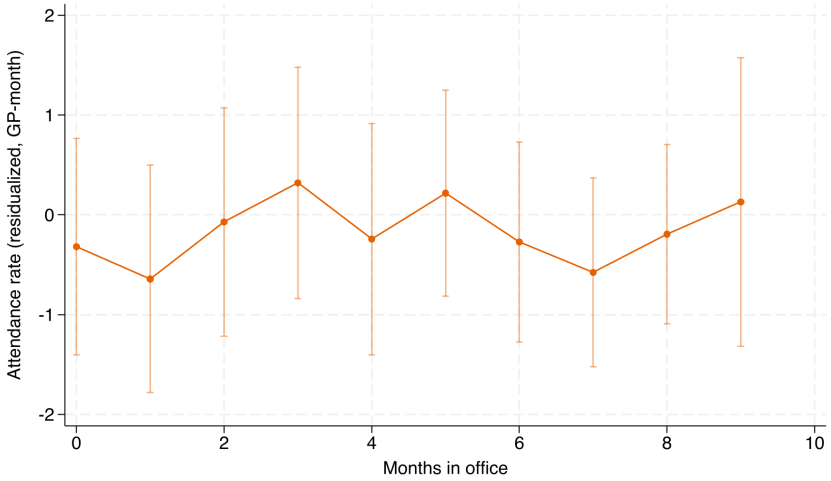
(b) Appointed

Notes: Each panel plots mean NREGS person-days (aggregated to the GP-month) against the leader's months in office, with 95% confidence intervals. For elected councils, months in office are counted forward from the inferred start of the five-year term (sixty months prior to `ElectedEndDate`); for appointed administrators, from the transition date (`ElectedEndDate`). The outcome is residualized on village fixed effects and block × year × month fixed effects prior to aggregation. The two panels cover largely non-overlapping tenure ranges by construction: appointed administrators are observed only early in their tenure (assigned during COVID), while elected councils are observed predominantly in later months of their term. Discussed in Section 6.2.

Figure A.20: Relationship between GP Staff Attendance and In-Office Tenure



(a) Elected



(b) Appointed

Notes: Each panel plots mean attendance rate (aggregated to the GP-month) against the leader's months in office, with 95% confidence intervals. For elected councils, months in office are counted forward from the inferred start of the five-year term (sixty months prior to `ElectedEndDate`); for appointed administrators, from the transition date (`ElectedEndDate`). The outcome is residualized on village fixed effects and block × year × month fixed effects prior to aggregation. The two panels cover largely non-overlapping tenure ranges by construction: appointed administrators are observed only early in their tenure (assigned during COVID), while elected councils are observed predominantly in later months of their term. Discussed in Section 6.2.

Table A.1: **Summary Statistics**—GP Administrators

	(1)	(2)
	Mean	SD
Panel A: Demographics		
Age	50.32	10.06
Male	0.91	0.29
Bachelor's degree or higher	0.62	0.49
Panel B: Experience and Training		
Years in Government Service	19.38	10.87
Prior experience as GP administrator	0.54	0.50
Attended GP administrator training	0.47	0.50
Selected by senior bureaucrat	0.99	0.10
Panel C: Workload		
Experienced double hatter	0.95	0.23
No. of GPs assigned	1.76	2.19
Has held Non-GP admin additional charge	0.86	0.35
% of time on GP administrator duties	38.52	14.33
GP admin: visits in a month	12.10	7.83
Expected $\geq$ 6 months tenure as GP administrator	0.56	0.50
GP administrator role as additional charge	0.93	0.25
GP administrator consulted previous elected leaders	0.04	0.20
Panel D: Familiarity with Assigned GP		
Administrator is from assigned GP	0.05	0.21
Distance between native village and assigned GP (km)	18.99	15.57
Was working in same district as assigned GP	0.71	0.46
Was working in same block as assigned GP	0.56	0.50
Previously visited assigned GP	0.69	0.46
Previously worked with assigned GP	0.51	0.50
Personally knew households in assigned GP	0.66	0.48
Panel E: Self-reported expertise and priorities		
Expertise: Village development works	0.56	0.50
Expertise: Roads	0.16	0.37
Expertise: Sanitation	0.11	0.31
Priorities as GP administrator: Engaging citizens	0.35	0.48
Priorities as GP administrator: Delivering social assistance	0.28	0.45
Priorities as GP administrator: Women's empowerment	0.17	0.37
Priorities as GP administrator: Social justice	0.25	0.44
Panel F: Incentives and performance evaluation		
Evaluation: RDPR monitors	1.00	0.06
Perceives strong incentives (rewards & consequences)	0.32	0.47
Willing to take future GP Admin position	0.78	0.42

Notes: This table reports the mean and standard deviation of administrator characteristics from the GP Administrator Survey (main phase). Variables in Panels B–F that are used as heterogeneity dimensions in the analysis are described in the text. Definitions of each variable are provided in Table A.32. Discussed in Section 2.1.2.

Table A.2: **Electoral term end dates**—Distribution across GPs

	Frequency	Percentage	Governance during FY 2020-21
2020	5831	97.30	Appointed bureaucrat
2021	101	1.69	Elected politician
2022	27	0.45	Elected politician
2023	23	0.38	Elected politician
2024	10	0.17	Elected politician
2025	1	0.02	Elected politician
Total	5993	100.00	

Notes: This table displays the ending date for the electoral term for each GP across all GPs in Karnataka. The final column indicates the governance regime during 2020-21 for each GP category and shows that only GPs whose electoral term ended in 2020 were governed by administrators. Discussed in Section 3.1.

Table A.3: Balance Table

Variable	Appointed	(SD)	Elected	(SD)	Difference	(SE)	Observations
Area (sq km)	690.007	(802.377)	714.008	(940.663)	32.394	(40.521)	9,414
Non-Agri Area (sq km)	0.065	(0.097)	0.064	(0.107)	-0.004	(0.005)	9,524
Rural Pop. Density	5.239	(166.655)	3.160	(4.768)	-1.855	(3.150)	9,414
SC Population (%)	0.216	(0.205)	0.201	(0.202)	-0.021*	(0.011)	9,414
Literate Population (%)	0.614	(0.107)	0.635	(0.108)	0.009**	(0.004)	9,414
Primary schools	1.761	(1.565)	1.794	(1.926)	0.095	(0.085)	9,414
Primary Health Sub-Centres	0.306	(0.511)	0.336	(0.548)	0.031	(0.020)	9,349
ASHA Presence (0/1)	0.586	(0.493)	0.551	(0.498)	0.000	(0.020)	9,349
Power Supply (0/1)	0.998	(0.040)	0.997	(0.059)	-0.002	(0.002)	9,414
All weather roads (0/1)	0.934	(0.248)	0.914	(0.280)	-0.006	(0.014)	9,349
Tap Water (0/1)	0.458	(0.498)	0.446	(0.497)	0.016	(0.025)	9,349
Open Drainage (0/1)	0.696	(0.460)	0.701	(0.458)	-0.005	(0.024)	9,349
Mobile Coverage (0/1)	0.838	(0.368)	0.844	(0.363)	-0.009	(0.017)	9,349
Public Bus Connection (0/1)	0.831	(0.375)	0.843	(0.364)	-0.004	(0.017)	9,349
District Road (0/1)	0.330	(0.470)	0.337	(0.473)	0.017	(0.028)	9,349
State Highway (0/1)	0.227	(0.419)	0.212	(0.409)	-0.007	(0.022)	9,349
Public Goods Index	0.000	(0.994)	-0.002	(1.085)	0.038	(0.045)	9,349
Service sector employment (%)	0.795	(0.209)	0.803	(0.207)	0.002	(0.008)	8,990
Manufacturing sector employment (%)	0.195	(0.204)	0.187	(0.201)	-0.001	(0.008)	8,990
Rural per captita consumption	19,043.070	(6,100.128)	19,098.998	(4,947.898)	-274.834	(262.525)	8,799
HHs income from cultivation (%)	0.545	(0.290)	0.546	(0.293)	0.003	(0.018)	8,936
Socio-Economic Index	-0.003	(1.001)	0.046	(0.983)	0.018	(0.040)	8,427
Days Requested	339.023	(760.430)	360.953	(891.541)	7.002	(20.903)	310,026
Days Worked	304.885	(691.865)	309.998	(758.544)	0.636	(18.316)	310,026
Total New Cards	2.198	(8.040)	2.649	(10.539)	0.385	(0.371)	310,026
Payment Earned	74,894.586	(170596.234)	76,184.609	(186926.047)	259.994	(4,536.680)	310,026
NREGS Index	-0.001	(0.992)	0.019	(1.112)	0.009	(0.028)	310,026
All GP Staff Attendance	23.281	(39.084)	23.130	(38.716)	0.735	(1.112)	639,531
PDO Attendance	9.757	(29.591)	9.498	(29.233)	0.525	(1.424)	133,060
Data Staff Attendance	34.215	(46.046)	32.157	(45.379)	-0.815	(2.152)	122,637
Accounts Staff Attendance	32.284	(43.045)	30.722	(41.825)	0.129	(1.699)	122,791
Any Progress	0.089	(0.284)	0.089	(0.285)	0.001	(0.001)	4,495,836
Approval Progress	0.078	(0.267)	0.079	(0.269)	0.000	(0.001)	3,585,090
Completion Progress	0.017	(0.131)	0.018	(0.134)	0.001	(0.001)	4,495,836
Progress Index	-0.000	(0.999)	0.005	(1.014)	0.004	(0.005)	3,585,090
Mean Night lights (log)	-0.520	(0.802)	-0.499	(0.930)	0.025	(0.047)	104,089
Kharif Agri output	-0.001	(1.005)	0.008	(0.928)	0.026	(0.044)	35,788
Rabi Agri output	0.002	(1.003)	-0.036	(0.960)	-0.006	(0.039)	35,788
Summer Agri output	0.003	(1.003)	-0.045	(0.950)	-0.018	(0.047)	35,788

Notes: This table reports baseline balance between elected- and appointed-run GPs in our sample of blocks. Each row is a pre-period (pre-2020) or time invariant characteristic of the GP. Column 5 reports the difference (elected minus appointed), estimated from a regression of the standardized characteristic on an indicator for elected-run GPs. All regressions include block fixed effects and standard errors are clustered at the GP level. Discussed in Section 3.3.

Table A.4: **First Stage**—De Jure Elected Status and De Facto COVID Management

	(1) Administrator managed	(2) Elected leader managed	(3) PDO managed
Elected (de jure)	-0.122***	0.084*	0.007
	(0.020)	(0.046)	(0.050)
Mean (bureaucrat-run, 2020)	0.125	0.048	0.807
GP FE	Yes	Yes	Yes
Period FE	Yes	Yes	Yes
Observations	6096	6096	6096
GPs	3048	3048	3048

Notes: This table presents data from the survey of Village Secretaries — Panchayat Development Officers (PDOs), using the full sample of responding GPs. The unit of observation is a GP-year; each GP is observed in 2020 and 2021. The dependent variable in columns (1)–(3) is an indicator for whether an administrator, an elected leader (Adhyaksha, Upa-Adhyaksha or Ward Member), or the PDO, respectively, was reported to be in charge of COVID management in the GP. *Elected (de jure)* equals one for politician-run GPs and zero for bureaucrat-run GPs in 2020, and equals one for all GPs in 2021, when elected councils had been restored and almost no GPs remained under administrators. All regressions include GP and period fixed effects; standard errors, clustered at the GP level, are in parentheses. Discussed in section 3.4. Significant at *10%, **5%, and ***1%.

Table A.5: Impact of Form of Government on Public Spending by Category

	(1) Drains	(2) Education	(3) Health	(4) Housing	(5) Library	(6) Roads	(7) Streetlights	(8) Toilets	(9) Water	(10) Wells
Elected	-0.324	0.108	-0.457	-0.836**	-0.166	-0.301	-0.174	-0.233	-0.035	0.321
	(0.443)	(0.489)	(0.333)	(0.371)	(0.442)	(0.427)	(0.226)	(0.401)	(0.153)	(0.468)
Observations	644	644	644	644	644	644	644	644	644	644
Adjusted R^2	0.513	0.167	0.184	0.471	0.178	0.507	0.431	0.439	0.404	0.163
Admin Y Mean	7.70	5.27	2.02	11.98	5.30	8.19	11.66	10.10	13.79	4.43
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gram Panchayats	644	644	644	644	644	644	644	644	644	644

Notes: This table presents results from estimating equation (3) separately for each expenditure category. The dependent variable is the log of expenditure in GP i on category j. The independent variable of interest *Elected* is a dummy indicating whether GP i is governed by an elected leader during the 2020-21 financial year. All regressions include block fixed effects and control for total expenditure in a GP. Standard errors, clustered at the GP level, are in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.

Table A.6: Citizen Preferences over Public Spending in Politician- and Bureaucrat-run GPs

	(1) Bureaucrat-run	(2) (SD)	(3) Politician-run	(4) (SD)	(5) Difference	(6) (SE)
Roads	0.310	(0.462)	0.322	(0.467)	0.013	(0.013)
Piped water	0.317	(0.465)	0.314	(0.464)	-0.004	(0.012)
Housing	0.137	(0.344)	0.143	(0.350)	0.008	(0.010)
Toilets	0.226	(0.418)	0.223	(0.417)	0.008	(0.010)
Street lights	0.117	(0.322)	0.116	(0.321)	-0.002	(0.007)
Library	0.060	(0.237)	0.062	(0.241)	0.003	(0.005)
Education	0.181	(0.385)	0.175	(0.380)	-0.001	(0.009)
Health care	0.138	(0.345)	0.142	(0.349)	0.001	(0.008)
Anganwadi	0.034	(0.182)	0.032	(0.175)	-0.002	(0.004)
Tube well	0.023	(0.151)	0.023	(0.150)	-0.001	(0.003)
Temple	0.034	(0.181)	0.035	(0.183)	-0.000	(0.004)
Drainage	0.190	(0.392)	0.195	(0.397)	0.004	(0.009)
Observations	11,245					

Notes: The table compares the stated spending priorities of citizen-survey respondents in bureaucrat-run (appointed) and politician-run (elected) GPs. Each row is an indicator for naming that category among the two public goods the respondent most wants the GP to spend on, so the twelve shares sum to approximately two within each regime. Columns (1)–(4) report means and standard deviations by regime. Column (5) is the difference, estimated by regressing the indicator on an indicator for a politician-run GP with block fixed effects; column (6) is its standard error, clustered at the GP level. All twelve survey categories are shown. Temple appears here but not in the expenditure analysis, where it has no corresponding GP budget head. Discussed in section 4.1.1. Significant at *10%, **5%, and ***1%.

Table A.7: Alignment between Citizen Preferences and Public Spending—Robustness to Alternative Specifications

	No Fixed Effects		District FE		Block FE	
	(1)	(2)	(3)	(4)	(5)	(6)
Citizen Priority (prop)	0.063***	0.058***	0.064***	0.058***	0.064***	0.059***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
	[0.006]***	[0.005]***	[0.006]***	[0.005]***	[0.006]***	[0.005]***
Citizen Priority × Elected		0.035***		0.034***		0.034***
		(0.011)		(0.011)		(0.011)
		[0.013]***		[0.012]***		[0.012]***
Fixed Effects	None	None	District	District	Block	Block
Mean Y (Admin GPs)	7.33	7.33	7.33	7.33	7.33	7.33
Gram Panchayats	637	637	637	637	637	637
Observations	7,007	7,007	7,007	7,007	7,007	7,007

Notes: Dependent variable is log GP expenditure in category *j*. *Citizen Priority* is the share of citizens in GP *i* naming category *j* as a top-two priority. Odd-numbered columns include citizen priority and log total expenditure only; even-numbered columns additionally include *Elected* and its interaction with citizen priority. Coefficients on *Elected* and log total expenditure suppressed. Parentheses: standard errors clustered at the GP level. Square brackets: Conley spatial standard errors with a 100km cutoff; fixed effects are partialled out to match the corresponding regression column. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.1.

Table A.8: **Representation** — Unequal Alignment between Spending and Citizen Preferences: Robustness to Alternative Specifications

	Male	Female	General	OBC	SC/ST	Main Village	Sub Village
Panel A: No fixed effects							
Citizen Priority (prop)	0.053***	0.021***	0.031***	0.030***	0.023***	0.044***	0.022***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)
	[0.003]***	[0.003]***	[0.004]***	[0.002]***	[.]	[0.006]***	[0.002]***
Citizen Priority × Elected	0.035***	0.005	0.031***	0.019**	0.010	0.031***	0.005
	(0.011)	(0.009)	(0.010)	(0.009)	(0.008)	(0.011)	(0.007)
	[0.011]***	[0.012]	[0.012]**	[0.007]***	[0.007]	[0.011]***	[0.008]
Panel B: District fixed effects							
Citizen Priority (prop)	0.054***	0.021***	0.031***	0.031***	0.023***	0.044***	0.022***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)
	[0.003]***	[0.003]***	[0.004]***	[0.002]***	[.]	[0.006]***	[0.002]***
Citizen Priority × Elected	0.034***	0.006	0.032***	0.018*	0.010	0.030***	0.004
	(0.011)	(0.009)	(0.010)	(0.009)	(0.008)	(0.011)	(0.007)
	[0.011]***	[0.012]	[0.012]***	[0.007]**	[0.007]	[0.011]***	[0.008]
Panel C: Block fixed effects							
Citizen Priority (prop)	0.054***	0.021***	0.032***	0.031***	0.024***	0.045***	0.022***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)
	[0.003]***	[0.003]***	[0.004]***	[0.002]***	[.]	[0.006]***	[0.002]***
Citizen Priority × Elected	0.034***	0.004	0.032***	0.018*	0.010	0.030***	0.004
	(0.011)	(0.009)	(0.010)	(0.009)	(0.008)	(0.011)	(0.007)
	[0.011]***	[0.012]	[0.012]***	[0.007]***	[0.007]	[0.011]***	[0.008]
Mean Y (Admin GPs)	7.33	7.33	7.33	7.33	7.33	7.30	7.30
Gram Panchayats	637	637	637	637	637	630	630
Observations	6,974	4,774	6,622	5,478	5,423	6,358	11,264

Notes: Dependent variable is log GP expenditure in category *j*. *Citizen Priority* is the share of the sub-group named in the column header who name category *j* as a top-two priority, aggregated at the GP level. Columns 6–7 aggregate preferences from main- and sub-village citizens respectively. Panel A includes no fixed effects, Panel B district fixed effects, Panel C block fixed effects. Parentheses: standard errors clustered at the GP level. Square brackets: Conley spatial standard errors with a 100km cutoff; fixed effects are partialled out to match the corresponding panel. Some Conley SE estimates are unstable for the SC subgroup; results don't qualitatively change for lower cutoffs. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.2.

Table A.9: Variation in Citizens' Preferences over Public Goods

	Across all GPs	GPs with this as top preference	
	Citizens who prefer (%)	GPs with this top preference (%)	Citizens who prefer (%)
Anganwadi	3.32	0.73	37.14
Drain	19.24	15.38	39.68
Education	17.86	10.26	39.09
Health	14.00	6.23	39.74
Housing	13.94	3.66	44.50
Library	6.06	0.37	53.85
Roads	31.50	23.20	49.88
Street lights	11.69	2.56	42.21
Temple	3.41	0.73	28.89
Toilets	22.48	12.94	47.40
Water	31.57	23.69	49.97
Wells	2.33	0.24	21.43

Notes: This table presents summary statistics on citizen preferences over various categories of public goods. Data comes from the citizen survey. Column 1 reports the share of citizens who list each category as one of the top two priorities for GP expenditure. Column 2 reports the share of GPs for which each public goods category is the most preferred category among citizens. Column 3 reports the share of citizens in GPs where category j is the most popular category who list j as one of their top two priorities. Discussed in Section 4.1.3.

Table A.10: Alignment between Public Spending and Citizen Preferences—Heterogeneity by Leader Gender

	(1) Male	(2) Female	(3) General	(4) OBC	(5) SC/ST	(6) Main Villages	(7) Sub Villages
Citizen priority (prop)	0.056***	0.021***	0.032***	0.033***	0.027***	0.046***	0.024***
	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.003)
Citizen Priority × Elected	0.044***	0.009	0.039***	0.014	0.021**	0.033***	0.011
	(0.011)	(0.010)	(0.010)	(0.010)	(0.009)	(0.012)	(0.007)
Citizen Priority × Female Leader	-0.016*	-0.005	-0.011	0.006	-0.023***	-0.004	-0.012*
	(0.010)	(0.009)	(0.010)	(0.009)	(0.009)	(0.010)	(0.007)
Observations	6347	4356	6028	4994	4939	5841	10538
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gram Panchayats	644	644	644	644	644	638	638

Notes: Dependent variable is log GP expenditure in category *j*. *Citizen Priority* is the share of the sub-group named in the column header naming category *j* a top-two priority. *Elected* = 1 if the GP is headed by an elected leader. *Female Leader* = 1 if the elected leader is female (0 for male-led elected GPs and all appointed GPs). The two interaction terms capture the extra responsiveness to citizen preferences of elected leaders and of female elected leaders respectively. All columns include block fixed effects and control for log total expenditure. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.3.

Table A.11: Alignment between Spending and Preferences of Different Social Groups—Heterogeneity by Administrators' Governance Priorities

	(1) Male	(2) Female	(3) General	(4) OBC	(5) SC/ST	(6) Main Villages	(7) Sub Villages
Citizen Priority (prop)	0.057***	0.017**	0.037***	0.027***	0.024***	0.035***	0.017***
	(0.010)	(0.008)	(0.008)	(0.008)	(0.007)	(0.010)	(0.006)
Citizen Priority × Elected	0.033**	0.009	0.028**	0.023*	0.009	0.041***	0.010
	(0.014)	(0.011)	(0.012)	(0.012)	(0.010)	(0.014)	(0.009)
Citizen Priority × Admin: Women's emp.	-0.006	0.015	-0.015	0.005	0.009	-0.005	0.007
	(0.018)	(0.018)	(0.014)	(0.018)	(0.016)	(0.017)	(0.014)
Citizen Priority × Admin: Social justice	-0.006	-0.006	-0.022*	0.027*	-0.016	0.012	-0.000
	(0.015)	(0.013)	(0.012)	(0.015)	(0.013)	(0.014)	(0.010)
Citizen Priority × Admin: Engaging citizens	0.017	-0.001	0.009	-0.004	0.010	0.010	0.011
	(0.016)	(0.013)	(0.013)	(0.014)	(0.012)	(0.017)	(0.009)
Observations	3619	2794	3498	3069	2970	3322	6600
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gram Panchayats	644	644	644	644	644	638	638

Notes: Full sample (elected and appointed GPs). Dependent variable is log GP expenditure in category *j*. *Citizen Priority* is the share of the sub-group named in the column header naming category *j* a top-two priority (aggregated at the GP level for cols 1–5; from main- and sub-village citizens respectively for cols 6–7). *Citizen Priority* × *Elected* captures extra responsiveness of elected leaders relative to appointed admins. The three admin-attitude interaction terms capture extra responsiveness of appointed admins who personally value the stated governance priority (Q9): *Women's empowerment*, *Social justice*, and *Engaging citizens*. All three attitude interactions are included simultaneously in every column; admin attitude dummies are coded 0 for elected GPs (no admin survey). Main effects of *Elected* and admin attitude dummies are included but suppressed. Block fixed effects and log total expenditure included. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.3.

Table A.12: Alignment between Public Spending and Citizen Preferences—Heterogeneity by village population share

	(1)	(2)	(3)	(4)	(5)
Citizen priority (overall)	0.028***	0.017***	0.017***	0.021***	0.021***
	(0.002)	(0.004)	(0.004)	(0.005)	(0.005)
Priority × Elected	0.007	0.003	0.003	-0.003	-0.004
	(0.006)	(0.008)	(0.008)	(0.009)	(0.009)
Priority × Pop. share (village in GP)		0.363***	0.363***	0.075	0.072
		(0.088)	(0.088)	(0.141)	(0.143)
Priority × Elected × Pop. share		0.305*	0.306*	0.537*	0.556*
		(0.159)	(0.159)	(0.304)	(0.304)
Constant	-19.565***	-18.573***	-18.567***	-19.149***	6.993***
	(2.484)	(2.485)	(2.485)	(2.686)	(0.068)
Observations	19723	17809	17809	11440	11440
Mean Y	7.360	7.280	7.280	7.299	7.299
Block FE	Yes	Yes	Yes	Yes	
Panchayat FE					Yes
Controls	Yes	Yes	Yes	Yes	Yes
Sample	All	All	All	Non-main	Non-main

Notes: The dependent variable is the log of expenditure in category c by gram panchayat i in block j. "Citizen priority (overall)" is the proportion of surveyed citizens in village v that report public goods category c as a priority. *Elected* equals 1 if the gram panchayat president is elected rather than appointed. *Pop. share (village in GP)* is the continuous share of the gram panchayat population residing in village v. Column (1) is the baseline specification. Column (2) adds heterogeneity by village population share. Column (3) additionally includes an indicator for main villages. Columns (4) and (5) restrict the sample to non-main villages; column (5) replaces block fixed effects with gram panchayat fixed effects. All specifications control for (the log of) total GP expenditure. Coefficients on controls and village population share are suppressed. Standard errors in parentheses are clustered at the gram panchayat level. *** p<0.01, ** p<0.05, * p<0.10. Discussed in Section 4.1.3.

Table A.13: **Citizen Engagement**—Public Meetings Organised by Politician- and Bureaucrat-run GPs

	(1) Index	(2) Gram Sabha	(3) Ward Sabha	(4) General Body	(5) Special	(6) Standing Committee	(7) Jamabandi	(8) Other
Elected	0.115**	-0.038	0.001	0.868***	0.017	0.102*	0.052	0.107
	(0.050)	(0.114)	(0.061)	(0.280)	(0.093)	(0.056)	(0.048)	(0.120)
Observations	883	883	883	883	883	883	883	883
Adjusted R^2	0.201	0.187	0.113	0.135	0.061	0.096	0.348	0.382
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Y Admin	-0.00	1.31	0.24	2.23	0.37	0.09	0.44	0.48
SD Y	0.49	1.16	0.65	2.33	0.99	0.41	0.50	1.48

Notes: This table presents results from estimating equation (1). In columns 2-8, the dependent variable is the number of meetings of each type organised by GP i. In column 1, the dependent variable is a summary index constructed following Kling et al. (2007): each of the seven meeting counts in columns 2-8 is converted to a z-score by subtracting the mean and dividing by the standard deviation of bureaucrat-run (appointed) GPs, and the index is the equally weighted average of those seven z-scores. The index is therefore expressed in standard deviations of the appointed-GP distribution and has mean zero for appointed GPs; higher values indicate more meetings. *Elected* is a dummy variable indicating whether GP i was governed by an elected leader during FY2020-21. *Mean Y Admin* contains the mean of the raw counts of the specific type of meetings in administrator-governed GPs. All columns include block fixed effects. Standard errors, clustered at the GP level, are in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.3.

Table A.14: **Citizen Participation:** — Heterogeneity by Social Group

	(1) Male	(2) Female	(3) General	(4) SC/ST	(5) Main Village	(6) Sub Village
Elected	0.055*	0.045	0.068*	-0.052	0.047	0.048
	(0.031)	(0.049)	(0.036)	(0.047)	(0.033)	(0.042)
Observations	8729	1578	5157	1990	5934	3870
Block FE	Yes	Yes	Yes	Yes	Yes	Yes
Gram Panchayats	737	504	703	571	676	582

Notes: Dependent variable is the *meeting attendance index*: the standardised mean of two z-scored binary indicators — gram sabha attendance and ward meeting attendance. The index is expressed in standard deviation units. Each column restricts the sample to citizens in the named subgroup. *Elected* = 1 if the citizen resides in a GP headed by an elected leader. Block fixed effects included. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.3.

Table A.15: Determinants of Administrators' Spending Allocations: The Role of Administrator Expertise and Home Department

	Expertise match			Department match		
	(1)	(2)	(3)	(4)	(5)	(6)
Citizen priority (overall)		0.026***	0.003		0.026***	0.023***
		(0.008)	(0.012)		(0.008)	(0.009)
Citizen priority × Elected		0.068***	0.091***		0.068***	0.071***
		(0.013)	(0.015)		(0.013)	(0.013)
Expertise match	1.752***	1.330***	0.585			
	(0.231)	(0.320)	(0.412)			
Citizen priority × Expertise match			0.042***			
			(0.015)			
Department match				2.324***	1.750***	1.456***
				(0.385)	(0.404)	(0.512)
Citizen priority × Department match						0.016
						(0.020)
Observations	3271	3271	3271	3271	3271	3271
Block FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Full sample (elected and appointed GPs). Dependent variable is log GP expenditure in category j. Columns 1–3 use *Expertise match* (admin self-reported expertise in the survey domain mapped to category j); columns 4–6 use *Department match* (admin's joining department is responsible for category j, per the crosswalk in the code). Both are coded 0 for elected GPs (no admin survey). *Citizen priority* × *Elected* captures the responsiveness gap for elected leaders relative to appointed admins without a match; *Citizen priority* × (*Expertise*/*Department*) *match* captures extra responsiveness for matched admins. Main effects of *Elected* and log total expenditure, and block fixed effects, are included but suppressed. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 4.1.3.

Table A.16: Administrator Performance Before and After the Election Announcement

	NREGS delivery			Staff attendance		
	(1) New job cards	(2) Days worked	(3) Payment (INR)	(4) Baseline	(5) + Weekday FE	(6) + Staff mix
Elected × Post	1.708**	86.592***	24118.562***	5.279**	5.220**	5.360**
	(0.760)	(27.497)	(7677.630)	(2.289)	(2.285)	(2.267)
Elected × Post × Election Notice	0.259	-11.465	-3067.636	-2.172	-2.252	-2.466
	(0.186)	(35.472)	(9613.086)	(2.592)	(2.596)	(2.566)
Observations	419376	419376	419376	160345	160345	160345
Adjusted R^2	0.496	0.456	0.454	0.408	0.412	0.414
Mean Y Admin	2.73	337.30	85,614.60	42.13	42.13	42.13
SD Y	10.16	766.19	196407.56	38.23	38.23	38.23
Controls	None	None	None	None	Reg. rate	Reg. rate, staff mix
Village FE	Yes	Yes	Yes			
Block × Month-Year FE	Yes	Yes	Yes			
GP FE				Yes	Yes	Yes
Week FE				Yes	Yes	Yes
Weekday FE				No	Yes	Yes

Notes: This table tests whether administrators became less effective once the delayed GP elections were announced in November 2020, one month before they were held. Columns 1–3 re-estimate the NREGS delivery regression (equation 4) and columns 4–6 the staff attendance regression (equation 4), each adding an interaction with an indicator for the post-announcement period. NREGS columns use specification 3, absorbing village and block × month-year fixed effects, the specification used throughout the paper's NREGS analysis. Attendance columns are the first, third and fifth rungs of the control ladder reported in the main attendance table. Because the announcement period falls entirely inside the post-treatment period, the reported interaction identifies the change in the administrator gap after the announcement rather than a separate triple difference. *Mean Y Admin* is the outcome mean in administrator-run GPs. Standard errors are clustered at the GP level. Significant at *10%, **5%, and ***1%.

Table A.17: **Effort** — Attendance Rates of Frontline Staff, Heterogeneity by Administrator Visit Frequency

	(1)	(2)	(3)	(4)	(5)	(6)
Elected x Post	3.669**	4.277**	4.130**	4.137**	4.308**	4.208**
	(1.630)	(1.881)	(1.878)	(1.876)	(1.885)	(1.869)
Admin x Post x Above-median visits		1.129	0.909	0.909	1.038	0.848
		(1.645)	(1.636)	(1.635)	(1.640)	(1.627)
Observations	66695	66695	66695	66694	66694	66694
Adjusted R^2	0.392	0.392	0.396	0.396	0.393	0.397
Week FE	Yes	Yes	Yes	Yes	Yes	Yes
Weekday FE	No	No	No	Yes	Yes	Yes
GP FE	Yes	Yes	Yes	Yes	Yes	Yes
Registration-rate control	No	No	Yes	Yes	No	Yes
Officer-type shares	No	No	No	No	Yes	Yes
Mean Y Admin	42.13	42.13	42.13	42.13	42.13	42.13
SD Y	38.23	38.23	38.23	38.23	38.23	38.23

Notes: This table reproduces Table 5 of the paper and adds an interaction with how frequently the administrator visited the GP. The unit of analysis is the GP-week and the dependent variable is the average attendance rate (in %) of active frontline staff in GP j during week-year t. $Elected$ indicates a politician-run GP and $Post$ a week after June 2020. *Above-median visits* equals one when the administrator reported visiting the GP more than the median number of times per month (the median is 10 visits); it is taken from our survey of administrators and is set to zero for politician-run GPs, which have no administrator. All specifications include GP and week-year fixed effects; the remaining controls are indicated in the table. Lower-order terms are included but absorbed by the fixed effects. Standard errors are clustered at the GP level. Because the visit measure is observed only for surveyed administrators, the estimation sample comprises all politician-run GPs together with bureaucrat-run GPs whose administrator responded to our survey. The median split is close to even across administrators (262 above, 264 at or below), so this comparison — unlike some of our other administrator-trait splits — is not short of identifying variation. We note that reported visits correlate only weakly with the share of time administrators devoted to the role, so this measure captures presence at the GP rather than overall effort. Significant at *10%, **5%, ***1%. Discussed in 4.2.1.

Table A.18: Village Secretary weekly time use in Politician- and Bureaucrat-run GPs

Variable	(1) Appointed	(2) Elected	(3) Difference
Roads/Drains Cleaning (% of week)	8.922	8.216	-0.501
	(5.719)	(3.765)	(0.491)
Solid waste management (% of week)	8.447	8.504	0.266
	(4.881)	(4.242)	(0.540)
Maintenance works (% of week)	7.953	7.561	-0.175
	(5.075)	(6.657)	(0.792)
Natural resource management (% of week)	6.777	6.407	-0.198
	(4.032)	(3.021)	(0.391)
Review meetings (% of week)	7.896	7.648	-0.262
	(5.091)	(4.550)	(0.546)
GP meetings (% of week)	6.395	6.667	-0.064
	(4.978)	(5.259)	(0.578)
Tax collection (% of week)	7.926	7.633	-0.418
	(4.396)	(4.308)	(0.536)
Registers/ file work (% of week)	11.474	11.070	-0.592
	(7.273)	(5.677)	(0.750)
Covid-related work (% of week)	10.455	10.206	-0.183
	(7.438)	(5.609)	(0.705)
Protocol work (% of week)	2.515	2.317	0.085
	(3.387)	(5.757)	(0.749)
Public service delivery (% of week)	7.320	8.828	1.433**
	(4.622)	(5.072)	(0.601)
Citizen interaction (% of week)	8.190	9.182	0.572
	(4.858)	(6.258)	(0.743)
Social welfare (other dept) (% of week)	5.730	5.761	0.038
	(4.452)	(3.900)	(0.472)
Observations	972	73	1,045

Notes: Data are from the survey of Panchayat Development Officers (village secretaries). Each row is a task; the entry is that task's hours as a percent of the PDO's total weekly hours across the tasks listed here, so the rows sum to 100% for a given PDO, rather than the raw hour count. Columns (1) and (2) report the mean share in bureaucrat-run (appointed) and politician-run (elected) GPs, with standard deviations in parentheses; column (3) reports the elected-appointed difference (coefficient on *Elected* from a regression with block fixed effects), with standard errors clustered at the GP level in parentheses. Significant at *10%, **5%, ***1%. Discussed in Section 6.3.

Table A.19: **Corruption**—Self-Dealing in NREGS and Citizens' Self-Reported Bribes

	Days worked			Payment Earned			Citizen assessment	
	(1)	(2)	(3)	(4)	(5)	(6)	Self-Reported bribes	Other citizen's bribes
Elected							-0.062*	-0.050*
							(0.035)	(0.029)
Elected x Post	0.946	1.103		251.381	293.698*			
	(0.635)	(0.674)		(172.861)	(176.817)			
Council Member x Post	0.018	-0.272	-0.627*	3.744	-71.562	-175.161*		
	(0.391)	(0.378)	(0.360)	(104.315)	(100.477)	(96.005)		
Council Member x Elected x Post	1.305	1.616	2.208	342.979	387.684	588.682		
	(1.895)	(1.776)	(1.494)	(518.907)	(483.529)	(403.461)		
Observations	3703854	3703767	3701677	3703854	3703767	3701677	6840	7815
Adjusted R^2	0.201	0.243	0.376	0.207	0.250	0.382	0.064	0.034
Mean Y Admin	15.39	15.39	15.39	3,913.88	3,913.88	3,913.88	0.15	0.17
SD Y	13.68	13.68	13.68	3,508.89	3,508.89	3,508.89	0.34	0.37
Applicant FE	Yes	Yes	Yes	Yes	Yes	Yes		
Period-Year FE	Yes	Yes	No	Yes	Yes	No		
Village x Period FE	No	Yes	No	No	Yes	No		
Village x Period-Year FE	No	No	Yes	No	No	Yes		

Notes: Two corruption outcomes for politician- vs bureaucrat-run GPs. Columns 1–6 estimate equation (5) on NREGS data: the dependent variable is workdays (1–3) or payments (4–6) for household i in GP j in half-year t, and the coefficient of interest is $Council\ Member \times Elected \times Post$, where *Council Member* flags households of an elected council member. Columns 1/4 include household and time fixed effects, 2/5 add village × time, and 3/6 use household and village × time fixed effects. Columns 7–8 use self-reported bribes from the citizen survey (paid by the respondent, and by others in the village), estimating equation (1) with block and enumerator fixed effects and village/household controls. Standard errors clustered at the GP level. Significant at *10%, **5%, and ***1%. Discussed in Section 5.1.

Table A.20: **Crisis Management**—COVID Management in Politician- and Bureaucrat-run GPs (Robustness to Alternative Fixed Effects and Conley Standard Errors)

	Task force (W1) (1)	Covid Mortality (W1) (2)	Covid Well-Being (3)	Economic Well-Being (4)	GP Covid Rating (W1) (5)
Panel A: No fixed effects					
Elected	-0.038	0.020	0.023	0.040	-0.038
	(0.037)	(0.030)	(0.032)	(0.037)	(0.035)
	[0.020]	[0.021]	[0.011]	[0.048]	[0.031]
Panel B: District fixed effects					
Elected	-0.031	0.020	0.023	0.039	-0.026
	(0.037)	(0.029)	(0.031)	(0.036)	(0.033)
	[0.017]	[0.022]	[0.009]	[0.047]	[0.030]
Panel C: Block fixed effects					
Elected	-0.028	0.013	0.023	0.032	-0.019
	(0.035)	(0.023)	(0.029)	(0.034)	(0.031)
	[0.019]	[0.017]	[0.011]	[0.045]	[0.034]
Mean Y Admin	0.76	0.96	0.01	-0.01	3.96
SD Y	0.43	11.83	1.05	1.05	1.00
Observations	8,104	8,095	7,591	8,683	8,598

Notes: Each column regresses a z-standardised COVID-management outcome (defined in Table 7) from the citizen survey on *Elected*, with household and village controls. Panel A includes no fixed effects, Panel B district fixed effects, Panel C block fixed effects. Parentheses: standard errors clustered at the GP level. Square brackets: Conley spatial standard errors with a 100km cutoff; fixed effects and controls are partialled out to match the corresponding panel. *Mean Y Admin* is the mean of the raw outcome in appointed GPs; *SD Y* its standard deviation. Significant at *10%, **5%, ***1%. Discussed in Section 5.2.

Table A.21: Development Progress Implementation under Elected vs Appointed Leaders, heterogeneity by citizens' preference over project domain

	(1) Any Progress	(2) Milestones completed	(3) Approval Prog	(4) Workorder Prog	(5) Tender Prog	(6) Monetary Prog	(7) Completion Prog
Elected x Post	-0.009	-0.014	0.004	-0.003	-0.006	0.008	0.001
	(0.012)	(0.018)	(0.010)	(0.009)	(0.033)	(0.025)	(0.004)
Post x Citizen priority	0.014	0.024	0.003	0.018	-0.011	-0.039	-0.001
	(0.011)	(0.017)	(0.010)	(0.013)	(0.025)	(0.025)	(0.003)
Elected x Post x Citizen priority	0.018	0.024	-0.027	0.008	-0.029	-0.000	-0.002
	(0.031)	(0.042)	(0.020)	(0.019)	(0.055)	(0.069)	(0.010)
Work ID FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Period-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	276784	276784	200451	245017	24611	59525	276784

Notes: Sample is public-works projects whose implementing agency maps to a citizen-preference sector: water (Rural Drinking Water & Sanitation; Watershed Development) and roads (Public Works; Karnataka Rural Road Development Agency). General (Rural Development & Panchayat Raj) and unlabelled works are excluded. *Citizen priority* is the share of citizens naming the work's sector as a top priority in the GP (0–1 scale). Column 2 counts milestones completed (0–5). The unit of analysis is a project i in GP j during period y; the dependent variable indicates progress in that period. All regressions include project (work ID) and period-year fixed effects; standard errors clustered at the GP level. Significant at *10%, **5%, ***1%. Discussed in Section 5.3.

Table A.22: Development Projects Started under Elected vs Appointed Leaders by Extent of Spillovers

	(1) # Narrow	(2) # Broad-based (GP)	(3) Share broad-based
Elected	0.373	0.560	0.025
	(0.436)	(0.471)	(0.016)
Observations	2554	2554	2554
Mean (appointed)	4.85	7.22	0.47
Block FE	Yes	Yes	Yes

Notes: Each column regresses a project-count outcome on *Elected* with block fixed effects, restricted to projects started in FY2020–21. Outcomes are the number of narrowly-targeted projects (household- or neighbourhood-level benefit; column 1), the number of broad-based projects (GP-wide benefit; column 2), and the broad-based share of projects (column 3). *Mean (appointed)* is the mean outcome in bureaucrat-run GPs. Standard errors clustered at the GP level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Discussed in Section 5.3.2.

Table A.23: Preferred Form of Government and Trust in Leaders, by Social Group

	Overall	Men	Women	General	SC/ST	Main vil.	Sub vil.
Election is the best system (% yes)							
Elected	86.1	86.0	86.4	85.4	87.5	87.0	85.4
	(34.6)	(34.7)	(34.3)	(35.4)	(33.1)	(33.6)	(35.3)
Admin	86.5	86.0	89.3	86.2	84.3	85.9	86.8
	(34.2)	(34.7)	(30.9)	(34.5)	(36.4)	(34.8)	(33.9)
Elections are free and fair (% yes)							
Elected	77.8	77.4	80.2	75.7	80.0	78.8	77.2
	(41.5)	(41.8)	(39.9)	(42.9)	(40.0)	(40.9)	(42.0)
Admin	78.6	78.0	82.2	76.8	79.3	78.3	78.4
	(41.0)	(41.4)	(38.3)	(42.2)	(40.5)	(41.2)	(41.1)
Trust in leadership							
Elected	84.8	84.4	87.2	85.1	83.1	85.4	83.8
	(35.9)	(36.3)	(33.4)	(35.7)	(37.5)	(35.3)	(36.9)
Admin	79.3	79.0	81.6	79.9	80.4	79.8	79.1
	(40.5)	(40.8)	(38.8)	(40.1)	(39.7)	(40.2)	(40.7)
Preferred governance (non-crisis)							
Elected	76.9	77.0	76.3	77.3	75.8	77.3	76.0
	(42.2)	(42.1)	(42.5)	(41.9)	(42.9)	(41.9)	(42.7)
Admin	23.1	23.0	23.7	22.7	24.2	22.7	24.0
	(42.2)	(42.1)	(42.5)	(41.9)	(42.9)	(41.9)	(42.7)
Preferred governance (crisis)							
Elected	67.9	67.5	69.8	69.4	66.3	68.3	66.9
	(46.7)	(46.8)	(45.9)	(46.1)	(47.3)	(46.5)	(47.1)
Admin	32.1	32.5	30.2	30.6	33.7	31.7	33.1
	(46.7)	(46.8)	(45.9)	(46.1)	(47.3)	(46.5)	(47.1)

Notes: Each cell reports a percentage with its standard deviation (in percentage points) in parentheses below. Within the two election-system blocks, *Elected* and *Admin* rows refer to citizens residing in politician- and bureaucrat-run GPs, respectively. Within *Trust in leadership*, they refer to trust in elected and appointed leaders. Within *Preferred governance*, they report the shares preferring elected leadership and appointed administration. Subgroups: General = general-caste citizens; SC/ST = scheduled caste or tribe; Main/Sub vil. = main or sub village residents. Discussed in Section 6.1.

Table A.24: Politicians' Impact on Citizens' Preferred Governance Regime

	Local Democracy Support (Index) (1)	Election Best (2)	Election Fair (3)	Admin Suitable (4)	Trust Elected (5)	Trust Admin (6)	Prefer Elected (normal times) (7)	Prefer Elected (crisis) (8)
Elected	-0.025	0.004	-0.012	-0.030	0.039	-0.029	-0.019	-0.036
	(0.035)	(0.031)	(0.029)	(0.033)	(0.029)	(0.030)	(0.033)	(0.035)
Observations	6855	8626	8519	8174	8819	8632	8675	8628
Adjusted R^2	0.021	0.019	0.017	0.040	0.032	0.024	0.025	0.028
SD Y	1.38	0.34	0.41	0.47	0.73	0.76	1.49	1.61

Notes: This table presents regression estimates from estimating equation (1). Data comes from the citizen survey. Each observation is the view of a citizen i in GP j. The main independent variable is $Elected$, which takes 1 if citizen i was in a politician-run GP during 2020-21. In Column 1 the dependent variable is a standardized local democracy support index using all variables in Columns 2-8. Columns 2 - 4 are responses to whether elections are the best method to elect a GP President; whether such elections are fair; and whether a government-appointed administrator would be a more suitable leader, respectively (as in Table A.23). The dependent variables in columns 5 and 6 are citizens' trust in elected and appointed leaders. The responses range from 1 = trust completely to 3 = do not trust. Lastly, the dependent variables in Columns 7 and 8 are citizens' preferred governance regime during normal and crisis times. These range from 1= strongly prefer elected leader to 5 = strongly prefer government-appointed administrator. All specifications control for respondent, village, and surveyor-specific characteristics. Respondent-level controls include age, sex, caste category, religion, education, and occupation. Village controls are SC, ST, and literate proportion of population, manufacturing and service sector share of employment, number of primary, middle, secondary and senior-secondary schools, number of public health centers and medical dispensaries, public distribution shops, Anganwadi centers, and per-capita consumption. Lastly, we include a dummy for each surveyor. Standard errors are clustered at the GP level and reported in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 6.1.

Table A.25: **Elected vs. Appointed Leaders**, by Leader's Tenure

	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Below-median tenure elected vs. appointed	0.040***	36.558	3.133**	0.007	-0.005*
	(0.014)	(41.467)	(1.535)	(0.028)	(0.003)
Obs.	6,248	406,512	406,512	6,355	6,583,636
Above-median tenure elected vs. appointed	0.030**	62.685	-0.179	0.039	0.007**
	(0.015)	(38.316)	(0.781)	(0.041)	(0.003)
Obs.	6,314	405,518	405,518	6,191	6,595,770

Notes: Elected GPs are split at the median tenure of elected leaders (months in office as of 31 December 2020, implied by the term end date under fixed five-year terms). Each cell reports the elected-versus-appointed difference (a main effect) estimated on a sample of one elected-tenure group and ALL appointed GPs: row 1 uses below-median-tenure elected GPs, row 2 uses above-median-tenure elected GPs. Column 1 is the GP-expenditure/spending-alignment gap (citizen priority × Elected); columns 2–3 are NREGS days worked and new job cards registered (Elected × Post); column 4 COVID mortality in wave 1 (Elected); column 5 whether a work makes any progress (Elected × Post). Outcomes and fixed effects match the corresponding main tables; standard errors are clustered at the GP level. If the two rows are similar, the elected advantage does not depend on how long the elected leader has been in office. Discussed in section 6.2. Significant at *10%, **5%, ***1%.

Table A.26: Effects of Elected Leaders—Heterogeneity by Leader's Prior Experience

Heterogeneity Dimension	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Above-median tenure (elected leaders)	0.027*	39.411	-0.498	0.042	0.007**
	(0.015)	(36.133)	(0.712)	(0.034)	(0.003)
Obs.	7,084	420,625	420,625	8,377	6,849,074
Above-median govt. service	-0.007	-6.238	0.115	-0.002	-0.003*
	(0.015)	(18.659)	(0.417)	(0.020)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Prior GP-admin experience	0.011	10.889	-0.466	0.030*	-0.004**
	(0.015)	(19.232)	(0.406)	(0.018)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Elected leader held prior office	0.033*	-109.206*	-0.909	0.059	0.010**
	(0.020)	(57.460)	(1.889)	(0.053)	(0.004)
Obs.	1,595	26,472	26,472	3,729	428,025

Notes: This table shows how the impact of governance varies with leader characteristics. Row 1 codes whether an elected leader's tenure (months in office, from the elected end date) is above the median among elected GPs, with all appointed administrators set to zero. Rows 2–3 restrict the sample to appointed GPs and use administrator traits—above-median years in government service and prior experience as a GP administrator. Row 4 restricts to elected GPs and codes whether any council member previously held elected office. The *Obs.* line reports the estimation sample for each cell. Columns 1–3 report accountability outcomes. In column 1 the outcome is the log of expenditure by GP i on category j, the regression estimated is equation (3), and the coefficient reported is (citizen priority $\times$ heterogeneity variable). In columns 2–3 the regression estimated is equation (4); the outcomes are NREGS days worked (column 2) and new job cards registered (column 3), and we report the coefficient on (heterogeneity variable $\times$ Post). In column 4 the regression estimated is equation (1); the dependent variable is COVID mortality during wave 1 and we report the coefficient on the heterogeneity variable. In column 5 the outcome is whether a development project makes any progress during period t, the regression estimated is equation (7), and we report the coefficient on (heterogeneity variable $\times$ Post). All specifications use the fixed effects of the corresponding main table; standard errors are clustered at the GP level and reported in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 6.2.

Table A.27: Elected vs Appointed Leaders—Heterogeneity by Administrators' Bandwidth

Heterogeneity Dimension	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Number of GPs assigned	-0.003*	5.366	-0.032	-0.001	0.000
	(0.002)	(4.463)	(0.040)	(0.001)	(0.000)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Colleagues covered dept. duties	-0.003	1.419	-0.725*	-0.017	-0.002
	(0.020)	(23.268)	(0.401)	(0.024)	(0.003)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Above-median % time on admin work	-0.009	-5.983	0.153	-0.051**	0.000
	(0.016)	(20.624)	(0.482)	(0.022)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Above-median council size	0.007	29.113	0.990**	-0.004	-0.000
	(0.017)	(19.652)	(0.460)	(0.025)	(0.002)
Obs.	2,035	144,302	144,302	1,693	2,016,379
Above-median GP population	-0.025	29.886	0.663	0.023	-0.002
	(0.015)	(18.837)	(0.411)	(0.019)	(0.002)
Obs.	2,024	143,118	143,118	1,686	1,980,714

Notes: This table shows how administrator impacts vary with administrator bandwidth—the number of GPs an administrator is assigned (entered as a count, so the reported coefficient is per additional GP), whether department colleagues covered some or many of the administrator's prior duties while they managed the GP, whether the administrator devotes an above-median share of weekly time to administrator work, whether the GP's elected council is above the median in size (number of current council members), and whether the GP's total population is above the median. Council size and population are measured at the GP level; above-median thresholds are taken over the sample of single-administrator appointed GPs. All rows restrict the sample to appointed (administrator-run) GPs; characteristics are measured at the administrator level. The *Obs.* line reports the estimation sample for each cell. Columns 1–3 report accountability outcomes. In column 1 the outcome is the log of expenditure by GP i on category j, the regression estimated is equation (3), and the coefficient reported is (citizen priority $\times$ heterogeneity variable). In columns 2–3 the regression estimated is equation (4); the outcomes are NREGS days worked (column 2) and new job cards registered (column 3), and we report the coefficient on (heterogeneity variable $\times$ Post). In column 4 the regression estimated is equation (1); the dependent variable is COVID mortality during wave 1 and we report the coefficient on the heterogeneity variable. In column 5 the outcome is whether a development project makes any progress during period t, the regression estimated is equation (7), and we report the coefficient on (heterogeneity variable $\times$ Post). All specifications use the fixed effects of the corresponding main table; standard errors are clustered at the GP level and reported in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 6.2.

Table A.28: Elected vs Appointed Leaders—Heterogeneity by Administrators' Time Horizon and Incentives

Heterogeneity Dimension	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Perceived tenure (12+ months)	0.057***	2.469	0.251	-0.026	-0.009***
	(0.021)	(29.082)	(0.664)	(0.020)	(0.003)
Obs.	1,441	98,956	98,956	1,245	1,448,493
Perceived tenure (6+ months)	0.034*	-5.092	0.305	0.004	-0.004
	(0.018)	(23.391)	(0.558)	(0.030)	(0.002)
Obs.	1,441	98,956	98,956	1,245	1,448,493
Perceives rewards	0.005	-29.903	-0.375	-0.029	-0.002
	(0.016)	(18.511)	(0.413)	(0.033)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Perceives consequences	-0.015	-9.609	-0.189	0.030	0.000
	(0.016)	(21.074)	(0.488)	(0.025)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Perceives strong incentives	-0.005	-29.830	-0.324	-0.031	-0.004**
	(0.017)	(18.462)	(0.418)	(0.031)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943

Notes: This table shows how administrator impacts vary with administrators' time horizon and perceived incentives—whether the administrator expected to serve at least twelve months, whether they expected to serve at least six months, whether they perceive any reward for good performance, whether they perceive any consequence for poor performance, and whether they perceive strong incentives (facing both a reward and a consequence). All rows restrict the sample to appointed (administrator-run) GPs; characteristics are measured at the administrator level. The *Obs.* line reports the estimation sample for each cell. Columns 1–3 report accountability outcomes. In column 1 the outcome is the log of expenditure by GP i on category j, the regression estimated is equation (3), and the coefficient reported is (citizen priority $\times$ heterogeneity variable). In columns 2–3 the regression estimated is equation (4); the outcomes are NREGS days worked (column 2) and new job cards registered (column 3), and we report the coefficient on (heterogeneity variable $\times$ Post). In column 4 the regression estimated is equation (1); the dependent variable is COVID mortality during wave 1 and we report the coefficient on the heterogeneity variable. In column 5 the outcome is whether a development project makes any progress during period t, the regression estimated is equation (7), and we report the coefficient on (heterogeneity variable $\times$ Post). All specifications use the fixed effects of the corresponding main table; standard errors are clustered at the GP level and reported in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 6.2.

Table A.29: Elected vs Appointed Leaders—Heterogeneity by Leader Demographics

Heterogeneity Dimension	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Male	0.024	-27.764	-0.846	-0.016	-0.004
	(0.019)	(36.346)	(1.449)	(0.049)	(0.003)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Graduate or above	-0.021	-0.547	-0.678	0.026	-0.001
	(0.016)	(20.669)	(0.470)	(0.024)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Native to block	-0.035*	30.410	-0.046	0.014	0.001
	(0.019)	(26.940)	(0.467)	(0.025)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943
Posted in block (COVID)	-0.008	-37.962*	-0.276	-0.048*	0.006***
	(0.015)	(20.187)	(0.434)	(0.026)	(0.002)
Obs.	2,035	145,469	145,469	1,693	2,037,943

Notes: This table shows how administrator impacts vary with administrator demographics—gender (male), whether the administrator holds a graduate degree or above, whether the administrator is native to the GP's block, and whether the administrator was posted in the GP's block during COVID. All rows restrict the sample to appointed (administrator-run) GPs; characteristics are measured at the administrator level. The *Obs.* line reports the estimation sample for each cell. Columns 1–3 report accountability outcomes. In column 1 the outcome is the log of expenditure by GP i on category j, the regression estimated is equation (3), and the coefficient reported is (citizen priority $\times$ heterogeneity variable). In columns 2–3 the regression estimated is equation (4); the outcomes are NREGS days worked (column 2) and new job cards registered (column 3), and we report the coefficient on (heterogeneity variable $\times$ Post). In column 4 the regression estimated is equation (1); the dependent variable is COVID mortality during wave 1 and we report the coefficient on the heterogeneity variable. In column 5 the outcome is whether a development project makes any progress during period t, the regression estimated is equation (7), and we report the coefficient on (heterogeneity variable $\times$ Post). All specifications use the fixed effects of the corresponding main table; standard errors are clustered at the GP level and reported in parentheses. Significant at *10%, **5%, and ***1%. Discussed in Section 6.2.

Table A.30: **External Validity**: How Our Administrators Compare to Other Bureaucrats

	Education (% of group)					Experience (years)				
			of which tertiary:							
	Secondary or below	Tertiary	Diploma	Bachelor's	Post-graduate	Govt. service	In district posts	Potential experience	Age	N
Our GP administrators	1.0	99.0	33.7	29.3	36.1	19.4	–	32.9	54.0	526
Block-level administrators (all India)	5.3	94.7	2.4	51.5	40.9	16.8	–	–	–	509
direct recruits (examination)	0.0	100.0	0.0	49.8	50.2	9.4	–	–	–	219
promoted from feeder cadre	10.1	89.9	4.6	53.4	31.9	23.5	–	–	–	238
IAS officers, sub-divisional postings	0.0	100.0	0.0	28.1	71.9	2.3	2.2	6.8	29.4	6,154
IAS officers, district postings	0.0	100.0	0.0	32.7	67.3	7.2	3.3	16.6	39.1	7,991
Indian public sector employees	53.5	46.5	–	–	–	–	–	23.4	40.6	–
Public sector employees, all countries	50.7	49.3	–	–	–	–	–	23.6	41.3	114

Notes: This table benchmarks the administrators who governed GPs during our study period against Indian and international comparison groups. Row 1 is our administrator survey. Rows 2 to 4 are an all-India survey of block-level administrators covering 509 officers in 174 districts across 33 states. Indian state services fill each officer grade by two routes, and the two produce very different officers, so the sample is shown pooled and then split: *direct recruits* enter at the officer grade through a Public Service Commission examination, for which a degree is required, while officers *promoted from the feeder cadre* joined a lower grade decades earlier, frequently before any degree requirement applied. The two routes differ by fourteen years of service and no direct recruit in the sample holds only a school qualification, against one in ten of the promoted officers, so the pooled figures in row 2 sit between two populations that barely overlap. The split rows cover 457 of the 509 officers; the remainder gave another answer on recruitment and appear only in the pooled row. That survey records no age, so the last two experience columns are blank for these rows.Rows 5 and 6 are Indian Administrative Service officers in field postings, from the Trivedi Centre for Political Data IAS dataset. A *sub-divisional* posting places an officer in charge of a sub-district unit, typically as Sub-Divisional Officer or Assistant Collector, and is usually an officer's first field assignment; a *district* posting places an officer in charge of an entire district, as District Collector, District Magistrate or Deputy Commissioner. Rows 7 and 8 are the World Bank's Worldwide Bureaucracy Indicators: row 7 is India in its latest available year (2019) and row 8 averages across countries, each taken at its own latest available year, with N the number of countries. Education is reported as shares of each group rather than as a threshold. The first two columns are the international (ISCED) split that all four sources report and sum to 100; the next three decompose the tertiary block. Tertiary follows the international convention of counting any post-secondary qualification and therefore includes diplomas, which is why it far exceeds the share holding a bachelor's degree among our administrators. The Worldwide Bureaucracy Indicators do not decompose tertiary, so those three columns are blank for rows 7 and 8, and for the IAS rows tertiary is 100% by construction, since a bachelor's degree is a prerequisite for entering the service. The three experience columns measure different things and are not interchangeable. *Govt. service* is career government service, measured as of 2020 for our administrators and as of the start of the field posting for IAS officers. *In district posts* sums the length of an officer's postings in that tier and averages over officers; it is not defined for our administrators, whose GP posting is the nine-to-ten month episode this paper studies. *Potential experience* is age minus years of schooling minus six, the only experience measure computable for rows 7 and 8, which carry no tenure variable; it measures time since leaving school irrespective of employer and so exceeds government service for every group. Years of schooling are taken to be 12 for higher secondary, 13 for a diploma, 15 for a bachelor's degree, 17 for a master's and 20 for a doctorate, and for rows 7 and 8, 0, 5, 10 and 15 for the four levels reported there. Restricting the IAS sample to postings beginning after 2000, after 2010, or to the Karnataka cadre alone leaves the experience and age figures essentially unchanged. Discussed in section 6.3.

Table A.31: **External Validity**—Heterogeneity in the Elected-Appointed Differential by Village Characteristic

Heterogeneity Dimension	Accountability			Service Delivery	
	Citizen Preferences	NREGA		Covid Management	Works
	GP Expenditure	Days worked	New Job Cards	Covid Mortality (W1)	Any Progress
Below-median consumption per capita	0.010	28.624	-0.142	0.077	0.003
	(0.026)	(61.047)	(1.792)	(0.098)	(0.005)
Obs.	5,489	359,564	359,564	6,605	4,695,742
Above-median land inequality	-0.026	2.704	0.546	0.099*	-0.002
	(0.027)	(65.175)	(1.645)	(0.053)	(0.005)
Obs.	5,346	350,421	350,421	6,427	4,562,991
Above-median SC/ST share	0.028	-104.824*	-1.745	0.046	-0.007
	(0.029)	(57.036)	(1.608)	(0.092)	(0.005)
Obs.	5,346	350,421	350,421	6,427	4,562,991
Former Mysore region	-0.026	-31.183	-2.994	-0.093	0.003
	(0.027)	(61.822)	(1.826)	(0.058)	(0.005)
Obs.	5,335	350,106	350,106	6,424	4,557,978

Notes: This table reports how the elected–appointed governance gap varies with four GP village characteristics: whether the GP's main village is below the median in SECC rural mean per-capita consumption, and above the median in land (property-tax) inequality and in scheduled-caste/tribe population share, and whether the GP lies in the former princely Mysore region. Each median is taken *within block*, so a village is classified relative to its own block rather than to the state-wide distribution. Each cell reports a single interaction coefficient from a full-sample regression (elected and appointed GPs). In column 1 the outcome is the log of expenditure by GP i on category j and the reported coefficient is (citizen priority $\times$ Elected $\times$ characteristic). In columns 2–3 the outcomes are NREGS days worked and new job cards and the reported coefficient is (Elected $\times$ Post $\times$ characteristic). In column 4 the outcome is COVID mortality during wave 1 and the reported coefficient is (Elected $\times$ characteristic). In column 5 the outcome is whether a development project makes any progress and the reported coefficient is (Elected $\times$ Post $\times$ characteristic). Each specification includes the full set of lower-order terms and the fixed effects of the corresponding main table; standard errors are clustered at the GP level and reported in parentheses. Discussed in section 6.3. Significant at *10%, **5%, and ***1%.

A Data

We compile survey, administrative and satellite-based data for our study. Table A.33 summarises these sources.

A.1 Survey data

Citizen survey. We describe the sampling procedures of the citizen survey in more detail. The first strategy involved acquiring a database of phone numbers from each village registered with the three major mobile service providers. Then, we drew a random sample of phone numbers for each GP, with half drawn from the GP's main village and the remainder drawn from one of the GP's peripheral villages.[24]

Our second strategy involved snowball sampling. For each of the 819 sampled GPs, we contacted a randomly selected member of the GP staff (e.g. the PDO, child care worker, cleaner, etc) and asked the worker to share phone numbers of citizens in their GP. Next, we contacted these citizens to harvest phone numbers of other citizens. Then, we surveyed citizens who were at least two degrees of freedom away from the initial seed. Reassuringly, both samples have similar demographic characteristics, and our results are similar regardless of the sampling procedure used.

A.2 Satellite data

Night-time lights. We use stray-light-corrected monthly composites from the VIIRS Day/Night Band and exclude observations affected by cloud cover. Mills et al. (2013) and Elvidge et al. (2017) describe the advantages of this product over alternatives. As an additional check, number of days of cloud cover were bench-marked with monsoon cycles in Karnataka during 2019 and 2020 to ensure that we are working on data less impacted by weather fluctuations.

Agricultural productivity. We calculate the NDVI measure as follows. Images are derived from the Moderate Resolution Imaging Spectroradiometer (MODIS) satellite. Each image from the satellite is a 16-day composite and its pixels are spatially averaged to village polygons to get mean VI at the village-composite level. Our primary measure of agricultural production is NDVI (Rojas, 2007; Mkhabela et al., 2005), which is the difference between the max VI value observed at the village level and early-season VI (the mean of the first three 16-day composites) (Labus et al., 2002; Rasmussen, 1997). Like Asher and Novosad (2020), we use the differenced measure because it controls for non-crop vegetation (such as forest cover) by measuring the change in vegetation from the planting period (when land is fallow) to the time of peak vegetation.

A.3 Variable Definitions and Details of Indices

Table 1 and figure 1 present summary statistics and balance tests for a wide range of variables. In this section, we describe their sources and definitions and explain how the various indices are constructed.

Data on geographic, demographic and socioeconomic characteristics and public goods availability all come from SHRUG, a wonderful dataset made publicly available by (Asher et al., 2021) at the Development Data Lab. This allows us to use variables from multiple administrative datasets, including the 2011 Population Census, the 2013 Economic Census and the 2011 Socioeconomic and Caste Census.

Public Goods. We construct a standardized index of public goods availability using the village amenities tab of the 2011 Population Census. The index is based on a wide range of variables, including the number of primary schools, number of primary health centres, dummies indicating the availability of

[24] A village was identified as the GP's main village if it shared the GP's name.

ASHAs, power supply, all weather roads, tap water, open drainage, mobile coverage, public bus connectivity, district roads and state highway connectivity. We first take principal components and then construct a z-score index.

Socioeconomic Characteristics. We construct a standardized socioeconomic index using data from the 2013 Economic Census's village directory and the 2011 Socio-Economic and Caste Census. Variables include the share of employment in the service and manufacturing sector, the number of households whose main income is from cultivation and per-capita consumption.

NREGS implementation. We construct an index of NREGS service delivery using administrative data sourced from the NREGS portal. We construct variables on the cumulative days requested, days worked, new job cards registered and workfare payment earned by NREGS beneficiaries in each village in each month. The NREGS index is a standardised variable based on these variables.

GP Staff Attendance. The attendance index is constructed using administrative data on GP staff attendance for all GPs in Karnataka. This data spans one randomly selected working day per week from April 2019 to March 2021.

Progress of Development Projects. The progress index is constructed using the local development projects data. For each project, using the dates of different project milestones, we define different variables indicating project progress, as described in section 2.2.2. We construct dummy variables denoting whether a project achieved that particular milestone during that period. We focus on the variables $AnyProgress$, $ApprovalProgress$ and $Completion$, where "any progress" is a catch-all dummy capturing whether the project made any progress on any milestone in that period. The progress index is a standardized variable constructed from these underlying three variables.

Local Economic Activity. We construct a local economic activity (or aggregate outcomes) index which combines night lights and agricultural productivity variables. The night-time luminosity variable used is the log of the average night light luminosity in village i during month t. For the agricultural production outcome, we use the mean NDVI measure during the three different cropping seasons, namely *Kharif* (April - September), *Rabi* (October-December) and Summer (January-March).

A.4 Project classification approach

As described in section 2.2.2, we observe the entire lifecycle of 1.4 million village developmental works. Additionally, we observe metadata that includes a project description and locations it serves. For section 5.3.2, we classify projects into three categories according to whether their likely beneficiaries are (i) a specific household or set of households, (ii) a neighbourhood, or (iii) across multiple villages based on their textual descriptions. These include the specific construction (road, well, streetlight, etc), and the geographical scope or location of the project. We train three separate language model-based binary classifiers. First, we extract a random sample of work descriptions from the universe of works in our dataset. We then construct a labelled dataset by manually annotating 6000 project descriptions. All descriptions are double-annotated to ensure high-quality labels. For example, projects involving infrastructure for public schools or large roads are labelled "*GP*" works. Project descriptions like streetlights, pavements, or handpumps in certain areas of a village are classified as "*Neighborhood*" projects. Descriptions that mention specific residents are "*Household*" projects. We split the data into a 70-15-15 train-validation-test split. Model training hyperparameters are tuned on the validation split. We use this data to train binary classifiers for each category. We fine-tune a multi-lingual BERT model (Devlin et al., 2019)— specifically, *bert-base-multilingual-cased* sourced from the Hugging Face Hub using LinkTransformer (Arora and Dell, 2023). These models are trained to minimize classification loss, and the best model checkpoint is selected using F1-score. On the hold-out test split, the classifiers achieve F1-scores of 90.3% (GP), 95.9% (Neighbourhood), and 90.9% (Household). We deploy each classifier and pool Household and Neighbourhood projects and mark those that serve a wider area in a GP as those with "Externalities".

A.5 Variable Definitions: GP Administrator Survey

This table defines each variable reported in the GP Administrator Survey summary statistics (Table A.1). All variables are drawn from the GP Administrator Survey (main phase); question numbers in parentheses refer to the survey instrument.

Table A.32: Variable Definitions — GP Administrator Survey

Variable	Definition
Panel A: Demographics	
Age	Administrator's age in years at the time of interview. (Q59)
Male	Indicator = 1 if the administrator is male. (Q60)
Bachelor's degree or higher	Indicator = 1 if the administrator's highest completed education is a Bachelor's, Master's, or Doctoral degree. (Q62)
Panel B: Experience and Training	
Years in Government Service	Number of years since the administrator joined the Karnataka government, measured at interview. (from Q2)
Prior experience as GP administrator	Indicator = 1 if the administrator had served as a GP administrator at least once before the COVID period (before 2020). (Q11)
Attended GP administrator training	Indicator = 1 if the administrator attended any training related to the GP-administrator role. (Q18d)
Selected by senior bureaucrat	Indicator = 1 if the administrator was selected for the role by the Deputy Commissioner/District Collector or a line-department supervisor. (Q18a)
Panel C: Workload	
Experienced double hatter	Indicator = 1 if the administrator has, at any point in their career, held multiple official charges/assignments simultaneously.
No. of GPs assigned	Number of GPs the administrator was in charge of during the COVID period (June–Dec 2020). (Q20)
Has held Non-GP admin additional charge	Indicator = 1 if the administrator has held an additional charge other than a GP-administrator role.
% of time on GP administrator duties	Share of weekly working hours spent on GP-administrator duties, computed as hours on GP-admin work divided by total weekly working hours (GP-admin plus block/non-admin). (Q39, Q40)
GP admin: visits in a month	Number of times per month the administrator visited the assigned GP. (Q41)
Expected $>$ 6 months/$>$ 1 year tenure as GP administrator	Indicator = 1 if, at the start of COVID, the administrator expected to serve at least 6months / at least a year as GP administrator. (Q36)
GP administrator role as additional charge	Indicator = 1 if the GP-administrator appointment was an additional charge held alongside the administrator's regular departmental duties. (Q37)
GP administrator consulted previous elected leaders	Indicator = 1 if the administrator consulted the outgoing elected council (Adhyaksha/ward members) for advice when unsure how to handle a task in the GP. (Q47)
Panel D: Familiarity with Assigned GP	
Administrator is from assigned GP	Indicator = 1 if the administrator's native GP is the same as the assigned GP. (Q34a)
Distance between native village and assigned GP (km)	Geographic distance (km) between the administrator's native place and the assigned GP. (computed from Q32–Q34a)

Variable	Definition
Was working in same district as assigned GP	Indicator = 1 if, at the start of COVID, the administrator was posted in the same district as the assigned GP. (Q12)
Was working in same block as assigned GP	Indicator = 1 if, at the start of COVID, the administrator was posted in the same block as the assigned GP. (Q13)
Previously visited assigned GP	Indicator = 1 if the administrator had visited the assigned GP before appointment (before 2020). (Q28)
Previously worked with assigned GP	Indicator = 1 if the administrator had previously done any work with the assigned GP office or its staff. (Q30)
Personally knew households in assigned GP	Indicator = 1 if the administrator personally knew any households in the assigned GP before appointment. (Q31)
Panel E: Self-reported expertise and priorities	
Expertise: Village development works	Indicator = 1 if the administrator lists village development/public works among their areas of greatest expertise. (Q8)
Expertise: Roads	Indicator = 1 if the administrator lists roads among their areas of greatest expertise. (Q8)
Expertise: Health	Indicator = 1 if the administrator lists health among their areas of greatest expertise. (Q8)
Priorities as GP administrator: Engaging citizens	Indicator = 1 if the administrator lists engaging citizens to participate more actively among the social/development issues important to them. (Q9)
Priorities as GP administrator: Delivering social assistance	Indicator = 1 if the administrator lists delivering social assistance to citizens efficiently among the issues important to them. (Q9)
Priorities as GP administrator: Women's empowerment	Indicator = 1 if the administrator lists women's empowerment among the issues important to them. (Q9)
Priorities as GP administrator: Social justice	Indicator = 1 if the administrator lists social justice among the issues important to them. (Q9)
Panel F: Incentives and performance evaluation	
Evaluation: RDPR monitors	Indicator = 1 if the administrator believes the RDPR Department monitors and evaluates GP-administrator performance. (Q52)
Perceives strong incentives (rewards & consequences)	Indicator = 1 if the administrator perceives both a reward for good performance and a consequence for poor performance. (Q54, Q55)
Willing to take future GP Admin position	Indicator = 1 if the administrator would like, or would not mind, being appointed a GP administrator in the future. (Q56)

Notes: All variables are drawn from the GP Administrator Survey (main phase) and define the characteristics summarised in Table A.1. Question numbers in parentheses (e.g. Q9) refer to the survey instrument. Indicator variables equal 1 when the stated condition holds and 0 otherwise; standardised measures have mean 0 and standard deviation 1 across surveyed administrators.

Table A.33: Summary of the data sources

Data source	Type	Time period	Outcomes	Unit of Analysis	Hypothesis	Variable construction
Panchayat Development Officer survey	Survey	September 2021	Decision-making power in the GP	PDO	De-facto vs De-jure (Table A.4)	To measure treatment compliance, we compare PDO responses to who was in-charge of governance during the treatment period to distinguish between de-facto and de-jure power.
			PDO time use	PDO	PDO Behaviour (Table A.18)	Given the central role PDOs play, we ask how much time they spent on various routine governance tasks such as — COVID management, service delivery, paper work etc.
Citizen phone survey	Survey	August - September, 2021	Citizen preferences over GP expenditure	GP-Category	Representation (Table 2)	Using citizen responses to the two most important public goods they want the GP to prioritise, we aggregate citizen preference for each category in a GP.
			Sub-group preferences over GP expenditure	Group-GP-Category	Elite Capture (Table 3)	We aggregate citizen preferences of different groups — gender and socio-economic caste. Then, we assess whether preferences align with expenditure by gender, caste, and main-versus-sub-village residence.
			COVID management evaluation	Individual	Crisis Management (Table 7)	We create indices to assess quality of COVID management using citizens responses on — awareness of the COVID task force, mortality, well-being and their overall evaluation of the governance during COVID.
			Governance regime preferences	Individual	Preference in governance regime (Table A.24)	We ask citizens a variety of questions — whether elections are the best method to elect GP president, fairness, their levels of trust and preference for each regime — to construct a local democracy support index. Then, we test whether this support changes under elected/admin GPs.
Rural Development Panchayat Raj (RDPR)	Admin	April 2020-March 2021	GP expenditure	GP-Category	Representation (Table 2)	Using each GP's income/expenditure report we can measure the amount of total expenditure and category-wise expenditure. Eleven of the 12 survey categories map to GP expenditure heads; Temple has no corresponding GP budget line, while Anganwadi is retained but has limited expenditure support.
	Admin	April 2019 - March 2021	Attendance of GP Frontline Staff	GP-Week	Effort (Table 5)	We collect the bio-metric attendance given by each front-line staff in the GP office for one working day per week from April 2019 to March 2021. We identify the staff roster as all officers that were present at least once in a 3-month window prior to the week (t), then construct the mean attendance for all GP staff.
	Admin	April 2020 - March 2021	GP meetings	GP	Citizen Engagement (Table A.13)	We use the number of different public and official GP meetings organised in a fiscal year.
	Admin	2015 - 2021	Progress on local development projects	Work Project-Period	Expertise (Table 6)	The outcome to test expertise is created using the binary *progress* which indicates whether a project experiences any progress during periods defined as Jan-May and June-December in each year. Using various project milestone dates we can create any progress or specific types of project milestones.

Table A.33: Summary of the data sources

Data source	Type	Time period	Outcomes	Unit of Analysis	Hypothesis	Variable construction
	Admin	2015-2021	Extent of project benefits	Work Project-Period	Internalising externalities (Table A.22)	Using each work project's description of the asset constructed, we classify these projects according to how narrowly targeted vs defused its benefits are — a household, a neighbourhood, or the whole GP. This allows us to create the *externalities* dummy.
Rural Development Panchayat Raj (RDPR)	Admin	2020	Prior experience in project implementing agency	Work Project-Period	Expertise (Table 6)	We consider an appointed administrator to have expertise if their prior department is the same as the implementing agency of the development project.
	Admin	2020	Administrator characteristics	Outcome based	Administrator heterogeneity (Tables A.26–A.29)	We create administrator characteristics-specific variables — tenure/prior experience, bandwidth, perceived time horizon/incentives, and demographics. Then we limit our sample to administrator GPs and estimate heterogeneous effects.
	Admin	2015-2021	Election terms and leader metadata	Outcome based	Main *Elected* status Variable; Gender Heterogeneity (Table A.10)	A GP is defined as *Elected* if the representative still has an active term. The metadata includes gender.
Ministry of Rural Development, NIC portal	Admin	January 2017 - 2021	MGNREGS benefits	Village-Month	Responsiveness (Figure 4)	Aggregate individual data on registration date, days worked and payment earned to create village-month level MGNREGS benefits. Leveraging our individual data, we can decompose these village outcomes by sub-groups —Male/Female, Non-SC/ST/SC-ST, and Main/Sub Village residents
				Household-Month	Corruption (Table A.19)	We locate our elected council members' households in the MGNREGS beneficiaries. Using this we construct a *Council member* dummy that takes 1 for council households and 0 otherwise.
Visible Infrared Imaging Suite (VIIRS)	Satellite	2019-2021	Night-time luminosity	Village-Month	Local economic growth (Figure A.4)	We create area-weighted average, cumulative and maximum luminosity of a village within a GP during a given month to measure the night-time lights.
Normalised Difference Vegetation Index (NDVI)		2015-2021	Agricultural productivity	Village-Season-Year		We construct average difference between early-season and maximum vegetation for Kharif, Rabi and Summer seasons at the village level, in a given year to measure productivity.
Decennial census (2011), SECC 2013	Admin	1991-2011	GP characteristics	Village	Balance (Table 1,Table A.3, Figure 1)	We report pre-treatment averages (SD) for a host of village characteristics and our main outcomes across the elected-run and bureaucrat-run GPs to discuss baseline similarity.
Decennial census (2011), SECC 2013	Admin	2011	Village characteristics	Village	Heterogeneity by village characteristics (Table A.31)	Using the 2011 census and our property tax data, we assign whether a village is above/below median on — per-capita consumption, land inequality, SC/ST proportion. Also, whether it historically belonged to the Mysore princely state. Then, we test whether our elected/admin effects differ by these (otherwise salient) village characteristics.

Discussed in Section 2.2.