My Way and the Highway:

Embedded Bureaucrats and Bargaining Over Land for Infrastructure

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Abstract

Infrastructure is critical for economic development, but states often face vigorous opposition to land acquisition for infrastructure from landowners. Intermediaries, such as bureaucrats embedded in local communities, could mediate between state and society, but they may also extract resources for citizens thereby increasing the state's costs. I argue that when the state can offer rent-seeking opportunities, embedded bureaucrats intervene on behalf of the state. Using a difference-in-differences design, I demonstrate that embedded bureaucrats decrease observed opposition by 9-12 percent. I test three possible mechanisms for their effectiveness: reduction in agency costs, improved responsiveness to the community, and lowering the costs of information gathering. I find the most evidence for the agency cost explanation. Because politicians can punish embedded bureaucrats informally, bureaucrats are more willing to coerce landowners. The paper, therefore, makes explicit the conditions under which intermediaries between state and society intervene on behalf of the state and enforce bargains with citizens.

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1 Introduction

Efficiently-built infrastructure is key for economic development (Donaldson, 2018; Acemoglu, Moscona, and Robinson, 2016; Rogowski, Gerring, Maguire, and Cojocaru, 2021). Yet, infrastructure investment is declining, with the global infrastructure deficit set to reach $15 trillion by 2040 (OECD, 2021). Although scholars have shown that political incentives often prove to be an obstacle (Keefer and Khemani, 2009; Bohlken, 2018), even those governments that are willing to invest face roadblocks. A common, but overlooked, problem is conflict between the state and landowners over land acquisition. Opposition to infrastructure projects has particularly high stakes in developing countries, where land remains the main asset in rural areas, with about 1.5 billion smallholders relying on land for food and livelihood (FAO, 2013). Claims that conflict over land hinders infrastructure implementation, however, are theoretically puzzling because prior explanations of state-led resource extraction fail to predict resistance.

This paper addresses this puzzle in two steps. First, I examine whether we should expect land acquisition to cause conflict between the state and landowners. A vast literature argues that the social contract rests on citizens relinquishing resources and, in exchange, the state delivering services.[1] These works by-and-large focus on taxation and argue that the level of taxation is explained by state capacity (Mann, 1984; Levi, 1988; Tilly, 1992). Land acquisition differs markedly in that, unlike taxation, it is not a repeated interaction. Resource extraction in the form of taxation offers the state and citizens an opportunity to build a reputation for trustworthiness due to the threat of punishment for infractions *in the future*. This is entirely absent with resource extraction involving a *one-time bargain*. If state capacity determines the outcome of *one-time bargains* like land acquisition, one would expect that the state either does not acquire land at all or only acquires it in places where it does not

[1]On the emergence of the social contract, see Hobbes (1968), Rousseau (1762), Locke (1824), Olson (1993). On bargaining between citizens and the state, see Schumpeter (1991), Levi (1988), Brewer (2002), Timmons (2005), Tilly (1992), Weigel (2020), Grossman, Phillips, and Rosenzweig (2018).

expect resistance from citizens. In contrast, I argue that land acquisition will, on average, increase resistance to the state. This is because neither the state nor citizens can commit to co-operating without an opportunity to build a reputation for trustworthiness.[2]

Second, the paper investigates whether the state can reduce citizens' resistance. States can use a combination of coercion and selective incentives to enforce bargains with citizens, but in prior works, it is often under-specified how states overcome the transaction costs of gathering information, negotiating with citizens, or monitoring the repressive apparatus (Olson, 1965). While most of the literature treats concepts such as "state" and "society" as distinct and unitary, in reality, states often rely on intermediaries who can mediate between different parts of the state or between state and society.[3] Bureaucrats are one type of intermediary. Although they belong to the state, they are often embedded in various social and political networks as well. This is both an opportunity and a challenge for the state. Bureaucrats' embeddedness allows them to informally collect information about citizens (Mattingly, 2020; Magiya, 2020; Balan, Bergeron, Tourek, and Weigel, 2020). However, embeddedness can also motivate bureaucrats to carry out citizens' bidding instead of the state's (Lipsky, 2010). A key puzzle is whether and how the state can provide incentives to its embedded bureaucrats to enforce bargains. Building on the literature on principal-agent problems, I posit that embedded bureaucrats will enforce citizens' compliance for the state when the state can offer rent-seeking opportunities.

To test this argument, I focus on the case of land acquisition in India. India has the highest incidence of land acquisition conflict in the world, affecting 7.8 million people and threatening around $270 billion investment in infrastructure (Daksh, 2016).[4] Conflict over land takings also overburdens courts: these lawsuits constitute one of the largest number

[2]A separate paper within my dissertation examines how variation in landowners' ability to commit explains variation in conflict.

[3]For works that focus on intermediaries between state and society, see Barkey (1994); Boone (2003); Tsai (2007); Bhavnani and Lee (2018); Brulé (2020); Mattingly (2016); Stokes (2007).

[4]See LandConflictWatch (2022) for details.

of cases in all levels of the judiciary (Wahi, 2017). Additionally, building infrastructure is important for India's economic growth and job creation, both of which are necessary to lift more than 200 million people out of poverty. This makes India an important case study from a policy perspective. At the same time, land acquisition implementation is decentralized in India, which allows for studying how bureaucrats' embeddedness shapes the state's capacity for managing noncompliance.

Because there is no administrative data on the incidence and extent of land takings, I construct a dataset by collecting information on 20,000 infrastructure projects, political violence, and bureaucrats' career trajectories covering all of India between 2016 and 2020.[5] In addition, I incorporate land acquisition litigation data and a nationally-representative panel survey of households, the Indian Human Development Survey (IHDS). I combine insights from the quantitative data with information from over 100 interviews and focus group discussions with landowners, bureaucrats, activists, and lawyers conducted during seven months of fieldwork.

The first result the paper delivers is that protests and riots increase once infrastructure projects are announced. Using a difference-in-differences design, I find that projects increase the risk of protests or riots by 23-30 percent. Contrary to state capacity models, this finding demonstrates that one-shot bargains between state and society increase conflict because neither side can commit to cooperating.

The second result shows that embedded bureaucrats lower the transaction costs of land bargains when the state can offer rent-seeking opportunities. To causally identify the impact of embedded bureaucrats, I exploit the quasi-random assignment of bureaucrats in the Indian Administrative System (IAS) to their home states (domiciles). Domiciled bureaucrats, when present, erase the risk of land acquisition-induced protests and riots almost entirely and lower the threat of stalled or abandoned projects. In line with my theory, this result is driven by private sector projects, which offer more lucrative rent-seeking opportunities.

[5]I focus on this period because protest data at a granular level for India only exists since 2016.

Building on the literature on bureaucratic embeddedness, I unpack what enables domiciled bureaucrats to manage resistance. I develop and test three possible explanations. First, embeddedness may reduce *agency costs*—the time and effort politicians have to expend to ensure bureaucrats comply with their orders—because shared networks between politicians and embedded bureaucrats and between embedded bureaucrats and other members of the coercive apparatus facilitate monitoring and sanctioning. I find strong evidence in support of this mechanism. If politicians' ability to monitor and informally sanction bureaucrats matters, embedded bureaucrats' impact on protests should differ by the types of incentives politicians face. I use a close-election regression discontinuity design to show that embedded bureaucrats only lower resistance when a project is based in the electoral district of a politician who belongs to the government and has incentives to reduce public opposition to the government. In contrast, embedded bureaucrats do not lower opposition when the project falls in the district of an opposition politician because these politicians can benefit from protests against the government. Evidence from interviews and the household survey demonstrate that bureaucrats primarily rely on coercion to reduce resistance.

Second, I test whether embedded bureaucrats lower conflict, because the threat of informal sanctions from the community makes them *more responsive to landowners* (Tsai, 2007; Bhavnani and Lee, 2018). This may result in embedded bureaucrats providing better deals to landowners in terms of employment or compensation. I do not find evidence in support of this mechanism. In fact, landowners are more likely to report owning fewer assets and being poor, when embedded bureaucrats oversee project implementation.

Third, I investigate whether embedded bureaucrats lower the costs of gathering information (Balan et al., 2020). If so, embedded bureaucrats may target selective incentives or coercion to landowners more effectively. I find weaker support for this mechanism in the data. There is no evidence that embedded bureaucrats provide side payments to landowners. However, the results imply embeddedness matters for targeting coercion: landowners who have bureaucrats in their networks are more likely to experience harassment.

This research makes several theoretical and empirical contributions. First, it extends the literature on state capacity since building infrastructure is not only important for economic development, but also for increasing the state's control over society (Scott, 2008; Herbst, 2014). In particular, the paper contributes to a growing literature on the domestic determinants of investments in state capacity (Karaman and Pamuk, 2013; Garfias, 2018; Slater, 2010; Mares and Queralt, 2015; Charnysh, 2019; Wang, 2022). Unlike most research in this vein, this paper investigates not why investments in state capacity occur, but when these efforts are likely to be successful. This is important to distinguish because a different set of causal factors may underlie whether state building emerges and whether it succeeds (Soifer, 2015).

I also build on the literature on embedded bureaucrats and state-society relations by making explicit the conditions under which embedded bureaucrats intervene on behalf of the state instead of citizens. Theories of state-society relations suggest that communities can use their noncompliance with the state's policies to bargain for more resources (Levi, 1988; Grossman et al., 2018). In contrast, when the state can rely on intermediaries, I show that communities lose the power to bargain with the state. Furthermore, the paper also extends prior work on how bureaucrats' embeddedness impacts corruption, coercion, and public goods delivery (Xu, Bertrand, and Burgess, 2018; Bhavnani and Lee, 2018; Tsai, 2007; Hassan, 2020). The paper shows that bureaucrats are most likely to coerce when politicians can informally punish and monitor them and when embedded bureaucrats have rent-seeking opportunities.

Importantly, the paper marshals new data for the study of land acquisition. While there have been many new innovative studies on land takings and conflict, most of this research relies on case studies and surveys, which often limit the generalizability of findings (Boone, 2014; Levien, 2018).[6] By combining large-scale administrative datasets, surveys, and interviews, this project opens up land acquisition conflict to quantitative methods of

[6]See Holland (ming) and Mattingly (2016) for other quantitative studies of land acquisition conflict.

inquiry, broadening the literature on the politics of land and natural resources (Albertus, 2015; Christensen, 2019; Christensen, Hartman, and Samii, 2021; Steinberg, 2019). This is critical for generating macro-level insights on land acquisition conflict that has the potential to improve policy on infrastructure and land administration.

2 State-Society Bargaining Over Land

This section discusses the problem of acquiring land to provide public goods. The first section discusses why land acquisition may be more prone to bargaining failure than other forms of resource extraction such as taxation. The second section reviews the strategies the state can use to improve compliance among landowners.

2.1 How State-Society Bargains Unravel

This paper investigates how states resolve the problem of taking highly valued resources from a few citizens to provide public goods. Literature on state-society relations suggests that the social contract is a quid-pro-quo between state and society. Citizens agree to give up resources and in exchange the state provides services. Citizens' dislike for paying taxes puts pressure on the state: if the state does not live up to its bargain, in the future citizens will stop providing resources. However, most of this work has focused on revenue extraction, a repeated interaction between state and society. In case of taxation, both sides can hold each other accountable by the threat of punishment in future periods.

Prior works on state extraction suggest that state capacity (and citizens' bargaining power) is one of the primary determinants of how much the state can extract (Levi, 1988; Schumpeter, 1991; Timmons, 2005). If so, in case of land acquisition we would expect the state with a given level of capacity to acquire as much land as it can and no more. A very low-capacity state would not initiate any land acquisition, as it would expect to be stopped by landowners. Therefore, if state capacity explains the state's ability to acquire

land, we would not expect to see any conflict between the state and landowners. However, simply because a state has the technical capacity to acquire land, citizens will not necessarily cooperate.

Because land acquisition is a one-shot interaction, citizens cannot hold the state accountable, if it reneges on its promises. In most countries, eminent domain legislation permits the state to acquire private property, but the state has to provide fair compensation. Citizens, however, may have a higher value for land than the pre-determined compensation. While the state may agree to provide additional compensation in the form of jobs or public goods to landowners who cede their land, landowners give up any bargaining power with their land. Therefore, state promises are not credible. Landowners, on the other hand, can hold up projects by remaining on their land or blocking roads and can use protest to extract resources from the state. Thus, landowners cannot promise to remain compliant once the state has delivered additional compensation: they could continue their protest to extract even more. Commitment problems arise on both sides, which could make it more difficult for the state and citizens to conclude bargains.[7]

2.2 Strategies for Improving Compliance

When faced with landowners' noncompliance, the state may pursue different strategies to improve compliance. Relying on the state-society relations literature, I discuss two of these strategies: coercion and selective inducements.[8] Next, I discuss challenges for each of these and under what conditions the state is most likely to overcome them.

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[7]Two other chapters of the dissertation tests how the seriousness of commitment problems shapes variation in conflict. The first one uses exogenous variation in citizens' collective action capacity to study how it leads to increased conflict. The second one examines whether land record digitization programs can make it easier for the state to commit.

[8]Levi (1988) offers other strategies that the state can use to improve compliance such as creating norms of cooperation or establishing institutions that help build the state's credibility. I do not discuss these strategies, because most of them rely on repeated interactions between citizens and the state. While these strategies may be relevant for the extraction of other types of resources such as taxes, they are less likely to matter in case of land acquisition, which tends to be a one-shot interaction.

Coercion To respond to non-compliance, the state can mobilize its repressive capacity to coerce citizens into compliance. States have historically responded to international competitors and internal security risks by mobilizing manpower and exercising coercion (Tilly, 1992; Brewer, 2002; Slater, 2010; Queralt, 2019; Karaman and Pamuk, 2013; Blaydes and Paik, 2016; Gurr, 1988). Analyses of why citizens comply with the state's policy also cite coercion as an important factor (Levi, 1988; Olson, 1965). However, many argue that state elites prioritize other strategies to coercion because of its costs. Coercion requires significant investments in monitoring non-compliers and it can be damaging to the reputation of the state, especially in democracies.

More recent work has also focused on agency problems that can increase the costs of coercion. Levi (1988) defines agency costs as the costs associated with monitoring bureaucrats and discouraging shirking. Agency costs of coercion are high when ruling elites prefer to implement coercion, but those in charge of the coercive apparatus—police, or military—have different preferences or incentives (Tyson, 2018). For example, street-level bureaucrats who regularly interact with the community they serve tend to be more responsive to community needs and are less likely to follow central state directives (Lipsky, 2010). Bureaucrats who have ethnic or kinship ties to the local community may also face informal sanctions if they exercise too much coercion on co-ethnics (Hassan, 2020). The state, therefore, needs to lower agency costs to effectively coerce citizens.

Selective Incentives Since coercion is costly, states often encourage compliance by providing selective incentives to (potential) noncompliers (Levi, 1988; Olson, 1965). Grossman et al. (2018), for example, show that when Nigerian communities refused to get their children vaccinated during a polio vaccination campaign, the state made other health services available to citizens. Once other services were in place, citizens were willing to comply with the vaccination campaign.

The problem with selective incentives is that during one-shot interactions, citizens may

refuse side payments if they do not trust the state (Levi, 1997). Distrust could be the result of prior repression or a poor record of service delivery. Low trust in the state's ability to deliver services, in turn, increases the transaction costs of bargaining because the state has to expend effort to convince citizens that it will not renege on its promises.

A second potential issue for using selective incentives is the cost of gathering information. To strike a bargain, the state must know citizens' preferences and who can be given side payments. This can be challenging when government records are incomplete, there are language barriers, or the population is otherwise "illegible" to the state (Scott, 2008; Lee and Zhang, 2017). Where institutions exist to overcome transaction costs associated with collecting information, the state has a better chance of successfully providing selective incentives to citizens.

All in all, both coercion and selective incentives have distinct transaction costs, creating barriers to implementation. When is the state most likely to overcome these transaction costs and improve compliance? Prior literature has conceptualized the state's capacity to enforce citizens' compliance as even throughout the territory of the state and slow to change (Evans and Rauch, 1999). Others have more recently recognized that the state's capacity for enforcement can vary with how much the state can penetrate society by relying on intermediaries (Kim, 2020; Hassan, 2020; Boone, 2003).

2.3 The Problem of Embedded Bureaucrats

Embedded bureaucrats are one kind of intermediary on which states can rely. Political scientists have used the concept of bureaucratic embeddedness to refer to social relationships that influence bureaucratic decision-making (Pepinsky, Pierskalla, and Sacks, 2017). Because of these social ties, embedded bureaucrats have different sets of incentives and skills from their non-embedded colleagues.

2.3.1 Embedded Bureaucrats' Skills & Incentives

Responsiveness to community First, social ties and familiarity between bureaucrats and communities can improve trust and evaluations of the state (Haim, Nanes, and Davidson, 2021; Karim, 2020). Communities can use the threat of informal social sanctions and ostracization to motivate bureaucrats. As a consequence, when bureaucrats have social ties to the local community, they are more likely to provide public goods and serve locals' interests (Tsai, 2007; Bhavnani and Lee, 2018; Hassan, 2020).

Agency costs Second, embeddedness can lower agency costs, improving cooperation between bureaucrats and politicians. Institutions and technologies, however, that reduce the cost of monitoring and enforcement are successful in motivating bureaucrats to implement policies (Olken and Pande 2012; Kiser and Kane 2001).[9]

Embeddedness may function informally as such an institution in two ways. First, politicians may be better able to monitor and sanction embedded bureaucrats. Especially in patronage democracies, politicians can provide invaluable support in accessing jobs, promotions, education, health care, and police (Chandra, 2007). But politicians can create obstacles to accessing these services as well. Because embedded bureaucrats have family, friends, and kinship ties in the communities they serve, they and their families are more at risk of reprisals from politicians.[10] Moreover, shared kinship or social ties may facilitate politicians' monitoring of bureaucrats by lowering the costs of gathering information about bureaucrats' shirking. Second, embedded bureaucrats can have more control over the working of other bureaucrats because they can also more easily monitor and sanction shirking through their networks (Bozcaga, 2020). Together, this implies that politicians have lower

[9]Some studies also demonstrate that monitoring depresses bureaucratic productivity (Rasul & Rogger 2015, 2016) and increases government waste and corruption (Bandiera, Prat, and Valletti, 2009; Brierley, 2020).

[10]Bureaucrats at higher levels of administration who work closely with their political principals are more at risk of such backlash. While street-level bureaucrats with multiple layers of hierarchy between themselves and politicians may find it easier to avoid detection and conceal their actions, higher-level bureaucrats are less likely to do so.

agency costs when working with embedded bureaucrats.

Lowering the Costs of Gathering Information Another mechanism by which embedded bureaucrats improve policy implementation is by lowering the costs of obtaining information. An important obstacle to governance and information gathering in multi-ethnic polities is linguistic barriers (Scott, 1998; Zhang and Lee, 2020). Embedded bureaucrats can make a diverse population "legible" to the state when they speak the same language (Magiya, 2020). Furthermore, embedded bureaucrats can penetrate local society because they share social networks with citizens. Networks facilitate the flow of information (Habyarimana, Humphreys, Posner, and Weinstein, 2009; Larson, Nagler, Ronen, and Tucker, 2019). With lower costs of finding information about citizens, embedded bureaucrats can increase compliance because they have to spend less effort on monitoring and enforcement (Balan et al., 2020).

2.3.2 Cooperation with the State

Embedded bureaucrats present a challenge and an opportunity to the state. On the one hand, embedded bureaucrats can lower the transaction costs associated with bargaining with citizens, because of their ties to the community. On the other hand, embedded bureaucrats' ties to communities motivate them to work for citizens *even at the cost of ignoring the state's directives* (Lipsky, 2010). The state, hence, has to motivate embedded bureaucrats to work for the state and not citizens. One possibility is that the state "shuffles" bureaucrats so that citizens' and the state's goals are aligned (Hassan, 2020). Another is the provision of rent-seeking opportunities, which can motivate bureaucrats to carry out the state's bidding. Balan et al. (2020), for example, show that Congolese embedded bureaucrats used their knowledge about the population to extract more taxes than non-embedded bureaucrats, but this resulted in increased corruption. Other works also suggest that embedded bureaucrats are more likely to extract rents, even when they provide more services (Xu et al., 2018;

Bhavnani and Lee, 2018). Therefore, when the state can provide rent-seeking opportunities, embedded bureaucrats should be more likely to cooperate with the state.

3 Context: Land Acquisition in India

This section reviews the evolution of opposition to land acquisition in India as well as the role and incentives of key actors: landowners, politicians, and bureaucrats. I discuss landowners' reasons for protest. I describe how politicians' need for campaign funding drives rent-seeking around private sector projects and create incentives for lowering protest for politicians who are part of the governing coalition. Lastly, I demonstrate that bureaucrats face a dilemma of resolving land acquisition conflict. While their professional incentives dictate that they have to implement projects, bureaucrats' limited resources and fear of corruption allegations may lead them to prefer limited action.

3.1 Infrastructure Projects and Land Acquisition

While conflict around eminent domain is common around the world, resistance to land acquisition is highly salient in India, which has the highest incidence of such conflicts according to data by the Environmental Justice Atlas (Temper, Del Bene, and Martinez-Alier, 2015). Opposition to infrastructure projects has been so prevalent that the national media have termed the conflict India's "land wars" (Levien, 2018). Estimates on land conflict suggest that currently there are 7.8 million affected people and around USD 270 billion at risk because of disputes. Furthermore, land disputes overwhelm courts at every level, constituting one of the largest set of cases in absolute numbers (Wahi, 2017).

Historically, however, India saw limited opposition to land acquisition. This changed when market liberalization reforms contributed to rising land prices and better access to information (Chakravorty, 2013). Today, the Land Acquisition Act (LAA) of 2013, which replaced the 1894 colonial eminent domain legislation, mandates that the state can acquire

land for public purpose when it provides just compensation and follows due procedure. Anecdotally, opposition to land takings started to rise following market reforms in 1991, constituting a major obstacle for projects (Jenkins, Kennedy, and Mukhopadhyay, 2014). The state started to acquire land not only for projects with national or state-level importance such as highways, defense, or energy projects, but also for private sector initiatives such as office parks, factories, or special economic zones. At this time, land prices increased due to the rush of capital to the country and landowners had more information about prices and their rights, because of improved access to news media and civil society.

3.2 Landowners' Concerns During Land Acquisition

Insufficient compensation has been landowners' main grievance during land acquisition (Chakravorty, 2013; Wahi, 2017). Since India's economic growth has not been accompanied by job growth, landownership constitutes a safety net and a respectable source of income for the majority of rural Indians.[11] Concerns about compensation have continued even though the LAA 2013 mandates two times the market price in urban areas and four times the market price in rural areas as compensation for acquisition (Levien, 2013). However, landowners have raised concerns about the state's manipulation of compensation by using the ready reckoner rate as the basis of compensation rather than the market price, resulting in much lower payments.[12]

Landowners try to block projects in a variety of ways to pressure the government to increase compensation rates. The most observable forms are protests, riots, roadblocks, and rallies. However, landowners rely on a combination of strategies. For example, some landowners have succeeded in improving compensation rates through the courts, but litigation remains a prohibitively expensive and time-consuming procedure for most (Wahi,

[11]During the first two years of the Covid-19 pandemic, agriculture was the only sector that registered job growth as many employed in the urban informal sectors returned to family landholdings.

[12]The ready reckoner rate—also known as circle rate, jantri rate, government rate, or collector rate—is the minimum price at which property sales can be registered in an area.

2017). In addition, landowners often combine protests with lobbying politicians and bureaucrats and using traditional and social media to create a wider reach for their cause (Levien, 2013).

3.3 Politicians' Role and Interest in Infrastructure

Although politicians do not play a formal role in infrastructure project implementation, they initiate projects and have an electoral interest in project completion. Because the subject of "land" comes under the responsibility of federal states in India, it is typically state governments that set rules for land acquisition as well. Furthermore, state governments have the authority to promote and transfer bureaucrats who are in charge of land acquisition, expanding politicians' influence over the process.

State-level politicians in India are called Members of Legislative Assembly (MLAs). MLAs are elected from typically competitive single-member districts for five-year terms. MLAs face stiff re-election campaigns with high anti-incumbency (Uppal, 2009). Politicians' incentives around infrastructure projects and land acquisition differ by whether a politician is part of a governing coalition and whether the project is a public or private sector project. Politicians are interested in infrastructure projects because they can use them to generate political support.

Elections and Campaign Funding Infrastructure projects are useful for re-election in two ways. First, infrastructure projects are often popular with electorates and can be used to reward supporters (Keefer and Khemani, 2009). However, claiming credit for such projects is difficult because completion often spans multiple years and because multiple politicians may have the authority to initiate these projects (Gulzar and Pasquale, 2017). Second, infrastructure projects generate an electoral advantage through illicit funding for political campaigns. Studies show that close to 50 percent of MLA's campaign funding comes from illicit funds (Bussel, 2018). Infrastructure projects constitute an important source of such

funding (Tandel, Gandhi, and Tabarrok, 2022; Kapur and Vaishnav, 2013; Wilkinson, 2006). Politicians extract from infrastructure projects either by embezzling funding from public sector projects or by receiving bribes from private developers for green-lighting and fast-tracking projects.[13] Different modes of extraction, however, generate divergent incentives for politicians for completing infrastructure projects. Politicians benefit from delays and extended timelines in case of public sector projects because it allows them longer term extraction. Private sector developers bribe politicians and bureaucrats to fast-track projects, providing incentives for swifter completion timelines (Chandra, 2015).

Government vs. Opposition Politicians Politicians' incentives during land acquisition differ by whether they belong to the government. Politicians who belong to the governing party can extract rents from infrastructure projects, but opposition politicians tend to encourage landowners' protests (Levien, 2018). Opposition parties can use land acquisition as an issue to unite diverse constituencies (Jenkins et al., 2014). For example, large-scale protests against Special Economic Zones in West Bengal, Goa, and Punjab have been successful in channeling landowners' grievances into political action, leading to either a major overhaul of government policy or a change of government (Jenkins et al., 2014). Therefore, opposition politicians may encourage protest, whereas those in government want to reduce observed opposition.

A key problem politicians face, however, is the delegation of project implementation to bureaucrats, who may prioritize other issues. Indeed, Zérah (2020) describes the importance of alignment between politicians and bureaucrats for the success of urban infrastructure projects.

[13]For example, Chandra (2015) quotes one developer on why bribing politicians and bureaucrats is necessary: "Suppose you want 100 acres of land for a polyester factory or a yarn factory or a textile mill. You approach the government. The government acquires the land at Rs 1.5 lakh an acre, allots it at Rs 10 lakh an acre, and you add Rs 5 lakh an acre as bribe. It is still cheaper than doing it yourself."

3.4 Bureaucrats and Land Acquisition Implementation

It is members of the Indian Administrative Service (IAS) who are in charge of land acquisition. The IAS is the highest echelon of Indian bureaucracy, staffing top positions in central and state governments. IAS officers are key players in land acquisition because they are the heads of acquiring authorities: the district administration and lead agencies in charge of infrastructure projects such as the National Highways Authority of India or the Indian Railways.

Bureaucrats have various responsibilities: nominating a team for social impact assessment, surveying the land, informing landowners about the acquisition, verifying who is eligible for compensation, determining the amount of compensation, inviting objections to the acquisition, and disbursing compensation (LAA 2013). Additionally, IAS officers remain focal points in the land acquisition process, because as the heads of district administration they keep land records. These records indicate the ownership, fertility, and irrigation of landholdings, all of which impact how much compensation is mandated. Most documents are, however, out of date, giving further discretion to bureaucrats to read and interpret information (Chandra, 2015). This gives IAS officers both responsibility and discretion over land acquisition.

Bureaucrats' Incentives Bureaucrats have professional and private incentives to complete infrastructure projects. Professionally, land acquisition protests and delayed projects do not reflect well on local state governments that are in charge of bureaucrats' transfers and promotions, making it important for bureaucrats to act on delays. Privately, bureaucrats can be included in rent extraction around infrastructure projects due to their discretion in the process (Chandra, 2015; Jenkins et al., 2014). In addition to their incentives, bureaucrats also have administrative tools to ensure compliance. For example, bureaucrats set the compensation rate, allowing them to negotiate with dissatisfied landowners. Bureaucrats also concentrate coercive power because of their control over the police. Lastly, bureaucrats

may advise the government about canceling, moving, or revising infrastructure projects.[14]

Although bureaucrats have incentives to move along the land acquisition process, fear of corruption allegations, lack of resources, and the need to cooperate with communities in the future may lead bureaucrats to prefer limited action. First, bureaucrats often worry about negotiating with landowners and revising land acquisition compensation rates because of the possible appearance of corruption (Wahi, 2017). Second, administrative overload—responsibility for managing and overseeing governance at a large scale—means that bureaucrats are often stretched thin with limited resources (Dasgupta and Kapur, 2020). Hence, bureaucrats may simply focus their energies and resources on resolving other governance issues, especially if opposition to land acquisition is well-organized. Third, service delivery frequently requires cooperation from communities and local governments, which bureaucrats' abuse of coercive power could threaten.[15] Together, this means that bureaucrats may prefer not to take decisive action in case of land acquisition.

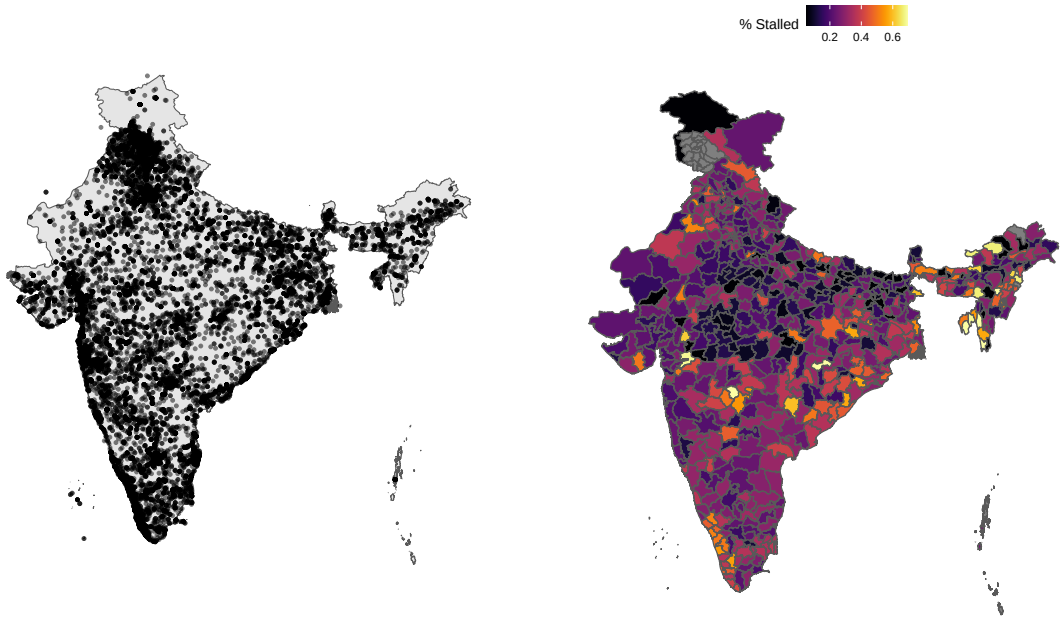
4 Data and Measurement

Studying land acquisition resistance is challenging because there is no comprehensive government record of land acquired or compensation offered. Therefore, any large-scale investigation of this phenomenon requires compiling data from a diverse set of sources. I discuss these datasets in detail below. Additionally, Appendix Tables A.1 and A.3 include information on the geographic and temporal coverage of these datasets and the coding strategy for the main dependent and independent variables. Appendix Table A.2 provides descriptive statistics for each dataset.

[14] Author's interview with an IAS officer, Delhi, 2022.04.25.

[15] Research on the impact of Covid-19, for example, note that in communities where governments built trust with communities, coordinated action with public participation was much more likely (Dutta and Fischer, 2021).

Figure 1: **Projects' Location and Proportion of Stalled Projects**



Source: Center for Monitoring the Indian Economy. The figure on the left shows the location of projects across India. The figure on the right shows the percentage of stalled projects by district.

Infrastructure Projects Given the decentralized nature of land acquisition in India, it is challenging to assemble a dataset that identifies the universe of land acquisition cases. To make this task more manageable, I focus on capital expenditure projects worth at least INR 10 million (USD 130,000), as most of these require land assembly. These projects are identified by a dataset compiled by the Center for Monitoring the Indian Economy (CMIE). Projects include manufacturing, mining, electricity, real estate, irrigation, transport infrastructure services, and information technology (Figure A.1). The majority of projects commence post-1990 (Figure A.2), although some of them were announced as early as 1945. Land acquisition is listed as the third most common problem for projects' stalling in CMIE's dataset (Figure A.3). Figure 1 shows the geographic distribution of projects as well as what percentage of projects are stalled in each district. I differentiate between government and private sector projects as these offer different incentives for politicians and bureaucrats.

Embeddedness To study the impact of embedded bureaucrats, I collect information on IAS officers' home states and attributes such as education, languages spoken, and career paths. The dataset includes information on all 4,806 bureaucrats who as of 2020 belong to the IAS.[16]

I follow Bhavnani and Lee (2018) and Xu et al. (2018) in measuring the embeddedness of IAS officers. I code bureaucrats who are assigned to their home state (domicile) as embedded. While Pepinsky et al. (2017) define embeddedness as social relationships that influence bureaucrats' decisions, studies have measured this attribute in different ways. Tsai (2007) and Mattingly (2016) characterize embedded bureaucrats as those who belong to local solidary groups. Others focus on the frequency of interaction with citizens (Tendler and Freedheim, 1994). Bureaucrats who serve in their home states capture similar dimensions of this concept including having spent substantial time in an area, having local connections, and sharing cultural traits with citizens. I use information on the date a bureaucrat began a position and the location of the position to characterize districts as having or not having an embedded bureaucrat in a particular month.

Resistance and Project Completion I measure resistance to land acquisition in two distinct ways. My primary measure of resistance is whether any protest or riot takes place following the announcement of a capital expenditure project. Protests and riots have been the most common ways of opposing land acquisition (Levien, 2013). To measure the presence or absence of a protest or a riot, I collect data on protests and political violence in India from the Armed Conflict Location and Event Data (ACLED) Project. I use information on the precise geographic location and timing of each event to map protests geographically and temporally. Since ACLED only started collecting data on Indian political violence post-2015,

[16]Relying on this cohort of IAS officers means that I am unable to capture bureaucrats who have retired, passed away, or otherwise left the IAS before 2020. When coding whether districts have at least one domiciled bureaucrat, I may mis-code districts that did, in reality, have an embedded bureaucrat as not having any, because a retired bureaucrat is not in the dataset. This would bias against finding effects since districts with embedded bureaucrats and (wrongly coded) districts without an embedded bureaucrat would be more similar to each other.

I focus on the period between 2016 and 2020. This dataset yields 59,118 protests, 13,028 riots, and 3,644 instances of violence against civilians in the dataset.

A potential critique of measuring resistance only as the presence of a protest or riot could be that both of these actions require significant coordination and collective action. To address this issue, I also use data on land acquisition-related litigation to validate the protest measure. The dataset by Ash et al. (2021) identifies when, in which district, and under which law a case was filed.

Lastly, to check whether a reduction in observed opposition has consequences for project stalling or abandonment, I take advantage of CMIE's coding of project outcomes. CMIE updates project progress every quarter relying on both public sources as well as contact with companies. There are three categories for the current status of the project: completed, stalled or abandoned, or under construction. I use these categories to understand what happens to projects in the long run.

5 Identification

Infrastructure's Impact on Protest To identify projects' impact on protest, I rely on a generalized difference-in-differences approach. To do so, I construct a panel dataset with the unit of analysis being the 10x10 km grid cell and month between January 2016 to December 2020.[17] To identify infrastructure projects' impact, I assume parallel trends: units that are affected by land acquisition would have trended the same way without project announcements as those units where no project is announced. The analysis section provides more evidence that this assumption is realistic.

Embedded Bureaucrats' Impact on Protest Estimating the impact of embedded bureaucrats relies on the quasi-random assignment of domiciled bureaucrats to their home

[17]This follows Christensen (2019)'s study of political violence in response to the construction of mines in Sub-Saharan Africa. This approach yields 30-35 grid cells in an average-sized Indian district. I focus on this interval because ACLED only has data on protests in India from 2016.

states in India. IAS officers spend the majority of their careers in one state and their initial assignment is governed by strict rules (Singh and Singh, 2011). There are two recruitment channels for the IAS. The primary method of recruitment remains a centralized entry examination. Only about 100 new bureaucrats—0.15 percent of applicants who take the entrance examinations—are accepted into the service each year (Singh and Singh, 2011). After admission into the service, officers go through additional training. Upon graduation, IAS officers receive a posting in one of India's states, referred to as cadres. Only one-third of bureaucrats may be domiciled (local to the state) and two-thirds have to be non-local. The second channel of recruitment is promotion from the state civil service to the IAS. Since the state civil service is staffed by local officers, promotion increases the number of domiciled bureaucrats within the IAS. While the first of these channels remains governed by factors orthogonal to bureaucrats' preferences, the second is not.

The assignment of those officers who have been recruited through competitive examinations to their home states is determined both by supply and demand-side factors. On the supply side, a new class of bureaucrats is selected through examinations and they have to rank their preferences for home state (insider) and out-of-home-state (outsider) assignments. The overwhelming majority of officers list staying in their home state as their first choice (Bhavnani and Lee, 2018). Then, officers are ranked according to their exam scores. The demand side is determined by new bureaucrat positions opening up in each state according to the retirement and promotion of current bureaucrats. Within each state, the type and number of positions that open up are determined by quotas for domiciled officers and caste groups. Once positions from each state are compiled, officials rank and allocate bureaucrats according to their test scores, their domicile, and their caste groups. This means that the supply of new bureaucrats is exogenous to the positions that arise in each state and the demand for new bureaucrats is orthogonal to the selection of candidates. For greater detail on the assignment process, see Appendix B.1.

Several studies confirm that initial assignment is as-if random (Bhavnani and Lee, 2018;

Iyer and Mani, 2012; Bertrand, Burgess, Chawla, and Xu, 2015; Xu et al., 2018). Appendix Table C.4 reports whether observable characteristics of bureaucrats jointly predict whether a bureaucrat is domiciled. While the p-value of the joint significance test is significant when looking at all bureaucrats, the p-value increases to 0.203 when looking at those bureaucrats who are centrally recruited through examinations according to the as-if random mechanism—as opposed to promoted from the state civil service (Column 4).[18] Together, this implies that amongst directly-recruited bureaucrats, on average, insider and outsider bureaucrats are no different.

Because those insider officers who are promoted from the state civil service are likely to differ from outsider bureaucrats on other characteristics, an estimate of the effect of domiciled bureaucrats on resistance to land acquisition may be biased. To focus on those bureaucrats whose assignment is plausibly random, I create a variable that identifies whether there are *any directly-recruited domiciled bureaucrats* in the district as an instrument for the presence of *any domiciled bureaucrats*. This strategy is similar to Bhavnani and Lee (2018) and Clots-Figueras (2012) that both use the plausibly-random subset of the variable to instrument for the endogenous variable. Appendix Table C.5 confirms a strong first-stage relationship between these two variables.

6 Empirical Strategy

I first estimate the impact of infrastructure projects on the likelihood of protests and riots using the following regression:

$$Y_{it} = \alpha_i + \beta_t + \delta Project_{it} + \epsilon_{it}, \tag{1}$$

[18]There remains one significant difference: the number of languages spoken by a bureaucrat. This makes sense because outsider bureaucrats are encouraged to learn the local language of their state. Nevertheless, I control for bureaucrats' language speaking ability in the analysis.

where the dependent variable, Y_{it} is a binary indicator of whether or not there is any protest or riot in grid cell i in month t. The coefficient of interest is δ, which indicates the change in the probability of protest after a project is announced in grid cell i in month t. To parse out any grid-cell specific characteristics such as reliance on agriculture or colonial land tenure regime that would predict the prevalence of resistance and projects, I include unit fixed effects, α_i, and to control for any month-specific shocks common to all units such as macroeconomic changes, I add year-fixed effects, β_t. I use robust standard errors clustered at the grid-cell level.

For robustness, I estimate two additional specifications. First, I include standard errors robust to spatial autocorrelation as well as spatial lags. Spatial-autocorrelation-robust standard errors correct for any correlation related to the prevalence of resistance and projects across neighboring geographical units, while spatial lags account for any spillover effects projects may have on resistance in neighboring units. Second, I use the doubly-robust method to estimate the difference-in-difference coefficient (Callaway and Sant'Anna, 2020). The doubly-robust method estimates unbiased difference-in-difference estimates when units are not treated at the same time, as is the case here.

For capturing the impact of domiciled bureaucrats, I use both OLS and 2SLS estimations. I estimate the following system of equations:

$$D_{dt} = \alpha_i + \beta_t + \xi Z_{dt} + \delta' Project_{itd} + \eta' Project_{itd} \times Z_{dt} + \mathbf{X}_{itd} + u_{itd} \tag{2}$$

$$Y_{itd} = \alpha_i + \beta_t + \gamma D_{dt} + \delta Project_{itd} + \eta Project_{itd} \times D_{dt} + \mathbf{X}_{itd} + \epsilon_{itd}, \tag{3}$$

where Y_{itd} indicates whether or not there is any protest or riot in grid cell i that is situated in district d in month t. D_{dt} is the measure of whether or not there are any domiciled bureaucrats in the district d at month t, while Z_{dt} is the instrument that measures whether or not there are any centrally-recruited domiciled bureaucrats in the district. As in Equation (1), α and β are grid-cell and month fixed effects, respectively. The coefficient, δ identifies

the change in probability of protest when there is a planned project in grid cell i in month t for those grid cells that do not have any domiciled bureaucrats working in their district in a given month. The coefficient of interest, η indicates the change in the probability of a protest or riot when there is a project for those grid cells that have at least one domiciled bureaucrat. X_{td} is a vector of controls that includes the proportion of bureaucrats with advanced graduate degrees, the proportion of bureaucrats who speak the main language of the district, and the average age of entry of bureaucrats in the district. Along with OLS estimates, I also report the results of this two-stage least squares analysis. Standard errors are clustered at the level of bureaucrat assignment, the district-month level.

7 Analysis

This section first presents results on the impact of land acquisition for infrastructure projects on protests and riots. I argue that commitment problems prevent state-landowner bargains from taking place, increasing conflict around infrastructure projects. The section provides evidence for this theory: as infrastructure projects are announced the probability of a protest or a riot taking place spikes.

7.1 Projects and Conflict

Table 1 summarizes the impact of infrastructure projects on protests and riots. A project announcement increases the probability of a protest or a riot by 0.8 percentage points (Column 1, p-value < 0.01). This corresponds to a 6 percent increase in the average probability of a protest or riot for a grid cell in a given month. The results are robust to including spatial autocorrelation robust standard error and spatial lags to account for spillover effects (Column 3).[19] In addition, using the doubly-robust group-time average treatment effect estimation, I find a larger effect of projects on protest. Projects increase the risk of protest by 23

[19]Results attenuate when including state-year fixed effects to control for trends such as economic growth (Column 2).

Table 1: **Impact of Infrastructure Projects on Protests and Riots**

Dependent variable:	Any Protest or Riot					
Project Type:	All	All	All	All	Public	Private
Post Project	0.008**	0.001	0.008***	0.041***	0.035***	0.030***
	(0.003)	(0.003)	(0.002)	(0.008)	(0.007)	(0.009)
Grid FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
State-Year FE	No	Yes	No	No	No	No
Spatial lags	No	No	Yes	No	No	No
Spatial autocorrelation-robust SE	No	No	Yes	No	No	No
Doubly-robust correction	No	No	No	Yes	Yes	Yes
Grid Clusters	2,904	2,904	2,904	2,904	2,904	2,904
DV Mean Value	0.128	0.128	0.128	0.128	0.128	0.128
Num. obs	165,528	165,528	165,528	165,528	165,528	165,528

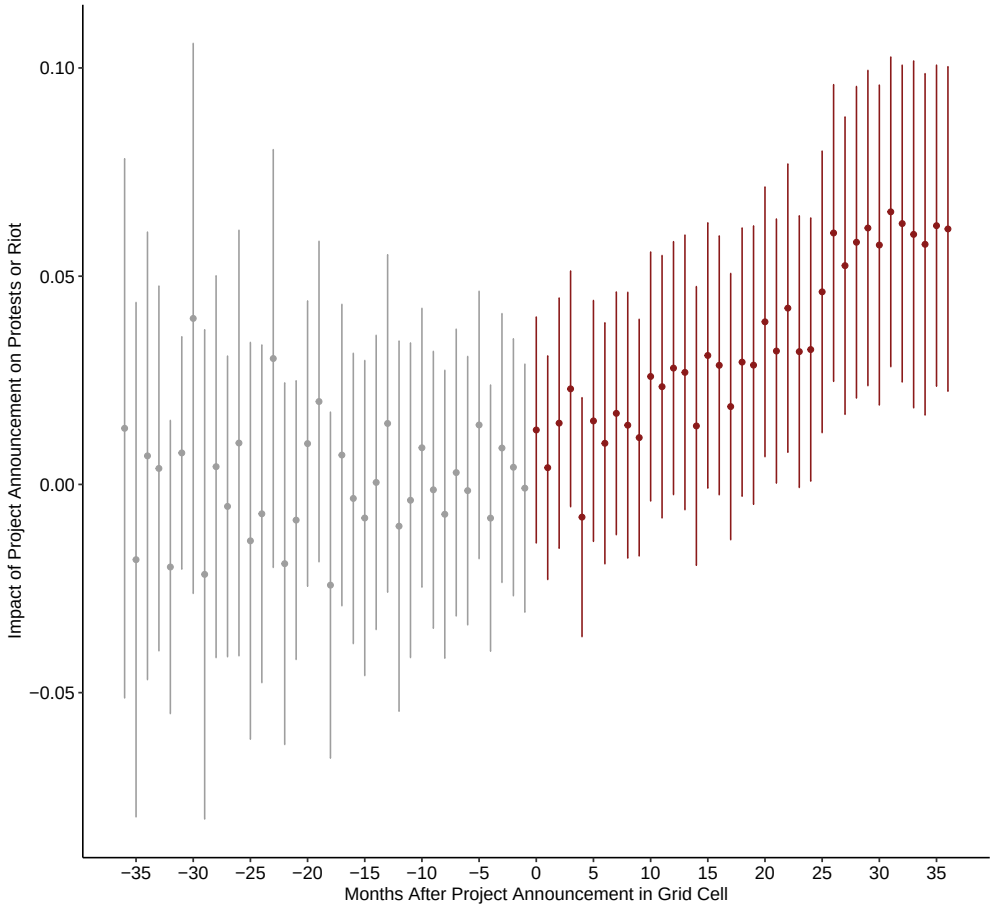
Note: The unit of observation is the grid-cell-month. The dependent variable is a binary indicator of whether any protest or riot took place in a grid cell in a given month. Model 3 estimates the impact of projects on the likelihood of a protest or a riot by including spatial lags and standard errors using the `splm` package in `R`. Models 4-6 estimates the difference-in-differences coefficient using the doubly-robust method in Callaway & Sant'Anna (2020) using the `did` package in `R`. *p<0.1; *p<0.05; **p<0.01.

percent compared to the baseline (Column 4, p-value<0.001). Additionally, I disaggregate the impact of projects by sector. Using the doubly-robust adjustment, I find that public and private sector projects increase the risk of protest by 27 and 23 percent, respectively (Columns 6-7, p-value<0.001). This suggests that the ownership of the project itself does not affect whether there is resistance to it.

Alternative Explanations There may be three main concerns with interpreting these results as evidence of land acquisition encountering resistance. First, these findings may capture outsider political or paramilitary groups' organization in response to government-initiated development and displacement, rather than landowners' opposition.[20] If so, we might expect that the probability of other kinds of political activities increases as well in

[20]One example of such violence has been the Maoist insurgency in the resource-rich states of east India, where mining projects have undermined the rights of indigenous groups to land.

Figure 2: **Impact of Projects on the Likelihood of a Protest or a Riot by Length of Exposure**



Note: The figure shows increasingly positive impact of infrastructure projects on the probability of a protest or riot. The y-axis gives the estimated effect of infrastructure projects on the probability of protest. Estimates were obtained using the `did` *package based on Callaway and Sant'Anna (2020). Bars represent 95 percent confidence intervals. The x-axis shows the number of months that have passed since a infrastructure project has been announced in a grid cell.*

response to projects. Figure D.4, shows that is not the case with the likelihood of violence against civilians, explosions, and strategic developments.[21] Another potential concern is that projects are situated in grid cells that already experience an upward trend in conflict. To test this, I plot the estimate of the treatment effect by the number of months elapsed since the announcement of an infrastructure project. Figure 2 shows a clear upward trend

[21]The probability of battles decreases in response to projects.

in the probability of protests and riots after project announcement, but not before. Lastly, a concern with the ACLED dataset is that it relies on media reports of conflict, which could miss smaller-scale resistance. To make sure that this does not affect the results, Appendix Table D.6 presents the impact of infrastructure projects on land acquisition-related litigation. The most precise estimates with the doubly-robust estimation show an increase of 17 percent in the likelihood of land acquisition litigation following project announcement (Model 1, p-value<0.01). Together, these results indicate that infrastructure projects increase the likelihood of opposition to the state both on the streets and in courts.

7.2 Bureaucrats and Conflict

Do embedded bureaucrats reduce resistance to land acquisition? Table 2 provides evidence in support of embedded bureaucrats' effectiveness. In places with at least one domiciled bureaucrat in the district following a project's announcement, the probability of a protest or a riot taking place drops by about 10 percent (Columns 1-2, p-value < 0.05).

While the OLS results do suggest that domiciled bureaucrats reduce conflict, these cannot be interpreted causally. To do so, I instrument the presence of a domiciled bureaucrat with the presence of directly-recruited domiciled bureaucrats. In case of the 2SLS results, the coefficient on the interaction term of domiciled bureaucrats and projects remains negative with a similar size to the OLS results (Columns 5-6, p-value < 0.1). In addition, the 2SLS results imply that bureaucrats' impact depends on project type. With at least one domiciled bureaucrat in the district, the threat of a protest is reduced by 1.8 percentage points for private sector projects (p-value < 0.05). Government projects do not significantly raise the threat of protest in areas without a domiciled bureaucrat and, in turn, domiciled bureaucrats do not seem to reduce the likelihood of protest or a riot for government projects. This is consistent with the theory that the state can only motivate embedded bureaucrats to enforce land bargains when rent-seeking opportunities are available.

Table 2: **Impact of Embeddedness on Protest and Riots**

Dependent variable:	Any Protest or Riot					
Project Type:	All	All	All	All	Public	Private
Post Project	0.014^{***}	0.006	0.014^{***}	-0.002	-0.006	0.024^{***}
	(0.003)	(0.004)	(0.004)	(0.005)	(0.005)	(0.006)
Any Domiciled	-0.003	-0.001	0.001	-0.011^{*}	-0.015^{**}	-0.004
	(0.004)	(0.004)	(0.006)	(0.006)	(0.006)	(0.006)
Project × Any Domiciled	-0.012^{***}	-0.009^{**}	-0.012^{**}	-0.002	0.004	-0.018^{**}
	(0.004)	(0.004)	(0.006)	(0.006)	(0.007)	(0.008)
Model	OLS	OLS	2SLS	2SLS	2SLS	2SLS
Grid FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	No	Yes	Yes	Yes
State-Year FE	No	Yes	No	Yes	Yes	Yes
District-Month Clusters	34542	26713	34542	26713	26713	26713
DV Mean Value	0.128	0.128	0.128	0.128	0.128	0.128
Num. obs	165528	116653	165528	116653	116653	116653
Adj. R2	0.420	0.414	0.420	0.427	0.427	0.427

Note: The unit of analysis is the grid-cell month. Robust standard errors are clustered at the district-month level. The dependent variable is a binary indicator of whether or not a protest or a riot takes place in a grid cell in a given month. Controls include the proportion of bureaucrats with a graduate degree, the average age of entry to the service for bureaucrats, and the proportion of bureaucrats speaking the most commonly used language in the district. $^{***}p < 0.01$; $^{*}p < 0.05$; $^{*}p < 0.1$

Robustness Findings are robust to alternative specifications. First, estimates remain consistent when including state-year trends that may influence the allocation of domiciled bureaucrats and protest dynamics (Table 2, Columns 2, 4-6). Second, I include controls for the proportion of bureaucrats with an advanced degree, the average age of entry to the service for bureaucrats in the district, and the proportion who speaks the main language of the district to parse the impact of embeddedness from other bureaucrat characteristics. Results remain consistent even when controlling for these factors (Columns 2, 4-6).

Lastly, I examine whether fewer protests translate into more successful infrastructure

project implementation. Table D.7 shows how project and bureaucrat type impacts the likelihood of a project being stalled, abandoned, or without available information on it. Looking at the set of projects implemented after 2015 (the period of protest data availability), having a domiciled bureaucrat in the district at the time of the project announcement increases the likelihood of stalling by 7 percent in case of public sector projects, although this is not statistically significant. When it comes to private sector projects, however, domiciled bureaucrats reduce the likelihood of stalling by 11 percent (p-value ≤ 0.1). When looking at all projects in the dataset, the size of domiciled bureaucrats' impact is similar but much more significant (p-value ≤ 0.01).

7.2.1 Alternative Explanations

Bad Cadres Several identification concerns remain. First, allocation guidelines to the IAS changed in 2008, which allowed newly-admitted bureaucrats to give a full list of their preferences for allocation, whereas beforehand they could only state whether they would like to be domiciled or not. This may have resulted in some states receiving lower-quality bureaucrats over time. One may worry that larger differences in these states ("bad cadres") between domiciled and outsider bureaucrats drive the results (Thakur, 2021).[22] To address this issue, I break down the results from Table 2 by excluding states one by one to study whether states less preferred by bureaucrats are driving the results. Figure D.5 shows coefficients with 95 percent confidence intervals on the interaction term of a project announcement and a domiciled bureaucrat. While the results are stronger when excluding some states, they are not significantly different for any of the states that Thakur (2021) identifies as "bad cadres", neither when we look at these states separately, nor when grouping them together.

[22]Thakur (2021) identifies the northeastern states and states with ongoing insurgencies as bad cadres since bureaucrats consistently rank these lower in their preferences. These are Nagaland, Assam, Meghalaya, Manipur, Tripura, Sikkim, Jammu and Kashmir, West Bengal, and Chattisgarh.

Non-Random Transfers Within State Second, bureaucrats may use their connections later in their career to be placed in districts that have less violence (Iyer and Mani, 2012). While grid fixed effects control for differences in violence across districts that do not vary over time, it is possible that districts that receive domiciled bureaucrats are on a downward trend in violence before the arrival of a domiciled bureaucrat. To test this possibility, I plot the effect of having at least one domiciled bureaucrat in the district with leads and lags to check for any pre-trends. Figure D.6 does not indicate that there is a consistent downward trend prior to the arrival of domiciled bureaucrats.

As an additional test, I also use early-career domiciled bureaucrats as an instrument for the presence of any domiciled bureaucrat (Table D.8). This test likely identifies the impact of domiciled bureaucrats in their first assignment, which is not affected by political connections. The size of the standard errors on domiciled bureaucrat coefficient becomes larger, but remains significant and consistent with earlier results (Column 3, p-value < 0.05). This suggests that transfers to areas that are on a downward trend also do not explain the results.

Projects Differ by Bureaucrat Type Lastly, even if insider and outsider bureaucrats are not different on average, the projects instituted under them may be. If so, lower protests under domiciled bureaucrats could reflect bureaucrats selecting projects that are more appealing to citizens. Figure A.3 shows the different types of projects in the dataset and Table D.9 shows the impact of a domiciled bureaucrat in the district on the type of project announced. None of the project types are more likely to be implemented under a domiciled bureaucrat, suggesting that this does not drive results.

In sum, these results offer strong evidence that domiciled bureaucrats reduce the likelihood of protests or riots associated with land acquisition. This is in line with the theory that embedded bureaucrats reduce transaction costs, improving compliance.

7.3 Unpacking the Link Between Embeddedness and Compliance

This section develops three possible mechanisms as explanations for bureaucrats' effectiveness: improved monitoring and enforcement within the bureaucracy (*agency costs*), *responsiveness* to the community, and lowered costs of *accessing information*. To test each mechanism, I use three pieces of evidence. First, I leverage variation in the type and location of infrastructure projects. Second, I rely on information from over a 100 detailed interviews conducted with landowners, bureaucrats, politicians, lawyers, and land rights activists over seven months of fieldwork in India during the summer of 2019 and spring of 2022. Appendix B provides more information on how interviews were conducted as well as precautions taken to limit harm to subjects.

Third, to home in on landowners' experiences, I rely on both rounds of the Indian Human Development Survey (IHDS). The IHDS is a representative survey of mainland India and its panel structure allows for exploiting variation over time in respondents' exposure to infrastructure projects. Although there are no questions on land acquisition, the survey includes several questions on landownership and social networks. I use these questions to investigate how bureaucratic embeddedness affects landowners' resources as a measure of negotiations for resources with the state and their confidence in the state government and their experience with harassment as a measure of coercion.

The results reported in this section provide robust evidence that embeddedness helps bureaucrats enforce land bargains by lowering agency costs. I find convincing evidence that bureaucrats' embeddedness facilitates cooperation with politicians. This helps bureaucrats mobilize the state's resources to repress protesters. In addition, I find some evidence that embedded bureaucrats also use their networks to lower the costs of gathering information about whom to target for coercion.

7.3.1 Agency Costs

One channel by which embedded bureaucrats could facilitate citizens' compliance is by lowering agency costs. Producing coercion and providing selective incentives requires cooperation between politicians and many layers of the bureaucracy. Although bureaucrats may want to intervene because of the promise of rents, they may fear reprisals from politicians or other bureaucrats. Embedded bureaucrats could enable politicians to motivate the bureaucracy to take action. First, embeddedness can allow bureaucrats to cooperate with politicians, because their shared networks facilitate the flow of information (Xu et al., 2018). Second, embedded bureaucrats may also have better networks with lower-level bureaucrats, local political leaders, and members of the police.

Qualitative Evidence Interviews offer evidence that bureaucrats are somewhat reluctant to interfere if there is resistance to land acquisition. Many of them disclosed in interviews that, for example, increasing compensation and negotiations with landowners may expose them to scrutiny from above:"Any civil servant normally would be risk averse. Why should you, you know, justify a very high amount and then open yourself to criticism."[23] In addition, officers insisted that using coercion against landowners would not be the norm, because civil society is often well-organized and it may undermine the legitimacy of the government. Bureaucrats, therefore, may need reassurance that if they intervene in land acquisition, they will not be investigated or undermined by the government.

Embeddedness, however, can be a basis for cooperation between bureaucrats and politicians. Embedded bureaucrats in interviews have discussed that their relationship with politicians and their networks is what truly distinguishes them from their non-domiciled colleagues: "There are smart people from the outside who cultivate relationships with politicians, who get good jobs, so there are exceptions. But the general rule is simple. If you belong to that state then the likelihood that you have a huge network through your classmates, through

[23]Author's interview with retired IAS officer, Delhi, 2022.03.15.

your friends, through your relatives is immense. So there is this issue of network availability."[24] In turn, when bureaucrats cooperate with politicians, they can be a lot more effective: "Informally, [politicians] can do a lot of things. Whereas bureaucrats can only do things in a formal manner."[25] Some IAS officers, however, noted that cooperation is not always possible. In particular, both bureaucrats and activists confirm that opposition politicians and parties usually politicize land acquisition issues. Therefore, it is much more likely that bureaucrats will work together with politicians who are part of the governing coalition.

What happens when bureaucrats cooperate with politicians? In theory, bureaucrats may use the resources of the state to coerce or bargain with citizens. While bureaucrats and politicians insist that they manage resistance by persuasion, landowners and activists paint a different picture. In Raigharh district of Chhattisgarh, an area rich in mineral resources, stories about bureaucrat-politician-corporation "nexus" and corruption are widespread.[26] Landowners describe bureaucrats and politicians as intent on "divide and rule policies."

In particular, activists suggest that politicians are adept at co-opting resistance against land acquisition:"[Politicians] have close ties to villages and they are on the ground. They end up taking leadership roles in these struggles. Once they take leadership roles, it's easy for them to get sold out. Once the leadership is sold out, people are left to hang and dry. ... Longest struggles were those without political involvement. Because it is easy to tempt people, politicians will get a party ticket, they will get monetary offers and then the smaller peasantry is not organized anymore." Once the leadership is divided, bureaucrats use the coercive resources of the state to repress land acquisition opposition. Landowners and activists describe overt harassment and intimidation from officials such as being beaten by the police or jailed. They also report more subtle forms of pressure from officials: "People are told 'all the land around will be taken, you will be the only one left, and if you do not

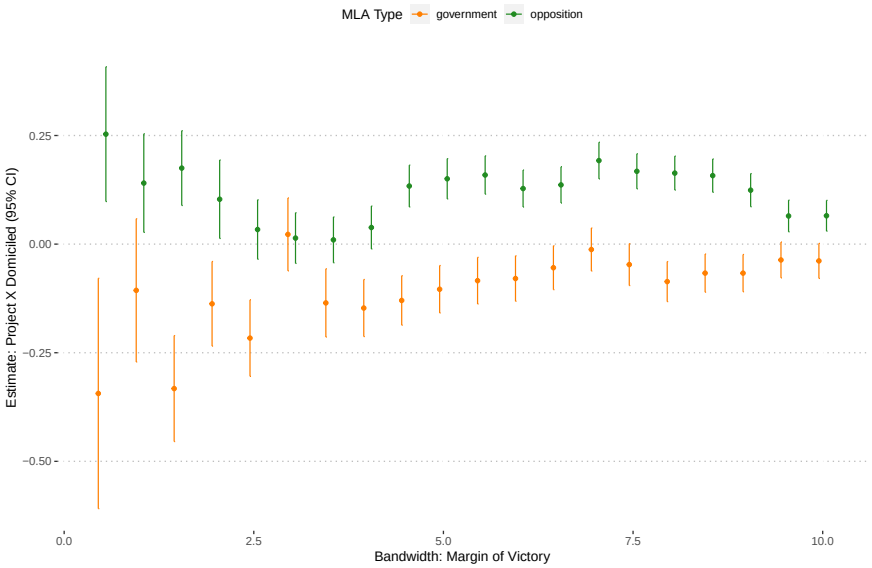
[24]Interview with retired IAS officer, Delhi, 2022.02.07.

[25]Interview with retired IAS officer, Delhi, 2022.03.16.

[26]According to a local joke, corruption always starts with "p": patwari (village land record official), pradhan (local council head), pradhan mantri (prime minister).

take the money now, it will go into the treasury and then you will have to litigate.' People are afraid to go to court, so rather they just give up the land."[27] Together, evidence from interviews suggests that cooperation between bureaucrats and politicians can allow them to coerce landowners more effectively.

Figure 3: **Embedded Bureaucrats' Impact on Resistance by Politician Type**



Note: This figure shows that when projects fall into the constituency of a government politician who barely won her seat, embedded bureaucrats' impact is more likely to be negative on protest. By contrast, when a project falls into the constituency of an opposition politician who barely won her seat, embedded bureaucrats have a zero to positive impact on protests. Coefficients represent the impact of having at least one domiciled bureaucrat in a district with a project that either falls in an opposition or government constituency. The comparison group is a district without an embedded bureaucrat. The x-axis represents the margin of victory in constituencies included in the analysis. The source for electoral data is the TDCP's Lok Dhaba database.

Variation in Infrastructure Projects' Location Using data on infrastructure projects, I formally test whether embeddedness lowers the cost of monitoring bureaucrats for politicians, improving cooperation and reducing landowners' noncompliance. To do so, I map the impact of embedded bureaucrats by Member of Legislative Assembly (MLA) type. Based

[27]Interview with land rights activist 17 May, 2022.

on qualitative evidence, it is government politicians who have the most incentives to reduce observed resistance to infrastructure projects, while opposition politicians often prefer to encourage protests for potential electoral gain. Therefore, if embeddedness facilitates cooperation, we should see this in case of embedded bureaucrat-government politician pairs.

To causally identify the impact of politician type, I use a close-election regression discontinuity approach. I investigate the embedded bureaucrats' impact depending on whether or not an infrastructure project falls into the constituency of a government or an opposition politician, focusing on races that were within 1-1.5 percentage points of margin of victory. I provide details on the identification and empirical strategy in Appendix E.1.

Table E.10 and Figure 3 show the impact of domiciled bureaucrats on resistance when a project is based in a constituency with a government or an opposition politician. Consistent with embeddedness reducing monitoring costs, I find that embedded bureaucrats have a large and significant negative impact on resistance when projects fall into constituencies that a government MLA narrowly wins. In contrast, domiciled bureaucrats either do not reduce resistance or encourage it in constituencies that opposition politicians narrowly win.

Landowner Panel Survey Lastly, I test whether landowners are more likely to experience coercion and, consequently, less likely to trust the state government after a project is announced in their district, as the qualitative evidence suggests. To test the impact of embedded bureaucrats on landowners' experience with coercion, I rely on the IHDS dataset and run the following specification:

$$Y_{idt} = \alpha_i + \beta_t + \gamma Project_{dt} + DB_{dt} + \delta Project_{dt} \times DB_{dt} + u_{idt}, \tag{4}$$

where Y_{idt} is the outcome for individual i in district d in survey round t. I include individual fixed effects, α_i, and survey round fixed effects, β_t, to parse out variation in an outcome associated with an individual or survey round. γ indicates the change in the outcome if a project was announced in the district in the year before the survey was conducted; identifies

the change in the outcome when there has been at least one domiciled bureaucrat in the district in the year before the survey was conducted. The coefficient of interest is δ, which identifies the change in the outcome when there has been at least one domiciled bureaucrat in a district where a project was announced in the year prior to the survey. Heteroskedasticity-robust standard errors are clustered at the district-year level. In addition, I present results using the 2SLS strategy in which I instrument the presence of domiciled bureaucrats with the presence of any directly-recruited domiciled bureaucrats, similarly to prior results.

Table E.11 reports the findings. I focus only on landowners in the IHDS. The results provide additional evidence that landowners experience coercion around projects. The upper panel in Table E.11 shows that landowners report lower confidence in the state government when there is a domiciled bureaucrat in the district in the year of project announcement. This is true for both public and private sector projects. Additionally, landowners are 43 percent more likely to make a report about harassment in the village when there is a private sector project announced under a domiciled bureaucrat (p-value < 0.01, Column 8). This could be the consequence of harassment by the police or the harassment of women by local gangs associated with private companies. In either case, it indicates that there is more violence around private sector projects. This is not the case for public sector projects for which landowners report a slightly lower incidence of harassment. Taken together, the qualitative and quantitative results provide strong evidence that embeddedness lowers the agency costs associated with coercion. Especially around private sector projects that offer lucrative rents, bureaucrat-politician teams mobilize the coercive resources of the state to weaken protests.

7.3.2 Responsiveness to the Community

A second potential explanation for domiciled bureaucrats' effectiveness is their ability to respond to the needs of local landowners. Bureaucrats' embeddedness in the community may create more trust in the state. In turn, this would reduce the time and effort bureaucrats have to spend to convince landowners that they can be trusted (Jensen and Meckling

1973). Therefore, bureaucrats' embeddedness could both enable the community to pressure bureaucrats to provide more resources and equip bureaucrats to be more persuasive.

Qualitative Evidence In interviews, some bureaucrats echoed the idea that embedded bureaucrats may be more trustworthy and sympathetic towards landowners.[28] Landowners, while not always certain from which state bureaucrats were, agreed that domiciled bureaucrats may be more concerned with their needs. In one land acquisition case, landowners relayed rumors about a domiciled bureaucrat who was more receptive to the community's demands, but eventually became a political party candidate and lost in the elections. Landowners thought the party intentionally ruined the candidate-turned bureaucrat's chances to remove him from power. These rumors are indicative of citizens' attitudes towards embedded bureaucrats. Although in general they are viewed more favorably, citizens also worry about political capture. Even some bureaucrats expressed skepticism about domiciled officers' ability to convince citizens: "I don't think that if the bureaucrats are local, they are so capable of winging it and bringing people over to their way of thinking. Landowners will look at their own interest, I doubt that they would be looking at what the local officer is saying."[29] Bureaucrats and landowners, therefore, both affirm that domiciled bureaucrats may be more sympathetic towards landowners, but any efforts to help landowners are likely limited by political pressure or citizens' skepticism.

Variation in Project Type As the goal of most protests is to extract compensation or concessions such as employment from the government, if bureaucrats are more willing to negotiate with landowners and provide additional resources to secure their compliance, resistance should be lower around projects that offer employment. I test this proposition using variation in whether projects can generate employment or not.[30] Table E.12 shows

[28]Interview with IAS officers, Delhi, 2022.02.07.

[29]Interview with IAS officers, Delhi, 2022.03.16.

[30]I code manufacturing and agriculture and food production-related projects as employment generating.

whether domiciled bureaucrats are more effective around employment-generating projects. Employment-generating projects, on average, increase resistance, but I do not find evidence that domiciled bureaucrats are particularly effective at bargaining with citizens around these types of projects.

Landowner Panel Survey I provide an additional test for this mechanism using the IHDS sample of landowners (Table E.11). It is possible that landowners do not receive employment around projects, but embedded bureaucrats provide them with increased compensation. If so, landowners may have a higher level of household assets and should be less likely to report that they are poor. The results, however, show the opposite. Embedded bureaucrats' involvement in case of both public and private sector projects lowers the index of household assets by 3-5 percent, although only significantly so in case of private sector projects (p-value < 0.01) (Columns 1 & 5). In addition, embedded bureaucrats also increase the likelihood that landowners report that they are poor by 25-38 percent following the implementation of infrastructure projects (p-value < 0.1, Columns 2 & 6). Together, the results imply that it is unlikely that embedded bureaucrats resolve resistance because they are more responsive to the community. Rather, they suggest that landowners take compensation packages that are unfavorable to them when embedded bureaucrats are in charge.

7.3.3 Cost of Access to Information

Lastly, embedded bureaucrats may be more effective at reducing resistance, because they can lower the costs of gathering information about landowners or the area. If so, the state may be more effective at targeting selective incentives or coercion.

Qualitative Evidence One such selective incentive for which location knowledge can be essential is the manipulation of project boundaries by excluding certain landholdings. Both bureaucrats and landowners confirm in interviews that the manipulation of project location and boundary is a concern during land acquisition. One IAS officer said in an interview that

such non-technical considerations lower the legitimacy of the process: "[A thermal power corporation would] say this is the piece of land that they need. Then they would come back and tell us that they will leave out that piece of land or that piece of land. It was clear that there was corruption and non-technical considerations: some people did not want their land to be included or they wanted their land to be adjacent to this new development. Hence, a lot of decisions by the state are seen as very exploitative."[31] This suggests that embedded bureaucrats with access to local social networks may speed up the process of finding whose land to exclude. Levien (2015), however, suggests that those landowners who have more connections do not receive incentives, rather they are more likely to be targeted for land acquisition and receive worse deals.

Variation in Project Type I evaluate whether embedded bureaucrats use their local knowledge to manipulate project boundaries or to co-opt protest leaders. To do so, I compare domiciled bureaucrats' impact by the mobility of projects. If embedded bureaucrats reduce opposition around projects by selectively excluding some landowners' land, this should be more possible around projects that can be shifted. I categorize transportation infrastructure projects, mines, and energy projects as difficult to shift whereas agricultural, commercial, pharmaceutical, education, health, and housing projects as easier to move. I find that embedded bureaucrats have a significant negative impact on easier-to-shift projects, but this impact does not significantly differ from embedded bureaucrats' impact on difficult-to-move projects (Table E.13). All told, this implies that embedded bureaucrats do not reduce resistance by shifting entire projects to places where they are less likely to face conflict.

Landowner Panel Survey Even if embedded bureaucrats do not shift entire projects, they may use their networks to collect information on whom to strategically target for side payments or coercion. Once again, I turn to the IHDS dataset to test these propositions. To proxy for bureaucrat-landowner networks, I focus on the sample of individuals who have

[31]Interview with IAS officer, Delhi, 2022.02.13.

indicated that they know somebody who works for the state administration. The lower panel of Table E.11 provides partial evidence to the claim that bureaucrats rely on their networks to collect information. Contrary to arguments that connected individuals may be co-opted and bribed, those who know state officials in the dataset report 5 percent lower asset ownership (p-value < 0.05, Columns 1,5) and are 80 percent more likely to state that they are poor (p-value < 0.01, Column 2) when embedded bureaucrats are present in the district when the infrastructure project is announced. In line with the notion that these individuals are more vulnerable to coercion, I find that they are more likely to experience harassment and consequently have lower confidence in the state government (p-value < 0.1, Columns 7-8).

8 Discussion

This paper describes the conditions under which the state can resolve state-society bargaining failure. It demonstrates that when the state can provide rent-seeking opportunities to intermediaries who can lower the costs of coercion, it is less likely that citizens can resist the state. Findings here are relevant not only for policy, but also for informing our knowledge of state-society relations. The paper implies that increasing exploitation of natural resources—land, forests, water—will bring into conflict local communities with states and companies. Because citizens have few exit options in these cases, such conflict also provokes more coercion by the state and private actors. This runs against the notion in social contract theory that citizens can improve their resources if they refuse to comply with the state's resource extraction. Taken together, the paper suggests that coercion can be an important unintended consequence of policies that advocate for greater infrastructure investments in countries with dominant agricultural sectors. Future research may focus on finding more micro-level evidence of how natural resource extraction shapes communities' access to resources and their experience with repression.

Implications for Infrastructure Projects This paper contributes to the literature on why it is difficult to build large-scale development projects (Scott, 1998). Previous studies have cited political incentives (Bohlken, 2018; Khemani, 2010), corruption (Olken, 2007), and time inconsistency in collective choice (Williams, 2017) as important obstacles to the provision of large-scale public goods. This paper, on the other hand, places conflict over land and social mobilization as a key constraint on infrastructure development.

While the setting of this paper may be unique in the intensity of land conflict, recent work indicates that access to land is a growing problem for infrastructure projects. Holland (ming) shows that communities in Colombia frequently mobilize against highway projects to extract resources from the state. Christensen (2019) and Steinberg (2019) demonstrate that conflict around mines in Sub-Saharan Africa can be attributed to communities' attempts to bargain for resources from the state and mining firms. Furthermore, Boone (2014) and Mattingly (2016) discuss the important role traditional leaders and officials with social ties to communities play in resolving eminent domain disputes in Ghanaian and Chinese villages. This suggest that not only is land conflict a common hindrance for infrastructure projects around the world, but embedded leaders play an important role outside of India in managing such conflict.

The implication of these findings is that investments in institutions that can prevent bargaining failures can allow for more efficient project implementation. In particular, policies that clarify land titles could contribute to resolving some asymmetries in information (Christensen et al., 2021), whereas communities' financial incorporation into projects could serve as a commitment mechanism for landowners. While these institutions could allow governments to take land and implement projects, they may also lead to extraneous takings. Governments and international organizations would need to pair such policies with institutions that empower communities to protect scarce natural resources such as land, forests, and water to balance priorities for economic growth with attention to climate change (Lal, Gulzar, and Pasquale, 2021).

Embeddedness and Bureaucrat-Politician Cooperation This paper also extends debates on the consequences of bureaucrat-politician cooperation for governance. Theory on bureaucracies asserts that bureaucrats are often a source of agency loss, especially in democracies where politicians have incentives to provide services for voters (McCubbins and Schwartz, 1984). Indeed, studies show that when politicians have stronger control over bureaucrats, governance improves (Olken, 2007; Shleifer and Vishny, 1993; Gulzar and Pasquale, 2017; Dasgupta and Kapur, 2020). Others, however, warn that easier cooperation between bureaucrats and politicians can increase rent-seeking (Brierley, 2020; Xu et al., 2018; Xu, 2018). While most of these works highlight either the positive or negative aspects of cooperation, research here shows that linkages between politicians and bureaucrats are a double-edged sword. Cooperation does improve public goods delivery but at the cost of greater coercion and rent-seeking.

State-Society Relations Seminal works on state-society bargaining argue that the social contract emerges from a quid pro quo between state and citizens. The state remains accountable to citizens and delivers services because citizens' distaste for paying taxes imposes a credible threat of noncompliance (Levi, 1988; Tilly, 1992; Schumpeter, 1991). Even in developing country settings, citizens' withdrawn compliance can lead to increased service provision (Grossman et al., 2018). Yet, findings here demonstrate that instead of providing selective incentives, the state may also be engaged in increased coercion.

There are three possible reasons why Indian bureaucrats are more likely to rely on coercion than on service provision to improve compliance. First, bureaucrats covered in this study are higher-level officials who are more likely to share networks with politicians rather than local communities. This makes it more likely that bureaucrats are motivated by their ties to politicians. This contrasts with research on Chinese village officials who can leverage their relationship with local communities to convince them to give up land for infrastructure projects (Mattingly, 2016). Second, prior works show that citizens' exit options can shape

state response (Hirschman, 1970; Karadja and Prawitz, 2019). In case of land acquisition, landowners have limited exit options since land is an immobile asset. While citizens' "voicing" their concerns can still impose large costs on the state, citizens' bargaining power is reduced by their inability to leave. This also resonates with literature on democratization that argues that mobile asset owners—merchants—had more leverage to pressure the state for property rights protections than those with immobile assets—landowners—who could not threaten with exit (Ansell and Samuels, 2010). Third, effective coercion requires the state to monitor who non-compliers are (Levi, 1988). Because land acquisition involves only a limited set of landowners, the state can easily detect who non-compliers are and focus on coercing them.

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FOR ONLINE PUBLICATION: APPENDIX

A Descriptive Tables and Figures

Table A.1: **Variable Coding**

Variable	Coding Strategy	Source
Dependent Variables		
Any Protest or Riot	If there is at least one protest or riot in a grid cell in a given month, the variable is coded 1, and 0 otherwise.	ACLED
Any LA Case	If there is at least one land acquisition case filed in a given month in a given district, the variable is coded 1, and 0 otherwise.	Ash, Asher, Bhowmick, Chen, Devi, Goessmann, Novosad, and Siddiqi (2021)
Project Type	Projects are categorized into 9 categories based on the project description: agriculture and food production, commercial properties, pharmaceutical industry, education, energy production or transmission, health care, housing and real estate, transportation infrastructure, mining projects. Based on these categories separate binary variables are created which are coded as 1 if the project falls into that specific category and 0 otherwise.	CMIE CapEx
Assets	A scale that sums 30 dichotomous items measuring household possessions and housing quality	IHDS
Poor	"According to you, is your household poor/middle-class/comfortable?" The variable is coded as 1 if the respondent chose "poor" and 0 otherwise.	IHDS
High Conf. in State Gov.	Binary variable that is coded 1 if the respondent answers "A gread deal of confidence" to the question "As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in the state government - to look after the people?" and 0 otherwise.	IHDS
Harassment	Binary variable that is coded 1 if the respondent answers "sometimes" or "often" to the question "How often are unmarried girls harassed in your village / neighborhood?" and 0 otherwise.	IHDS
Stalled/Abandoned/No Info	Binary variable that is coded 1 if the project has been stalled, abandoned, or there is no information available about it and 0 otherwise.	CMIE CapEx
Independent Variables		
Post Project	Binary variable coded 1 if the grid cell has had at least one project announced in it in any of the prior months	CMIE CapEx
Domiciled	Binary variable coded 1 if the district has at least one domiciled bureaucrat in a given month	DOPT Gov't of India

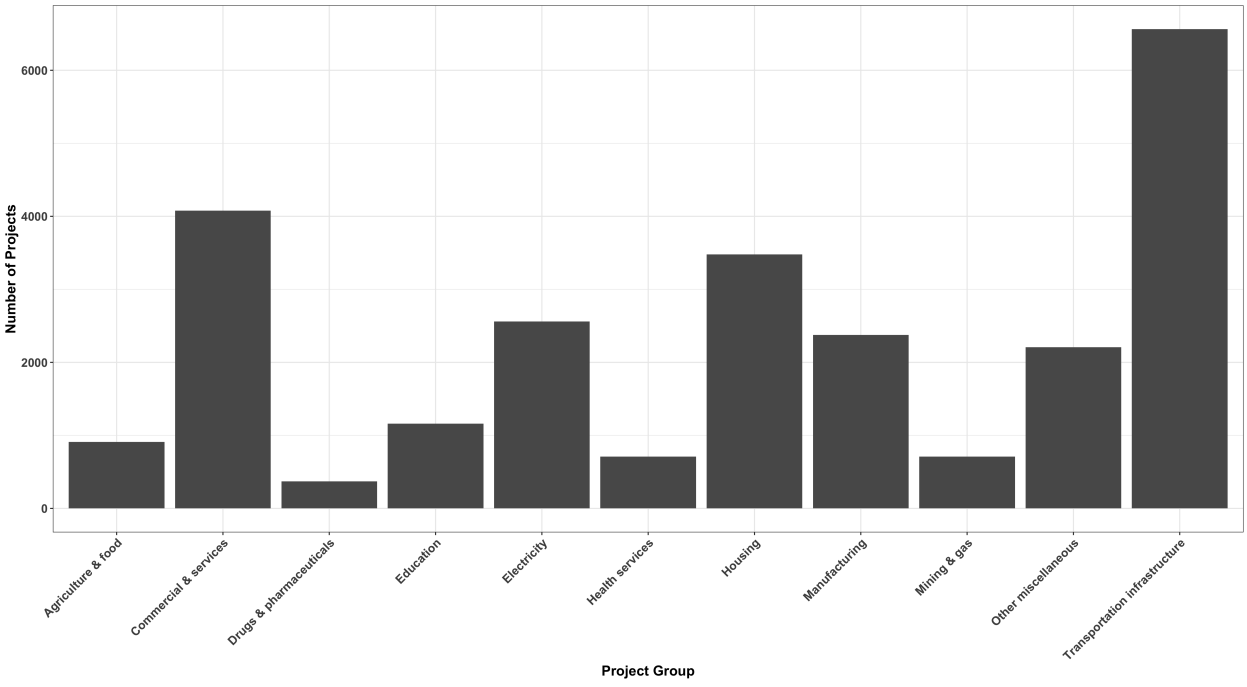
Table A.2: **Descriptive Statistics**

Variable	Mean	SD	N
Project-Level Dataset			
Stalled, Abandoned, No Info (0/1)	0.37	0.48	112024.00
Any Domiciled (0/1)	0.54	0.50	105660.00
Any Domiciled (direct recruit)	0.46	0.50	105623.00
Private Project	0.55	0.50	112027.00
\% With Advanced Degree	0.56	0.39	105660.00
\% Speaks Local Lang.	0.50	0.41	105660.00
Age at Entry	27.50	3.98	105621.00
Agriculture & Food	0.04	0.21	110162.00
Commercial & services	0.17	0.37	110162.00
Drugs & pharmaceuticals	0.02	0.14	110162.00
Education	0.03	0.17	110162.00
Electricity	0.11	0.31	110162.00
Health services	0.02	0.15	110162.00
Housing	0.09	0.29	110162.00
Manufacturing	0.15	0.36	110162.00
Mining & gas	0.03	0.17	110162.00
Transportation infrastructure	0.23	0.42	110162.00
Litigation Dataset			
Any LA Case	0.22	0.41	61884.00
Post Project	0.96	0.20	61884.00
Post Public Project	0.94	0.24	61884.00
Post Private Project	0.82	0.38	61884.00
Any Domiciled	0.42	0.49	57780.00
Any Domiciled (Directly Recruited)	0.33	0.47	57236.00
Protest Dataset			
Any Project (0/1)	0.08	0.27	165528.00
Public Project	0.05	0.22	165528.00
Private Project	0.04	0.20	165528.00
Post Project	0.58	0.49	165528.00
Any Protest (0/1)	0.11	0.31	165528.00
Any Riot (0/1)	0.04	0.20	165528.00
Any Protest or Riot (0/1)	0.13	0.33	165528.00
Any Violence (0/1)	0.02	0.13	165528.00
Any Explosion (0/1)	0.01	0.07	165528.00
Any Battle (0/1)	0.01	0.11	165528.00
Any Strategic Development (0/1)	0.01	0.07	165528.00
Any Domiciled	0.37	0.48	165528.00
Any Domiciled (Directly-Recruited)	0.24	0.42	165528.00
\% With Advanced Degree	0.43	0.44	117192.00
Age At Entry	30.23	5.76	116653.00
Speaks Local Language	0.39	0.44	117192.00
Opposition Politician	0.44	0.50	144894.00
Margin of Victory	11.68	9.63	144837.00
Post Moveable Project	0.41	0.49	165528.00
Post Non Moveable Project	0.48	0.50	165528.00
Post Employment Project	0.19	0.39	165528.00
Post Non Employment Project	0.56	0.50	165528.00
IHDS Dataset			
HH Assets	11.48	5.71	41167.00
Poor (0/1)	0.20	0.40	41145.00
High Confidence in State Gov't	0.29	0.45	40773.00
Any Harassment	0.15	0.35	40975.00
Any Project	0.75	0.43	41178.00
Any Domiciled	0.50	0.50	34263.00
Any Domiciled (Directly Recruited)	0.43	0.49	34195.00

Table A.3: **Summary of Dataset Sources and Coverage**

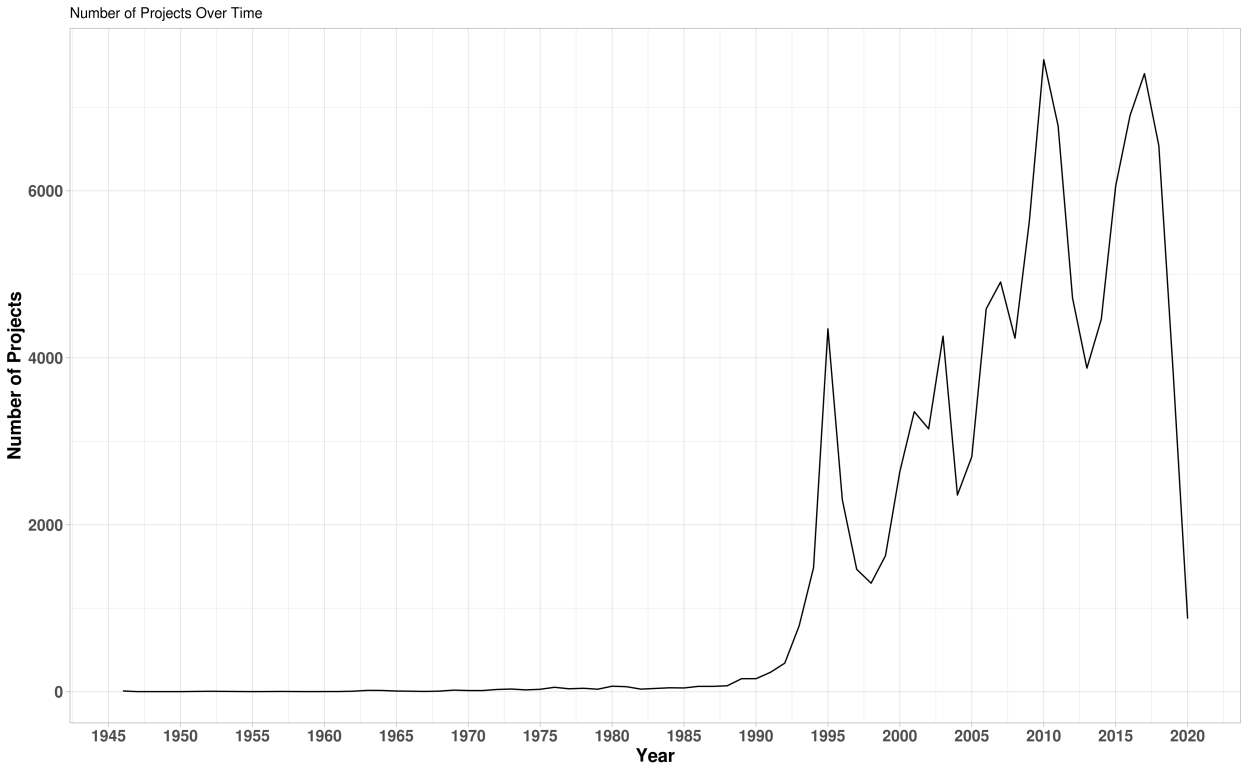
Dataset	Geographical coverage	Unit of analysis	Time coverage	Period analyzed	Source
Capital Expenditure (CapEx) Dataset	All India	10x10 km grid-cell-month	1995-2020	2016-2020	CMIE, CapEx Dataset, 2020
ACLED Political Violence Dataset	All India	10x10 km grid-cell-month	2016-2020	2016-2020	ACLED, India
Judicial Dataset	All India	district-month	2010-2018	2010-2018	Ash et al. (2021)
IAS Dataset	All India	district-month	1990-2020	2004-2020	Dept. of Personnel & Training, Govt. of India
SHRUG Dataset	All India	district-census year	1991, 2001, 2011	2001; 2011	Asher, Lunt, Matsuura, and Novosad (2020)
IHDS	Mainland India	household	2004/05, 2011/12	2004/05, 2011/12	Desai et al. (2005, 2012)

Figure A.1: **Distribution of Project Types in the Data**



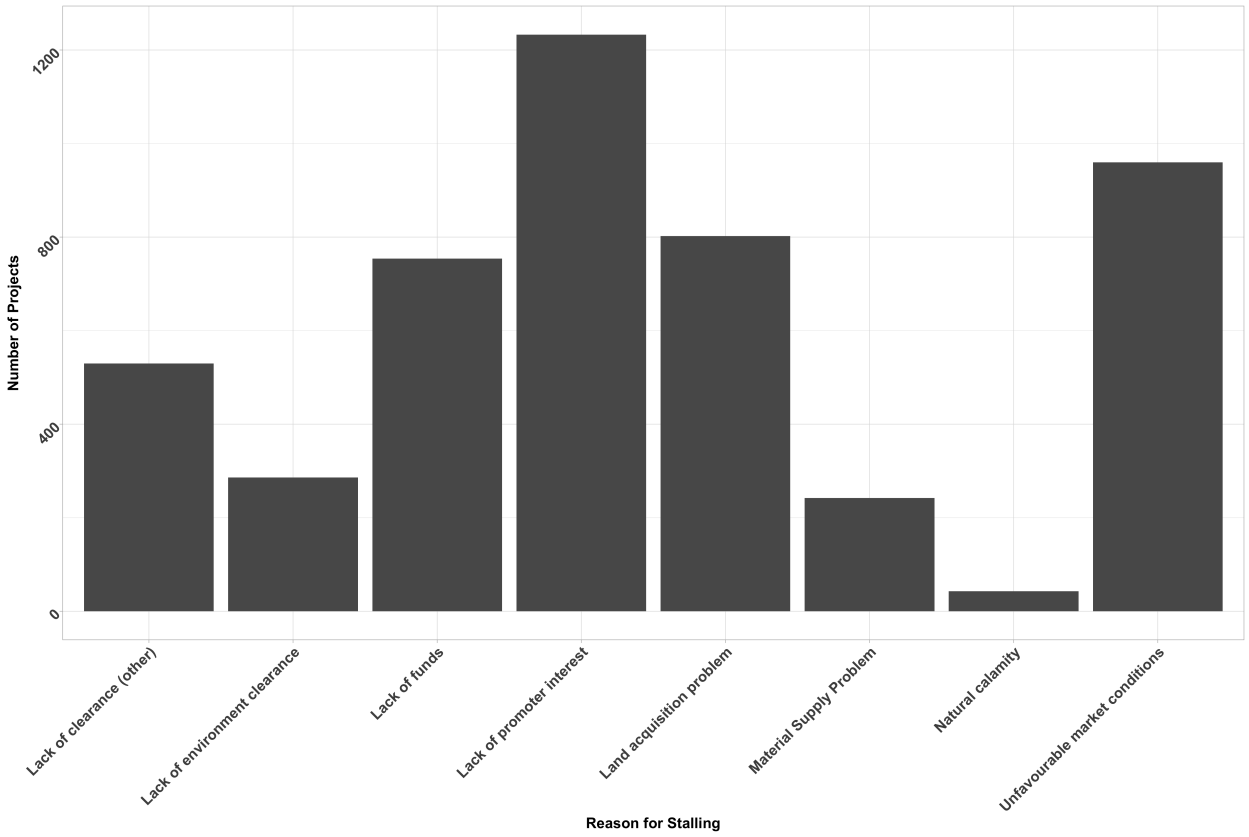
Note: The histograms in this figure show the number of projects belonging to each project category in the CMIE dataset.

Figure A.2: **Distribution of Projects Over Time**



Note: The figure shows the distribution of capital expenditure projects in the CMIE datasets by the year in which they are announced.

Figure A.3: **Reasons for Stalled Investments**



Note: The figure shows the number of projects by the reason why a project was stalled or abandoned in the CMIE dataset.

B Qualitative Evidence

Fieldwork in India for this research project was conducted in two phases. A first round of exploratory fieldwork was carried out in June-September 2019 and a second round was conducted in February-May 2022. The goal was to interview landowners, bureaucrats, politicians, lawyers, and land rights activists about how the state acquires land for infrastructure projects, how and why landowners organize resistance, how bureaucrats think about managing such resistance as well as the consequences of land acquisition for landowners. Most of the first round of fieldwork was conducted in Delhi and its surrounding area as well as Gujarat. The second round of fieldwork took place in and around Delhi and Chhattisgarh.

Landowners were invited for interviews through a reputable land rights organization and in some cases snowball sampling was used (mostly around Delhi). Landowners were explained in Hindi or Chhattisgarhi what the interview was about in advance by activists in the land rights organization and could opt in to participate. During the initial fieldwork, groups of landowners affected by land acquisition were invited to participate in a focus group discussion. Later on, follow-up interviews were conducted with landowners one-on-one. Bureaucrats, politicians, lawyers, and activists were contacted for interviews through snow-ball sampling. Interviews and focus group discussions lasted for about an hour.

Prior to fieldwork, the qualitative component of this research (Protocol 63931) was approved by Stanford University Institutional Review Board. Efforts were made throughout the research project to minimize harm and protect subjects' privacy and confidentiality. Because land acquisition can be a sensitive subject, I worked with a reputable land rights organization that has been assisting communities in Chhattisgarh for the past decade in accessing land rights. Initial introductions by the land rights organization were made in village meetings, followed-up by private interviews in landowners' homes to protect the privacy of research subjects. During the interviews no names were recorded and no audio recordings were made. Interview notes were later on transcribed and saved as encrypted files. Prior paper notes were then destroyed. Interviews with other research subjects such as bureaucrats and lawyers were most often conducted in their offices or in their homes over the phone.

Special precautions were taken as the second part of the fieldwork was conducted over the Covid-19 pandemic. The researcher and translators always wore a mask in any of the settings. Interviews were by and large conducted outside where social distancing was possible. If outside interviews were not possible, the research team wore masks or the interview was conducted over the phone.

C Identification Strategy

C.1 Assignment of IAS Officers to States

Assignment within the Indian Administrative Service is governed by strict rules. There are two channels for recruitment into the service. The primary method of recruitment remains a centralized entry examination. Only about a 100 new bureaucrats—0.15 percent of applicants who take the entrance examinations—are accepted into the service (Singh and Singh, 2011). After admission into the service, officers go through additional training. Upon graduation, IAS officers receive a posting in one of India's states, referred to as cadres. Only one-third of bureaucrats may be domiciled (local to the state) and two-thirds have to be non-local. In addition, the IAS has quotas for different caste groups: General, Scheduled Caste, Scheduled Tribe, and Other Backward Classes. Caste group positions are allocated in proportion to their share in the population. The second channel of recruitment is promotion from the state civil service to the IAS. Since the state civil service is staffed by local officers, promotion increases the number of domiciled bureaucrats within the IAS. While the first of these channels remains governed by factors orthogonal to bureaucrats' preferences, the second is not.

The allocation procedure changed in 2008, hence, I refer to the rule prior to 2008 as the "old guidelines" and the post-2008 rule as the "new guidelines." The assignment of those officers, who have been recruited through competitive examinations, to their home states is determined both by supply and demand-side factors. Common to both the new and old allocation rule is the first step in the allocation process: a list of new IAS officers is drawn, ranked by exam score (Xu et al., 2018). Thakur (2021) gives a detailed description of both allocation rules. According to the old allocation mechanism, states are arranged into four alphabetically ordered groups, which are rotated every year by moving the first group to the last place. Each state creates a list of vacancies in each caste and insider/outsider category. The civil service in India has quotas for each of these categories, therefore, new jobs open up in accordance with promotions and retirements of bureaucrats in the state. Next, officers are asked whether they would like to be stationed in their home state (insider) or in a different state (outsider). The overwhelming majority officers list staying in their home state as their first choice (Bhavnani and Lee, 2018). New officers who have indicated that they prefer staying in their home state are allocated there according to exam rank if a vacancy exists in their home state in their caste category. Swaps are permitted across caste categories if insider vacancies remain open (Thakur, 2021). Remaining IAS officers are allocated to outsider positions based on the ordered list of states, their caste group, and exam score.

The new guidelines differ by-and-large on this last step of allocation. According to the new rules, officers are asked not only to list whether they prefer insider or outsider positions, but rather to give their preferences over the full list of states. Insider positions are allocated according to the old guidelines. Then, all remaining positions are converted to outsider positions and new officers are allocated according to their exam rank and to their preferences. This suggests there is a chance that some states systematically receive worse quality outsider officers than others. Indeed, Thakur (2021) finds that overtime a small number of states may be disadvantaged. To verify that these states do not drive results, I

break down results by excluding states one-by-one.

C.2 Balance Table

Table C.4: Differences Between Domiciled and Non-Domiciled Bureaucrats

	Domiciled Bureaucrat			
	Column 1	Column 2	Column 3	Column 4
Female	−0.002	−0.004	0.003	−0.000
	(0.007)	(0.008)	(0.005)	(0.006)
STEM Degree	0.006	0.010	0.012	0.015
	(0.010)	(0.009)	(0.013)	(0.012)
No. of Degrees	0.012	0.007	0.009	0.011
	(0.014)	(0.014)	(0.015)	(0.014)
Age at IAS Entry	0.067	−0.022	0.066	−0.011
	(0.036)	(0.035)	(0.035)	(0.031)
No. of Languages	0.039**	0.035**	−0.031**	−0.030**
	(0.015)	(0.015)	(0.014)	(0.014)
Any Advanced Degrees	0.025	0.031**	−0.002	0.002
	(0.014)	(0.015)	(0.011)	(0.011)
Allotment Year-Home state FE	No	No	Yes	Yes
Direct Recruits Only	No	Yes	No	Yes
Joint p-value	0.000	0.000	0.008	0.203
Num. obs.	3277	3235	3277	3235
Adj. R^2	0.017	0.016	0.223	0.215

Note: Each column reports regression coefficients. The unit of analysis is at the bureaucrat-level. Each variable independent variable has been standardized to have a zero mean and a standard deviation of one. The dependent variable for each column is whether a particular bureaucrat is domiciled. Columns 3 and 4 include fixed effects for allotment year-home state. Columns 2 and 4 only include officers who have been recruited to the IAS directly, instead of having been promoted from the state civil service. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

C.3 First-Stage Results

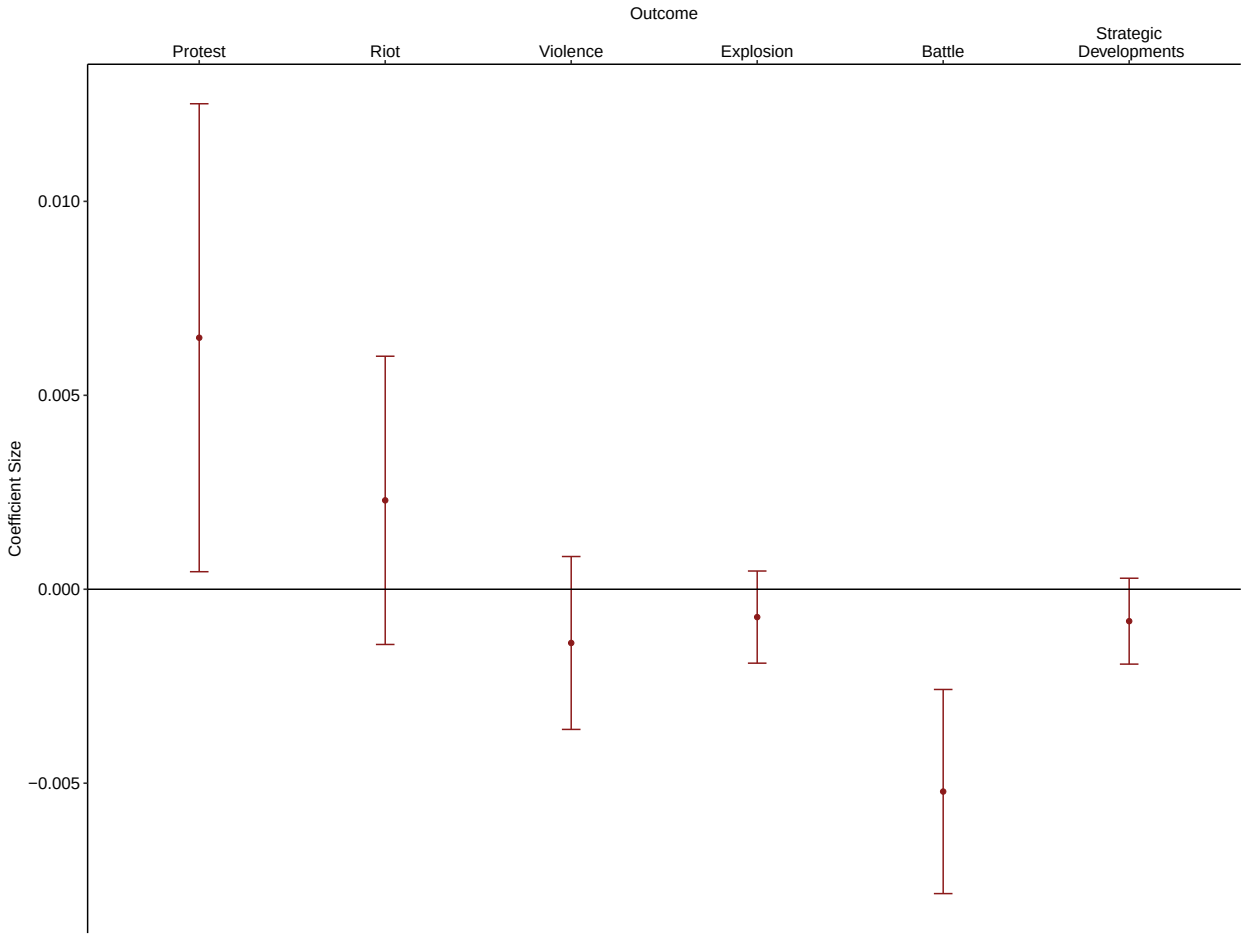
Table C.5: **First-stage results**

Dependent variable:	Post Project	Any Domiciled	Project × Any Domiciled
Post Project	1.000***	−0.012***	0.204***
	(0.000)	(0.003)	(0.005)
Any Domiciled (Directly Recruited)	0.000***	0.672***	−0.061***
	(0.000)	(0.013)	(0.007)
Project × Any Domiciled (Directly Recruited)	0.000***	0.048***	0.806***
	(0.000)	(0.007)	(0.006)
Grid FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
District-Month Clusters	34542	34542	34542
Num. obs	165528	165528	165528
Wald Test p-value	0.000	0.000	0.000

Robust standard errors clustered at the grid-level are included in parentheses. The dependent variable is a binary indicator of whether there are any domiciled bureaucrats in the district in a given month. Each model includes grid cell and year fixed effects. $^{**}p < 0.01$; $^{*}p < 0.05$; $^{*}p < 0.1$

D Land Acquisition and Resistance

Figure D.4: **Probability of Political Violence Following Project Announcements**



Note: The figure captures the impact of project announcement on different types of political violence: protest, riots, violence, explosion, battles, and strategic developments. The coefficients are estimated using Model 1 in Table 1. The bars represent 95 percent confidence interval.

Table D.6: **Bureaucratic Embeddedness and Land Acquisition Litigation**

Dependent variable	Any LA Litigation		
Project Type	All	Public	Private
Post Project	0.038***	0.042***	0.003
	(0.013)	(0.014)	(0.021)
District FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
Doubly-robust correction	Yes	Yes	Yes
District Clusters	573	573	573
DV Mean Value	0.220	0.220	0.220
Num. obs	61884	61884	61884

The unit of analysis is at the district-month level. Robust standard errors clustered at the district level are included in parentheses. The dependent variable is a binary indicator of whether or not there is any land acquisition-related litigation filed in the district in a given month. Models 4 and 5-6 estimates the difference-in-differences coefficient using the doubly-robust method in Callaway & Sant'Anna (2020) using the `did` package in `R`. Models 5 and 8 estimate the impact of projects on the likelihood of a protest or a riot by including spatial lags and standard errors using the `splm` package. *p<0.1; **p<0.05; ***p<0.01.

Table D.7: **Embedded Bureaucrats and Project Completion Rates**

Dependent variable:	Stalled, Abandoned, No Info			
Any Domiciled	0.040***	0.039	0.027	0.026
	(0.015)	(0.027)	(0.026)	(0.008)
Private S. Project	−0.055***	−0.066***	−0.065***	−0.030***
	(0.010)	(0.014)	(0.015)	(0.006)
Any Domiciled × Private S. Project	−0.055***	−0.038*	−0.039*	−0.034***
	(0.014)	(0.021)	(0.022)	(0.009)
Model	OLS	2SLS	2SLS	2SLS
Time Period	Post-2015	Post-2015	Post-2015	Post-1995
District FE	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes
Controls	No	No	Yes	Yes
DV Mean Value	0.373	0.373	0.373	0.373
Adj. R2	0.139	0.139	0.151	0.122
Num. obs.	25536	25536	24122	101671
Num. Clusters	10437	10437	10091	44286

Note: Robust standard errors clustered at the district level are included in parentheses. The dependent variable is a binary indicator of whether the project is stalled, abandoned, or there is no information available for it. Controls include the proportion of bureaucrats with a graduate degree, the average age of entry to the service for bureaucrats, and the proportion of bureaucrats speaking the most commonly used language in the district. *p<0.1; **p<0.05; ***p<0.01.

Table D.8: **Impact of Bureaucratic Embeddedness on Land Acquisition Protest For Early-Career Bureaucrats**

Dependent variable	Any Protest or Riot			
Project Type	All	All	Public	Private
Post Project	0.018***	0.011	0.011	0.025***
	(0.005)	(0.008)	(0.008)	(0.009)
Any Domiciled	−0.006	0.002	0.002	−0.006
	(0.009)	(0.010)	(0.010)	(0.009)
Project X Any Domiciled	−0.021*	−0.025*	−0.029**	−0.020
	(0.012)	(0.013)	(0.014)	(0.015)
Grid FE	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes
State-Year FE	No	Yes	Yes	Yes
DV Mean Value	0.128	0.128	0.128	0.128
Adj R2	0.420	0.427	0.426	0.427
Num. obs	165528	116653	116653	116653
District-Month Clusters	34542	34542	34542	34542

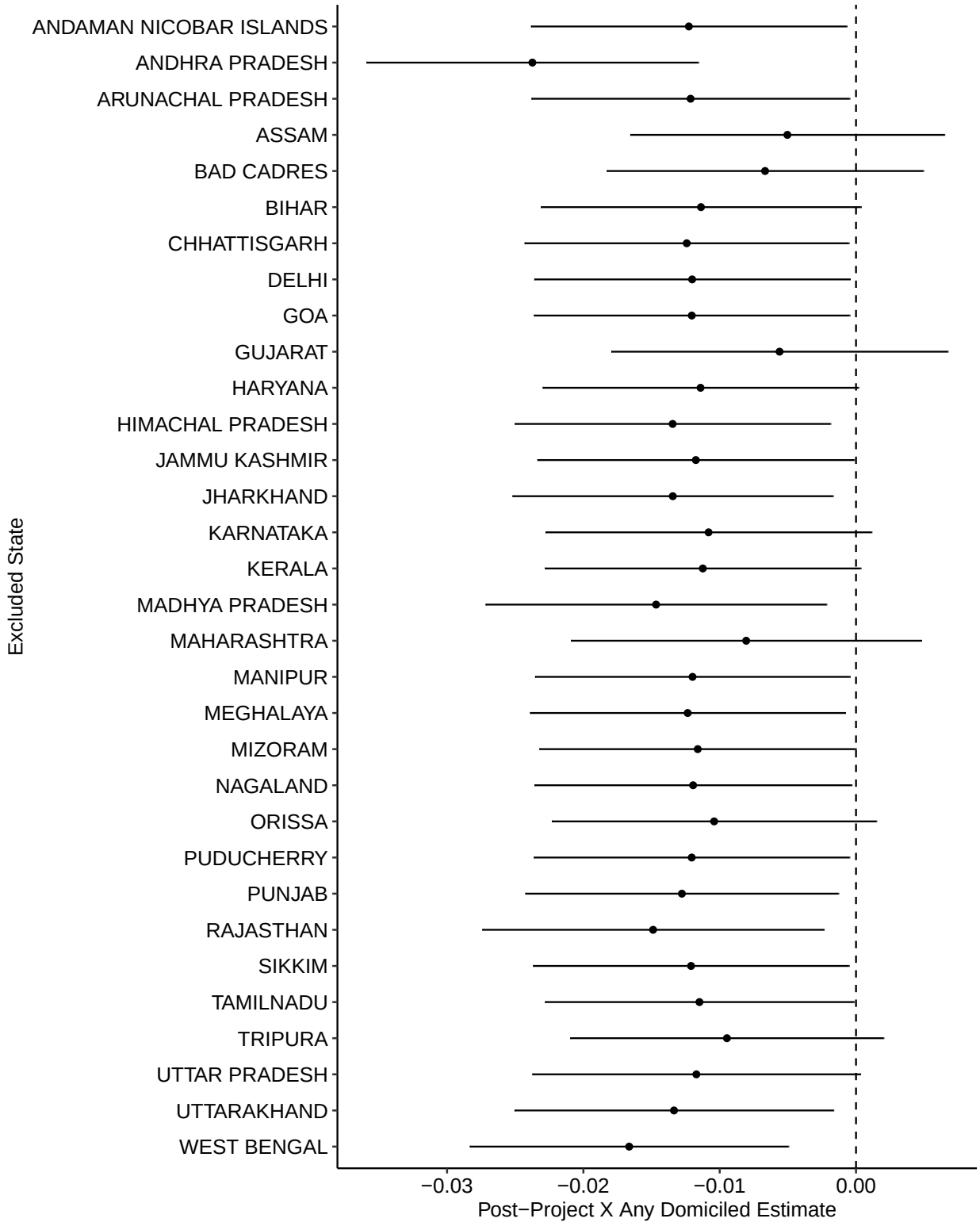
Note: Robust standard errors clustered at the district-month level are included in parentheses. The dependent variable is a binary indicator of whether any protest or riot took place in a grid cell in a given month. Controls include the proportion of bureaucrats with a graduate degree, the average age of entry to the service for bureaucrats, and the proportion of bureaucrats speaking the most commonly used language in the district. *p<0.1; **p<0.05; ***p<0.01.

Table D.9: **Differences in Project Type Across Districts**

	Agriculture&Food	Commercial	Pharma	Education	Energy	Health	Housing	Transport Infrastr	Mining
Any Domiciled	0.002	−0.003	−0.008	−0.005	−0.000	0.010	−0.011	0.007	0.006
	(0.009)	(0.015)	(0.006)	(0.011)	(0.019)	(0.008)	(0.017)	(0.025)	(0.009)
Model	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.051	0.087	0.066	0.077	0.122	0.063	0.194	0.182	0.147
Num. obs.	23736	23736	23736	23736	23736	23736	23736	23736	23736
N Clusters	577	577	577	577	577	577	577	577	577

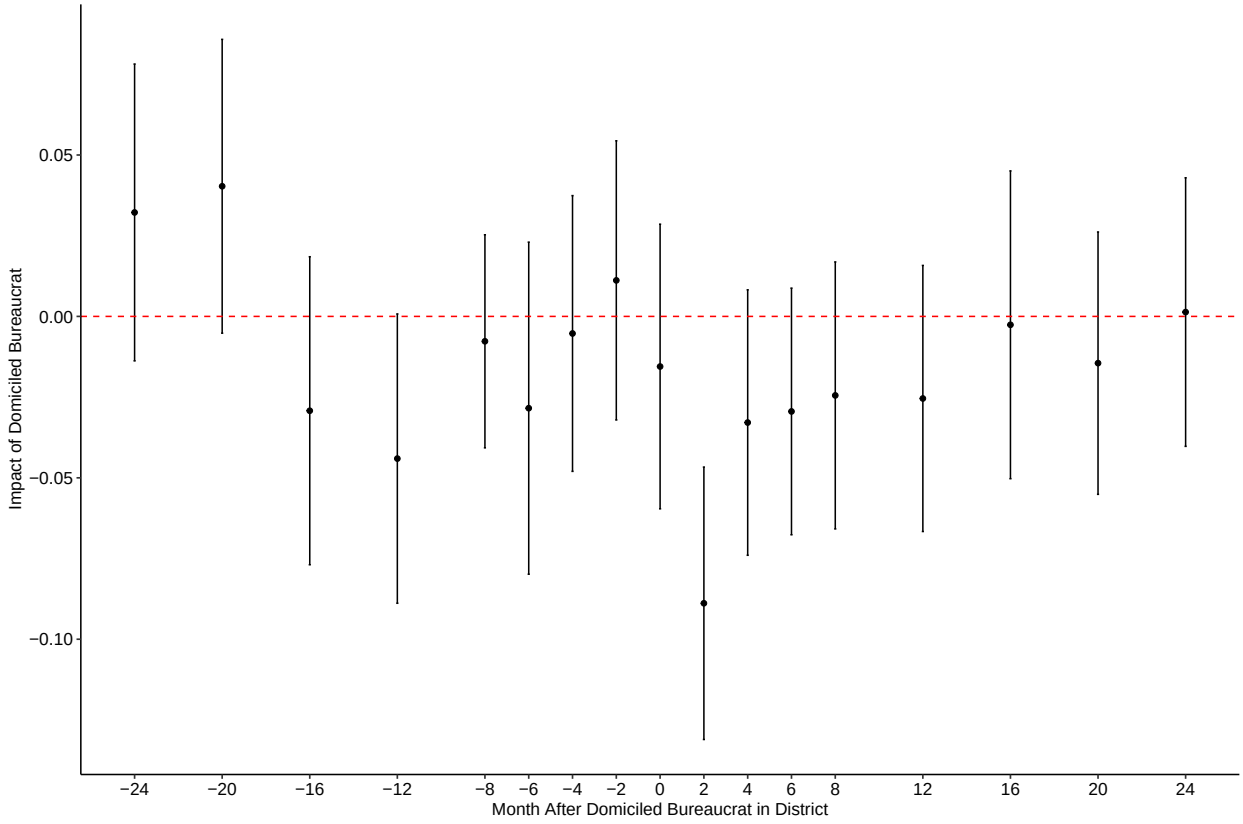
Note: Robust standard errors clustered at the district level are included in parentheses. The unit of analysis is at the project-level. The dependent variable is a binary indicator of whether or not a project belongs to a particular industry category. Controls include the proportion of bureaucrats with a graduate degree, the average age of entry to the service for bureaucrats, and the proportion of bureaucrats speaking the most commonly used language in the district. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Figure D.5: **Impact of Project on Protest or Riot When Excluding States**



Note: The figure shows the estimated impact of a project announcement on the probability of a protest or a riot when excluding each state in the dataset one by one. Each coefficient was estimated using Model 1 in Table 2. Bars represent 95 percent confidence intervals.

Figure D.6: **Impact of Having At Least One Domiciled Bureaucrat on Protest By Month**



Note: The figure shows the impact of having a domiciled bureaucrat in the district for the first month there is a domiciled bureaucrat with leads and lags. Bars indicate 95 percent confidence intervals. The coefficients were estimated using Model 1 in Table 2.

E Mechanism Tests

E.1 RD Identification

In order to identify the impact of politician type on embedded bureaucrats' willingness to enforce land acquisition, I rely on a close-election regression discontinuity design (Eggers, Fowler, Hainmueller, Hall, and Snyder Jr, 2015). I code the politician who wins a constituency to which a grid cell belongs as either a "government politician" if she is a member of the party with the largest vote share and an "opposition politician" otherwise. To identify the impact of an embedded bureaucrat overseeing a project falling into a government vs. opposition politician's constituency, I run a regression of the following form:

$$\begin{aligned} Y_{itcd} = {} & P_{itcd} + D_{dt} + G_{cdt} + M_{cdt} + P_{itcd} \times D_{dt} + P_{itcd} \times G_{cdt} + P_{itcd} \times M_{cdt} \\ & + D_{dt} \times G_{cdt} + D_{dt} \times M_{cdt} + G_{cdt} \times M_{cdt} + P_{itcd} \times D_{dt} \times G_{cdt} \\ & + P_{itcd} \times D_{dt} \times M_{cdt} + D_{dt} \times G_{cdt} \times M_{cdt} + P_{itcd} \times D_{dt} \times G_{cdt} \times M_{cdt} + u_{itcd}, \end{aligned}$$

where P_{itcd} represents whether any project has been announced in grid cell i, in month t, in constituency c, in district d; D_{dt} represents whether there are any domiciled officers in month t in district d; G_{cdt} represents whether the politician in constituency c in district d during month t belongs to the government coalition, and M_{cdt} gives the margin of victory for the politician in constituency c in district d in month t.

To compare the impact of embedded bureaucrats in opposition vs. government-held constituencies, I take the baseline category to be a grid cell with a project announced in an opposition constituency. I interpret $P_{itcd} \times D_{dt}$ as the impact of embedded bureaucrats in a constituency where an opposition politician barely wins election compared to the baseline. Then, I interpret $P_{itcd} \times D_{dt} + P_{itcd} \times D_{dt} \times G_{cdt}$ as the impact of embedded bureaucrats in a government-held constituency compared to the baseline. For Table E.10, I restrict the sample to cases where the margin of victory is less than 1 and 1.5 percentage points. To test the robustness of these results, I plot Figure 3 with increasing bandwidths.

Table E.10: **Impact of Embedded Bureaucrats on Protest by Politician Type**

Dependent variable	Any Protest or Riot			
Project Type	All	All	All	All
Project X Any Domiciled (Opposition)	0.140**	0.059	0.175***	0.022
	(0.058)	(0.069)	(0.044)	(0.048)
Project X Any Domiciled (Government)	−0.106	−0.113	−0.333***	−0.242***
	(0.084)	(0.104)	(0.062)	(0.066)
Bandwidth	≤ 1	≤ 1	≤ 1.5	≤ 1.5
State FE	No	Yes	No	Yes
Adj R2	0.046	0.236	0.036	0.193
Num. obs	8664	8664	13737	13737

Note: Coefficients identify the impact of embedded bureaucrats when interacted with a politician type (government or opposition). Coefficients are obtained from running Equation (2)-(3) while fully interacting component terms with margin of victory. Grid and month fixed effects are dropped and state fixed effects are used to control for common state-specific shocks. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table E.11: Projects, Embeddedness, and Landowners' Experience

Dependent variable	Assets	Poor	Conf.Gov	Harassment	Assets	Poor	Conf.Gov.	Harassment
Project Type	Public				Private			
Sample: Landowners								
Post Project	−0.031	−0.026***	−0.025	0.011	0.504***	−0.028	0.078***	−0.094***
	(0.185)	(0.009)	(0.020)	(0.018)	(0.086)	(0.021)	(0.017)	(0.026)
Any Domiciled	−0.164	−0.046**	−0.016	0.095***	−0.055	−0.016	0.022	0.022
	(0.209)	(0.021)	(0.036)	(0.008)	(0.068)	(0.017)	(0.029)	(0.019)
Project X Any Domiciled	−0.241	0.074***	−0.033	−0.044	−0.504***	0.048*	−0.056	0.063***
	(0.250)	(0.015)	(0.038)	(0.031)	(0.116)	(0.024)	(0.037)	(0.022)
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel Round FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District-Year Clusters	754	754	754	754	754	754	754	754
DV Mean Value	11.70	0.186	0.299	0.146	11.70	0.186	0.299	0.146
Num. obs	20680	20668	20519	20588	20680	20668	20519	20588
Adj. R2	0.806	0.238	0.025	0.007	0.807	0.238	0.026	0.002
Sample: Connected to Government Officials								
Post Project	0.190	−0.020	−0.041	−0.031	0.523**	0.002	0.104***	−0.062*
	(0.205)	(0.019)	(0.056)	(0.023)	(0.224)	(0.015)	(0.028)	(0.030)
Any Domiciled	0.405**	−0.042**	−0.029	0.031	0.330*	0.001	0.051	0.042
	(0.194)	(0.018)	(0.046)	(0.029)	(0.188)	(0.019)	(0.031)	(0.031)
Project X Any Domiciled	−0.488**	0.078***	0.023	0.068**	−0.501**	0.031	−0.098**	0.070*
	(0.230)	(0.018)	(0.051)	(0.033)	(0.232)	(0.020)	(0.036)	(0.036)
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel Round FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District-Year Clusters	754	754	754	754	754	754	754	754
DV Mean Value	14.35	0.095	0.278	0.140	14.35	0.095	0.278	0.140
Num. obs	10083	10081	10025	10039	10083	10081	10025	10039
Adj. R2	0.793	0.118	0.048	0.001	0.793	0.116	0.050	0.001

Note: The dependent variable is an index of household assets in Columns 1 and 5; a binary variable indicating whether a respondent categorizes his household as poor in Cols. 2 and 6, whether the respondent trusts the state government to look after people in Cols. 3 and 7, whether there has been any harassment in Cols 4 and 8. Robust standard errors are clustered at the sampling unit level. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table E.12: **Impact of Bureaucratic Embeddedness on Land Acquisition Protest for Employment-Generating Projects**

Dependent variable	Any Protest or Riot				
Project Type	All	All	All	All	All
Post Employment Project	0.010*	0.004	0.018***	0.018***	0.017**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)
Post Non-Employment Project	0.014***	0.009**	0.013***	0.003	−0.002
	(0.003)	(0.004)	(0.004)	(0.004)	(0.005)
Any Domiciled	−0.005	−0.003	0.001	−0.005	−0.010*
	(0.004)	(0.005)	(0.006)	(0.006)	(0.006)
Post Employment P X Domiciled	0.007	0.009	−0.010	−0.010	−0.010
	(0.007)	(0.008)	(0.010)	(0.010)	(0.011)
Post Non-Employment P X Domiciled	−0.011**	−0.010**	−0.008	−0.002	0.001
	(0.004)	(0.005)	(0.006)	(0.006)	(0.007)
Model	OLS	OLS	2SLS	2SLS	2SLS
Grid FE	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes
State-Year FE	No	No	No	Yes	Yes
DV Mean Value	0.128	0.128	0.128	0.128	0.128
Adj R2	0.420	0.414	0.420	0.431	0.427
Num. obs	165528	116653	165528	165528	116653
District-Month Clusters	34542	26713	34542	34542	26713

Note: Robust standard errors clustered at the district-month level are included in parentheses. The dependent variable is a binary indicator of whether any protest took place in a grid cell in a given year. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table E.13: **Impact of Bureaucratic Embeddedness on Land Acquisition Protest for Moveable Projects**

Dependent variable:	Any Protest or Riot				
Project Type	All	All	All	All	All
Post Moveable Project	0.023***	0.014***	0.026***	0.017***	0.014***
	(0.004)	(0.005)	(0.004)	(0.004)	(0.005)
Post Non-Moveable Project	0.015***	0.006	0.014***	0.005	−0.004
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)
Any Domiciled	−0.001	−0.002	0.005	−0.001	−0.008
	(0.004)	(0.005)	(0.006)	(0.006)	(0.006)
Post Moveable P X Domiciled	−0.009*	−0.005	−0.016**	−0.015∗∗	−0.014*
	(0.005)	(0.005)	(0.007)	(0.007)	(0.008)
Post Non-Moveable P X Domiciled	−0.008*	−0.005	−0.007	−0.001	0.005
	(0.005)	(0.005)	(0.006)	(0.006)	(0.007)
Model	OLS	OLS	2SLS	2SLS	2SLS
Grid FE	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes
State-Year FE	No	No	No	Yes	Yes
DV Mean Value	0.128	0.128	0.128	0.128	0.128
Adj R^2	0.420	0.414	0.420	0.431	0.427
Num. obs	165528	116653	165528	165528	116653
District-Month Clusters	34542	26713	34542	34542	26713

Note: Robust standard errors clustered at the district-month level are included in parentheses. The dependent variable is a binary indicator of whether any protest took place in a grid cell in a given year. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$