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***Land Rights without
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Property Rights
Institutions, Growth,
and Development in
Rural India***

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Land Rights Without Law

Understanding Property Rights Institutions, Growth, and Development in Rural India

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I. Introduction

Theorists of new institutional economics are often accused of treating formal property rights institutions as a silver bullet for solving problems of economic growth, political development, and particular cultures' successes.¹ Yet the establishment of rights to property does not guarantee control over property. The relationship between formal property rights and economic development is unclear when legal rights to property are distinct from the informal capacity to control property. I consider formal institutions to be a set of rules with *legal* enforcement. In contrast, informal institutions rely on *social norms* to enforce rules, which are often framed as codes of behavior.² Formal and informal institutions usually coexist in a given state, with informal institutions and formal institutions acting as complements. Informal institutions coordinate interests, whereas formal institutions enforce decisions. I examine the relationship between formal and informal institutions in the context of rights to a highly-valued resource: land rights in rural North India.

I question how farmers utilize informal (non-legal) and formal (legal) property rights institutions to solve contested land rights, which are a frequent problem in the developing world. I will analyze this question in the context of two neighboring states in rural north India, Uttar Pradesh and Haryana, where land rights are extremely valuable and there is high intra-state and inter-state variation in the development and quality of property rights. Based on a dataset of randomly-selected district court cases about disputed land title in Pratapgarh

1 Critique and testing of this view provided by Rodrik, Subramanian and Trebbi (2002: 2): "Since long-term economic development is a complex phenomenon, the idea that any one (or even all) of the ... deep determinants [of growth: geography, integration, and institutions] can provide an adequate accounting of centuries of economic history is, on the face of it, preposterous." Theories on the institutional foundations of growth are provided by: North and Thomas 1973; North 1981, 1990; North and Weingast 1989; Milgrom, North and Weingast 1990; Greif 1992; Greif, Milgrom and Weingast 1994; Engerman and Sokoloff 1994; Acemoglu, Johnson and Robinson 2001; and Easterly and Levine 2004. A critique of underlying assumptions provided by Ricker 1980; Elster 2000; Shepsle 2006. Examination of logical claims about institutions' role is provided by Haber, Razo and Maurer 2003; Stasavage 2003; Greif and Laitin 2004; and Greif 2006.

2 This definition squares with North (1990) who calls institutions as "the rules of the game" in a given society, with incentives for cooperation and sanctions for defection. Greif (2006) provides a similar definition that combines formal and informal institutions' functions into a single concept of institutions.

district, central Uttar Pradesh, I provide preliminary tests of my verbal theory's implications. The descriptive statistics show that my theory is plausible. Three conclusions follow from these empirics. First, coercion is the most frequently-used tool for resolving land disputes between parties with large differentials in informal (caste) power. However, coercion is limited to settling disputes *between individuals*, as opposed to settling disputes *for an entire class of people*. Second, there is initial statistical evidence of pro-upper caste bias in Pratapgarh's District Court proceedings. However, a data on landownership by caste is required to confirm the court's upper-caste bias. Third, this research provides a basis for future studies of caste as an informal identity that provides valuable coordination mechanism in formal property rights institutions.

My theory is that formal and informal institutions are complements. Informal institutions have a comparative advantage in coordinating interests, whereas formal institutions have an advantage in enforcing laws. By interests, I refer to "the things we value as a society." I define interest coordination as the process by which people develop: (1) similar beliefs about social interests, (2) common knowledge about what these beliefs are, and (3) general principles about how decisions are made in the social interest. I define legal enforcement as use of the state's coercive apparatus – mainly local police forces and the national military – to implement the judicial system's legal decisions. This theory has two observable implications.

First, both powerful and weak farmers utilize the courts. Farmers choose to use formal institutions if the benefits of *legal enforcement* over and above a farmer's individual ability to enforce land claims outweigh the court's expected costs. Court use is valuable to a farmer when there is a small power differential between the given farmer and his/her opponent, regardless of their absolute power. Thus, both powerful and weak farmers use courts, but only when litigant's evenly-matched informal power requires a formal arbitration mechanism.

Second, India's formal institutions do not treat all litigants equally. Specifically, a litigant's informal power, as measured by caste (and subcaste: *jati*) is a significant determinant of whether the courts will rule in favor of his or her claim. This bias occurs because litigants' informal power is a significant tool in either constraining or expanding their access to the formal (legal) system. The logic of interest coordination works as follows: first, certain castes (and *jatits*), nationally grouped as Other Backward Castes, have longstanding social rights to land ownership. Non-OBC castes have diminishing rights to land ownership in descending order of influence (Brahmin, Vaiyasha, and lastly former untouchables). Multiple resources follow from more accepted rights to land: greater ability to secure and defend land title with local land revenue administrators; more connections to officials who have influence in securing property; and greater ability to secure legal council and information on court proceedings. Conversely, the less influential a given litigant's caste and *jati*, the less likely that litigant will be able to access documents to gather and present evidence, and the less likely the litigant will be aware of court proceedings and able to reach the court for hearing dates.

My theory explains a puzzle evident throughout the developing world: widespread use of *impersonal* formal institutions without rejecting pre-existing *personal* informal institutions. I theorize that India's formal court decisions remain based upon a pervasive informal institution: caste. In studying caste I refer to both the four-tier caste system and the *jati* system of endogamous subcastes, where each *jati* has a well-defined social status and a corresponding set of labor, religious, and social obligations and proscriptions with a clear enforcement mechanism: *caste and jati panchayats*.³ Although *jati* rules and regulations

3 Evidence of the Caste system's four varnas generally refers to the *Bhagavad Gita* and *Manusmriti*, which can be interpreted either as arguing that caste emerged from external influences – such as surplus labor within the newly-conquered slaves who were incorporated into Aryan tribes around 1000 BCE – or from an intrinsic notion of duty. (Shah 2002) Regardless, the Caste system creates four categories of people: Brahmin scholars and priests, Kshatriya royalty and warriors, Vaishya merchants, and Shudra agriculturalists and artisans, ignoring a fifth category of 'untouchables' who are excluded from most benefits of the social system. The *jati* system relies on a more complex set of marriage laws that divide each caste into multiple subcastes, each with their own set of rules and enforcement mechanisms. The most visible enforcement mechanism is the *caste panchayat*, or council of castes discussed by Srinivas, (1962, 1976, 1994) Dumont, (1970) and Mendelsohn (2002) among others.

continue to change in the present time, there is still dramatic evidence of their enforcement.⁴

I theorize that formal institutions have a comparative advantage in enforcing laws, whereas informal institutions have a comparative advantage in coordinating interests, making enduring consensus more likely. The selection of informal institutions for resolving land disputes does not preclude use of the formal institutions, and efficiency may even require use of both institutions. However the welfare effects of using these institutions remain uncertain.

I focus on property rights to land because agricultural land is one of the most valuable commodities in the initial development of societies worldwide.⁵ Property rights to land include three types of rights: the right to exclude non-owners from accessing land, the right to appropriate rents from use and investment in land, and the right to transfer land to others.⁶ Historical studies of variation in property rights to land in India by Banerjee and Iyer (2003) find significant correlation between historical access to formal property rights and contemporary growth patterns. Recent experiments by De Soto (1989) to increase low-income groups' access to property rights over Peru's urban land have led to significant advances in local economic and political well-being.

Theoretically, formal institutions represent an improvement over informal institutions if they have a relatively cheap, predictable enforcement mechanism. Thus, India's system of formal property rights under-girded by courts is desirable to the extent that contracts for property rights are written clearly and consistently, and courts uphold contractual obligations. Yet formal institutions may not be equally or more efficient as informal institutions in *coordinating* contracts for scarce resources between multiple interested parties. Thus, I suggest that

4 T.K. Rajalakshmi (2008) writes of "Caste Injustice" based on the Malik *jati panchayat's* ruling banning their marriage in Rohtak, Haryana; Vimal Sumbly (1999) writes of another Malik *jati panchayat's* decision to ban a girl from her in-law's village in Kaithal, Haryana.

5 Michael Mann (1986)

6 Gary Libecap (1989)

widespread use of formal institutions' enforcement mechanisms does not preclude widespread use of informal institutions, particularly for coordination purposes. I will provide a simple model of institutional use and conduct preliminary tests of institutional use as well as its effects on Indians of varied social standing.

In reality, the informal, daily negotiation of property rights institutions often diverges from the formal, legal framework for these rights. Nowhere is this more evident than in the developing world. This raises questions about whether formal institutions are actually best-suited for encouraging growth. Even if formal institutions are appropriate, legal scholar David Kennedy (2003) underlines the point that there is no single method of formalizing property rights. There are many stable and efficient formal systems, as well as mixes of formal and informal systems, each with its own set of winners and losers. In order to assess which system is best-suited for encouraging growth, one must first consider the system of norms that undergirds a given society.⁷

Rodrik, Subramanian and Trebbi (2002) remind us that formal property rights regimes may be a suboptimal coordination mechanism in developing countries.⁸ Thus, formal institutions might only be appropriate when considered as a component of a larger system including both formal and informal coordination mechanisms.⁹ Alternately, formal institutions may be completely irrelevant, given Ellickson's (1993) suggestion that better-enforced, less costly local systems of rules and sanctions often exist.

I study the relationship between formal and informal property rights in India because the country's tangled legal system raises doubts that legal property rights are a fundamental

7 David Kennedy (2003). See also Jean Platteau (1994, 2000) and Avner Greif (2006).

8 For example, Russia scores lower on scales of institutional quality than China despite its more traditional formal legal regime. (Bardhan 2005: 17) For the negative effects of "too many institutions" in Russia see Rose (1986), Heller (1997).

9 On this point, see James Scott's (1998) critique of 20th century states' attempts to create growth solely via rational formal institutions.

source of economic growth. The Indian legal system's ability to enforce property rights is at best slow and at worst a hindrance to growth. On average, cases take ten years to resolve in court.¹⁰ My field research supports Moog's (1997) finding that litigants' most effective means of resolving disputes in Indian courts generally occurs outside the court: via out-of-court settlements, withdrawals, and/or compromises between litigants and defendants.

A major benefit of formal institutions is their provision of an impersonal standard for arbitrating disputes over rights.¹¹ Although India's formal rules are indeed impersonal, I argue that the operation of legal institutions (courts) is personal, providing difference outcomes based on a litigant's informal (caste) status. These preliminary studies of Indian judicial institutions suggest that the contemporary system has a clear set of winners and losers: political, economic, and social elites benefit while non-elites lose. The winner's group of political and economic elites shifts according to national and state politics, but the majority of Indians live in poverty¹² and belong to lower-caste groups with little chance of advancement to elite status. Until India develops an impersonal legal system, I argue that the state will be unable to promote the broad-based *impersonal* investment in specialized skills that acclaimed scholars such as North and Thomas (1973), Besley and Case (1994), Amsden (2001), Rodrik, Subramanian and Trebbi (2002), and North, Wallace, and Weingast (forthcoming) consider necessary for sustained political and economic growth.

India's dilemma of how to develop a coherent, productivity-enhancing system of formal property rights with its majority-rural population base is the same dilemma faced historically

10 World Bank (2006). Fali Nariman, (2006) head of the Indian Bar Association, considers the proliferation of appeals in Indian courts to be the major source of delays in court. He writes that "provision for three or four appeals (which we frequently have under many of our laws) suggests a complete lack of confidence in the judiciary! We end up, in our anxiety to do justice, denying it altogether or unduly delaying it."

11 See North, Wallace, and Weingast (forthcoming) for a longer exposition on this.

12 80% of Indians live on less than two dollars per day according to Nation Master: (<http://www.nationmaster.com/red/country/in-india/eco-economy&all=1>). By the conservative estimate of India's National Sample Survey, lower-caste groups compose 55% of India's population. National Sample Survey Organization (2000) Delhi: Government of India. As reported in *The Tribune*, 11 June, 2006. Accessed at: <http://www.tribuneindia.com/2006/20060611/main2.htm>

by states like England, France, and Japan.¹³ Many other emergent powers face the same question today, including China, Indonesia, and most African states. Democratic India's quest to establish an equitable distribution of property rights leading to broad-based growth should be a serious question for all scholars and practitioners who consider equitable distribution of resources and rights important for either ethical and/or practical reasons.

My contribution to the political economy literature on property rights institutions is an analysis of how formal and informal institutions are jointly used to resolve a clear economic problem: long-standing disputes over property rights to land. Whereas prior work posits the existence of informal institutions undergirding formal institutions, scholars have yet to develop and test game theoretic models of how formal and informal institutions interact. This research presents an initial attempt to provide a clear verbal theory of institutional overlap and examine the theory's plausibility using descriptive statistics. This work also creates the basis for future formal models and more rigorous statistical tests of the theory's legal and welfare implications.

The next section of this paper provides a brief review of the existing literature on property rights over land (e.g. land tenure systems), and India's land tenure system. In the third section I lay out my verbal theory. In the fourth section I discuss my empirical strategy and data analysis. The fifth section includes a discussion of the analysis, with a particular focus on caste as a coordination mechanism, and concludes.

¹³ See Weber (1922) *Economy and Society*; Polanyi (1944) *The Great Transformation*; Gerschenkron (1966) *Economic Backwardness in Historical Perspective*; Moore (1966) *Social Origins of Dictatorship and Democracy*; Skocpol (1979) *States and Social Revolutions: A comparative analysis of France, Russia, and China*; and Goldstone (1991) *Revolution and Rebellion in the Early Modern World*.

II. Literature Review

Property rights to land.

Questions about the evolution and contemporary form of property rights institutions are central to political economy, mainly because of the thesis popularized by North (1981): better-defined and better-enforced property rights result in a virtuous circle of increasing state capacity and increasing economic growth. Property rights to land matter for political development because state capacity burgeoned alongside rulers' centralized ability to tax agricultural production on well-defined private land.¹⁴

Charles Tilly (1990) and Mancur Olson (1982) pinpoint state¹⁵ control over taxable territory, e.g. taxable rights to land as a fundamental resource for political development. Olson (1993) focuses on the economic incentives for state development, finding that once rulers give peasants secure rights to land, these rights provide self-enforcing economic incentives for peasant investment in agriculture. Peasant investment in agricultural production creates increasing incentives for rulers to refrain from expropriating peasant profits.¹⁶

Abhijit Banerjee and Lakshmi Iyer (2003) find that longstanding control over land, defined as historical land tenure systems (either landlord or non-landlord controlled) directly predicts post-independence levels of agricultural investment.¹⁷ After controlling for a range of geographic and historical variation (the length of British colonial rule), Banerjee and Iyer find

14 In contrast, the economic development literature on institutions begun with a set of specialized questions as to why private firms emerge and create more secure property rights within decentralized markets. Demsetz (1967), Alchian and Demsetz (1973), and Williamson (1985) focus on the origins and growth of firms and markets.

15 Using Weber's (1958: 78) definition of the state, whereby a state possesses a monopoly on the legitimate use of physical force across its given territory.

16 Tilly (1990) provides an alternate focus on territorial control as a means to maximize revenue extraction. More elaborate histories of the process of centralizing states' territorial power are given by: Giovanni Poggi (1978), Michael Mann (1993), Karen Barkey (1994), Hendrick Spruyt (1994), and Margaret Levi (1998).

17 Irrigation is 25 percent higher in non-landlord-controlled districts, alongside 45 percent higher use of fertilizer, and 16 percent higher overall crop yields. This result holds after re-testing their regressions on a restricted sample of geographically-contiguous districts where choice of colonial land tenure system was completely exogenous to local characteristics. Banerjee and Iyer (2002) "History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India," *American Economic Review*.

significantly higher agricultural investment in non-landlord controlled districts, where *individuals* rather than a few elites held property rights. This research shows that areas where colonists established historical institutions approximating today's property rights had sustained patterns of higher agricultural investment, whereas areas without such institutions did not. Only a handful of scholars have conducted empirical studies of land rights institutions' longterm economic effects.¹⁸

There are two well-developed critiques of this literature, one theoretical and the other empirical. Tim Besley (1995) critiques the theoretical assertion that causality runs from security in land rights to growth-enhancing investment in land. Using cross-sectional, field-level data on household production in two regions of Ghana, Besley finds that strong property rights to land *precede investment* in only one of two regions studied.¹⁹ Deininger et al. (2004) refute Besley's claim that higher investment may cause the development of more secure property rights in a study of Ethiopian agriculture.²⁰ The authors study two types of investment. Investment in planting trees is a clear means of asserting property rights without causing a definite improvement in productivity. Farmers exclusively invest in tree planting where tenure insecurity is high. In contrast, *productivity-enhancing investment* in building terraces is not a visible signal of property rights. Deininger et al. find that farmers' investment in terrace-building increases significantly as tenure insecurity decreases. Thus, investment in secure property rights is a precondition for agricultural investment in rural Ethiopia.

A second, empirical critique of the political economy of land rights concerns the importance of power in shaping land markets. Empirical studies by Lanjouw and Stern (1998), Binswanger et al. (1995) and a review by Bardhan and Udry (1999) suggest that land rights

18 Notable research on the longterm growth consequences of developing property rights to land includes Berry (1993), Besley (1995), Banerjee, Gertler, and Ghatak (2002), Engerman and Sokoloff (2003), Goldstein and Udry (2005), and Field (2007).

19 The two regions areWassa, where Besley studies 217 households and 1,074 fields, and Anloga, where 117 households with 494 owner-cultivated fields are studied. Besley suggests inconclusive results may be due to Anloga's small sample size.

20 Klaus Deininger et al. (2005).

are the result of long-term processes of consolidating power, rather than the result of increasingly competitive markets. This conclusion is plausible because land-ownership continues to be a common method of controlling many resources including local social status, access to credit, and the returns to production.²¹ Understanding how power shapes current and future property rights to land is particularly important because, as Hoff and Stiglitz (2005: 3) explain, property rights can be self-defeating in any context where individual ownership of assets does not guarantee “control rights.”²²

In sum, there is a theoretical consensus that the specification of formal land rights institutions is a prerequisite for modern economic growth and development, yet empirical studies suggest reasons to doubt that formal land rights regimes are impersonal *in practice*. I hypothesize that we can predict which disputes enter formal institutions (courts) based on litigants' calculation of the benefits and costs of legal enforcement over and above their individual ability to enforce land claims. To clarify the Indian context of this argument I next provide a brief overview of India's land tenure system.

Land tenure in India.

India's contemporary land title system is highly dependent on its historical organization.²³ In Mughal times, rights to land were gained by conquest, but contests for power varied according to regional systems of control. In Oudh, which now constitutes a major part of Uttar Pradesh, Zamindars held large tracts of land and controlled cultivation, revenue collection, and defense of their land.²⁴ The British administration attempted to downgrade

21 T.N. Srinavas (1959) *The Dominant Caste and Other Essays* argues that land is transferred towards members of the dominant, e.g. powerful caste. More specific theses are provided by Dumont (Srinavas 1987) and G.K. Karnath (1996) “Caste in Contemporary Rural India,” pp. 87-109 in MN Srinivas, ed. *Caste: Its Twentieth Century Avitar*. New Delhi: Penguin Books. However, recent disagreement about the existence of Srinivas's hypothesized “dominant caste” comes from Dube (1968), Oomen (1970), Louis Dumont (1970), and most recently Mendelsohn (2002).

22 Karla Hoff and Joseph Stiglitz (2005) “The Creation of the Rule of Law and the Legitimacy of Property Rights: The Political and Economic Consequences of a Corrupt Privatization,” NBER Working Paper Series, Working Paper 11772.

23 The system's continuity is evident in Uttar Pradesh state, where land revenue administrators record dates based on the number of years since the Mughal ruler Akbar's Land Revenue Settlement of 1571.

24 B.H. Baden-Powell (1907: 41) *Land Revenue in British India*. Oxford: Clarendon Press.

Zamindars' power with little success.²⁵ In the pre-colonial and colonial Punjab, now divided into the two states of Punjab and Haryana lying north-east of Uttar Pradesh, “the villages ... had a strong constitution and no extensive system of 'Zamindars' ever prevailed.”²⁶ As a result, land revenue was collected at the village-level both during Mughal and British rule using a system known as Mahalwari (village-level) tenure.

Despite the aforementioned differences in landholding patterns across north Indian states, Independent India's administrative system for maintaining land revenue and rights is constant across states. The local unit of the land revenue administration, known as the *Pattwari* or *Lekpal*, is responsible for all local records of property rights to land and taxation within one revenue circle (three to five villages, or 1,200-5,000 acres of land).²⁷ The *Pattwari* maintains the two crucial documents for establishing and arbitrating land tenure: *ketawni*, the record of land title that is updated yearly, and *khazra*, the record of land use that is updated each season (twice annually).

A *Pattwari* is supervised by a clear hierarchy of officers:²⁸ a *kanoongo* supervises about every ten *Pattwaris*, and has authority at the level of the Mughal district (*pargana*).²⁹ A *Tehsildar*³⁰ supervises about three to five *Kanoongos*. *Tehsildars* constitute the first court for deciding revenue matters and keep records of all court disputes, known as *missile bandh registers* (“case closed registers”).³¹ The *Sub-Divisional Magistrate* or *Officer* (SDM) heads the first court of

25 The British reclassified Zamindars as 'Taluqdars', meaning "dependents" in Arabic. Baden-Powell (1907: 41).

26 Baden Powell (1907: 44).

27 Baden Powell (1907: 28), authors' observations and interviews with District Commissioners in Yamunanagar District, Haryana, Sonapat, District, Haryana, Bhagpat District, UP, and Pratapgarh District, UP.

28 Hierarchy details provided by District Commissioner Mr. Nitin Yadav of Yamunanagar, Uttar Pradesh on 4 July, 2008.

29 Baden Powell (1907: 26).

30 Now known as a *Circle Revenue Officer* in Haryana and Punjab.

31 Local land disputes include contested land revenue records (including contested size and landholder name), contested land transfers within and across villages, contested use and control over common (village or collectively-held) land, and contested village boundaries. *Tehsildars* determine legal cases based mainly on evidence of current possession, secondarily based on additional legal records, and thirdly based on witnesses' testimony.

appeal in addition to supervising about three or four *Tehsildars*. The District *Collector*³² controls the second court of appeal for revenue matters, with further appeals brought to the Commissioner and finally to the state-level Board of Revenue.³³ Alternately, individuals can take revenue concerns to the Civil Courts system if they believe a civil right has been violated in the course of a given dispute. Civil Courts' authority trumps Land the Revenue Courts' if a case is simultaneously raised in both courts.

A major source of variation in the apportionment and administration of land title stems from differing state-administered land reform policies. The three most relevant types of reform are: attempts to remove intermediary revenue collectors (*Zamindars*), implementation of landholding ceilings, and consolidation of dispersed landholdings.³⁴ Consolidation surveys are meant to preclude property rights disputes, but often cause a large set of new disputes.³⁵ Across India, landholding inequality remains high despite reforms, with eighty percent of farming households cultivating only thirty six percent of India's total agricultural land.³⁶

Overall, there is a wide gap between the formal system for distributing and recording land tenure and the informal system of creating and accessing land tenure rights. Formally, each state has implemented a progressive system of land redistribution administered by officials stretching from the village to the state center. These formal property rights are officially accessible to everyone, especially since most states now provide digital land title records (*ketawni*). In practice, land redistribution almost never gives poorer individuals effective control rights over new plots. Instead, consolidation of landholdings through reforms and

32 The District Collector also serves as the *Divisional Commissioner* and sometimes as the *Divisional Magistrate* or *District Magistrate*, (DC/ DM).

33 Baden Powell (1907: 22).

34 Besley and Burgess (2000: 392).

35 Consolidation surveys are conducted once every three years in Haryana, whereas only one consolidation survey has occurred since independence in Uttar Pradesh's villages. From the author's observations, variation in frequency of consolidation surveys causes variation in the clarity, accuracy, and accessibility of land tenure records.

36 Indian Agricultural Census (1996), c.f. Oksana Nagayets (2005) "Small Farms: Current Status and Key Trends," *Information Brief* prepared for the "Future of Small Farms" Research Workshop at Wye College, 26-29 June, 2005.

surveys generally allows powerful landholders to attain the most fertile plots in a village and settle old scores with less-powerful neighbors.³⁷ Thus, discussion of formal land tenure institutions in India must be moderated by an understanding of informal rights to land.

III. Argument

In order to model a farmer's strategic decision about whether to use courts or coercive power to resolve a land dispute, I suggest a simple verbal theory. My goal is to provide a plausible theory about why landowners with a range of high to low coercive power choose to enforce land rights *both inside and outside courts* as well as a secondary theory about the outcome of formal litigation. I first outline the players, their alternative actions, the structure of the players interactions, and their payoffs in my verbal theory. I then explain the set of predictions that follow from my primary and secondary hypotheses about when formal litigation occurs and what its results will be. In the following, empirical section I will provide evidence of my secondary hypothesis that courts have institutional bias against litigants with lower caste and *jati* status when arbitrating between two landowners of different caste status.

Imagine there are two players, 1 and 2. Each player is a landowner who claims rights to the same plot of land. For simplicity's sake, I model disputes over land as a one-stage game where each player has two possible options. The players decide simultaneously whether to grab the disputed plot of land (G) or litigate for the land by bringing the case to court (L). If either player chooses to litigate, the case is decided before the court and both players must pay a cost for litigation. This one-stage game is a reasonably accurate portrait of reality, where disputing landowners rarely coordinate decisions.

³⁷ I observed that access to state-administered land titles and justice in both Haryana and Uttar Pradesh usually requires bribing a long line of officials from the *Pattwari* to the close associates of the *Divisional Commissioner*. Without either literacy or influence, access to records is unlikely.

This verbal model lays the groundwork for a future paper centered on a more rigorous formal model of land disputes as a Markov perfect equilibrium (MPE), where players' moves to grab land in one period change their probability of successful litigation in the next period. A MPE models reality more accurately, given that each disputing party has an incentive to grab land before their opponent formally initiates litigation. This is because "possession is 9/10th of the law" in India, as in the United States.³⁸

Before I explain disputant's payoff structure, I provide a verbal theory of landowners' strategic interactions. I first discuss the logic of grabbing, followed by the logic of litigation. I include vignettes of field observations to clarify each strategy.

When one party attempts to grab land, they do so expecting that each player's relative place in a power hierarchy determines which party retains or gains possession of the disputed land. The hierarchy of coercive power is relatively clear in a given locality, where one's place in the hierarchy is determined by three main elements: first, one's caste and *jati* provide a social status, resources for collective action within one's caste, and – explicitly for 'middle' and Other Backward Castes (OBCs) such as Jats and Yadavs – justification for land ownership.³⁹ Second, one's political connections provide access to the most significant means of organizing coercive power: the state. Individuals with strong political connections can rely on help from the local police, local officials, and official's 'voter-mobilization network,' e.g. the individuals who build political parties' 'vote banks', often via thugs and state-wide mafiosa.⁴⁰ Third, one's material resources, either in terms of land, income, and/or family wealth, allow organization of violence through private contracts and reliance on local economic influence.

38 Lawyers and Justices in Haryana and Uttar Pradesh's High Courts recited this mantra. Author's fieldwork, July 2008.

39 Myron Weiner (1987: 66-67) discusses influential "middle peasants" as belonging to "middle and backward castes."

40 Weiner, *ibid.* Vote banks arose as the Congress Party developed modern India's system of local politics, and remain influential. Crawford Young (1979) also discusses India's development of vote banks. Their continuing importance is evident due to references made in recent speeches, such as BJP leader Advani's critique of the UPA government's "vote bank politics" as of 31 January, 2008. *The Economic Times* (2008) "Shun Vote Bank Politics, Fight Terrorism."

A few of informants' many stories of land grabs illustrate the importance of a landowner's relative power in determining the outcome of land grabs. In Koyradjpur, a small village neighboring Varnasi, UP, ten Dalits recounted how they won and quickly lost land in 1973. The Central government allocated 1 bigha (acre) of land to about eighty to ninety low-caste Dalits in 1952, and clarified the location of these plots in 1973's land consolidation process. It's important to note that implementation of the type of land reforms carried out in Koyradjpur, consolidation of plots, is widely agreed to be unsuccessful across Indian states.⁴¹ Each Indian state establishes a temporary legal infrastructure to conduct the consolidation process. States appoint consolidation officers, who are then sent to localities to revalue and restructure all local landholdings. Many disputes arise in this process, which are all heard in an ad hoc consolidation court that is completely detached from the land revenue and civil courts. The consolidation court has fewer staff than the land revenue and civil courts and is unsupported by pre-existing legal institutions, all of which lead to extremely weak enforcement power.

Given the uncertainty surrounding land consolidation, Koyradjpur's Dalits claimed their land by building homes on their newly-identified plots. In response, one of the town's OBC Yadavs led a group of co-castes in a violent land grab, where they burned down all of the Dalit's newly-built homes and killed one Dalit man.

Intra-caste coordination is evident throughout this initial process of land contestation. The Dalits given state land in 1952 and 1973 approached their community's Dalit panchayat to coordinate a method of securing land ownership. Additionally, the Yadavs whose land was redistributed by the state also coordinated a method of reasserting their land rights by using their caste panchayat.

41 Besley and Burgess (2000) study post-Independence land reform across Indian states, and find that neither consolidation of plots nor land ceilings (establishing a maximum level of landholdings) were successfully carried out. In contrast, abolishment of feudal landowners (Zamindars) and reform of tenancy contracts' terms have been well-implemented.

Caste continues to play a role in coordination of land rights. Koyradjpur's Yadav 1973 violence was brutal enough to silence a Dalit response for thirty years. Yet sources of local influence changed with India's Panchayati Raj Amendment of 1993. The amendment mandated the establishment of elected municipal panchayats with one third of seats reserved for lower castes and women. As of 2007, Koyradjpur had a Dalit woman named Mooniya Debi as the elected panchayat's Pradhan.

Additionally, in the past decade a few Dalits have capitalized on their newfound local influence and raised complaints with the local land revenue administrator (*Tehsildar*). However, many informants claimed that the Yadavs had convinced the Tehsildar to erase all Dalit claims to land prior to 2007. Additionally, the Tehsildar had taken no action against the upper-caste constituents who grabbed land.⁴² Thus, both the coordinated power of upper-caste landowners and local officials' aligned interests prevented Dalits from retaining their land title.

In Kotana village, ex-Pakistani President Musharraf's birthplace located in North Eastern Uttar Pradesh along the Yamuna River, land grabs are also common. Ten individuals of the Dalit caste claimed that they can neither occupy nor cultivate their land since the early 1980s. Throughout this time, "strong men" of the more powerful Muslim Malla caste have occupied and cultivated the land.

Again, caste identities were important as each side coordinated access to resources. Members of the Dalit caste argue that they began losing control of their land forty years ago, when the Jain *Pradhans* (heads) of local panchayats who helped the Dalits enforce their land title lost elections, and were replaced by Muslim *Pradhans* who grabbed Dalit land.⁴³ Enmity between

42 Interview by author on 20 July, 2007, with follow up during the summer of 2008.

43 Interview by the author on 1 August, 2007. 14th Informant, Khotana.

Muslims and Hindus is high, as are tensions across castes. According to one Dalit informant, “Islamic *Madersas* (schools) are used for (Muslim) organization, not for studies.”⁴⁴ Due to the combination of their relatively-stronger entitlement to landownership, their effective intra-caste coordination, and local political alliances, members of the Malla caste successfully grabbed formerly-Dalit land.

Given that a landowner's local status predicts his/her ability to successfully grab land, a logical prediction would be that the most powerful individuals in a village should grab all land. However, a stable order with infrequent grabs currently exists in rural India. What explains the stability of broad-based land ownership in India?

Constraints to land-grabbing do not stem from India's legal system, but rather from the informal *jajmani* system that assures reciprocity and social order through the caste division of labor.⁴⁵ (Karnath 1966) Although industrialization and land redistribution have created dramatic changes in the occupational opportunities available to a given caste, Karnath (1966: 92) argues that “members of the dominant [upper] castes bring economic and other pressures on dependent [lower] castes to ensure continued master-servant or patron-client relationships.” Although exogenous changes due to weather (floods), state government policy (land surveys and title consolidation), and commercial development opportunities provide a rationale for land grabs, the *jajmani* system discourages grabs without an external impetus. Thus, caste provides a resource for amassing local coercive power, but also limits the use of such power.

Litigation initially seems to be a pointless strategy given the importance of one's relative place in the local power hierarchy in determining whether a disputant (re)gains possession of land

44 Ibid.

45 The age and strength of this system is debatable, but its influence is clear based on the continued ability of caste-based councils (*jati panchayats*) and alliances in structuring social and political action by large groups across North India.

following a land grab. Litigation becomes significant because landowners realize they are playing a repeated game with other landowners, where the possibility of future adjustments in power make a landowner's long-term ability to enforce claims to land gained through a grab uncertain. Thus, a landowner decides to litigate when (s)he realizes that there is a relatively small or uncertain difference between his/her coercive power and his/her opponent's power. In these cases, a player gains two resources from a court trial: more information about relative power – because the more powerful litigant usually wins a court trial – and use of the court's legal enforcement power, which ensures long-term possession of the land for the trial's victor. The following case illustrates the logic of litigation.

In Rangauli village, located in the center of Uttar Pradesh, a local official recounted an ongoing land dispute that began when he sold 2.5 bigha of his 3.5 bighas to an upper caste Thakur (Kyshtria) party. According to the official, the Thakur who bought a portion of his land claimed that he bought all 3.5 bighas of land and prevented the official from cultivating his remaining one bigha of land. The official filed a court case three years ago, and the land has remained uncultivated and unoccupied in the interim. The official claims he cannot retain physical control of the land because his opponent has a large family with many strong young men, connections to the local police, and his sons are “big officers” in the nearby Rae Bareilly government.

In Rangauli, the uncertain balance of caste and political power led the slightly weaker party, the Muslim official, to approach the court for dispute resolution. In contrast, the slightly stronger Thakur party attempted to grab land. However, the parties' imbalance of coordination resources became much clearer once the Muslim official attempted to approach the court. The Thakur party's traditional (caste) justification for land ownership combined with direct connections to government gave him what the Muslim official calls greater “police

power.”⁴⁶ Thus, when the Muslim official attempted to register a police report (FIR) disputing the Thakur's land grab, he had insufficient influence to register a report against the Thakur. However, the Muslim official pursued a court case for three years. The official succeeded in having the land remeasured under section 41 of Uttar Pradesh's Zamindari Abolishment and Land Reforms Act of 1950. Currently, the Thakur party occupies the land, making a final court verdict in his favor likely.⁴⁷

The aforementioned logic of grabbing and litigation suggest two hypotheses about rural land disputes: first, as the disparity between disputants' coercive power increases in a given land dispute, the dispute should be decreasingly likely to reach the district court. Second, as disputants' information about their own future ability to enforce a claim to land becomes more uncertain or incomplete, relative to their opponent's ability, the dispute is increasingly likely to reach the district court. In the following section, I provide some preliminary tests of these hypotheses using unique data sets I gathered during 2007 and 2008 in rural North India.

IV. Empirics

In this section I present a dataset of legal land title disputes that allows preliminary tests of my argument that there is a higher probability of relatively-evenly (vs. unevenly) matched parties using the formal system of courts to arbitrate disputes. I also use this dataset to test the second part of my theory: when two parties of unequal power litigate for land, courts are biased in favor of the litigant with greater informal power, e.g. with a higher caste (and *jati*) status. I begin by discussing the nature and limitations of the dataset I collected, and then use the dataset to test each segment of my theory.

The Dataset

46 Interview by the author with help from the Naib Tehsildar Ms. Shilpa Aronin in Rangauli, UP on 9 August, 2008.

47 Ibid.

The ideal dataset would include a random selection of landowners, along with their informal power, a complete history of each individual's land disputes, and each dispute's method of resolution. Such a dataset would allow me to test what predicts a given landowner's likelihood of entering a land dispute as well as what predicts the means used to resolve a dispute. Unfortunately, gathering a random dataset large enough to include significant numbers of landowners with and without disputes was beyond my means.

In order to answer the question of why a given landowner enters into a dispute, I conducted qualitative interviews of farmers in two neighboring districts in two North Indian states: Saharanpur, Uttar Pradesh and Yamunanagar, Haryana (interview template in Annex I). I interviewed a range of local elders, politicians who lead both elected and caste panchayats, journalists, lawyers, and farmers to discover the cause and nature of disputes over land, both in the present day and as far back in time as respondents could recall. I began each round of interviews by meeting High Court justices and lawyers in the state capital (either Lucknow or Chandigarh), and then moved to interview 60 people in nine rural villages on the UP side of the state border and 35 people in nine villages located on the Haryana side.

Overall, interviewees in both Uttar Pradesh and Haryana claimed that whereas everyone could remember disputes occurring in earlier times, the number of disputes has risen steeply in the past decade. Disputes have become increasingly common because land prices have soared. Although prices rise much more dramatically in quasi-urban areas than in rural areas, farmers across these regions all argued that increases in land prices cause farmers to fight for every inch of land they can possibly secure. The nature of dispute resolution – coercive or legal - does vary across villages and states. Land revenue officers and farmers suggested a range of reasons explaining variation: differences in villages' religious composition, caste composition, longstanding village 'personalities,' or the quality of local elders were all noted as causal mechanisms by multiple respondents.

Given the intra- and inter-village range in causal explanations for different dispute resolution mechanisms, I developed a template for studying individual- and case-level variation in the nature and means of resolving land disputes. Unfortunately, due to my inability to irrefutably verify stories of land disputes that ended with land grabs, my evidence of non-legal disputes is anecdotal. However, these anecdotes support my theory. The vast number of disputes that individuals claimed to be “resolved” coercively, e.g. by land grabs, were carried out by individuals of a higher caste and/or more influence (government officials). One *Pradhan* from Uttar Pradesh's Khotana Village put it best, explaining: “The man with the stick owns the buffalo.”⁴⁸ This assessment confirms the predictions that follow from Section III's verbal model.

To study the nature of legal disputes, I randomly selected a dataset of 63 land disputes within 33 villages in central Uttar Pradesh's Pratapgarh District.⁴⁹ Pratapgarh is notable for its largely-agricultural economy, with a range of relatively arid land and irrigated land.⁵⁰ The district has a mix of landholders ranging from precolonial royalty who still control vast tracts of land to smallholders recently granted land in the state's multiple rounds of land reform since Independence.⁵¹ Additionally, Pratapgarh District has wide variation in village-level caste composition and wealth distribution.

My goal in constructing this dataset was to amass as close to 2,000 court cases as possible for a group of neighboring villages in a representative tehsil (sub-district) of Pratapgarh, UP. I selected Sadr tehsil, where records were comprehensive and fallow land occurred for a range

48 Author's interview on 1 August, 2007.

49 AMS survey company conducted an additional survey of 24 ongoing disputes in the district. I will summarize these findings as well, but do not include them in my dataset because they were not randomly selected.

50 On average, villages in Pratapgarh have 1,070 hectares of irrigated land and 18 hectares of unirrigated land. (UP State Government 2001).

51 UP implemented three major land reforms: the 1950 Zamindari Abolition and Land Reforms Act; the 1953 Consolidation of Holdings Act, and the 1960 Imposition of Ceilings on Landholdings Act. Besley and Burges (1993: 401).

of reasons. In addition to gathering legal cases, I interviewed thirty individuals, mainly comprising land revenue officials within Pratapgarh's capital town and eight villages. I also conducted informal interviews with farmers, lawyers, and local royalty. Although the District Commissioner, local reporters, and lawyers gave me their full cooperation, data collection was constrained by extremely limited hours of electricity, limited court record room hours of operation, limited clerks to help collect relevant files, and the often-degraded quality of the legal records.⁵² As a result, after a month of consistent partnership I was only able to assemble a set of 63 court cases, which comprise a random selection of the past ten years of land disputes for 33 villages, as raised in the first court of appeal: the Deputy District Commissioner's Court.

The following descriptive statistics of plaintiff and respondent's castes show the range of the castes using the court system. In the following descriptive statistics, the caste number refers to the four-tier caste system. The number 4 represents the highest-status caste, Brahmins, while 3 represents Kshatriyas, 2 represents Backward Castes who were the traditional landowners, and 1 represents the lowest social status, Scheduled Castes (and Tribes). Although members of the Scheduled Castes were traditionally barred from owning land, government-initiated land reforms from Independence until the present day have focused on reallocating land from large feudal landowners (Zamindars) to Scheduled Castes.⁵³

In Chart I, it is clear that the highest caste, Brahmins, rarely appear as plaintiffs raising cases. Just over six percent of Brahmins raise disputes. The figures in the second-to-last column are slightly deceptive because I code the government as a Brahmin litigant. In the final column, where I exclude cases involving the government as a litigant, Brahmins raise just over four

⁵² I owe much gratitude for help gathering data to Yogesh Narayan Dixit, Deputy National Editor, Amar Ujala Publications, LTD in Chandigarh, Punjab; Amitendra Srivastava, Sahara TV News Reporter, Pratapgarh; Bhartendu Trivendi, Priyanka Singh, and Manmohan Singh of Lucknow, UP, as well as Gordip Sodhi, Editor-in-Chief of the Punjabi Kesari, Yamunanagar, Haryana, along with his paternal Uncle and his wife, Gudu Sodhi. In Pratapgarh, I also owe many thanks to the Senior Advocate Tej Bahadur Singh and the entire staff of the District Record Room, under the guidance of Chotti Lal.

⁵³ See Besley and Burgess (2000) for a description of India's post-Independence land reforms listed by state.

percent of cases and are never defendants. This percentage of cases is far less than the caste's approximately twenty percent of population share in Pratapgarh's relevant tehsil (Sadr). These estimates are based on estimates of caste population shares calculated from electoral constituencies' composition during Uttar Pradesh's 2007 Vidhan Sabha elections.⁵⁴

I hypothesize that Brahmin litigation is scarce because Brahmins have not traditionally owned or cultivated land, and were not the intended beneficiaries of post-Independence land reforms. In contrast, Scheduled Castes bring cases to court at a level proportionate to their population share. In Pratapgarh Scheduled Castes constitute 22 percent of the population and raise fifteen percent of court cases. (Census of India 2001) Thus, the majority of Pratapgarh's landholders use formal institutions in proportion to their population size.

Chart I. Individual-level descriptive statistics

Plaintiff vs Defendant	Number of Cases	Number ProPlaintiff	% of Cases ProPlaintiff	% of Total Cases	% of Total w/out Gov't (47 cases)
4vs4	4	1	25	6.45	4.26
4vs3	0	0	-	0	0
4vs2	1	0	0	1.61	2.13
4vs1	0	0	-	0	0
3vs4	1	0	0	1.61	0
3vs3	16	4	25	25.81	34.04
3vs2	0	0	-	0	0
3vs1	0	0	-	0	0
2vs4	7	1	14.29	11.29	0
2vs3	0	0	-	0	0
2vs2	20	3	15	32.26	42.55
2vs1	1	0	0	1.61	2.13
1vs4	5	2	40	8.06	0
1vs3	0	0	-	0	0
1vs2	0	0	-	0	0
1vs1	7	3	42.86	11.29	14.89
Total	62	14	22.58	100	100

⁵⁴ I owe many thanks to Amitendra Srivastav for securing this information from Pratapgarh's Electoral Commission.

Chart I. also shows that, when excluding the government as a litigant, both litigants are of the same case in over 95 percent of cases. This finding supports the general prediction from the preceding section's verbal model, where disputes between litigants with relatively evenly-distributed power are more likely to be resolved inside court.⁵⁵

Chart II. Case-level Outcomes

Court Result	Frequency	Percent	Cumulative Percent
Accepted	9	14.29	14.29
Compromise	4	6.35	20.63
Dismissed in Default	45	71.43	92.06
Rejected	2	3.17	95.24
Stay	2	3.17	98.41
Withdrawn	1	1.59	100
Total	63	100	

Chart III. Case-level descriptive statistics

Indicator	Mean	Standard Error	95% Confidence Interval: lower	95% Confidence Interval: upper
Total land (hectares)	0.73	0.1	0.53	0.92
Number fees	14.3	1.53	11.24	17.37
Amt fees	21.26	1.97	17.32	25.2
File pages	24.63	2.48	19.68	29.59
Plaintiff Caste	2.24	0.11	2.02	2.46
Resp Caste	2.68	0.13	2.42	2.94

Chart II highlights the fact that most cases – 71 percent (45 out of 63) – are Dismissed in Default (DID). This status means that the cases are dismissed because the plaintiff doesn't appear for a hearing, despite multiple notifications. Whereas one cause of the large number of dismissals would be cases over trivial matters, Chart III. statistics on average case length – 25 pages – indicates that court cases are generally substantive. A case's records include a brief note of the date and subject of each court hearing, relevant land title documents, and the summary of plaintiff's and defendant's arguments. When cases require simple rulings over

⁵⁵ This result holds for the set of 24 cases of ongoing land disputes gathered by AMS in Pratapgarh, UP in the fall of 2007.

issues such as measurement of land boundaries, case records consist of a only a few pages.⁵⁶

The summary statistics on the relationship between caste and court results in Chart I show very little variation in the plaintiff versus defendant's castes. However, lawyers in Yamunanagar, Haryana and Pratapgarh, UP, claim that DID decisions are often the result of out-of-court coercion. If true, this fits the picture of upper-caste respondents' strategy of coercing lower-caste plaintiffs into not prosecuting cases against upper-caste respondents. This strategy would support my second theoretical prediction that court decisions are biased in favor of litigants with stronger informal (caste) power. Unfortunately, without a larger data set and more information on sources of plaintiff-defendent variation in informal power, I cannot test this hypothesis. For example, a larger data set with information on each caste's *jati* (*sub-caste*) would allow me to test whether courts are biased toward the litigant with the more influential *jati*.

Lastly, the correlation matrix in Chart IV illustrates that there is a positive, if weak (0.11) correlation between the plaintiff's caste and a trial decided in favor of the plaintiff. There is also a fairly strong negative (-0.19) correlation between the plaintiff's caste and the trial's length. These two statistics suggest that parties with more influence, e.g. higher caste, can reasonably expect the court to facilitate their case against a lower-influence, e.g. lower caste party.

Chart IV. Correlation between Caste & Case Outcome

Correlation	Pro-plaintiff Result	Trial Length
Plaintiff Caste	0.11	-0.19
Respondent Caste	0.03	0.03
Total land (hectares)		-0.06
Amount of fees		0.38
Pro-plaintiff Result		-0.25

⁵⁶ Author's observations, confirmed by Sid Dinah Shukulal, a Pratapgarh-based lawyer and the Pratapgarh District Records Room staff in August 2008.

This analysis provides plausible grounds for my theory that although litigants approach courts in order to access legal enforcement mechanisms, litigants still rely on the informal institution of caste as a resource for coordinating responses to land disputes. Although there is only a weak correlation between the plaintiff's caste and the court outcome, it is in the correct direction: higher caste status predicts a favorable outcome of litigation. Additionally, the data confirms that relatively evenly-matched litigants, e.g. litigants from the same caste use the courts 95 percent of the time, whereas more unevenly-matched litigants avoid use of courts. A larger dataset would allow more rigorous statistical tests of these hypotheses.

V. Discussion

The data analysis suggests three conclusions with substantial theoretical and practical implications. First, coercion is the most frequently-used method of settling land rights disputes between parties with large differentials in informal (caste) power. Although this conclusion is unsurprising, there are two important pieces of information: first, caste still operates as a means of coordinating village-level coercion. Yet, despite enduring caste-based coercion, even the lowest tier of castes, Scheduled Castes utilize the courts to resolve disputes. In the random sample of Pratapgarh's District Court cases over land, nearly fifteen percent of litigants were Scheduled Caste, nearly matching the 22 percent of Pratapgarh's population who is Scheduled Caste.

Section III's case studies illustrate that when disputes arise between parties of different castes, their differential influence allows the higher-caste disputant to coerce the lower-caste party into accepting the higher-caste party's preferred deal. This compact is efficient, if socially-retrogressive, because both parties have common knowledge that the informal institution of caste is the accepted means of resolving conflicting interests within a given local community. However, when caste-based influence is relatively similar, informal institutions do not

provide an effective, certain means of coordination. In these cases, relatively evenly-matched disputants approach formal institutions and benefit from the court's effective enforcement mechanism. Section IV's empirical study of court use shows that the formal institution of courts are nearly exclusively used by litigants of the same caste. The combination of Sections III and IV's findings suggests that disputants use formal institutions as complements to informal institutions.

Second, there is preliminary, statistically-weak evidence of a high-caste bias in Pratapgarh's District Court proceedings. As a plaintiff's caste status increases by one rank or category, Chart IV shows that (s)he becomes eleven percent more likely to receive a favorable decision in a land dispute. I suggest that the causal mechanism is not a bias by Justices, but rather lower-caste litigants' low informal resources, which provide them with limited access to both social resources and the legal system. The lower a given litigant's caste and *jati*, the less likely that litigant will be able to secure official's support and have independent resources to access the legal information and documents necessary to gather and present legal evidence of land title claims. Thus, a litigant's informal influence predicts whether they will be able to coordinate informal, social interests to win land disputes outside courts. It is likely that informal status also predicts a litigant's ability to successfully prosecute a case in court, but my current data is insufficient to prove this claim.

Although the pioneers of the Indian State, Gandhi and Nehru, attempted to make modern India blind to caste distinctions, caste remains an important means of social coordination. Within a given group of neighboring rural villages, one's caste and *jati* continue to structure one's social obligations in terms of marriage requirements, customs carried out within the family and community, and resolution of problems including family disputes and use of religious land.⁵⁷ While *caste* and *jati panchayats*, or appointed councils, enforce caste-based

⁵⁷ Ghurye (1969) c.f. Shah (2002: 40-56), Karnath (1996).

ritual obligations and thereby maintain caste identity, caste also structures new opportunities for individuals. Thus, G.K. Karnath (1996: 107) argues: "It is a matter of common knowledge that caste plays an active role in the political life of the country at all levels. Indeed allotment of party tickets, formation of state ministries, and appointment to numerous boards, committees and commissions, are made on a caste basis, and this seems to be accepted as legitimate by the bulk of the people."⁵⁸ Given the widespread use of caste networks to access political and professional opportunities, it is plausible that individuals turn to their caste group not only to coordinate social interests, but also to gain information about how the state works, specifically about how to use the legal system.

Courts' potential bias based on litigants' caste merits serious attention, but has not yet been examined in either legal or development scholarship. To date, most scholarship on legal reform in India, by the likes of Robert Moog (1997), F. Nariman (2006), and the World Bank (2006) has focused on the rampant delays in legal decisions. However legal delays do not deter most people from considering and utilizing the judicial system. Studying the influential role of caste status in Indian Courts should be a higher priority for scholars and practitioners interested in legal reform.

Third, the notion that caste acts as a valuable coordination mechanism has only recently begun to be addressed in recent scholarship, such as Munshi and Rosenzweig's (2008) "The Efficacy of Parochial Politics." These authors find an increase in the allocation of public goods when the leader of a numerically-dominant caste heads local government. Yet few scholars consider the interlinked contemporary effects of informal caste institutions and formal institutions in determining who accesses public resources. It is crucial to carry out further studies of the ties between formal and informal institutions in defining and mediating property rights. Contemporary political and economic development is built on the notion that

⁵⁸ Siwan Anderson (2007) suggests that caste-based economic activity is a contemporary source of economic efficiency.

clear property rights are preconditions for growth, and yet both Mushi and Rosenzweig's and my study show that studying formal institutions only provides half the story.

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Annex I. Formal & Informal Institutional Use

1. How wealthy is this village?
2. How would you measure wealth here?
3. What's the percentage of farmers in this village?
4. How do people invest in land here?
5. What are the major agricultural products?
6. How was land in your village surveyed? When was the last time your land was surveyed?
7. What's the social composition here? E.g. which castes exist, and what are their relative proportions?
8. Who is on the elected panchayat (name, caste)?
9. How effective is the elected panchayat here? What does the elected panchayat do here?
10. What sorts of concerns over land title bother people?
11. Which of these concerns become a source of conflict? Why? Where (in which communities/geographic location)?
12. Which of these concerns don't become a source of conflict? Why? Where?
13. What disputes are people able to resolve between themselves? How do they resolve such disputes?
14. Where do such disputes occur (which sections of the village)?
15. What disputes are often resolved within the village, by more people than just the concerned parties? How are such disputes resolved? (Ex. by Caste Panchayats)
16. Which villages often resolve disputes this way?
17. What disputes go to court? Does this vary across villages?
18. When did people start using courts frequently/ heavily?
19. On average, how much does it cost to raise a dispute in court, from beginning to resolution, amongst the poorer farmers here? Amongst the middle-income farmers? Amongst wealthy farmers?
20. Does this cost vary by village?
21. Do you have any fallow land in this village? If so, why? Is any land fallow due to disputes?
22. How difficult is it for you to get information about land revenue documents?

Annex II. Court Case Data Collection Template

- 1 Goshwara Number
- 2 Case Nature (वादोन की प्राक्रिती)
- 3 Date of Institution (दाग्रा की तिथी)
- 4 Date of Decision (दिन का निरण्या)
- 5 Plaintiff (वादी)
- 6 Caste of Plaintiff (वादी की जती)
- 7 Defendant (प्रते वादी)
- 8 Caste of defendant (प्रते वादी की जती)
- 9 Decision (निरण्या)
- 10 Village (गोव)
- 11 Amount Land (चेत्रा फाल)
- 12 Number of Pages (वादोन की सान्ख्या)
- 13 Number of Court Fees (न्याय शुल्क)
- 14 Amount of Court Fees (मुल्यान्कान)
- 15 Case Number (मुखदामा number)