Voice and Responsiveness: Citizen Strategies for Engaging Bureaucrats in India[1]

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Abstract

How can citizens demand accountability from unelected lower-level officials, who are critical gatekeepers of public resources? Existing research often cites high barriers to bureaucratic responsiveness, suggesting that appointed personnel are deeply capacity constrained as well as beholden to senior officials. We argue that citizens can lower these barriers through direct expressions of voice that elicit empathy and focus officials' attention, along with action that activates officials' reputational concerns. We illustrate our argument in rural India through qualitative fieldwork and an in-person survey of over 1200 personnel across every block in Jharkhand – one of India's poorest states. Experiments developed with a community media NGO reveal that exposure to citizen testimony increases officials' observed attention, and that the prospect of citizens publicizing complaints through social media increases officials' willingness to act on an issue. These findings suggest a citizen-led pathway to bureaucratic responsiveness – even for those lacking strong political connections.

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Introduction

In the spring of 2023, Zaheen, a woman in rural Jharkhand, traveled to her Block Development Office[6] to complain about delays in receiving her pension. She arrived in the morning, but was told that the Block Development Officer (BDO) – the senior official in charge – was not available. By the time our research team left six hours later, Zaheen was still waiting.[7] Experiences like these are common around the globe, where administrators exercise substantial discretion in interpreting rules and distributing resources (Lipsky 1980; Eiró and Lotta 2024). As appointed personnel, they are often more beholden to senior bureaucrats and politicians than directly to citizens (Olken 2007; Raffler et al. 2020). They are also frequently capacity constrained, and so forced to ration their time and attention (Dasgupta and Kapur 2020; Zacka 2017). In such settings, citizens routinely encounter weakly responsive bureaucracies (Gupta 2012; Auyero 1999).

What can citizens do to demand greater responsiveness from appointed personnel under such constrained conditions? A large scholarship explores "long routes" to accountability where citizens turn to elected officials to influence the behavior of bureaucrats (World Bank 2004; Kosack & Fung 2014). Appointed personnel, in this view, respond to oversight by senior officials or politicians (Iyer and Mani 2012; Gulzar and Pasquale 2017; Toral 2023). This, however, is a troubling proposition for those who lack the requisite political ties or other means to access higher-level officials. It follows that there is growing interest in the "short route" (World Bank 2004): citizens' direct engagement with appointed personnel (Grossman and Slough 2021; Gallagher et al. 2024). Non-electoral strategies of "social accountability" in the form of community monitoring and other citizen-led initiatives have garnered billions of dollars in investments (Peruzzotti and Smulovitz 2006; Mansuri and Rao 2013). Yet, evidence on the efficacy of these initiatives is highly uneven; while some studies identify an impact on government responsiveness, others find weak or null effects (Fox 2015; Tsai et al. 2019).

In this article, we develop a citizen-driven theory of bureaucratic responsiveness. We conceptualize responsiveness as having multiple dimensions, from hearing citizens' complaints to attempting to resolve them through the allocation of time and resources. In overburdened and capacity-constrained environments, simply capturing officials' attention is a first-order concern for citizens, while converting that attention into bureaucratic action poses additional challenges. We argue that citizens can exact responsiveness through a combination of voice and mobilization: direct expressions of voice that convey urgent needs can elicit empathy and focus officials' attention, while citizen action that triggers reputational concerns can prompt officials

[6] These offices are responsible for program implementation in rural blocks, which are administrative units akin to a county in the United States.

[7] Field observations, Chatra district, Jharkhand, February 2023. Names have been changed.

to prioritize claims. Media, and in particular digital technologies, are powerful tools in facilitating both processes, enabling citizens to tell their own stories, create visibility (Buntaine 2024), and trigger fears of oversight (Elrich et al. 2022).

Our multi-method study illustrates how this works in rural India. Our research was developed in partnership with the community media organization Video Volunteers,[8] which supports a national network of "community correspondents" (CCs) who are trained in the use of video to document and attempt to resolve local grievances. We observe that the Block Development Office is among the CCs' most frequent ports of call when trying to address local problems, but that block officials are variably responsive to their claims. Through qualitative research in which we visited block offices in three states (Jharkhand, Bihar, and Uttar Pradesh), combined with interviewing and shadowing CCs, we explore the constraints to block responsiveness and theorize the strategies through which citizens are able to command attention and action.

To test our theory, we designed a unique, in-person survey of 1293 personnel of varied ranks and designations, fielded in a near census (258/264) of block offices across Jharkhand. We developed two embedded experiments to measure block officials' responses to citizens' demands, designed to closely mirror the CCs' own claim-making strategies. The first featured pairs of differently framed videos designed with Video Volunteers. Officials were assigned to discuss one of two different issues: broken drinking water pumps and poor-quality housing. Within each of those issues, officials were then assigned to view a video that featured either a "citizen voice" frame in which residents narrated the problem in their own words, or an "official statistics" control that presented them with government data about the same problem. This design held constant the medium and provision of information about a given issue, but varied whether attention was called to lived experiences of local residents or to status-quo forms of government reporting. After viewing the video, respondents were asked to consider how they would react if people came to their own office to complain about the same problems. The video screening was then followed by a second experiment in which officials heard different vignettes about citizen action, one describing in-person collective action at the block office and the other describing digital mobilization in the form of sharing the video on social media and with officials. This held constant the fact that there was citizen mobilization around a problem, but varied the potential for higher ups to see it. The vignette was followed by questions about whether and why officials would feel pressure to resolve a problem along with hypothetical actions they might take.

[8] Video Volunteers (website) is one of India's leading community media NGOs, with over 20 years of experience in assisting local citizen journalists. We have been collaborating with VV since 2017 to study the factors that enable local collective action and bureaucratic responsiveness to citizens' demands. For more on our research partnership and research ethics, see Appendix I.

We find that videos featuring the citizen voice frame produced a more empathetic reaction and were more likely to focus officials' attention, compared to the official statistics control. These effects suggest that the way in which a claim is presented can shape how it stands out among a broader array of tasks. The citizen voice frame, however, generated no significant change in willingness to take action to resolve the issues. Hearing the digital mobilization vignette, though, led to greater perceived pressure to respond when compared to the citizen mobilization vignette. This was driven by fears of angering senior officials and increased reported willingness to act in the form of sending staff to investigate an issue.

Our results suggest that bureaucrats, far from being simply uncaring, often possess a sense of empathy and social commitment, and that citizens can harness those dynamics to amplify their claims. At the same time, our findings underscore the many constraints that officials face and the importance of top-down oversight in shaping their responsiveness to citizens. In hierarchical organizational settings, citizens can motivate officials to act by activating their reputational and career concerns. Digital mobilization, or employing the tools of video and social media, creates a pathway through which citizens can shape those concerns from the bottom-up. Together these findings reveal the potential of citizen-driven efforts to build accountability, while also provoking open questions about the implications of such efforts for local equity and local government capacity in under-resourced settings.

How can citizens demand responsiveness from bureaucrats?

The second half of the 20th century saw a wave of decentralization reforms that sought to devolve political, administrative, and fiscal power to the subnational and local levels (Bardhan 2002; Faletti 2005). The overarching theory behind these reforms is that bringing government closer to people helps to make it more accountable, by expanding local political decision-making (Bardhan 2002), better aligning service delivery with local preferences (Oates 1972), and allowing for citizen feedback on public performance (Faguet 2012). In reality, after decades of decentralization, the day-to-day implementation of policy and delivery of services remains primarily the responsibility of unelected personnel who are often under-resourced, overburdened, and formally not answerable to local residents.

There are, in stylized fashion, two broad theories about the conditions under which these non-elected officials might be responsive to citizens. The first emphasizes top-down oversight, following "within-government" channels where lower-level bureaucrats respond to scrutiny from higher-level appointed and elected officials (Tsai et al. 2019). Channels focused on appointed actors follow a Weberian logic: personnel in hierarchical organizations are monitored by senior officials and are motivated by career concerns, or by a sense of vocation stemming from within the agency (Honig 2021; Mangla 2024). Channels focused on elected actors follow a clientelist

logic, and view local bureaucrats as extensions of political networks, responding to politicians who oversee their budgets and postings (Toral 2023; Gulzar & Pasquale 2017; Iyer & Mani 2012). Politicians and political brokers can provide a pathway for citizens to make claims on bureaucratic agencies (Auyero 1999; Stokes et al. 2013; Auerbach 2019). But there is, in this view, relatively little that citizens themselves can do directly without intervention from higher levels – leaving little opportunity for citizens without political connections.

The second approach emphasizes a non-electoral or "social" pathway to accountability in which citizens directly monitor public officials (Mansuri and Rao 2013; Peruzzotti and Smulovitz 2006; Kosack and Fung 2014). There is, however, an uneven record on whether such bottom-up efforts can provoke changes in official behavior. In the areas of education and healthcare, for example, some studies find an impact of community monitoring on the performance of teachers and health workers (Pandey et al. 2009; Pradhan et al; Bjorkman and Svensson 2009), while others find null effects (Banerjee et al. 2010; Lieberman, Posner, and Tsai 2014; Raffler et al. 2020). In a landmark study of a road building program, Olken (2007) finds that grassroots participation had negligible effects on rates of corruption compared to top-down auditing by government. Raffler et al. (2020: 3), in a recent study of community health interventions, similarly conclude: "top-down monitoring by government officials may be a more powerful tool for changing [frontline personnel] behavior than bottom-up monitoring by citizens." Kumar (2024) further finds that even when bureaucrats are specifically tasked with responding to citizen complaints, such as in online grievance redressal platforms, actual rates of responsiveness remain low. There is, in sum, warranted skepticism over the extent to which citizen pressure can generate improvements in bureaucratic responsiveness to citizens' concerns.

Some of the most powerful critiques of social accountability stem from studies of interventions that attempted to induce citizen action by making them aware of poor public performance. The theory that this literature tests is that better informed citizens will make more effective claims on government, presuming a causal chain from information provision, to citizen monitoring, to more responsive governance. Numerous studies have found negligible effect of such information campaigns on citizen mobilization and, by extension, on service delivery outcomes (Chong et al. 2015; Lieberman et al. 2014; Dunning et al. 2019; Raffler et al. 2020). These results, however, may point to the weaknesses of external efforts to mobilize citizen voice, rather than to inherent weaknesses in citizen-led approaches.

More "organic," as opposed to externally induced (Mansuri and Rao 2013), forms of citizen-led accountability efforts are less well understood. When considering how these more organic forms work, scholars often focus on social relationships between bureaucrats and citizens, including shared identity characteristics or a shared sense of home (Pepinsky et al. 2017; Bhavnani and Lee 2017). At the most local level, where officials are embedded in dense social networks, their responsiveness to residents may be driven by the desire to enhance their social standing and

reputation (Tendler 1997; Tsai 2007; Paller 2019). But not all citizen-facing officials are locally embedded, particularly in agencies serving large catchments. India's rural block development offices, for example, serve an average of 150,000 residents – making it unlikely that officials will personally know the majority of citizens who approach them. We therefore focus on how citizens might demand responsiveness from such officials who, while operating locally, are not themselves locally embedded.

Gaining attention and prompting action: a citizen-driven theory of bureaucratic responsiveness

Bureaucratic responsiveness[9] can take many forms, from hearing a complaint, to symbolic or problem-solving action: contacting complainants, visiting communities, facilitating access to other officials or government departments, sanctioning funds, and intervening in program implementation. Simply being heard is an important outcome in a context where the poor may feel ignored or neglected by the state (Ahuja and Chhibber 2012; Sanyal and Rao 2018). Having a claim acknowledged or receiving "an equal hearing" (Verba 2003) is an important component of political equality and procedural justice more broadly (Tyler 2003; Beramendi, Besley, and Levi 2022). Beyond attention, having an official take action of any type, such as referring the complaint to another office, providing advice, or sending a staff member to examine an issue, are steps towards the resolution of a problem, even if the full chain of events may be outside of the control of a single official or agency. In capacity constrained settings, these steps – even when incomplete – are meaningful acts that signal the prioritization of a need through the allocation of scarce resources and time.

We focus in this paper on the first two components of a citizen's experience when approaching a bureaucratic office: whether they gain *attention* (their complaints are heard), and whether an official takes *action* upon hearing them (their complaints are prioritized). For both attention and action, bureaucratic capacity is a key constraint. Unelected officials frequently operate under conditions of "overload" (Dasgupta and Kapur 2020), with too few resources and too many tasks. With insufficient time and resources to process the many requests that they receive, officials are forced to ration their attention (Zacka 2017). The first barrier is thus a cognitive one: citizens must find a way to gain and hold officials' focus. To convert attention to action, citizens must also contend with the fact that officials in capacity constrained agencies must decide which demands to prioritize among their many tasks and other requests. When forced to

[9] Others use this term differently. Toral (2023, p. 2), for example, refers to bureaucrats' responsiveness "to the demands of their principals (politicians and senior officials)," distinguishing this from bureaucratic "effectiveness," which indicates "success at delivering services and improving outcomes." We, in contrast, refer specifically to the responsiveness of bureaucrats to citizens' claims.

decide, officials in hierarchical organizations are likely to focus on those needs that are consistent with higher-level directives or that provoke concerns over scrutiny from senior officials, including politicians. The second barrier that citizens face is therefore structural: they must provoke action from below among officials whose reputational and career incentives are upwardly aligned.

Citizens must work within these constraints to demand bureaucratic responsiveness. We theorize two pathways through which this can occur: voicing narratives that gain officials' attention, and publicly sharing those narratives to trigger reputational concerns. First, we argue that direct expressions of citizen voice can capture officials' attention by provoking an emotional response. A key premise is that public officials often possess a sense of social mission (Honig 2021; Kyle and Resnick 2018; Cowley and Smith 2014; Banuri and Keefer 2013), but are constrained in their ability to pay attention to the vast numbers of citizens who approach them. Studies from psychology suggest that when faced with too many choices, emotion helps guide decision-making and problem-solving (Damasio 1994; Lerner et al. 2015; Galinsky et al. 2008), and that empathy can generate a greater willingness to help (Glynn and Sen 2014; Jensen and Pedersen 2017). Empathetic concern is associated with an increased likelihood of taking steps to alleviate the suffering of others (Wilhelm and Bekkers 2010; Clifford et al 2019), while taking others' perspective is associated with a psychological response similar to experiencing a situation oneself (Lamm et al. 2007). Citizens, we argue, can therefore use personal testimony to convey the urgency of their needs in a manner that provokes empathy and captures attention.

Second, we argue that citizens can motivate action on their behalf by threatening to publicize their complaints in a way that activates officials' reputational concerns. Theoretically, gaining officials' attention could be sufficient to provoke bureaucratic action because intrinsically motivated public personnel are likely to want to help citizens in need (Banuri and Keefer 2013). In practice, however, we do not expect an automatic conversion of attention to action given the many pressures that officials face, as well as strong extrinsic concerns related to their standing within their broader organizations. An official must weigh the decision to act against other competing demands on her time and resources. Given these constraints, citizens can leverage the fact that bureaucrats are beholden to the politicians who appoint them and senior officials who monitor them by creating reputational costs to inaction. Digital technology and social media can play a particularly powerful role in enabling citizens to publicize their complaints (Buntaine et al. 2024) and prompt bureaucratic responsiveness (Erlich et al 2021). Ordinary citizens can activate a fear among lower-level personnel of angering senior officials by sharing, or threatening to share, their problems in a public manner. In publicizing their complaints, citizens are in effect cutting the "long route" to accountability short by themselves attempting to activate "within government" oversight.

We see the relationship between these two dimensions of bureaucratic responsiveness as sequential. Theoretically, each outcome could be obtained through independent channels: citizen voice might spark emotion and gain attention, while reputational concerns might separately prompt action. Yet, in constrained and overloaded bureaucratic settings, we posit that gaining attention is a necessary precursor to action. At the same time, by taking seriously the constraints on appointed officials, we expect attention alone to be insufficient to provoke action.

Study context and methods

Our empirical setting is rural India, where central, state, and local governments have spearheaded ambitious welfare and development programs that have been unevenly implemented at the local level (Banerjee 2004; Kruks-Wisner 2018; Veeraraghavan 2022). We focus on the level of the community development block (or more simply, the "block"), which sits below the district but above the village in a three-tier system of rural administration present in most Indian states since the 1950s. Block-level appointed personnel are charged with overseeing the implementation of a wide range of state and central government programs. They have substantial discretion in the everyday allocation of resources and implementation of policies related to rural development, poverty alleviation, education, and health. While appointed, they are expected to work alongside elected local officials in the panchayats (India's most local elected bodies) and indirectly elected officials in block and district councils.

As an intermediary between elected local government and district and state administration, block officials represent a middle layer of bureaucracy. They are lower-level officials with citizen-facing responsibilities but are not typically not embedded in communities. This makes them particularly important as gatekeepers for the distribution of government resources passed down from central and state governments. From the perspective of rural citizens, this makes the block one of the most visible and critical sites of government. However, the block remains a relatively understudied level of government in India, especially compared to more local panchayats and higher-level district and state administration.[10]

To understand the functioning of the block, we employed a mixed methods approach combining qualitative interviews and observations with a large-n survey and embedded experiments. We carried out four months of qualitative research in and around block offices. Working with a small team of trained Research Associates,[11] we interviewed 53 block and district officials across

[10] Notable exceptions include Gulzar and Pasquale 2017; Dasputa and Kapur 2020; and Purohit (2022).

[11] We worked with two Research Associates, one woman and one man, each fluent in local languages and with substantial prior field experience. Both received intensive in-person training in qualitative methods, interviewing, and shadowing.

three adjoining states: Jharkhand, Uttar Pradesh, and Bihar.[12] We aimed to gain a broad understanding of the role of the block in local governance, of the challenges block officials face, and their views regarding the citizens in their areas. Each interview involved full day visits or longer to offices, providing opportunities for observation. Following the invitation of senior state officials, we narrowed our focus to Jharkhand, one of India's poorest states with a high concentration of *Adivasi* (tribal) population, which was carved out of Bihar in 2000.[13] We carried out qualitative work in six blocks representing different geographical regions of the state, where we also piloted our survey.

We also draw on a total of 81 interviews with Video Volunteers' Community Correspondents (CCs), to gain insights into citizens' experiences with block officials. For the past 20 years, CCs have been accompanying community members in their claim-making activities.[14] The CCs film deficiencies in local service provision and the allocation of government resources in their communities and surrounding areas, interviewing residents who recount problems in their own words. They combine their video-making with forms of in-person and digital mobilization, including visits to government offices and sharing videos on social media. Video Volunteers reports that the CCs have a one in five success rate, in which they can directly trace the CCs' claim-making efforts to a documented impact (e.g. repair of a water source, delivery of delayed pensions, the staffing of a health clinic).

Our work with the CCs was carried out in several stages: first, preceding our fieldwork for this article, we carried out in-person interviews with 64 CCs with variable impact rates from across Video Volunteers' national network;[15] second, directly preceding our visits to block offices, we carried out phone or in-person interviews with an additional 17 CCs (recommended by VV as particularly active), to learn about their strategies for approaching officials;[16] third, in the six blocks of Jharkhand where we focused our qualitative work, we spent multiple days shadowing CCs, including accompanying them to block office visits. Our interviews and observations with

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[12] In preliminary research in November and December 2022, we conducted in-person interviews with 23 officials in three adjoining states: Jharkhand (5), Uttar Pradesh (11), and Bihar (7). We then carried out an additional 30 interviews with officials in Jharkhand in February and March 2023.

[13] Jharkhand placed 15 out of 19 states ranked by Human Development Index based on India's most recently available census data, putting it alongside the country scores of Ghana and Cameroon (UNDP 2011).

[14] The CCs are active in 19 states and 190 of India's poorest districts. CCs are both trained and paid by VV, and VV tracks the screening of the CC-made videos and officials' responses.

[15] See Kruks-Wisner 2022 for details.

[16] These interviews were conducted either over the phone (9) or in-person (8) and covered CCs working in Jharkhand (2), Bihar (10), Madhya Pradesh (2), Maharashtra (1), Uttar Pradesh (1), and Jammu and Kashmir (1).

both officials and CCs helped us to refine our understanding of the barriers to bureaucratic responsiveness and of citizens' attempts to overcome those barriers.

To systematically probe these dynamics, we designed and implemented a unique, all-state survey of block-level officials in Jharkhand. We carried out surveys in 258 of Jharkhand's 264 block offices, excluding the 6 blocks in which we had already carried out qualitative research and pilot surveys. In each block, we surveyed 5 actors, including the BDO; an administrative clerk (the lowest level employee who fields citizen complaints); the Block Panchayati Raj official, who serves as a liaison to local elected village councils; the Block Coordinator Awas, who oversees implementation of a large rural housing program; and the Junior Engineer for Public Health, who is a technician focused on water. If the post for one of these five officials was vacant, we surveyed the Block Program Officer for the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS, a rural work program), who manages employment and the construction of infrastructure across sectors (including both water and housing). This strategy gave us a Block sample of 1293 officials who were a mix of "generalists" who work on a wide range of programs (BDO, clerks, and the panchayat and MGNREGS officials), and "specialists" who focus on our two issues of interest (housing and water), as well as officials of different ranks. Our aim in constructing this sample was to capture a wide array of perspectives from within the block office, looking beyond just the senior officials in charge to other actors that engage citizens. To our knowledge, this is one of the first multi-actor surveys of an Indian administrative office.

The survey was fielded during Summer 2023, with support from senior officials in the Jharkhand Departments of Water and Sanitation and Rural Development – two of the key agencies that oversee the blocks. Surveys were completed in-person by a trained team of enumerators[17] at the block offices. The total number of interviews by designation is shown in Table 1.[18]

Table 1. Number of surveys completed with each type of official in 258 blocks in Jharkhand.

Official	Type	Surveys completed
Block Development Officer	Generalist (most senior)	241
Block Clerk	Generalist (lowest level)	241
Block Panchayati Raj Officer	Generalist	253

[17] We worked with Across Research & Communication Pvt. Ltd – a professional survey firm – to carry out this work, with direct, in-field supervision from our research team.

[18] Gaps between the number of surveys by designation and the block sample size (258) either represent vacant posts or an official with "multiple charges" who worked over more than one block. Note, in particular, that there are fewer interviews with Junior Engineers since these officers are frequently assigned to work in multiple blocks.

Block Coordinator Awas	Housing specialist	217
Junior Engineer for Public Health	Water specialist	107
Block Program Officer MGNREGS	Water & Housing responsibilities	234
Total		**1,293**

In addition to questions about their day-to-day responsibilities and experiences with citizens, we embedded pre-registered video and vignette experiments within each survey.[19] These experiments, described in detail below, were created in partnership with Video Volunteers, and reflect the strategies that the CCs most often employ when attempting to secure the responsive attention of block officials.

The bureaucratic accountability gap in rural India

Drawing on our interviews and block survey, we explore how personnel within the block office describe their responsibilities and engagement with citizens. We find that block officials are overburdened, under-resourced, and feel substantial pressure to answer to higher-ups. Many report having insufficient resources to complete their tasks, with vacancies and understaffing being by far the most commonly reported reasons that officials feel they cannot work effectively (Figure 1). Seventy-two percent said they agreed (strongly or mostly) when asked if they feel overloaded. In our interviews, they frequently reported that the job occupies them around the clock. As one official remarked, "Currently, no number of working hours is enough."[20] Another BDO explained his strategies for coping with the high workload, including outsourcing work to local NGOs and ignoring "small things" like minor acts of corruption among the junior staff to keep the office working smoothly.[21]

[19] The pre-analysis plan can be found here. Deviations in the labeling of variables are noted in the appendix.

[20] BDO in Uttar Pradesh, February 2023.

[21] BDO in Jharkhand, April 2023.

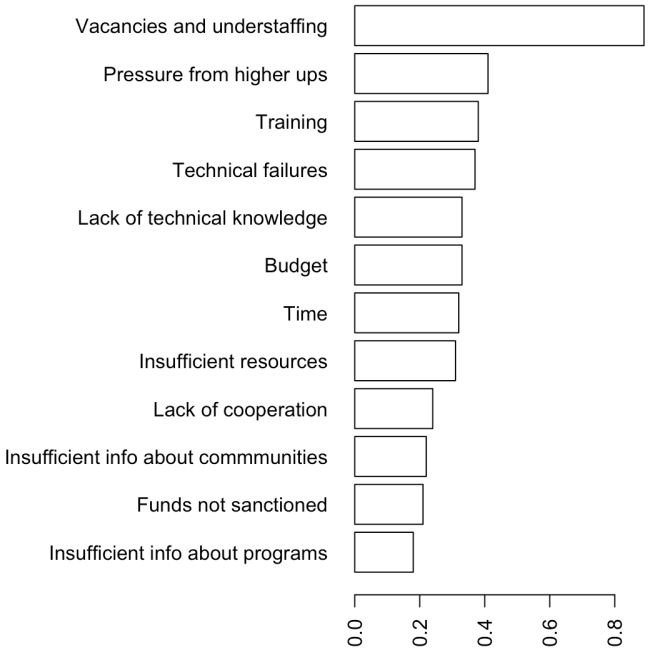

Figure 1. "Which of the following factors would you say also affect your ability to work effectively?" Multiple choice

Block officials are also constrained by the pressure they feel from higher-ups – the second most cited barrier to effective work. This pressure is a structural feature of the job: one official, for example, described how state targets for program implementation are used to monitor the blocks, noting that he found the approach "too task-focused and demotivational."[22] This same dynamic extends through the block office itself, with clerks and lower-level personnel worrying about the oversight of the BDO. As stated by a clerk, "I do what the BDO tells me to do. This is my only job."[23] It follows that, when asked to select the top two types of individuals to whom they feel accountable, officials in our sample overwhelmingly chose either the district (62%) or block officials (59%) to whom they directly report. Figure 1 shows that 41% of officials see this pressure from higher ups as a key barrier that keeps them from doing their work effectively.

Few respondents in our survey sample report being directly accountable to politicians, likely due to social desirability bias and a fear of appearing partisan. However, these dynamics were openly discussed by more senior officials, for example at the district level, who typically have more interface with politicians and who then pass politicians' concerns on to the block officials. For example, when asked how he prioritizes citizen requests, one district official reported following a

[22] Revenue Sub-Inspector in Uttar Pradesh, November 2022.

[23] Head block office clerk in Jharkhand, March 2023

clear hierarchy: he first looks at directions from his superiors and files that they have asked him to look at. Simultaneously, he focuses on requests made by influential individuals and those recommended by politicians.[24] As another stated, "if a matter is brought forward by the MLA or MP, it must be given priority."[25]

In contrast to this clear accountability to higher level officials and politicians, block officials express less accountability to citizens. Just over 40% of officials report feeling that they are answerable to citizens from the area. As noted, most block officials are not embedded in the communities they serve. Not all officials are from the state originally – only 86% were born there. Of these, 52% were born in the same district, and only 5% were born in the blocks they serve. In fact, only 50% of officials report currently living in the blocks they serve. Moreover, lengths of tenure in any given area are short. Officials have been working in their current blocks for only 2.44 years on average, and 54% report that they expect to be transferred within the year. These trends diminish the prospects of developing the deep community ties that might be expected to generate local accountability.

And yet block officials do spend considerable time receiving citizens' complaints and meeting with them. On average, officials report that just under 300 citizens visit their office each week[26] and that they spend about 4 hours per day engaging directly with citizens. Amid this constant stream of work, officials must decide which requests to prioritize. One BDO assured us that he tried to "get through as many as possible," and often took citizen complaints home. Even so, he said, motioning to the large stack of papers on this desk, "I can't get through all of these."[27] Similarly, an officer responsible for implementing MGNREGS reported that over 8,000 citizens in his block expected the 100 days of paid work for which they are eligible. But since the department lacks the resources to pay all of the laborers at once, he routinely faces a dilemma regarding which laborers should be paid first. Citizens also know that amid so much backlog, their complaints can get lost. According to one CC who has closely observed these dynamics, work gets stalled also because "clerks bury the file in the large stack."[28]

[24] Tehsildar in Uttar Pradesh, November 2022

[25] Sub-Divisional Magistrate in Uttar Pradesh, November 2022

[26] The sample average for the number of citizens visiting the office was 291, based on data that was winsorized at the top and bottom 5% of the distribution to account for outliers arising due to incorrect estimates.

[27] BDO in Jharkhand, April 2023

[28] CC in Bihar, October 2022

Citizen approaches to narrowing the accountability gap

Despite these challenges, engaging block officials is a central problem-solving strategy for citizens. For many citizens, reaching the block office represents a way to "level hop" to higher levels of administration when they feel blocked at the local level (Kruks-Wisner 2021). As a senior state official in Jharkhand reflected: "for ordinary citizens, the BDO is like god…. It is as close as many get to *sarkar* (the state)."[29] In an analysis of their national network, Video Volunteers found that block personnel were the most common officials cited by CCs as having "supported me in solving issues" – reported by 28.4 percent.[30] The CCs, with the training and support that they receive from the NGO, are not typical of all rural residents. However, a representative citizen survey in rural Rajasthan conducted in 2010, similarly found that 21 percent reported turning directly to block and district officials to make claims for welfare services and infrastructure. These represent significant numbers of residents (likely to have increased with time and improvements in rural connectivity), who have invested time, energy, and travel costs in visiting the block (Kruks-Wisner 2018).

What are citizens' strategies to ensure their complaints are addressed? To develop our theory, we draw directly on the experiences of the CCs. While the CCs are in some respects particular to their context and to Video Volunteers as an organization, we see them as representative of a broader, global class of actors pursuing bottom-up channels to accountability.[31] We focus on the strategies they use to make sure officials pay attention to a complaint and that they take some action to resolve it. Our work with the CCs suggests reveals that they attempt to overcome barriers to bureaucratic responsiveness by 1) using first hand testimony (which they capture in videos) to get officials to pay attention to a particular complaint, and 2) activating officials' career concerns by suggesting that those complaints might reach broader audiences, including senior officials.

If one of the main constraints officials face is administrative and cognitive overload, citizens must find a way to make them pay attention. The CCs' central strategy is to record videos of local problems including "face to camera" footage in which residents narrate the issue and its impact on their lives. The videos are designed to prompt an emotional response, with citizens

[29] Author interview, Ranchi, Jharkhand, June 2023.

[30] This was followed by 24.3 percent who reported receiving support from panchayat officials, and 21.6 percent who reported assistance from district officials. Just 4.8 percent reported assistance from a state Member of Legislative Assembly or Member of Parliament.

[31] Some, like the CCs, are embedded in civic organizations or government initiatives that work facilitate and amplify citizen claim-making (Kruks-Wisner 2022; Barrientos 2010; Buntaine et al. 2024), while others pursue more "organic" forms of citizen action (Mansuri and Rao 2014) that are not supported by an external organization (Krishna 2002; Kruks-Wisner 2018; Dunning 2009).

describing difficulties they face in their everyday lives along with how problems affect their children. Seeing citizens' faces, the CCs argue, helps officials to "focus."[32] As one Community Correspondent reports, when videos capture officials' attention, they then "talk seriously" about completing the work. Another CC asserted that the videos provide context and help officials "see" the problem. These observations suggest that exposure to citizen testimony has the potential to make officials prioritize a complaint by making a problem harder to ignore and by provoking an empathetic response.

Yet even if an official pays attention to a request, it might be difficult to prioritize. Here, CCs also reference the implicit threat that a video represents once it is created: that it might be shared. Virtually all the CCs we interviewed observed that officials fear recorded videos. As one reports, "One easy way to get things done is social media. My videos go viral because I share them on social media with groups of social workers and journalists, who circulate it further or tag officials on Facebook. In this way, I am able to get the attention of the officials even without following up much."[33] Another Community Correspondent believes that once officials see a video, they are pressured to work "to save their own reputations."[34]

Our interactions with officials support these observations. When we shared an example video filmed by a CC with an official in Jharkhand, he felt that any officer who saw the video would have to take action "because they are afraid of the video being spread on social media. If some senior officer sees the video then it could be disastrous for the local officers."[35] Similarly, 73% of survey respondents agreed (strongly or mostly) with the statement "social media makes officials' jobs harder because it makes it easy to cast blame and create bad publicity."

The CCs' experiences suggest that videos featuring citizen testimony can be used to focus attention and generate empathy. When followed by action that suggests visibility and publicity, citizens may also be able to activate officials' reputational concerns. These strategies serve to highlight two key aspects of social accountability: the harnessing of citizen voice from the bottom up, and the threat of public scrutiny. CCs use other strategies as well, for example relying on politicians and intermediaries to officials, repeated visits, and building a friendly rapport with officials. We, however, focus on the two strategies described here because they are broadly representative of the activities of other social accountability actors that also deploy

[32] CC in Bihar, October 2022

[33]CC in Madhya Pradesh, November 2022

[34] CC in Bihar, November 2022

[35] Block Panchayati Raj Officer in Jharkhand, February 2022

media.[36] They are, moreover, strategies that can theoretically be employed by most citizens with access to the internet, even those without political connections or high levels of social influence.

Voice + digital mobilization: Embedded experiments

Informed by the CCs' strategies, we designed embedded video and vignette experiments that aimed to isolate the impact of citizen voice and digital mobilization on bureaucratic responsiveness. Our interviews with CCs and officials suggest two sets of mechanisms through which citizens can elicit responsiveness: eliciting empathy to focus attention (emotional), and evoking concerns about oversight to prompt action (reputational).

We began by selecting two issues with high local salience: broken water hand pumps and delays in construction under a central government housing program (Pradan Mantri Awas Yojana-Gramin, PMAY-G). The block has clear responsibilities related to the implementation of PMAY-G, and has dedicated personnel for this (the Block Coordinator - Awas). While no block official is singularly responsible for water, it remains a key issue for the BDO, who coordinates with a network of "junior engineers" (technicians) from the Public Health and Engineering Department who are charged with maintaining water systems.

We assigned each official in our sample to one issue: housing or water. As discussed, we surveyed a combination of generalists (who work on all issues) and specialists (who have specific sectors/issues assigned to them). The generalists were randomly assigned to see a video related to either housing or water, while the specialists saw the video on the issue relevant to them (Table 2).

Table 2. Issue assignment for experiments

Randomized	Broken handpumps	Delayed housing
Generalists ■ Block development officer ■ Clerk ■ Block Coordinator (Panchayat) ■ Block Program Officer MGNREGA	**Water specialist** Junior Engineer Public Health	**Housing specialist** Block Coordinator Awas

[36] See for example, the "Video4Change" network with members in sub-Saharan Africa, South and Southeast Asia, the Middle East, and Latin America.

Once an official was assigned to an issue, we carried out two experiments to test our hypotheses about the ability of citizens to capture officials' attention and generate action.

Capturing attention through empathy

Our first experiment used videos, varying how they framed information about either water or housing to elicit an emotional response. We see videos as particularly good tools for operationalizing citizen voice, as they include both auditory and visual components offering contextual information and cues. They also enable us to directly observe the moment at which an official hears and sees complaints from citizens – dynamics that often remain elusive in other studies of social accountability (Grossman and Slough 2022). We held the medium of video constant across all treatments since we were most interested in isolating the effects of the framing of the message, as opposed to the technology by which it was delivered. We also held the messenger constant by embedding the videos in the survey, where they were screened on tablets by trained enumerators.

The videos draw upon real footage from Video Volunteers' archive, made and publicly published by CCs in Jharkhand active in blocks that were not included in the survey sample.[37] This ensured that the video footage looked and sounded real to officials, but that particular places and people were not recognizable to them.[38] The videos were of similar length (approximately three minutes) and about the same underlying issue and problem, but with different presentations. Each pair started with the same video montage of images (broken handpumps or incomplete housing) with the same voiceover in Hindi (spoken by the same female narrator, selected for having a "neutral" accent) who described the problem following an identical script. Following that introduction, the videos diverged as follows.

Citizen voice vs. official statistics

One video had a "citizen voice" framing, featuring the direct testimony of local residents describing the problems they face and the impact on their lives in their own words. These videos also included footage of the problem in the local context as experienced by residents. For example, as one man explains, due to late payments under P-MAY, he and his family have "been living in huts and *kutcha* houses." As another woman explains, these *kutcha*, or

[37] This full archive is available on YouTube.

[38] We chose not to provide footage of real problems from the blocks in which officers worked to avoid ethical concerns interfering with existing patterns of complaint-making and service delivery within a community, as well as the potential for backlash in a community if an official felt angered or threatened by a video. The videos were all introduced by enumerators as being from "not here in your area, but in another block."

impermanent houses "might collapse at any time." In the case of broken handpumps, a citizen shares that to find water, members of the household have to "walk long distances" to fetch drinking water, often from streams, which are "polluted with trash."[39] Citizens share, in their own words, the real life consequences of these gaps in program implementation and service provision. Each video featured two women and one man, and the footage was all drawn from villages with predominantly Adivasi (tribal) or Scheduled Caste residents. The speakers are (by speech and dress) likely to be identifiable as coming from traditionally marginalized communities.

A control video featured an "official statistics" framing that higthe same problem but without any citizen voice or footage of actual residents, instead presenting figures with government statistics describing the issue. The official statistics control primed officials to think about the issue of interest (water or housing), highlighting the same problems (inadequate supply of safe drinking water, and incomplete and substandard construction). The video mimicked the content and style of government reports typically received by block officials. It was intended to reflect the status quo of how senior officials would describe the problem, and how they would communicate it to block offices. Additionally, we placed logos of government programs throughout the video to prime officials to think about government targets for implementation. Screenshots from either video can be seen in Figure 2.

We do not include a pure control without any video, and nor do we include a placebo video that provides no information or offers no framing. This is because we are interested in learning about how citizen voice affects responsiveness in light of the status quo, where officials receive a constant flow of information and are under intense organizational pressure. The comparison therefore assesses two frames that each seek to prompt responsiveness from officials, but through different channels: one calling attention downward to residents and the other upward to senior officials. This offers a hard test of whether citizen voice can shape responsiveness when competing with a condition that might activate reminders of career concerns.

[39] The full text of the script of each video along with a description of the images featured is available in the appendix.

Figure 2. Screenshots from water videos with citizen voice frame (top row) and official statistics frame (bottom row)

Officials were randomized into seeing either one of the video types (citizen voice or official statistics) on the issue (water or housing) to which they were assigned. The randomization was stratified within issues to ensure equal proportions of video type across the two issues. Randomization was also stratified by officer type to ensure that officials from different backgrounds, locations, and experience were equally likely to see either type of video. As pre-specified, we find balance on issue, officer type, official characteristics (e.g. gender, length of tenure) and block characteristics Table B1 (Appendix). This ensures that relationships between the video seen and officials' reactions can be interpreted causally.

Measuring effects

Enumerators first introduced the videos to officials based on a script that varied slightly depending on the issue and treatment. Officials then watched the videos, after which they were told:

> **[If Citizen Voice frame]** "The people you saw in the video have tried to get the issue of [broken hand pumps //unfinished housing] resolved locally, but the problems have persisted. In such situations, many citizens contact **officials at the block level** to request assistance. I'd like you to **imagine - just for the sake of example - that the people from the video live here in your block**, and that they are requesting help from **your office**."
>
> **[If Official Statistics control frame]** "Citizens facing the kinds of issues of [broken hand pumps unfinished housing] that you saw in the video can try to solve the issues locally, but often the problems persist. In such situations, many citizens contact **officials at the block level** to request assistance. I'd like to ask you to **imagine - just for the sake of example - that people facing those same problems live here in your block**, and that they are requesting help from **your office**."

Enumerators then observed officials' reactions and asked them a series of follow-up questions to measure outcomes related to emotion and attention. Enumerators also asked them questions about what they thought a reasonable response to the problem might be to measure any effects on action. Our pre-registered dependent variables of interest are officials' emotional response, particularly feelings of empathetic concern and taking the perspective of affected citizens, and whether they pay attention to the video. We also examined the actions they state would take to resolve the problem should citizens come to their office with the same problem ("Imagine the people facing these problems are requesting your help"), and the effort they think should be expended in responding. The answer choices for actions officials might take to resolve a problem represent the actions we observed officials taking in our qualitative fieldwork. These variables, measures, and summary statistics are presented in Table 3.[40]

Table 3. Summary statistics: dependent variables and measures for video experiment

Dependent variable	Measures	Mean	SD
Attention	Maintained eye contact throughout video (enumerator observation, binary)	0.94	0.25

[40] In our pre-analysis plan, we also include measures of the "perceived value of citizen voice" and "sense of social mission." We show effects on this measure in the appendix.

	Had a response when asked if something from the video stood out (binary)	1.00	0.05
	Asked a question (binary)	0.35	0.48
Emotional reaction	Felt sad (on a scale of 0-10)	7.88	2.63
	Felt angry (on a scale of 0-10)	5.88	3.81
	Felt frustrated (on a scale of 0-10)	3.80	3.81
	Able to name the emotions affected citizens might feel (binary)	0.96	0.20
	Personally knew individuals affected by similar problems (binary)	0.61	0.49
	Able to name the consequences for citizens if problem unresolved (binary)	0.78	0.41
Action (hypothetical)	Taking any action from the following list (binary): A. Listening to citizens them and hearing them out B. Registering or record their complaints C. Advising them on how to solve the problem themselves D. Advising them on where else to seek help E. Investigating and gather more information on the problem F. Making a call or contact someone on the citizens' behalf G. Trying to raise funds to assist with the problem	0.99	0.09
	Total number of responses from above list	2.88	1.45
Effort	Taking high effort action (choosing any of item E-G, binary)	0.72	0.77
	Official's perception of the appropriate level of effort expended to (1-10)	9.08	1.82
	Would respond immediately (as opposed to "never" or "after dealing with other complaints," binary)	0.86	0.35
	Time allocated to issue assessed through an allocation game where they are asked to spread 10 hours of working time over different issues	2.48	2.37

We estimate the effects of the treatment frames on these dependent variables through an ordinary least squares regression, with heteroskedasticity-robust (HC2) standard errors:

Equation 1: $Y = \alpha + \beta_1 Frame_{CV} + \sum_1^i \theta_i \, Stratum_i \times Frame_{CV}$

Our coefficient of interest is β_1, which measures the effect of seeing the citizen voice video ($Frame_{CV}$) relative to the official statistics control video. Because randomization occurs in official type-issue type strata (10 strata in total), we include an interaction with the treatment indicator and a centered indicator for these strata ($Stratum$), following Lin (2013). Due to our limited sample size, we are unable to detect effects separately by issue or official type.[41] Effects should therefore be interpreted as averages across the different block-level actors.

As pre-specified, for all the sets of dependent variables other than "Action," we construct a mean effects index across the multiple measure by standardizing each variable within the set and taking the mean. These indices serve two functions. First, they allow us to aggregate multiple survey measures into a broader concept (e.g., attention). Second, by collapsing these multiple measures into just a few dependent variables, the use of indices also reduces the number of statistical tests, decreasing the likelihood of false positives. While these indices should be viewed as the main outcomes of interest, we also report effects on index components separately to allow for the interpretation of effects.

Results

The results can be seen in Figure 3, which shows both point estimates and 95% confidence intervals estimated using the procedures described above.

[41] These subgroup effects are available in Figures G1-G2 (Appendix) and are discussed further below. We investigate how the bureaucratic accountability gap varies with official type in a separate paper.

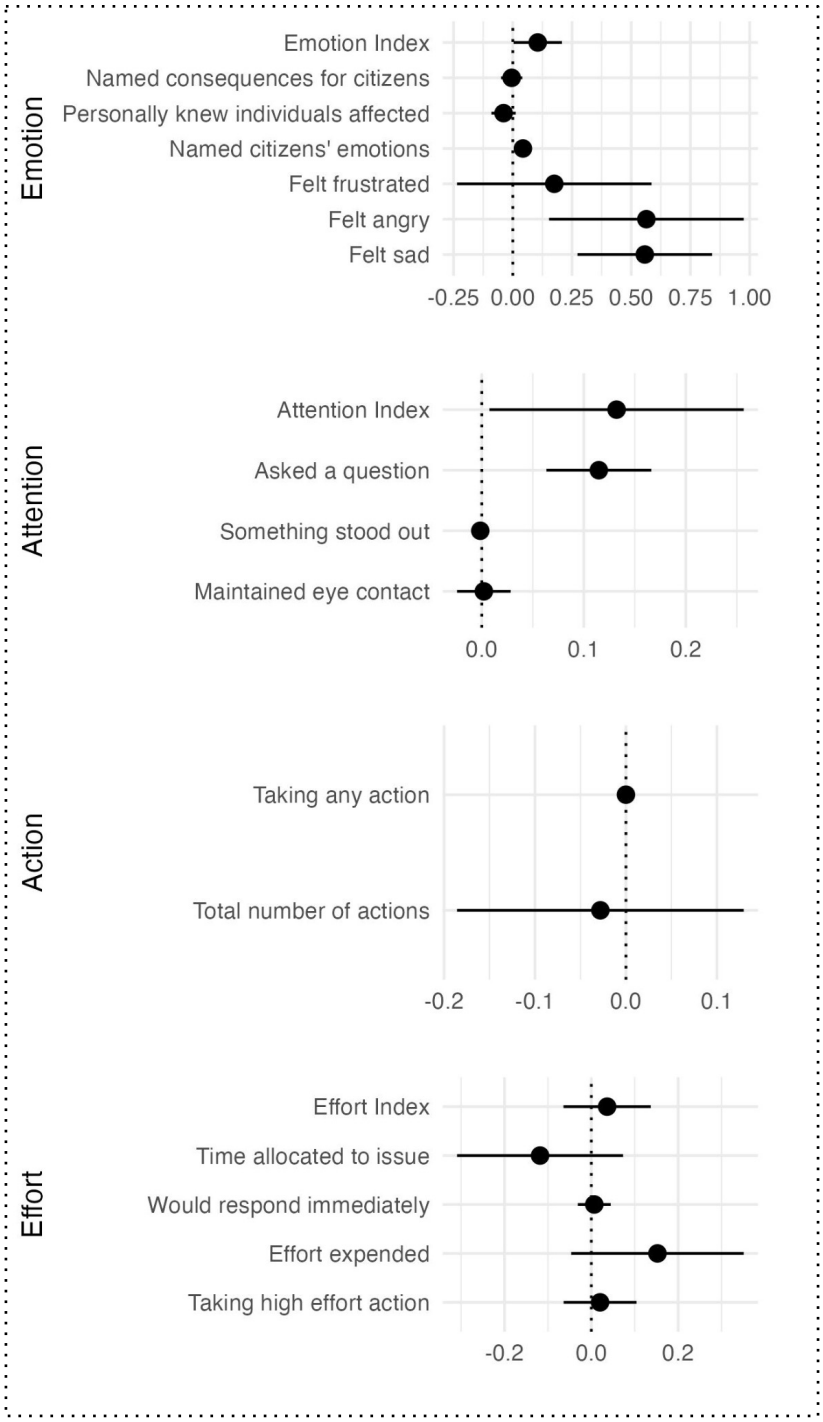

Figure 3. Effects of the citizen voice treatment (point estimates and 95% confidence intervals)

Figure 3 shows clear evidence that the citizen voice video generated an emotional reaction among officials, compared to those who view the official statistics video. The overall index shows

a 0.105 standard deviation effect. Examining the index components indicates that this effect was driven by feelings of sadness and anger upon seeing the video, with effect sizes of roughly a half point on a 10-point scale. These effects suggest that the video prompted empathetic concern among officials. Officials were also 5 percentage points more likely to be able to name the emotions that affected citizens likely face, suggesting that the citizen voice video prompted officials to take citizens' perspectives.

This empathetic reaction is accompanied by increased attention to the problem at hand. The overall index for attention shows a 0.132 standard deviation effect. This effect was driven by officials being 11.5 percentage points more likely to ask a follow-up question about the problem, which we interpret as a strong behaviorally observable indicator of attention paid to the issue.

Figure 3 shows the effects of the video treatment on the actions that officials state that they would hypothetically take in response to the issue shown in the video. We see no effect of the citizen voice treatment on the total number of hypothetical actions chosen, nor on the likelihood of an official choosing any action at all.[42] Similarly, we see no effect on the hypothetical types of level of effort taken in response to a video.

Overall, the results suggest that citizen voice elicits an emotional reaction from officials and leads them to pay more attention to the issues being presented. These emotional and cognitive reactions potentially make a claim to stand out among the broad array of tasks officials must complete. But as far as we can measure in this experiment, citizen voice on its own has limited ability to shift officials' professional constraints and incentives, and so does not yield additional action over that generated by the official statistics control framing. These null effects could be the result of true constraints to responsiveness or could also be artifacts of our experimental design. Almost all (99.5%) of officials receiving the official statistics control report that they would take some action in response to the issue presented. This suggests limited room for movement on this measure – either because of social desirability bias or because the official statistics control video also is effective in generating responsiveness. Given this, the comparison represents a hard test of the impact of citizen voice, with a lower likelihood of seeing an effect on responsiveness.

[42] Table E1 presents effects on each of the individual types of responses. We detect no effects on each of the individual types of responses, other than a negative effect on the likelihood that officials would advise individuals to solve the problem themselves. While we are cautious in interpreting this particular result, which was not pre-registered, it may suggest that officials are less dismissive of the problem.

Prompting action by activating reputational concerns

Our theory suggests that eliciting an emotional response, while important in capturing attention, may not be sufficient to prompt action unless citizens can also activate officials' reputational concerns, particularly among the higher levels to whom they report. Publicity – using increasingly accessible tools of digital media – is a key mechanism through which citizens may be able to activate these concerns and increase the likelihood that an official will prioritize their claims and needs.

Digital vs. in-person mobilization

To investigate how this can occur, we employed a vignette experiment directly after the video screening. Respondents were told a short story about affected citizens taking action to resolve the problem consisting of either in-person action (visits to a block office) or digital mobilization (sharing videos on WhatsApp and with officials). The digital mobilization condition was intended to convey to officials that the description of the problem at hand could be widely shared and publicized. We also mentioned that citizens were working with a local media NGO, further increasing the likelihood that the videos would be widely shared.

In contrast, visits to block offices, a localized activity, are less likely to be seen beyond the area surrounding the office. The in-person action condition was designed to hold constant certain aspects of the information conveyed to officials – namely that affected citizens are mobilizing around the problem and the problem holds some level of urgency. As in the video experiment, this creates a hard test of the impact of each kind of citizen action, since each is directly compared to the other rather than to a placebo or pure control.[43]

The text of each treatment condition was as follows:

> **Digital mobilization**: *Imagine again the video you just saw. This time, imagine that residents who are facing those same kinds of issues have been* ***trying to raise awareness*** *in the community about it. They worked with a* ***local media NGO to draw attention to the issue by filming a video documenting the problem.*** *They* ***shared that video with their friends and neighbors and others in the area using WhatsApp, and they also sent the video to the BDO through WhatsApp****. They are now asking for help in resolving the issue.*

[43] Both vignettes presented hypothetical scenarios, asking officials to think about the likely and appropriate response in an unnamed block. This was intended to create enough distance to mitigate desirability bias as well as to avoid officials becoming concerned about mobilization in their own area (which could have ethical implications).

In-person mobilization: *Imagine again the video you just saw. This time, imagine that residents who are facing those same kinds of issues have been* ***working together to try to solve the problem.*** *They have held community meetings, and have hand* ***written a petition asking government officials for help.*** *Many members of the community signed that petition, or marked it with their thumbprints. The community then pooled their resources for a* ***delegation of residents to travel to the block office.*** *They are now asking for help in resolving the issue.*

Officials were randomized into hearing either of the vignette conditions. Assignment was blocked within issue, officer type, and the video type assigned in the previous round of randomization, ensuring an even split across the digital mobilization and in-person action treatments among officials who had seen either type of video previously. As in the video experiment, Table B2 (Appendix) shows that officials who saw either type of vignette are similar across a number of variables.

Measuring effects

After hearing these vignettes, we measured effects on reputational concerns and hypothetical action. To measure different kinds of reputational effects, we included questions on the sources of pressure that officials might feel to respond – whether from people in the local surrounding area or from senior officials. To measure action, we also asked respondents to consider officials in the imagined block, and to reflect on how they think they would respond in the face of either in-person or digital mobilization. These variables, measures, and summary statistics are presented in Table 4.[44]

Table 4. Summary statistics: dependent variables and measures for vignette experiment

Dependent variables	Measures	Mean	SD
Reputational concerns	Overall pressure felt to resolve problem (on a scale of 1-3)	2.03	0.80
	Think people in the surrounding local area would be angry about issue (binary)	0.25	0.43
	Think people in the surrounding local area would be inspired by the citizen mobilization (binary)	0.81	0.40
	Think senior officials would be angry about issue (binary)	0.28	0.45

[44] In our pre-analysis plan, we also include a measure of the "perceived value of citizen voice." We show effects on this measure in the appendix.

	Think senior officials would be inspired by the citizen mobilization (binary)	0.77	0.42
Action	Likelihood of sending staff to look at a problem (scale of 1-3)	2.85	0.41
	Likelihood of sending contractor to look at problem (1-3)	2.41	0.75
	Likelihood of calling elected official about problem (1-3)	2.32	0.73
	Likelihood of fundraising to solve problem (1-3)	2.17	0.83

We estimate the effects of the vignettes on our outcomes and mechanisms of interest through an ordinary least squares regression, with heteroskedasticity-robust (HC2) standard errors:

Equation 2: $Y = \alpha + \beta_1 Frame_{DM} + \sum_1^i \theta_i \, Stratum_i \times Frame_{DM}$

Our coefficient of interest is β_1, which measures the effect of hearing the digital mobilization vignette ($Frame_{DM}$) relative to the in-person mobilization vignette. Because randomization occurs in Official type-Issue type-Video type strata (20 strata in total), we include an interaction with the treatment indicator and a centered indicator for these strata ($Stratum$), following Lin (2013). Here, too, we do not measure effects separately by official type or issue type, and effects should be interpreted as averages across the multiple types of actors.

In line with our pre-analysis plan, for our dependent variable related to "Action", we construct a mean effects index across the multiple measures by standardizing each variable within the set and taking the mean. We also report effects on index components separately to allow the interpretation of effects.

Results

The results can be seen in Figure 4, which shows that hearing the digital mobilization treatment significantly increases officials' overall perceived pressure to respond to the issue (a 0.27 treatment effect on a 3-point scale). This is driven by the fact that they are 7 percentage points more likely to be worried that senior officials will be angry if they hear of the issue. Importantly, while the wording of the digital mobilization vignette also indicates that videos may be shared with community members, we measure no treatment effects on worries that citizens will be angry when hearing about an issue. In other words, the digital mobilization treatment appears to be generating pressure to respond by activating reputational concerns for senior officials in particular. This is consistent with our interviews, in which officials expressed a fear of videos reaching higher levels.

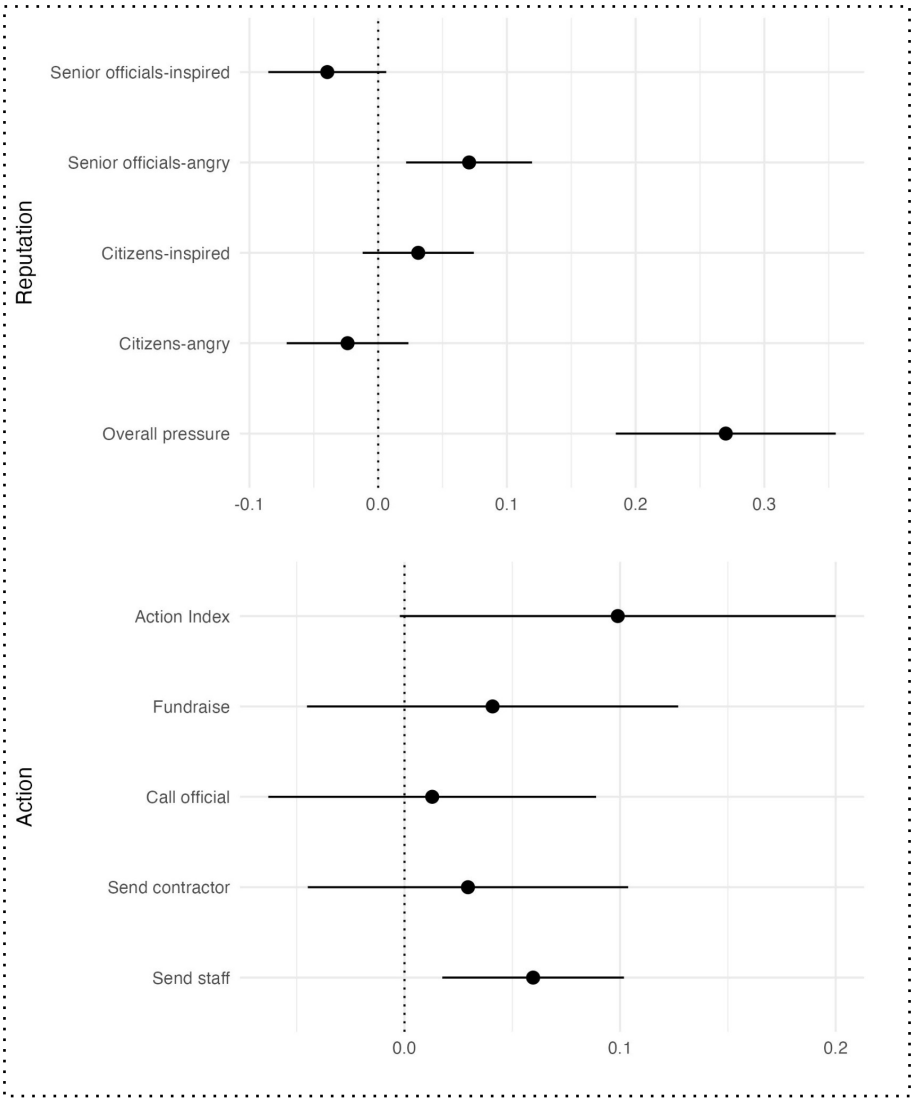

Figure 4. Effects of the digital mobilization treatment (point estimates and 95% confidence intervals)

Likely because of this increased pressure, Figure 4 shows that hearing the digital mobilization treatment index increases the index of overall action by .099 standard deviations – a result with a .06 p-value. This effect is driven by officials being more likely to report that they would send their staff to examine an issue. As shown in Table 4, this is the most likely action taken by officials in response to either video type, suggesting it is generally the most relevant initial action taken when investigating an issue.

Discussion

Our fieldwork highlighted real-world constraints upon block officials in responding to citizens, and strategies through which they might be overcome. Our experiments, while necessarily stylized, were designed to explore the effectiveness of those strategies. The video experiment shows that exposure to direct testimony from citizens can provoke empathetic responses and focus attention. Yet we also find, at least in our experimental context, that empathy and attention are insufficient to generate bureaucratic *action* to resolve an issue – particularly when compared to other frames that might prime accountability to higher levels of government (as reflected in the official statistics control). Barriers to action are overcome when citizens activate officials' reputational concerns. This occurs as the digital mobilization vignette provokes concerns about higher-level oversight,– specifically over angering senior officials.

There are, however, features of our experimental design that may prevent us from detecting the full effects of citizen voice. Given social desirability bias and the lack of true constraints in reporting whether one would take action in response to an issue, it is likely that we observe ceiling effects for our main outcomes of interest. In addition, our use of hypothetical scenarios may not evoke the same emotional or reputational responses as real-life situations, potentially diminishing the effectiveness of our treatments. Further, our comparison groups are not pure controls but rather other relevant forms of issue presentation or citizen mobilization that might also generate responsiveness, but through top-down mechanisms. And yet, despite a design that potentially biases against the treatments, we see evidence of citizen voice's cognitive, emotional, and (when digitally shared) reputational effects.

We observe an effect of digital mobilization on the pressure officials feel to respond, regardless of which video type the vignette follows (Tables E7-E8, Appendix).[45] While this might suggest that it is digital action is sufficient in gaining responsiveness, our qualitative work cautions against that interpretation. Our interviews with CCs clearly show that gaining officials' attention and eliciting their empathy are important precursors to any action that follows. One, for example, explained: "with video it would be easy to capture the situation in which people were living, and …the official would come to empathize. [The] scenes moved the officials to think about the difficulty people were facing."[46] Once their attention is captured, the CCs then apply pressure, including "post[ing] the video in all my social groups like Facebook, WhatsApp, Twitter and

[45] Although the cross-randomized nature of our design technically allows us to estimate the interaction between video type and vignette type, our sample size leaves us unable to detect it (Table E6). Detecting interaction effects could require sample sizes up to 16 times that needed to be able to detect the main effect. See a discussion here.

[46] CC interview, Uttar Pradesh, September 2018.

other media groups,"[47] and telling the official "if he does not give me a hearing, I will approach higher officials to tell them about the problem and the lack of assistance."[48] This suggests that citizen voice plays an important role in accomplishing the first-order task of getting officials to focus on a particular need.

It is likely that effects vary by an official's designation. We estimate these subgroup effects for attention and action in the video and vignette experiments, respectively, but are unable to detect significant differences in effect sizes, likely due to limited sample size (Figures G1-G2, Appendix). To learn more about how effects might vary by official type, we measure subgroup effects conditional on other variables that might shape their incentives and ability to respond. Those with shorter tenures or higher expectation of being transferred, for example, might be more sensitive to higher-level reputational concerns (Iyer and Mani 2012). Existing literature also suggests that bureaucrats' career concerns may be strongest in settings where political constituencies are aligned (Velasco Rivera, forthcoming), and that top-down monitoring is more likely in areas that fall under a single constituency (Gulzar and Pasquale 2017). We first test for these dynamics by examining those who do *not* expect to be transferred within the next year – among whom the effects of the vignette experiment on official pressure and action persist (Tables G11- G12, Appendix).[49] We then assess whether effects hold among blocks that fall within constituencies not aligned with the state's ruling party at the time of research (the Jharkhand Mukti Morcha, or JMM) or split between two parties. We find that the digital mobilization treatment still creates a sense of pressure to respond and worries of angering higher-level officials. We do not, however, detect effects on action taken (Tables G13-G14, Appendix). This may simply be a false negative, but it is also possible that the strongest effects of the digital mobilization vignette emerge from blocks in political constituencies aligned with the ruling party, where officials can both be more easily monitored and rewarded by the administration. The effects of citizen voice and action, in other words, may be interpreted differently by officials operating in different political contexts – dynamics that merit greater future research.

It is also possible that our results could be driven by officials of certain identities or backgrounds. A shared identity with citizens, for example, might increase the salience of the emotional mechanisms (Pepinsky et al. 2017; Bhavnani and Lee 2017; Tendler 1997; Tsai 2007), while those who are more locally embedded might be more concerned over local reputation

[47] CC interview, Uttar Pradesh, September 2018.

[48] Ibid.

[49] Interestingly, those seeing the digital mobilization frame are more likely to report that they would fundraise than send staff to examine a problem, which was the main action taken by those in the full sample. This is possibly because the officials who are not worried about the threat of transfer are less likely to be BDOs, the primary official with the ability to send staff to examine a problem in an office.

(Paller 2019). However, subgroup analysis finds that the effects of our treatments persist across differently situated officials. As the narrator's voice in our videos is identifiably female, and since the residents featured in the water and housing videos are identifiable as *Adivasis* (Scheduled Tribe, ST) or members of Scheduled Castes (SC), we measure effects of the citizen voice video treatment among male respondents (Tables G1-G2, Appendix) and among those who do *not* identify as ST (Tables G3-G4, Appendix) or SC (Tables G5-G6, Appendix). In all cases, we find that there is still a measurable increase in emotion and attention. We similarly find that effects persist on emotion, attention, pressure to respond (vignette experiment), and action (vignette experiment) among the respondents who do not live in the blocks that they serve (Tables G7-G10, Appendix). While we do not rule out that there may be important differences across officials, the main effects of citizen voice and action hold conditional on identity and embeddedness. This is critical when considering the ability of citizens to demand responsiveness from officials with whom they *lack* shared identity or social ties.

There are several scope conditions to consider when extending the theory beyond rural Jharkhand. First, for citizens to be able to demand responsiveness from officials, they must target citizen-facing public agencies where there are spaces for direct contact with officials. The level at which this contact occurs may shape how officials respond; those who are more locally embedded, for example, might be more sensitive to local reputation, whereas those in middle-level institutions (like the block office) may be more driven by higher-level career concerns. Second, Jharkhand is a poor and capacity constrained state. In better-resourced and less overburdened settings, citizens may have less need to activate the cognitive, emotional, and reputational drivers of bureaucratic responsiveness that we have identified. Third, for the reputational mechanism to hold, personnel must face top-down pressure, including real threat of transfer or other sanctions, or must be motivated to advance within an agency. Our theory is therefore conditional on the specific career trajectories and incentives that public personnel face, which can shape reputational concerns.

Further, to make and share videos, citizens must have access to a smartphone or other device, reliable connection to the internet, the technical ability to create and disseminate content, and an online social network with whom to share. The CCs, upon whose experiences we have built much of our theory, are supported by an NGO and given resources and training that help to amplify their voices. It is less clear whether individuals, without the support of such an organization, can employ the same techniques to the same effect. Yet, as of 2021, almost 67% of rural India's population had access to a smartphone (Iftikhar, 2021), and training programs suggest that technical skills can be taught.[50] Thus, while we do not suggest that these practices

[50] Video Volunteers, for example, has recently begun to offer free media training to local volunteers, and to date supports a network of more than 2500 individuals who engage in video-making to document local grievances. See, https://www.videovolunteers.org/buland-bol-free-media-training/.

are universally accessible, there is reason to think they could be widely adopted. There are also, as we discuss below, open questions about whether digital technology is required to focus officials' attention, elicit their empathy, and activate their reputational concerns.

Conclusion

Our study demonstrates the existence of citizen-led pathways to bureaucratic responsiveness under conditions – politicized, hierarchical, and unequal – where they might seem least likely. In procedurally democratic settings, most work on accountability centers on elected politicians who bring political pressure to bear on bureaucratic actors. This can take many forms, from clientelist brokerage (Auerbach and Thachil 2023) and constituency service (Bussell 2019), to the influence of patronage networks (Toral 2023) and political oversight (Raffler 2022). We do not discount the importance of these politician-centered pathways to accountability. Our concern, however, is with citizens who may lack access to political networks, and with settings in which democratic representation may be weak. In such settings, bottom-up demands placed directly on appointed officials may be the best and sometimes the only pathway for citizens attempting to secure essential goods and services.

Through our observations and interviews with CCs, we developed an understanding of the strategies citizens might employ along this bottom-up pathway. Through our interviews with officials in block offices, we learned about the constraints that inhibit their responsiveness to citizens. We combined those two perspectives to develop and test a citizen-driven but bureaucrat-centered theory of how citizen voice and mobilization can overcome these barriers. In short: if bureaucratic overload and upward accountability inhibit officials from prioritizing citizen claims, then citizens must work to elicit empathy, focus officials' attention, and evoke reputational concerns to gain a response.

From a policy perspective, our study highlights two sets of questions. First, what can be done to amplify the spaces in and tools with which citizens exercise voice? Video Volunteers offers one video-based model. But other forms of media (digital and traditional) as well as other platforms for grievance articulation (whether online or in-person) can also provide citizens with the means to make demands on public officials. The dynamics of storytelling and whether citizens can share their narratives on their own terms are particularly important for the politics of recognition and dignity (Sanyal and Rao 2018). Yet narrative forms of claim-making may be hard to process at scale. If policymakers and civil society organizations are successful in creating new spaces to foster citizen voice, could officials become more overwhelmed than ever or become desensitized to appeals from citizens? Or could the groundswell of citizen voice provoke an institutionalized change in how lower-level public agencies receive, listen, and respond to citizens? At issue here is the underlying capacity to respond to citizens' claims. Efforts to invest

in citizen-driven accountability must be coupled with efforts to give claims "teeth" by simultaneously investing in the "state's institutional capacity to respond to citizen voice" (Fox 2015: 347).

Second, and directly related, what might encourage lower-level officials to allocate their efforts to citizens' appeals? In the context of our experiment, digital mobilization had a greater effect on responsiveness compared to in-person collective action, but this does not mean that in-person action will not have an impact. Investigating the full array of strategies that citizens employ – both in-person and online – is an agenda ripe for further research. A key feature of any strategy, we argue, is the degree to which the claim-making process is visible to different audiences and creates pressure to respond.

There are also open questions concerning the social and distributional implications of strategies centered on citizen claim-making, which can both challenge and reinforce patterns of inequality (Gallagher et al. 2024). In settings where officials are overburdened and under-resourced, time allocated to responding to citizens could diminish time spent on other tasks or in meeting other needs. To the extent that it diminishes shirking or activities serving officials' private interests, increased bureaucratic responsiveness to citizens' claims might be unequivocally beneficial for a community. Responsiveness to certain demands, however, could crowd out demands from others. The equity implications depend on context, particularly whether citizens approaching bureaucrats are otherwise underserved by the status quo. Video Volunteers and other social accountability organizations explicitly aim to serve marginalized citizens who have trouble making their voices heard. In the absence of such organizations, it is possible that more elite local actors become the "squeaky wheels" that get responses at a cost to those who are less well positioned to make claims. Yet, where access to claim-making is widespread, it represents a potential pathway to more inclusive bureaucracies. Citizen-led efforts to build bureaucratic responsiveness, in sum, can deepen democracy by creating spaces in which to demand both distribution and recognition in the eyes of the state.

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Appendix

Appendix A: Scripts for video experiment

A1: Water treatment video (testimony)

(Surveyors read the following script out loud, before showing video): A common problem in many villages in Jharkhand is that handpumps, which are a primary source of drinking water, fall into disrepair – often due to normal wear and tear over time. Our team visited some villages – not here in your area, but in another block – where people explained the drinking water issues they face. I'd like to show you a video. It's only a couple of minutes in length.

A1.1: Video script (English translation)

Short montage (~15 seconds) of footage of broken handpumps – no audio, no humans.

Voice-over narration: In many villages in Jharkhand, residents struggle without reliable access to clean water. Often, the problem is that existing sources, provided by the government, have fallen into disrepair, such as when a handpump is broken.

A1.1a: Testimony 1

Woman: There is water in the well but it is infested with insects. We drink the same water and feed it to our kids. And then fall sick. The water that we fetch from the stream is also full of impurities. The nearest chapakal [handpump] that we can fetch water from is also far. There is a well but it is infested. Children drink this water and fall sick. Water that we fetch from the stream is also impure. And then we fall sick - catch cold and cough. Especially, the kids fall sick. We adults do too.

A1.1b: Testimony 2

Man : The hand-pump has been defunct and is still defunct.
Interviewer - where do you fetch water from then?
Man: we fetch water from that run down well and a nearby stream.
Interviewer - What is the problem with consuming the water from the well or the stream?
Man - there are obviously problems we face due to consumption of well/ stream water. The water from the steam is infested with insects etc. Same is the case with the water from the well. When we take the kids to the doctor, they ask us to drink boiled water or water from hand-pumps. And we have two hand-pumps – except that both are out of order.
Interviewer: What do you want?
Man - It will be nice if these things are fixed. We will get a stable source of water.

A1.1c: Testimony 3

Woman: There are a lot of difficulties. We catch cold, cough. The same water is consumed by young kids. The water from the stream is polluted with trash. These are the problems we face.
Interviewer: But there is a hand-pump in your village.
Woman: There is a hand-pump but it is out of order.
Interviewer: I have been told that it is defunct since six months.
Woman: Yes.
Interviewer: In these six months, has no one turned up to fix it?
Woman: Someone came to fix it. We even collected money to pay for fixing the hand- pump. We are poor people. Where will we get so much money from. We even paid for the fixing of the hand-pump but it is still not working.
Interviewer: What do you want?
Woman: I want that proper arrangements should be made for our drinking water. Young children have to walk long distances to fetch drinking water. It is the rainy season still, so there is water in the streams. Soon the rainy season will be over and then we keep wandering around, looking for drinking water.

Short montage (10 seconds) of broken handpumps – no audio, no humans.

A2: Water control video (information)

Surveyors read the following script out loud, before showing video: A common problem in many villages in Jharkhand is that handpumps, which are a primary source of drinking water, fall into disrepair – often due to normal wear and tear over time. Our team gathered some information on drinking water issues. I'd like to show you a video. It's only a couple of minutes in length.

A2.1: Video script (English translation)

Short montage (~15 seconds) of footage of broken handpumps – no audio, no humans.

Voice-over narration: Access to water is essential for the health and livelihoods of citizens of Jharkhand for drinking, cooking, and cleaning. India has faced a huge challenge of providing safe drinking water to its rural population – over 900 million people in more than 1 million villages.

A2.1a: Slide 1

Title slide with logos of government water schemes

Voice-over narration: Both the Government of India and the Government of Jharkhand have been making many efforts, with schemes pursued at multiple levels, a few of which you see here on the screen. We have seen the fruits of these efforts. According to the 2011 Census, 95% of the rural population has access to some form of water supply infrastructure.

A2.1b: Slide 2

Figure showing how Indian households get their water – shows heavy reliance on handpumps

Voice-over narration: One of the main strategies to achieve this progress is to rely on groundwater through the use of wells and pumps. As you can see from this graph, looking at the dark blue areas, about one-third of households across all of India rely on handpumps. This is even greater if we look just at rural areas, as in the right-most graph, where you can see that about 43% of households get their water from handpumps.

A2.1c: Slide 3

Figure showing sources of water in Jharkhand

Voice-over narration: We see even higher use of handpumps in Jharkhand. By far the most common source of water for citizens of Jharkhand is a handpump. Based on a survey conducted by the government of Jharkhand, over half of all households rely on these hand pumps for their drinking water.

A2.1d: Slide 4

Figure showing about ⅓ of handpumps in JH are not working

Voice-over narration: Yet not all of these pumps work. In a survey of handpumps across the state, about 30% were found to be non functional. Many of these problems occur just through normal wear and tear of a pump and are expected over its lifetime. As a result, communities have frequent need for repairs, without which they struggle without reliable access to clean water

Short montage (10 seconds) of broken handpumps – no audio, no humans.

A3: Housing treatment video (testimony)

(Surveyors read the following script out loud, before showing video)

A common problem in many villages in Jharkhand is that residents, even after being selected as housing beneficiaries, continue to live in kutcha houses because they are unable to complete construction of a pucca house – at times due to delayed dispersal of PMAY-G (Pradhan Mantri Awas Yojana) funds. Our team visited some villages – not here in your area, but in another block – where people explained the housing issues they face. I'd like to show you a video. It's only a couple of minutes in length.

A3.1: Video script (English translation)

Short montage of mix of incomplete construction of pucca housing + footage of katcha housing/housing in bad repair. No audio, no humans.

Voice over narration: In many villages in Jharkhand, residents continue to live in katcha houses, even when they have been selected as beneficiaries under programs like Pradhan Mantri Avas Yojana. Often, the problem is that they have not received the necessary installments of funds from the government to finance their construction in full. As a result, their houses remain incomplete.

A3.1a: Testimony 1

Woman: Our entire house is broken and the roof is damaged. We live in these kutcha houses. So the rain water pours in all the time. That's why sometimes we have to take our kids and sleep outside the house.

A3.1b: Testimony 2

Man: Issue is that the Indira Awas that we had been allotted in 2016 is still incomplete.
Interviewer: How many beneficiaries was it constructed for?
Man: Four beneficiaries
Interviewer: Has anyone come to inspect this place?
Man: No one does.
Interviewer: What do you want?

Man: We want that the construction that is incomplete should be complete. That would be nice. That would make it easy for us to live, otherwise so far we have been living in huts and kutcha houses.

A3.1c: Testimony 3

Woman: our entire settlement is in shambles. How can our families and kids live in such homes? How can we live like this? These houses might collapse anytime, at night. And kill our families and kids. Who will come to visit us if such an incident takes place? If anyone survives that collapse here, only then will they try to save/ revive others. Our houses are completely damaged and no one is trying to make any arrangements for us. No government is doing so. How should we go on living?

Short montage (10 seconds) of katcha and incomplete housing – same as intro – no audio, no humans.

A4: Housing control video (information)

A common problem in many villages in Jharkhand is that residents, even after being selected as housing beneficiaries, continue to live in kutcha houses because they are unable to complete construction of a pucca house – at times due to delayed dispersal of PMAY-G (Pradhan Mantri Awas Yojana) funds. Our team gathered some information on housing issues. I'd like to show you a video. It's only a couple of minutes in length.

A4.1: Video script (English translation)

Short montage of mix of incomplete construction of pucca housing + footage of katcha housing/housing in bad repair. No audio, no humans

Voice-over narration: In many villages in Jharkhand, residents continue to live in katcha houses, even when they have been selected as beneficiaries under programs like Pradhan Mantri Avas Yojana. Often, the problem is that they have not received the necessary installments of funds from the government to finance their construction in full. As a result, their houses remain incomplete.

A4.1a: Slide 1

Title slide with logos of government housing schemes

Voice-over narration: Both the Government of India and the Government of Jharkhand have been making many efforts, with schemes pursued at multiple levels, a few of which you see here on the screen. We have seen the fruits of these efforts. According to the 2011 Census, just over half of all Indian households had homes with pucca walls and a pucca roof. This number has grown rapidly, to more over 75 percent in recent years.

A4.1b: Slide 2

Housing status across India – figure shows rural gap and katcha housing

Voice-over narration: You can see that progress here, where nationally the share of 'pucca' houses rose from 55% in 2011 to 71% in 2015-16, with upward trends continuing. The 2018 National Sample Survey estimates that almost 77 percent of Indian homes qualify as pucca. But you can also see here that rural areas still lag behind – still hovering around 50%. And almost a third of rural homes are in very poor – or katcha – condition.

A4.1c: Slide 3

Figure showing PMAY-G completion across India – shows big push, but also gap in completion

Voice-over narration: Across India, there has been a big push to address this gap through programs like the Pradhan Mantri Awas Yojana – although you can also see the gaps between the targets and homes actually completed. This is sometimes due to beneficiaries who start but then fail to complete their homes. But in some cases, the problem is gaps in program implementation, such as delays in receiving funds from the government. In all, about 70 percent of registered beneficiaries have had their homes completed till now.

A4.1d: Slide 4

Figure showing PMAY-G implementation in Jharkhand

Voice-over narration: Jharkhand has done quite well under PMAY. You can see here the numbers of houses built each month. But Jharkhand also has the problem of incomplete houses. Here you see the drop off between beneficiaries who are registered, the geo-tagging process, getting a house sanctioned, and actual completion rates. While most houses do eventually get built, the delays in construction – at times due to delays in dispersal of funds – create a lot of difficulties for rural households.

Short montage (10 seconds) of katcha and incomplete housing – same as intro – no audio, no humans.

Appendix B: Balance Tests

Following our pre-analysis plan, to ensure that the coefficients measure the effect of the frame rather than some unintentional bias resulting from improper randomization, we conduct balance tests on the issue covered, official characteristics, and block characteristics (Table XX and Table XX). We estimate our main specification for our fixed and pretreatment characteristics of interest. Any variable for which the p-value on the coefficient either treatment indicator is less than 0.05 will be considered imbalanced. Because no variables are considered imbalance, we do not control for any of these, nor do we test for whether balance occurs by chance.

Table B1. Balance table for video experiment

	Issue	Officer Type			Official characteristics				Block characteristics			
	Housing	Generalist	Water	Housing + water	Female	Lives in block	Born in block	Years of service	PESA[1]	Distance nearest town[2]	JMM block[3]	Split block[4]
Intercept	0.543***	0.568***	0.083***	0.181***	0.110***	0.484***	0.049***	14.419***	0.417***	34.579***	0.371***	0.070***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.012)	(0.019)	(0.009)	(0.284)	(0.020)	(0.756)	(0.019)	(0.010)
Testimony	0.000	0.000	0.000	0.000	-0.008	0.027	-0.007	-0.047	0.037	1.122	0.008	-0.012
	(0.000)	(0.000)	(0.000)	(0.000)	(0.017)	(0.026)	(0.012)	(0.405)	(0.027)	(1.031)	(0.027)	(0.014)
N	1293	1293	1293	1293	1293	1293	1293	1291	1293	1269	1293	1293

All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

[1] Predominantly tribal areas that are categorized as Scheduled Areas under the Indian Constitution come under the Panchayat Extension in Scheduled Area (PESA) Act, which makes provisions for tribal self-governance. The Act applies to 16 of 24 districts.

[2] Village-level averages taken from the 2011 Census and averaged at the block level. Information for 5 blocks is missing in the census. We have dropped these blocks from this balance test.

[3] Whether the block lies in an assembly constituency (AC) won by the JMM in the 2019 election. Includes blocks belonging to two or more assembly constituencies if they were all won by the JMM. We placed blocks in ACs by asking District Program Officers (DPO) of MGNREGA. These individuals directly supervise the Block Program Officers of MGNREGA for every block of their district. As such, they have accurate information on all the blocks that fall within their district of posting. To cross-check their data, we approached the District Election Officers who are directly responsible for electoral matters within the district. In certain cases, where the DPOs were not able to provide accurate information about block to AC mapping, two approaches were undertaken, we directly contacted the Block Program Officers of MGNREGA or the Block Development Officer within the blocks for the AC mapping.

[4] Whether the block lies in multiple assembly constituencies controlled by more than one party based on the same electoral data as described in note 3.

Table B2. Balance table for vignette experiment

	Issue	Officer Type			Official characteristics				Block characteristics			
	Housing	Generalist	Water	Housing + water	Female	Lives in block	Born in block	Years of service	PESA[1]	Distance nearest town[2]	JMM block[3]	Split block[4]
Intercept	0.543***	0.568***	0.083***	0.181***	0.097***	0.499***	0.041***	14.334***	0.440***	35.171***	0.363***	0.067***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.011)	(0.018)	(0.008)	(0.290)	(0.019)	(0.731)	(0.019)	(0.010)
Digital Mobili-zation	0.000	0.000	0.000+	0.000	0.018	-0.003	0.010	0.139	-0.007	-0.097	0.026	-0.005
	(0.000)	(0.000)	(0.000)	(0.000)	(0.017)	(0.026)	(0.012)	(0.408)	(0.028)	(1.026)	(0.027)	(0.014)
N	1293	1293	1293	1293	1293	1293	1293	1291	1293	1269	1293	1293

All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

[1] Predominantly tribal areas that are categorized as Scheduled Areas under the Indian Constitution come under the Panchayat Extension in Scheduled Area (PESA) Act, which makes provisions for tribal self-governance. The Act applies to 16 of 24 districts.

[2] Village-level averages taken from the 2011 Census and averaged at the block level. Information for 5 blocks is missing in the census. We have dropped these blocks from this balance test.

[3] Whether the block lies in an assembly constituency (AC) won by the JMM in the 2019 election. Includes blocks belonging to two or more assembly constituencies if they were all won by the JMM. We placed blocks in ACs by asking District Program Officers (DPO) of MGNREGA. These individuals directly supervise the Block Program Officers of MGNREGA for every block of their district. As such, they have accurate information on all the blocks that fall within their district of posting. To cross-check their data, we approached the District Election Officers who are directly responsible for electoral matters within the district. In certain cases, where the DPOs were not able to provide accurate information about block to AC mapping, two approaches were undertaken, we directly contacted the Block Program Officers of MGNREGA or the Block Development Officer within the blocks for the AC mapping.

[4] Whether the block lies in multiple assembly constituencies controlled by more than one party based on the same electoral data as described in note 3.

Appendix C: Questions measuring our dependent variables

C1: Video experiment

C1.1: Interest in an issue

Relevant survey questions (effects will be measured separately for each and also as an index):

1. While watching the video did the respondent:
   Maintain eye contact with the screen for the duration (did not look away)?
   a. Look away briefly (e.g. to check phone, watch, clock)?
   b. Look away more than briefly (e.g. to sign paperwork or do other work)?
   c. Get interrupted by someone entering the office, asking them a question?
   d. Get interrupted by an unavoidable phone call (e.g. from a senior official)?
   e. Watch all the way to the end?
   f. Did you have to pause the video?
2. Does anything particular stand out to you from the video, in terms of the images, footage or audio? In other words, if you close your eyes and think about what you just saw and heard, what can you recall most clearly?
   a. Nothing stands out
   b. A person who was speaking (e.g. a particular woman or man)
   c. Something particular that was said (part of the testimony)
   d. Other people (not speaking) (e.g. children, residents engaged in activities)
   e. A feature of the village (not water or housing related)
   f. A government program (e.g. logo of a scheme/program)

   If water // If housing (separate choice sets for each)

   g. W: Handpumps // H: Unfinished houses
   h. W: Well water, river, or stream // H: Katcha [unimproved] houses, damaged houses
   i. W: Drinking water across India pie charts // H: Housing status across India graphs
   j. W: Sources of water in Jharkhand graph // H: Big push under PMAY graph
   k. W: Status of handpumps in Jharkhand figure // H: PMAY in Jharkhand graph
   l. Other, specify *(text)*
3. Do you have any questions about the issue/problem shown in this video?
   a. 0. Yes / 1. No
   b. If Yes, how many questions did they ask? (Numeric)

C1.2: An official's emotional reaction to an issue

1. To what extent did seeing the video make you feel any of the following? *(Please move these scales, where zero means you did not feel that at all, and 10 is the maximum strength of feeling.)*
    a. Sad, thinking about local conditions
    b. Angry – the repairs should have been done
    c. Annoyed with citizens who raise these issues
    d. Frustrated – there's not much I or my office can do
    e. Worried about work and pressure on my office
    f. Motivated – inspired to try to make a positive difference
    g. Demotivated – the problem is widespread and difficult
2. What do you think would best describe the emotions [[(V_T) <u>of the people in the video // (V_I) of people seeking help with problems like the ones described in the video</u>]]?
    a. Sad or worried
    b. Frustrated or angry
    c. Hopeful
    d. It's too difficult for me to get a sense of what others might be feeling
    e. None of the above *(spontaneous; do not read choice out loud)*
3. Do you know anyone personally (that is, outside of people you meet because of your job, for example among your friends or family, who at some point in their life have had to cope with similar issues of <u>[[W: drinking water scarcity // H: low-quality housing]]</u> ? *(0. No // 1. Yes)*
4. If problems like these don't get resolved, what can happen as a result? Of the following, please select the **two** biggest problems you think might occur, from the perspective of all those involved in both the local community and in government.
    a. The area will not meet government targets for <u>[[W: drinking water access // H: housing completion]]</u>
    b. Officials in the area will lose the confidence and trust of those in the local community
    c. Officials in the area will look bad in the eyes of other officials, including their seniors

    If water // If housing (separate choice sets for each)

    d. W: Citizens will not get enough clean water // H: Citizens will live in dilapidated and unsafe houses
    e. W: Citizens will travel far for water // H: citizens will not have shelter from rain or heat
    f. None of the above *(spontaneous responses, do not read out loud)*

C1.3: Action

1. There are a range of **possible ways to respond** to requests like the ones that these citizens are making. Of the choices you see on the screen, please select the responses

that you think are appropriate, even if it's not something that you yourself directly could do but you would hope another official here at the block level would do so. You can click the responses yourself here on the screen. I won't look at your answers.

0 = Nothing, there's nothing we can do
1 = Listen to them and hear them out
2 = Register or record the complaints
3 = Advise them on how to solve the problem themselves
4 = Advise them on where else to seek help
5 = Investigate and gather more information on the problem
6 = Make a call or contact someone on the citizens' behalf
7 = Try to raise funds to assist with the problem

C1.4: Effort

1. *(Show screen)* Here you can see a scale, ranging from 0 to 10, where 0 is the least and 10 is the maximum. What do you think is the appropriate **level of effort and energy** that your office should put into responding to these citizens' requests, considering the many demands on your resources and time?
2. How **quickly** do you think your office should respond to the request for help? *(Read choices out loud, select one)*
    a. Immediately
    b. After dealing with other complaints – other issues may have been raised first
    c. After dealing with other complaints – other things may be more urgent
    d. Never, there is nothing we can do.
3. I know your office deals with many more issues than just [[water // housing]]. Here on the screen you can see a list of common problems that citizens often bring to the block office – including the [[W: hand pump repair issues // H: housing construction issues]] that you just saw]]

    Imagine that the top row represents 10 hours of your time – let's say 10 hours in a long and busy working day. Each box represents one hour of your time. If you could spend your time working on any issues you want, what would you do? Click here on the screen to show how you would divide up your hours. You can decide to spend all 10 working on one issue (for example, you could click all ten boxes in one row for one issue), or you can spread them out (clicking different boxes in different rows for different issues). You only have 10 hours to spend, and you have to spend all ten.

    But before you answer, please imagine that you are free to work on anything, regardless of your actual job description. I'm not asking about what you are *supposed* to spend your time on. How would you spend your working time if you had total freedom to decide?

(Show screen)

Options on the screen are:

- Residents in a village have not yet received their transfer of funds for PMAY-G and so cannot complete their houses
- Many of the handpumps in a village are broken
- Elderly widows in a village have not yet received their pensions in months
- A groups of women from a nearby village need help running a self-help group
- Residents in a village are trying to receive missing wages for MGNREGS work
- The village access road has washed away
- A teacher assigned to a village primary school has not shown up in weeks
- A village health clinic is without supplies

C2: Vignette experiment

C2.a: Pressure

1. Imagine that you are the BDO or another senior official in the block. How much **pressure** to act do you think you would feel, upon [[seeing the group of people who came to the office // upon seeing the video forwarded on WhatsApp]]?*(1= No pressure at all; 2 = Some pressure; 3 = Extreme pressure)*
2. If people in the **surrounding area** came to know about the problem, and also heard about the actions the residents have taken [[in coming to the block office // in making and sharing their video]], how do you think they would **react**? Of the following options, please select all that apply
    a. They would angry or upset about the problem
    b. They would feel inspired or encouraged by the residents
    c. They probably wouldn't care or worry much about the problem
    d. They would think the residents were likely wasting their time
    e. They probably wouldn't react much at all
3. What about **senior officials**? How would they **react**?
    a. They would angry or upset about the problem
    b. They would feel inspired or encouraged by the residents
    c. They probably wouldn't care or worry much about the problem
    d. They would think the residents were likely wasting their time
    e. They probably wouldn't react much at all

C2.b: Action

1. How **likely** do you think officials in the block office would be to take the following actions? *(Read each out loud, and rank each on scale where 1 = Not likely, 2 = Somewhat likely, 3 = Very likely)*
    a. Send a staff member to look into the problem

b. Call a local contractor or technician or someone else who can assist in solving the problem
c. Call an elected official to try to get their help in solving the problem
d. Attempt to sanction or raise funds to solve the problem

Appendix D: Regressions for treatment effects

Note: No additional control variables were included in these regressions. The treatment interaction centered block indicators is not reported in the regression output when using estimatr's lm_lin() function in R, as this is essentially a reweighting method.

Table D1. Effects of Testimony Treatment on Emotional Reaction

	Index components						
	Emotion Index	Felt sad	Felt angry	Felt frustrated	Named citizens' emotions	Personally knew individuals affected	Named consequences for citizens
Intercept (Control mean)	-0.053	7.595***	5.595***	3.713***	0.936***	0.626***	0.783***
	(0.039)	(0.104)	(0.149)	(0.148)	(0.010)	(0.018)	(0.016)
Testimony Treatment	0.105*	0.557***	0.564**	0.175	0.043***	-0.039	-0.005
	(0.052)	(0.145)	(0.209)	(0.209)	(0.011)	(0.026)	(0.023)
Num.Obs.	1293	1293	1293	1293	1293	1293	1293
R2	0.053	0.036	0.039	0.037	0.040	0.090	0.031

All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators.
+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D2. Effects of Testimony Treatment on Interest in the Problem

	Interest Index	Maintained eye contact	Something stood out	Asked a question
Intercept (Control mean)	-0.067+	0.935***	0.998***	0.292***
	(0.039)	(0.010)	(0.002)	(0.018)
Testimony Treatment	0.132*	0.002	-0.001	0.115***
	(0.064)	(0.013)	(0.003)	(0.026)
Num.Obs.	1293	1293	1293	1293
R2	0.035	0.051	0.015	0.037
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				

Table D3. Effects of Testimony treatment on the hypothetical action.

	Total number of responses	Taking any action
Intercept (Control mean)	2.906***	0.995***
	(0.057)	(0.003)
Testimony Treatment	-0.046	-0.006
	(0.081)	(0.005)
Num.Obs.	1293	1293
R2	0.019	0.013
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001		

Table D4. Effects of Testimony treatment on hypothetical effort taken in response to a video

	Effort Index	Taking high effort action	Effort expended (1-10)	Would respond immediately	Time allocated
Intercept (Control mean)	-0.019	0.712***	8.998***	0.855***	2.542***
	(0.038)	(0.031)	(0.076)	(0.014)	(0.069)
Testimony Treatment	0.036	0.020	0.152	0.007	-0.118
	(0.051)	(0.043)	(0.101)	(0.019)	(0.097)
Num.Obs.	1293	1293	1293	1293	1293
R2	0.131	0.021	0.016	0.027	0.459
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table D5. Treatment effects of digital mobilization vignette on officials' pressure to respond to a problem

	Overall pressure	Citizens-angry	Citizens-inspired	Senior officials-angry	Senior officials-inspired
Intercept (In-person action mean)	1.896***	0.263***	0.790***	0.247***	0.792***
	(0.032)	(0.017)	(0.016)	(0.017)	(0.016)
Digital Mobilization Treatment	0.270***	-0.024	0.031	0.071**	-0.040+
	(0.044)	(0.024)	(0.022)	(0.025)	(0.023)
Num.Obs.	1293	1293	1293	1293	1293
R2	0.079	0.036	0.033	0.041	0.033
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Appendix E: Additional outcomes

Here we present effects for each of the individual hypothetical responses an official can take in response to the videos they see. These are not pre-registered.

Table E1. Treatment effects on individual possible responses in video experiment

	Listen	Register	Advise-solve themselves	Advise-seek help	Investigate	Call someone	Fundraise
Intercept (Control mean)	0.840***	0.439***	0.325***	0.595***	0.441***	0.205***	0.066***
	(0.014)	(0.020)	(0.018)	(0.019)	(0.019)	(0.016)	(0.010)
Testimony Treatment	-0.003	0.029	-0.055*	-0.024	0.027	-0.010	0.007
	(0.020)	(0.028)	(0.025)	(0.027)	(0.028)	(0.022)	(0.014)
Num.Obs.	1287	1287	1287	1287	1287	1287	1287
R2	0.020	0.019	0.037	0.030	0.034	0.023	0.020
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators.							
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

In our pre-analysis plan, we include additional outcomes for both the video and vignette experiment. We report summary statistics and effects on these variables here.

Table E2. Summary statistics for additional pre-specified measures

Dependent variable	Measures	Mean	SD	Video or vignette experiment?
Perceived value of citizen voice	The importance an official assigns within their work to "taking action to help resolve citizens' grievances (1-10)	9.09	1.96	Video

	Would share video with others, including new staff, senior officers, or community members (binary)	0.95	0.21	Video
	The importance an official assigns within their work to "listening to citizens," (1-10)	9.07	1.94	Video
	Whether officials provide phone numbers to receive community-generated video content over WhatsApp (binary)	0.85	0.35	Both
	Express interest in collaboration with through scanning QR code to sign up (binary)	0.50	0.50	Both
Sense of social mission	Felt "motivated-inspired to try to make a positive difference" (on a scale of 0-10)	8.15	2.55	Video
	Whether officials agreed that "it's important to try to go the extra mile whenever we can to help people, even if it means going above and beyond our formal duties" (binary)	0.17	0.37	Video

Table E3. Effects of Testimony Treatment on Perceived Value of Citizen Voice

	Value of Voice Index	Would share video	Importance of listening (1-10)	Importance of taking action	Gave WhatsApp number	Scanned code for collaboration
Intercept (Control mean)	0.001	0.942***	9.139***	9.144***	0.852***	0.495***
	(0.039)	(0.009)	(0.075)	(0.073)	(0.014)	(0.020)
Testimony Treatment	-0.003	0.024*	-0.136	-0.109	0.006	0.017
	(0.056)	(0.012)	(0.108)	(0.107)	(0.019)	(0.028)
Num.Obs.	1293	1293	1293	1293	1293	1293
R2	0.031	0.026	0.022	0.042	0.032	0.030

All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators.
+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table E4: Effects of Testimony Treatment on Sense of Social Mission

	Social Mission Index	Felt motivated	Said going extra mile is important
Intercept (Control mean)	0.005	8.153***	0.167***
	(0.039)	(0.098)	(0.015)
Testimony Treatment	-0.012	-0.014	-0.004
	(0.054)	(0.142)	(0.021)
Num.Obs.	1293	1293	1293
R2	0.031	0.019	0.023
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001			

Table E5. Treatment effects of digital mobilization vignette on behavioral measures of the perceived value of citizen voice

	Gave WhatsApp number	Scanned code for collaboration
Intercept (In-person action mean)	0.842***	0.528***
	(0.014)	(0.020)
Digital Mobilization Treatment	0.026	-0.050+
	(0.019)	(0.028)
Num.Obs.	1293	1293
R2	0.046	0.049
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001		

Appendix F: Video X Vignette interactions

Table E6. Effect of digital mobilization vignette on action, interaction with video type

	Action Index	Send staff	Send contractor	Call official	Fundraise
Intercept (Control mean)	-0.066	2.819***	2.404***	2.308***	2.122***
	(0.059)	(0.025)	(0.042)	(0.042)	(0.048)
Digital Mobilization Treatment	0.143+	0.067*	0.028	0.011	0.122+
	(0.078)	(0.032)	(0.059)	(0.059)	(0.066)
Testimony Video	0.022	-0.008	0.007	0.013	0.037
	(0.078)	(0.035)	(0.058)	(0.058)	(0.065)
Digital Mobilization X Testimony Video	-0.086	-0.001	-0.033	0.004	-0.142
	(0.108)	(0.045)	(0.084)	(0.082)	(0.093)
Num.Obs.	1293	1293	1293	1293	1293
R2	0.046	0.038	0.029	0.033	0.035
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table E7. Effect of digital mobilization vignette on action, conditional on seeing a testimony video

	Action Index	Send staff	Send contractor	Call official	Fundraise
Intercept (Control mean)	-0.035	2.818***	2.395***	2.328***	2.174***
	(0.054)	(0.023)	(0.040)	(0.039)	(0.046)
Digital Mobilization Treatment	0.042	0.054+	0.015	0.004	-0.039
	(0.076)	(0.032)	(0.056)	(0.056)	(0.065)
Num.Obs.	655	655	655	655	655
R2	0.041	0.058	0.101	0.050	0.040
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table E8. Effect of digital mobilization vignette on action, conditional on seeing an information video

	Action Index	Send staff	Send contractor	Call official	Fundraise
Intercept (Control mean)	-0.067	2.823***	2.397***	2.307***	2.120***
	(0.056)	(0.025)	(0.039)	(0.041)	(0.046)
Digital Mobilization Treatment	0.158*	0.066*	0.044	0.022	0.123+
	(0.076)	(0.032)	(0.055)	(0.058)	(0.064)
Num.Obs.	638	638	638	638	638
R2	0.072	0.044	0.146	0.051	0.059
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table E9. Effect of digital mobilization vignette on pressure, interaction with video type

	Overall pressure	Citizens-angry	Citizens-inspired	Politicians-angry	Politicians-inspired
Intercept (Control mean)	1.925***	0.288***	0.750***	0.150**	0.836***
	(0.122)	(0.060)	(0.050)	(0.057)	(0.057)
Digital Mobilization Treatment	0.560***	-0.024	0.112	0.178+	-0.086
	(0.167)	(0.091)	(0.076)	(0.091)	(0.087)
Testimony Video	-0.057	-0.050	0.079	0.190+	-0.088
	(0.229)	(0.112)	(0.092)	(0.110)	(0.110)
Digital Mobilization X Testimony Video	-0.572+	0.000	-0.160	-0.211	0.092
	(0.317)	(0.172)	(0.144)	(0.175)	(0.166)
Num.Obs.	1293	1293	1293	1293	1293
R2	0.079	0.036	0.033	0.041	0.033
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table E10. Effect of digital mobilization vignette on pressure, conditional on seeing a testimony video

	Overall pressure	Citizens-angry	Citizens-inspired	Politicians-angry	Politicians-inspired
Intercept (Control mean)	1.890***	0.297***	0.763***	0.252***	0.787***
	(0.045)	(0.025)	(0.023)	(0.024)	(0.023)
Digital Mobilization Treatment	0.306***	-0.035	0.030	0.070*	-0.034
	(0.061)	(0.035)	(0.032)	(0.035)	(0.033)
Num.Obs.	655	655	655	655	655
R2	0.081	0.035	0.031	0.031	0.031
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

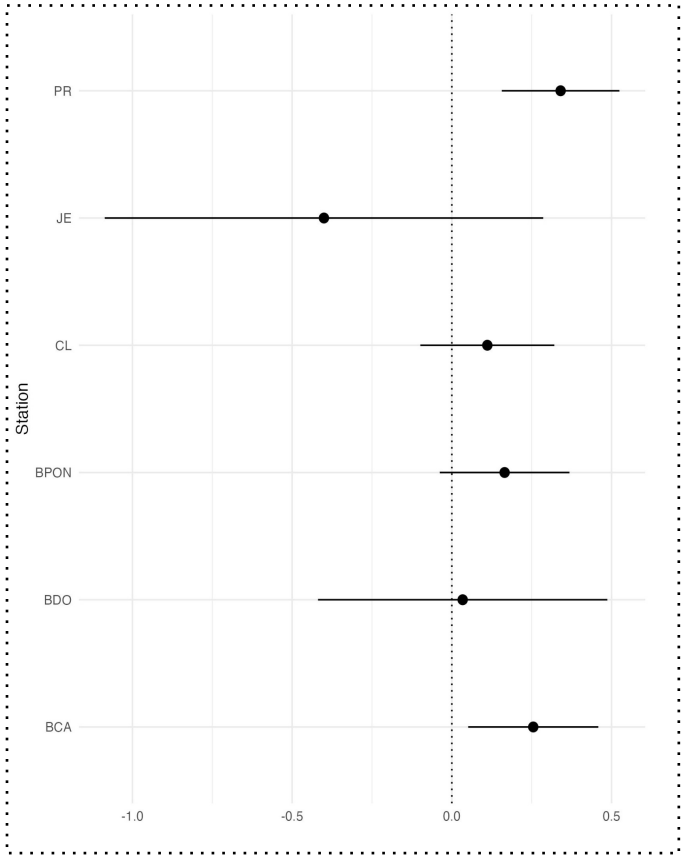
Table E11. Effect of digital mobilization vignette on pressure, conditional on seeing an informational video

	Overall pressure	Citizens-angry	Citizens-inspired	Politicians-angry	Politicians-inspired
Intercept (Control mean)	1.902***	0.229***	0.818***	0.241***	0.796***
	(0.046)	(0.024)	(0.022)	(0.024)	(0.023)
Digital Mobilization Treatment	0.233***	-0.013	0.032	0.071*	-0.045
	(0.062)	(0.033)	(0.030)	(0.035)	(0.033)
Num.Obs.	638	638	638	638	638
R2	0.077	0.030	0.023	0.051	0.036
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Appendix G: Subgroup effects

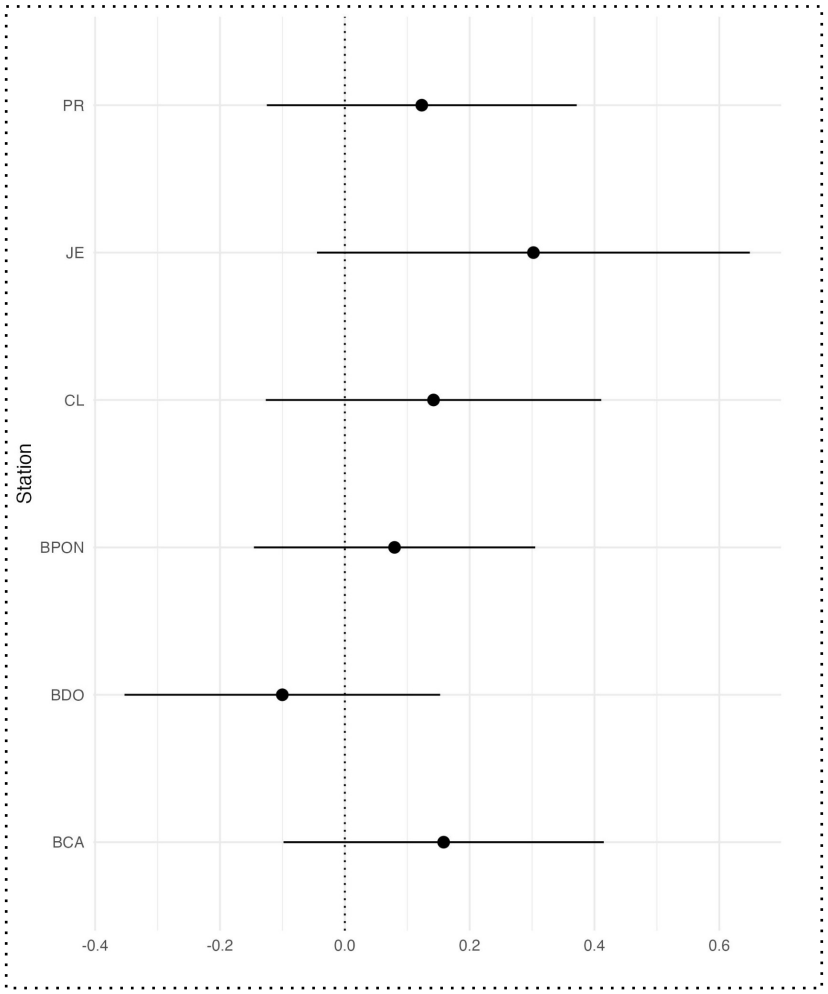
G1: Effects by designation

Figure G1. Effects of Testimony Treatment on Attention Index, subgroup effects by designation



Note: block indicators removed, as blocking was done by station

Figure G2. Effects of Digital Action Treatment on Action Index, subgroup effects by designation



Note: block indicators removed, as blocking was done by station

G2: Male respondents

Table G1. Effects of Testimony Treatment on Emotional Reaction, male respondents

	Felt sad	Felt angry	Felt frustrated	Named citizens' emotions	Personally knew individuals affected	Named consequences for citizens	Emotion Index
Intercept (Control mean)	7.565***	5.623***	3.677***	0.934***	0.619***	0.781***	-0.069+
	(0.110)	(0.156)	(0.157)	(0.010)	(0.020)	(0.017)	(0.041)
Testimony Treatment	0.610***	0.574**	0.188	0.045***	-0.040	-0.005	0.113*
	(0.151)	(0.219)	(0.221)	(0.012)	(0.028)	(0.024)	(0.055)
Num.Obs.	1156	1156	1156	1156	1156	1156	1156
R2	0.042	0.047	0.038	0.053	0.085	0.037	0.059
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

Table G2. Effects of Testimony Treatment on Interest in the Problem, male respondents

	Maintained eye contact	Something stood out	Asked a question	Attention Index
Intercept (Control mean)	0.933***	1.000***	0.296***	-0.042
	(0.010)	(0.000)	(0.019)	(0.033)
Testimony Treatment	0.006	-0.003	0.112***	0.111+
	(0.014)	(0.002)	(0.028)	(0.062)
Num.Obs.	1156	1156	1156	1156
R2	0.062	0.017	0.036	0.041
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				

G3: Non-ST respondents

Table G3. Effects of Testimony Treatment on Emotional Reaction, Non-ST respondents

	Felt sad	Felt angry	Felt frustrated	Named citizens' emotions	Personally knew individuals affected	Named consequences for citizens	Emotion Index
Intercept (Control mean)	7.490***	5.670***	3.699***	0.929***	0.606***	0.793***	-0.074+
	(0.122)	(0.169)	(0.168)	(0.011)	(0.021)	(0.018)	(0.044)
Testimony Treatment	0.556**	0.488*	0.032	0.048***	-0.057+	-0.009	0.072
	(0.171)	(0.242)	(0.240)	(0.013)	(0.030)	(0.026)	(0.059)
Num.Obs.	979	979	979	979	979	979	979
R2	0.041	0.047	0.041	0.050	0.090	0.044	0.057
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

Table G4. Effects of Testimony Treatment on Interest in the Problem, Non-ST respondents

	Maintained eye contact	Something stood out	Asked a question	Attention Index
Intercept (Control mean)	0.927***	0.998***	0.289***	-0.096*
	(0.012)	(0.002)	(0.020)	(0.048)
Testimony Treatment	0.004	0.000	0.104***	0.145*
	(0.016)	(0.003)	(0.030)	(0.070)
Num.Obs.	979	979	979	979
R2	0.056	0.023	0.037	0.043
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				

G4: Non-SC respondents

Table G5. Effects of Testimony Treatment on Emotional Reaction, Non-SC respondents

	Felt sad	Felt angry	Felt frustrated	Named citizens' emotions	Personally knew individuals affected	Named consequences for citizens	Emotion Index
Intercept (Control mean)	7.610***	5.573***	3.706***	0.940***	0.648***	0.786***	-0.025
	(0.110)	(0.161)	(0.161)	(0.010)	(0.020)	(0.017)	(0.042)
Testimony Treatment	0.580***	0.550*	0.249	0.034**	-0.049+	-0.012	0.087
	(0.155)	(0.226)	(0.228)	(0.012)	(0.028)	(0.025)	(0.056)
Num.Obs.	1100	1100	1100	1100	1100	1100	1100
R2	0.036	0.036	0.037	0.031	0.090	0.035	0.051
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

Table G6. Effects of Testimony Treatment on Interest in the Problem, Non-SC respondents

	Maintained eye contact	Something stood out	Asked a question	Attention Index
Intercept (Control mean)	0.930***	0.998***	0.283***	-0.092*
	(0.011)	(0.002)	(0.019)	(0.044)
Testimony Treatment	0.001	-0.002	0.115***	0.125+
	(0.015)	(0.003)	(0.028)	(0.072)
Num.Obs.	1100	1100	1100	1100
R2	0.071	0.017	0.043	0.043
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				

G5: Non-embedded respondents (those who do not live in the block)

Table G7. Effects of Testimony Treatment on Emotional Reaction, non-embedded respondents

	Felt sad	Felt angry	Felt frustrated	Named citizens' emotions	Personally knew individuals affected	Named consequences for citizens	Emotion Index
Intercept (Control mean)	7.427***	5.300***	3.819***	0.935***	0.607***	0.780***	-0.077
	(0.151)	(0.213)	(0.203)	(0.013)	(0.026)	(0.023)	(0.054)
Testimony Treatment	0.804***	0.948**	0.320	0.050**	-0.036	-0.033	0.138+
	(0.207)	(0.299)	(0.295)	(0.015)	(0.037)	(0.033)	(0.075)
Num.Obs.	649	649	649	649	649	649	649
R2	0.078	0.060	0.052	0.055	0.117	0.050	0.069
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

Table G8. Effects of Testimony Treatment on Interest in the Problem, non-embedded respondents

	Maintained eye contact	Something stood out	Asked a question	Attention Index
Intercept (Control mean)	0.942***	1.000***	0.282***	-0.039
	(0.013)	(0.000)	(0.025)	(0.044)
Testimony Treatment	0.001	-0.003	0.135***	0.130
	(0.019)	(0.003)	(0.037)	(0.086)
Num.Obs.	649	649	649	649
R2	0.053	0.025	0.055	0.043
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				

Table G9. Treatment effects of digital mobilization vignette on officials' pressure to respond to a problem, non-embedded respondents

	Overall pressure	Citizens-angry	Citizens-inspired	Senior officials-angry	Senior officials-inspired
Intercept (Control mean)	1.924***	0.263***	0.776***	0.224***	0.804***
	(0.045)	(0.024)	(0.023)	(0.023)	(0.022)
Digital Mobilization Treatment	0.296***	-0.006	0.037	0.069*	-0.027
	(0.060)	(0.034)	(0.032)	(0.035)	(0.032)
Num.Obs.	649	649	649	649	649
R2	0.112	0.076	0.063	0.076	0.055
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table G10. Treatment effects of hearing the digital mobilization vignette on action, non-embedded respondents

	Send staff	Send contractor	Call official	Fundraise	Action Index
Intercept (Control mean)	2.800***	2.412***	2.254***	2.146***	-0.098+
	(0.025)	(0.040)	(0.041)	(0.045)	(0.058)
Digital Mobilization Treatment	0.060+	-0.012	0.049	0.088	0.119
	(0.033)	(0.056)	(0.058)	(0.064)	(0.077)
Num.Obs.	649	649	649	649	649
R2	0.066	0.140	0.068	0.093	0.070
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

G6: Respondents who do not expect to be transferred in the next year

Table G11. Treatment effects of digital mobilization vignette on officials' pressure to respond to a problem, respondents not expecting transfer

	Send staff	Send contractor	Call official	Fundraise	Action Index
Intercept (Control mean)	2.866***	2.309***	2.293***	2.080***	-0.103+
	(0.024)	(0.047)	(0.050)	(0.054)	(0.062)
Digital Mobilization Treatment	-0.004	0.063	0.005	0.148*	0.107
	(0.035)	(0.066)	(0.069)	(0.075)	(0.087)
Num.Obs.	479	479	479	479	479
R2	0.101	0.175	0.102	0.108	0.113
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table G12. Treatment effects of hearing the digital mobilization vignette on action, respondents not expecting transfer

	Overall pressure	Citizens-angry	Citizens-inspired	Senior officials-angry	Senior officials-inspired
Intercept (Control mean)	1.889***	0.258***	0.796***	0.246***	0.800***
	(0.056)	(0.029)	(0.027)	(0.030)	(0.028)
Digital Mobilization Treatment	0.240**	-0.029	0.033	0.050	-0.035
	(0.075)	(0.040)	(0.036)	(0.042)	(0.039)
Num.Obs.	479	479	479	479	479
R2	0.095	0.090	0.078	0.075	0.090
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

G7: Respondents from blocks not aligned with the state-legislature ruling party (JMM)

We placed blocks in ACs by asking District Program Officers (DPO) of MGNREGA. These individuals directly supervise the Block Program Officers of MGNREGA for every block of their district. As such, they have accurate information on all the blocks that fall within their district of posting. To cross-check their data, we approached the District Election Officers who are directly responsible for electoral matters within the district. In certain cases, where the DPOs were not able to provide accurate information about block to AC mapping, two approaches were undertaken, we directly contacted the Block Program Officers of MGNREGA or the Block Development Officer within the blocks for the AC mapping.

Table G13. Treatment effects of digital mobilization vignette on officials' pressure to respond to a problem, respondents from blocks not aligned with the state-legislature ruling party (JMM)

	Overall pressure	Citizens-angry	Citizens-inspired	Senior officials-angry	Senior officials-inspired
Intercept (Control mean)	1.795***	0.243***	0.784***	0.203***	0.811***
	(0.039)	(0.021)	(0.020)	(0.020)	(0.020)
Digital Mobilization Treatment	0.382***	-0.012	0.026	0.116***	-0.055+
	(0.054)	(0.030)	(0.029)	(0.031)	(0.029)
Num.Obs.	807	807	807	807	807
R2	0.117	0.057	0.042	0.052	0.039
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001					

Table G14. Treatment effects of hearing the digital mobilization vignette on action, respondents from blocks not aligned with the state-legislature ruling party (JMM)

	Send staff	Send contractor	Call official	Fundraise	Responsiveness Index
Intercept (Control mean)	2.819***	2.387***	2.281***	2.137***	-0.082+
	(0.021)	(0.035)	(0.035)	(0.041)	(0.047)
Digital Action Treatment	0.042	0.040	0.038	0.049	0.107
	(0.029)	(0.050)	(0.050)	(0.058)	(0.067)
Num.Obs.	807	807	807	807	807
R2	0.077	0.135	0.084	0.069	0.088
All models include heteroskedasticity-consistent (HC2) standard errors. Following Lin (2013) we also include interactions between the treatment indicator and the centered block indicators + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$					

Appendix H: Pre-analysis Plan (filed with OSF, July 2023)

Note: In the pre-analysis plan that follows, the dependent variable called "responsiveness" is referred to as "action" in our paper, and the set of dependent variables called "pressure" are referred to as "reputational concerns".

The pre-analysis plan can be found here:
https://osf.io/gshfa/?view_only=d915eb9bb62e4ebe8808338ac62e5f0f

Appendix I: Research Ethics and Partnership

Our study was conducted under the *University of [Redacted] Institutional Review Board (IRB) protocol number [Redacted].* Building from and extending beyond that protocol,[1] this Appendix discusses ethical considerations in our research design and implementation. We begin by recognizing that our roles as researchers are never fully neutral. In what follows, we discuss our positionality as researchers; our research partnerships; and the guiding principles and specific protocols we followed to minimize risk and harm during our study.

Composition and positionality of the research team

We, the authors, are researchers of both Indian and non-Indian origin working at universities based in the global north. It follows that we are working from positions of relative power relative to the participants in the research, who were mostly officers in under-resourced local bureaucracies, or residents in local communities. We are, in addition, relative outsiders to the contexts we engage – despite each PI having spent well over a decade engaged in field research in India. We acknowledge that this necessarily limits our understanding of local dynamics that can shape the course of research.

[1] On the need to extend beyond IRB protocols, see: K. M. Blee, A. Currier, Ethics beyond the IRB: An introductory essay. *Qual. Sociol.* 34, 401–413 (2011). doi:10.1007/s11133-011-9195-z.

Cognizant of these limitations, our research was shaped by the insights and guidance of our local partners, including those within both civil society organizations (Video Volunteers and their network of citizen journalists) and in government (officials within the state Government of Jharkhand). These local partnerships enabled us to ground global best practices on research ethics in specific local context, with attention to ground realities and to local social, political, and economic constraints.

Our collaboration with Video Volunteers (videovolunteers.org) is now in its eighth year. Video Volunteers (VV) is an NGO based in India that coordinates a national network of community journalists (referred to as "Community Correspondents," or CCs). VV offers training to these CCs who, in turn, document deficiencies in public service delivery in their home communities. They do so by making videos, which they screen in the community and to local officials as part of an advocacy process. Our partnership with VV is an invited one, initiated by the NGO directors in 2017 as they sought academic partnerships to deepen their understanding of their organization's impact and the broader governance dynamics that shape their network. This laid the groundwork for our partnership, which included the co-design of all aspects of the research. The design of the study program was, in this sense, co-produced; rather than an external intervention imposed by researchers, it was built with careful attention to existing conditions, constraints, practices, and past experiences of Video Volunteers and their network. These close engagements enabled us to develop contextually grounded insights that helped us to better understand the risks and benefits of the research, as well as to interpret our findings.

Our collaboration with the Government of Jharkhand is now in its third year. In this case, we initiated the invitation, writing directly to senior officials in Jharkhand administrative service including those overseeing portfolios related to rural development and water and sanitation. To build our relationship and ground our research design in a manner that reflects the reality of Jharkhand's local governance structures, the PIs made repeated visits to meet with those officials. We discussed all aspects of the research design and survey development, and presented drafts of the instrument to a working group of administrators called together by a senior official. We relied closely on the guidance of these officials, including creating a WhatsApp group where we posted regular updates and could ask questions or seek advice when in the field. PIs also held regular zoom calls with groups of local administrators at the district and block levels during the course of our research, to explain the objectives of the research and to answer their questions about our presence and aims.

Beyond the PIs, our research team included Research Associates. We worked most closely with two RAs who were trained in qualitative research, who were charged with visits to both communities and to administrative offices. The decision to work with these RAs was motivated by methodological, ethical, and practical constraints. While PIs personally made site visits to many local communities (including meeting with and accompanying CC), and also made preliminary visits to a number of local administrative offices, we became concerned that our presence in those government offices, given our discernable status as international researchers, might shape dynamics and responses and could inadvertently bring pressure to bear on staff within the station. Working with local RAs (one female, one male) who were both fluent in Hindi, and who were identifiably more junior than the PIs, enabled us to have a less obtrusive presence as a research team.

Our ethical considerations also necessarily extended to the conduct and positionality of our RAs, as well as their own safety, wellbeing, and respect in the field and within our research team. PIs personally trained the RAs in field methods, including lengthy discussions of ethics protocols, including the importance of informed consent, privacy, confidentiality, and sensitivity to workplace and gender dynamics. RAs were also CITI certified. Beyond this, the PIs worked in close contact with RAs. We discussed their field experiences in weekly phone calls, which enabled us not only to process what we were learning but to also stay attuned to ethical dynamics during the RAs field visits. RAs clearly announced their visits and presence, and clearly explained their roles as researchers and members of our team.

Our survey was carried out by Across Research and Communications (ACROSS), a professional survey firm with close to a decade of experience in India. PIs worked closely with the directors of ACROSS to develop our survey instrument and protocols, and personally trained all enumerators at an in-person training. Our senior research associate then accompanied the survey team for the entirety of its implementation. This allowed us to develop a grounded view of the conditions under which the survey was carried out, and also enabled us to offer more direct support to the survey team.

Video experiments and ethics

The experimental component of our research – embedding video experiments in the survey – was designed with close attention to ethical considerations in conducting experiments, which requires consideration of the politics of intervention and the potential for unintended consequences.

Presenting video footage could present a number of concerns if the individuals in the videos are identifiable and/or if they prompted officials to change their behavior. With regard to the first issue, while our videos drew on real footage of real people, we ensured that none of those featured in the videos were from the same blocks where the survey was being carried out. Blocks are large enough (with average populations of 150,000, covering large geographical areas) that it is highly improbable that officials would recognize individuals from outside their own catchments. In addition, the video footage was drawn from a public archive of videos produced by Video Volunteers. All footage was therefore already in the public domain, and all individuals featured had previously consented to be in the videos at the time that the Community Correspondents filmed them.

With regard to the second issue of whether seeing the videos could alter bureaucrat behavior, the videos were all presented in the context of a set of *hypothetical* scenarios. Officials were asked to view the video, and were told that it included footage from "not here in your area, but in another block." They were then asked to "imagine - just for the sake of example - that the people from the video live here in your block, and that they are requesting help from your office. This, in addition to the fact that the places and people in the video were very likely unknown to the officials, makes it highly unlikely that viewing the footage would provoke real (as opposed to hypothetical) action by officials.

Protocols and practices

The participants in our research include local officials and citizens (community residents and Community Correspondents). Our data sources, drawing from these participants, include:

1. Qualitative interviews and process tracing with Community Correspondents – carried out in person and by phone.
2. Qualitative interviews with block and district officials – carried out in person.
3. A survey of block officials, carried out in person, with embedded video and vignette experiments.

Our practices were guided by the principles of respect for persons (recognizing the autonomy of individuals in deciding whether to participate in research); of do no harm, including concerns over safety, privacy, confidentiality, trauma, and stigma; and of beneficence – that is, the maximization and distribution of the benefits of the research. The following summarizes our

practices laid out in University of [Redacted] Institutional Review Board (IRB) protocol number [Redacted].

Informed Consent

A key concern is whether respondents can fully consent to participation in the study in an informed fashion. Interviews with CCs were carried out in their homes or in other places of their choosing, while interviews and surveys of officials were carried out in their workplaces. All followed strict oral informed consent procedures delineated in our IRB protocol. Survey enumerators and interviewers were trained to read-out consent scripts in the local language of the respondents. The consent scripts explained the aims of the research, its independence from any government agency, as well as from Video Volunteers or any other NGO, and the potential risks and benefits of participation. For the official survey and interviews with officials, the consent scripts explained they were not obligated to participate, that participation in the study would have no bearing on their job, and that their decision on whether to participate as well as responses to questions would not be shared with their supervisors. Surveys and interviews were conducted only after obtaining and documenting verbal consent from respondents.

Safety and other risks

The safety and comfort of research participants, including both respondents, enumerators, and research associates, was our primary concern in all stages of data collection. Survey supervisors, enumerators, and research associates were also trained on a series of safety protocols to ensure the safety of the field team.

For Community Correspondents and community members, who were asked about their opinions of and contact with government officials, there could be a potential risk of backlash from officials if their participation in the study, as well as their responses, were not kept private and confidential. To mitigate this risk, we ensured that residents and officials were interviewed in different blocks. We concentrated our qualitative research with CCs in six blocks that were then dropped from the officials' survey sample. We also, as described below, followed strict protocols for preserving the anonymity and confidentiality of all responses, including not collecting or redacting any personally identifying information.

For officials participating in the research, the primary risks involved were related to potentially being overheard by co-workers or supervisors. To minimize the risk of recrimination, we ensured that we did not ask questions that might make officials vulnerable, for example questions related to corruption/bribery; questions related to performance/opinions of supervisors/other

police superiors; or questions related to workplace harassment. We also used end-to-end data management protocols to minimize the risk of breach of confidentiality (described below).

Privacy and confidentiality

Survey enumerators and interviewers for both surveys and for qualitative research followed procedures, laid out in the IRB protocol, to ensure respondents' privacy and confidentiality.

All enumerators were required to sign a data confidentiality agreement and trained to engage appropriately with subjects. Enumerators collected information on password-protected electronic devices (rather than paper survey forms). These data were uploaded to a password-protected server located behind a locked door to which only the Principal Investigators and Research Associates had access.

We also ensured that no data can be linked to identified administrative offices, and all individual level data were stripped of personally identifying information (PII). In most instances, no PII was collected. Where PII was necessary (such as phone numbers, which respondents could volunteer to provide to receive follow up information), we stored PII and non-PII data separately, using encryption software.