

Access to Land in Rural India

Policy Issues and Options

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World Bank Policy Research Working Paper 2123, May 1999

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1 INTRODUCTION

Access to land is of fundamental importance in rural India. The incidence of poverty is highly correlated with lack of access to land, although the direction of causality in this relationship is not clear. Households that depend on agricultural wage labor account for less than a third of all rural households but make up almost half of those living below the poverty line (Agarwal 1994a). Many of these households also own some land, but in holdings that are so small or unproductive that their owners derive a greater share of their livelihoods from their own labor than from their own land. Land plays a dual role in rural India: aside from its value as a productive factor, land ownership confers collateral in credit markets, security in the event of natural hazards or life contingencies, and social status. Those who control land tend to exert a disproportionate influence over other rural institutions, including labor and credit markets.

The purpose of this paper is to provide an overall framework for the critical assessment of alternative approaches to improving access to land by the rural poor in India, as part of a broader strategy for reducing poverty through rural growth. Viewing persistent constraints on access to land in their historical context, the paper considers India's record in implementing land reforms, and identifies the elements of a new, complementary approach to improving access to land by the rural poor. This approach includes incremental reforms in public land administration that seek to reduce transaction costs in land markets, thereby facilitating land transfers, while at the same time increasing transparency and public access to information to ensure that socially excluded groups also benefit.

The weight of international evidence now strongly endorses a rural growth strategy based on the dynamism of economically viable, family farms. This means increasing the share of farmland operated in small units, which are demonstrably more equitable, labor-intensive and poverty-reducing than large holdings, and are at least as efficient or productive per unit area. In the Indian context, in which growing numbers of rural inhabitants are net consumers rather than producers of food, the equity gains will come as much from the higher demand for labor than from direct land transfers to the poorest (Lipton 1985).

While India's agrarian systems have not prevented the poor from taking advantage of new opportunities presented by the Green Revolution, the gains from technological innovation remain unequally distributed between those with access to land, water and inputs, and those without. There is broad consensus that the main causes of rural poverty lie in low rates of agricultural growth and factor productivity (Fan, Hazell and Thorat 1998), and that the key to raising productivity in agriculture lies largely in the deregulation of the policy environment together with measures to broaden access to land and complementary inputs. More equitable distribution of operational land holdings would create more equitable patterns of demand, which in turn would enhance growth in the rural non-farm sector and remove some of the biases in credit, marketing and research institutions that arise from the unequal distribution of assets and power (Singh 1990). This is supported by recent evidence which suggests that countries with more equal land distribution experience higher rates of economic growth (Deininger and Squire 1996).

This approach is consistent with the World Bank's overall strategy for rural development, its Country Assistance Strategy (CAS) for India, and the Government of India's own policies under the Ninth Plan. The Bank's rural development strategy, resting on the demonstrated

efficiency of family farms, includes a renewed emphasis on access to land and the promotion of secure land rights, particularly for the rural poor and socially excluded (World Bank 1997). Restrictions on land rentals, for example, are discouraged as they hurt the poor by restricting the supply of land to rent. Where land distribution is highly unequal, land reform is called for, and lessons from experience suggest that negotiated, decentralized and participatory approaches to land reform hold considerable promise. Institutional reforms lie at the heart of such approaches, and require the careful building of consensus among all stakeholders involved in land administration.

The India CAS identifies regulations around land, labor and capital markets as factors inhibiting private investment. For example, high transaction costs in land markets act as a significant brake on access to land through the market, and the resolution of land disputes is bogged down by an overburdened judicial system. World Bank support to India's poverty alleviation efforts emphasizes the social and economic inclusion of poor and disadvantaged groups, complemented by a growing emphasis on rainfed agriculture within the rural development program. Improving access to land by women is among the priority areas envisaged for Bank support to redress gender inequities, particularly in North India. During public consultations held to support CAS preparation in September 1997, attention was widely drawn to the importance of land rights of the poor, women, and tribals, in the context of poverty reduction strategies.

Land reforms are a major policy focus of the Government of India's Department of Rural Development under the Ninth Plan (1997-2002), following recent reassessment of India's post-Independence land reform experience. State-initiated land reforms are conventionally believed to have been unsuccessful in getting land to the poor in India (albeit with notable exceptions such as West Bengal), although it is widely acknowledged that they have been successful in creating the conditions for agricultural growth by consolidating the position of small and medium farmers. However, recent evidence suggests that much more redistribution has been achieved than is often supposed¹. The credible threat of enforcement of ceilings legislation, for example, accounts for much of the redistribution that has taken place through the market, even in 'non-reform' states such as Bihar (Yugandhar and Iyer 1993). Nonetheless, it is now recognized that the prospects for bringing about a meaningful improvement in access to land by the rural poor may be even stronger if attention is also turned to more pragmatic and market-oriented measures, such as the selective liberalization of land-lease markets; the promotion of women's land rights; and efforts to increase transparency in land administration and public access to land records (GOI 1997a). Incremental reforms in land administration, designed to facilitate more rapid, fairer and cheaper conveyancing procedures, are also likely to assist in the implementation of land reform legislation, thereby enabling state-initiated and market-oriented approaches to land reform to complement one another.

In short, policy instruments and mechanisms that improve access to land for the rural poor and socially excluded are of high priority in bringing about efficient, equitable, sustainable, and

¹ See for example the excellent series produced by the Land Reforms Unit of the Lal Bahadur Shastri National Academy of Administration, Mussoorie, based on extensive field studies carried out by Indian Administrative Service probationers. Four volumes have been published to date: Yugandhar and Iyer (1993), Yugandhar and Datta (1995), Yugandhar (1996), and Aziz and Krishna (1997), dealing with experience in Bihar, Rajasthan, Andhra Pradesh, and Karnataka respectively.

poverty-reducing patterns of economic growth in rural India. This overview paper provides the overall framework for a more detailed study of the factors that constrain access to land in selected states, and considers potential policy instruments and mechanisms to reduce those constraints. Four main sections follow this introduction. Section 2 presents the analytical framework, followed in section 3 by a description of the context within which land relations in India are played out. Policy approaches to improving access to land are likely vary from state to state according to differences in agrarian structure, conditioned in turn by history and political economy. In light of shortcomings in available data, preliminary evidence is presented on the distribution of rural land, and on the relationship between farm size and productivity.

Section 4 outlines five key issues that are suggested to be among the most important constraints on access to land for the rural poor and socially excluded, and which warrant further analysis in selected states. These issues are: restrictions on land-lease markets, fragmentation of holdings, the widespread failure to translate women's legal rights into practice, access to and encroachment on commons, and transaction costs associated with land transfers.

The final section summarizes the main policy options considered here for enhancing access to land by the rural poor and other socially excluded groups. Since land is a state subject in India, it is not possible to suggest specific policy options except with reference to particular states. A companion paper presents an exploratory, state-level analysis of social exclusion and land administration in the state of Orissa (Mearns and Sinha 1998). This pilot study aimed to apply the overall framework developed in the present paper in a specific context, and to field-test the methodology so that it may be used as a 'template' for further studies in selected states of India. In order to produce trustworthy and meaningful findings relating to the issues identified here as priorities, careful triangulation is required between existing survey data, village studies, and primary fieldwork adopting methods of institutional and stakeholder analysis. The intention is that on the basis of several state-level studies, each applying a common framework to a common set of research questions, a broad strategy may be identified for improving access to land for the rural poor in India.

2 ANALYTICAL FRAMEWORK

The principal concern in this paper is with the ability of the rural poor and other socially excluded groups² to gain access to and effective control over cultivable land. This calls for an analytical framework that allows for subtle nuances in the definition of property rights.

The analytical framework adopted here distinguishes individuals' rights, claims or interests in land according to three parameters: (i) whether or not they may legally be upheld, under prevailing legislation (*strict legality*); (ii) whether or not they are socially perceived to be legitimate, irrespective of their strict legality (*social legitimacy*); and (iii) whether or not they are actually exercised in practice, and therefore translate into effective control over land (*effective control*).

The last of these parameters refers to the degree of tenure security that is enjoyed in practice, regardless of the type of rights. For example, an individual with limited usufruct rights may enjoy security of tenure, if s/he is confident that s/he will actually be able to exercise those rights when necessary. Conversely, an individual with ownership rights to a parcel of land may find his or her claim to be vulnerable to land-grabbing by another individual with greater bargaining power, voice, and leverage over government officials, particularly if the original landholder's rights are not recorded in the official land records. The relative bargaining power of diverse agents strongly influences the extent to which individuals are able to enjoy effective command over land and other resources. The rural poor and other socially excluded groups, by definition, have less bargaining power vis à vis other agents (Leach, Mearns and Scoones 1998).

Generally speaking, ownership rights (which may be acquired through inheritance or the sale/purchase market) are the most secure. They are also the least likely to be enjoyed by the rural poor and other socially excluded groups. Individuals not owning land but still relying on land for at least part of their livelihood may also gain access to land through: (i) the land-lease (rental) market; (ii) customary use rights in commons; and/or (iii) encroachment on public land³. These forms of property rights may be more or less secure, depending on prevailing legislation (e.g. are tenancies legally recognized and protected?); their perceived social legitimacy (e.g. are women able in practice to exercise their legal rights to land under prevailing social norms and customs?);

² Patterns of social exclusion tend to be closely correlated though not synonymous with the incidence of poverty. It is well recognized that people of scheduled tribes and scheduled castes in India are much more likely than other groups to live below the poverty line. Throughout this paper, 'socially excluded groups' refer to people of scheduled tribes and castes, women, and the rural poor. All of these groups are more likely than better-off or more powerful and influential groups to suffer from forms of discrimination at the hands of those government officials with whom they come into contact, and to be more or less excluded from receiving entitlements through administrative procedures.

³ Owing to non-compatible definitions and mis-classification, it is difficult to obtain reliable estimates of the relative shares of the total land area in India under different uses and tenure regimes. The broad picture is as follows: private, cultivable land amounts to around 58 percent of the total land area for which records are available (of which around 9 percent is fallow and 2 percent under tree crops); forest land amounts to 22 percent of the total area (half of which has a forest cover of less than 40 percent); uncultivated (revenue) 'wastelands' 7 percent; rocky, barren land 7 percent; and urban/non-agricultural land 7 percent. 'Commons' include both cultivable and uncultivable wastelands, and some forest land, amounting to roughly 20 per cent of the total land area (World Bank 1993: 5).

and the relative bargaining power of the individual right-holders (e.g. in practice, are the landless able to press their legal claim to a plot of public land?). The matrix below presents a typology of common forms of property rights in land in India according to these three parameters (Table 1).

From a policy perspective, efforts to improve access to land for the rural poor and other socially excluded groups may address deficiencies in any or all of these three parameters. They may concentrate on granting new, legal rights to the asset-poor while simultaneously curtailing the existing rights of the asset-rich, as under state-initiated, redistributive land reforms. They may be geared towards public awareness-raising, motivated by a concern to promote social justice, as in the case of the efforts of NGOs to protect and promote tribal and women's land rights. In addition, this paper also considers incremental reforms in the operation of land markets and the practice of land administration itself, since these also have implications for the ability of the socially excluded to gain access to land. However, none of these approaches is sufficient in isolation. Efforts to enhance security of tenure are ultimately limited by the scope of the rights in question; while new, legal rights may not be exercised in practice if individuals face excessive transaction costs in land markets and in their dealings with government land administration services.

Socially perceived to be legitimate?

		Yes	No
Strictly legal?	Yes	<ul style="list-style-type: none"> • Ownership rights, acquired through inheritance or sale/ purchase market (although tenure security for those with little power/ voice may be vulnerable, particularly where rights unrecorded in land records) • Customary use rights over village commons (may not effectively be exercised in practice if land heavily degraded or encroached upon) • Legally protected tenancies under liberalized land-lease market (social legitimacy may be ambiguous) 	<ul style="list-style-type: none"> • Women’s right to own land independently (usually does not translate into effective control over land, given high opportunity cost to an individual woman in pressing her legal claim) • Legally protected tenancies? (may not locally be perceived as legitimate if markets for credit and labor highly interlinked with those for land to rent)
	No	<ul style="list-style-type: none"> • Concealed tenancies under oral contracts in which rent exceeds legal maximum, and where length of actual occupancy entitles tenant to acquire legal occupancy rights (most likely to prevail where factor markets highly interlinked) • ‘Illegalised’, customary use rights (e.g. cultivation rights of tribal communities on forest land, forbidden under 1980 Forest Conservation Act) 	<ul style="list-style-type: none"> • Encroachment on commons (whether or not this translates into effective control over land depends on relative bargaining power/ voice: e.g. more powerful groups may gain effective control over land through ‘illegal’ acquisition of occupancy rights, while already landless may lose effective control in spite of legal entitlement) • Alienation of tribal land (loss of effective control over land owing to indebtedness/ land mortgage)

Table 1 Typology of property rights in land

3 CONTEXT

Agrarian systems in modern India are marked by tremendous diversity. Although the particular configuration of institutions that helps to make progressive policy reforms possible in one state may not be present in others, it is important to be aware of broad variations in the factors that influence patterns of agrarian change (Binswanger and Deininger 1997; Binswanger, Deininger and Feder 1995). Various types of institution are of relevance in understanding how contemporary agrarian systems have evolved in India, including personal laws and customs regarding inheritance, the significance of patron-client relations, collective action to overcome ecological risk and missing markets, and other institutions in village society (Sahu 1997). For present purposes, we restrict attention to two factors that help to understand the political economy of agrarian relations in contemporary India: the historical legacy of British land settlements; and variation between states in enacting and implementing land reform legislation.

EVOLUTION OF LAND TENURE SYSTEMS

Three broad types of land revenue system were introduced to India under British rule (Baden-Powell 1892, Sharma 1992a). The differences between these systems account for significant variations in the subsequent evolution of land tenure systems throughout rural India. This is not to suggest that these systems swept away pre-existing land relations, however. A defining characteristic of each system was the attempt to incorporate elements of the preceding agrarian structure, and the interaction of colonial policy and existing systems produced widely different local results and hybrid forms⁴. Different areas came under British land settlements at different times. Tribal areas, in particular, were not covered by any of these systems, and some tribal areas remain to be 'settled' even today.

Under the *zamindari* or 'permanent settlement' system, introduced around 1793, feudal lords (*zamindars*, *jagirdars* etc) were declared proprietors of the land on condition of fixed revenue payments to the British regime. Peasants were transformed into tenant farmers, and rents were collected by serried ranks of intermediaries below the level of *zamindars*. This system prevailed over most of North India, including present-day Uttar Pradesh (except Avadh and Agra), Bihar, West Bengal, most of Orissa, and Rajasthan (except Jaipur and Jodhpur), and covered around 57 per cent of the total area cultivated.

The other major system was the *ryotwari* system, introduced in Madras in 1792 and in Bombay in 1817-18. In this case, individual cultivators (*ryots* or *raiyyats*) were recognized as proprietors of their land with rights to sub-let, mortgage, and transfer their land by gift or sale. Their tenure of land was secure so long as revenue payments were made directly to the collectors of the colonial administration. The *ryotwari* system held sway over most of South India, including present-day Maharashtra, Karnataka, Tamil Nadu, Kerala, Andhra Pradesh, and most of Madhya Pradesh and Assam. The princely states of Jaipur and Jodhpur in Rajasthan also fell under *ryotwari*-type systems. Pockets of *zamindari*-type tenure existed within these *ryotwari* areas,

⁴ For example, the techniques and instruments used in land surveying in many parts of India even today remain substantially unchanged since their introduction by Todormal, Emperor Akbar's finance minister during the 16th century.

particularly where administered by local rajas or nawabs. *Ryotwari* systems accounted for around 38 per cent of the total cultivated area.

The third type of system was the *mahalwari* system, in which revenue settlement was made with entire villages as collective units. Peasant farmers contributed shares of the total revenue demand for the village (*mahal*) in proportion to their respective holdings. The state was initially entitled to as much as 83 per cent of gross produce in revenue, although this was later lowered to 66 per cent. The *mahalwari* system was introduced between 1820 and 1840 to Punjab (including both present-day Punjabs in Pakistan and India, and the state of Haryana), parts of what are now Madhya Pradesh and Orissa, and the princely states of Avadh and Agra in Uttar Pradesh. This type of tenure system was much less extensive, and accounted for some 5 per cent of the cultivated area.

Although land markets had existed since at least the Moghul period, transfers of land were first institutionalized with the British land settlements. Legislation introduced in *ryotwari* and *mahalwari* areas during the 1850s enabled money-lenders to recover debts on loans secured on land holdings. Since revenue assessments were so high (particularly in *ryotwari* areas⁵), indebtedness grew, and dispossession of land led to rapidly rising tenancy. As a result, rural society in *ryotwari* and *mahalwari* areas was polarized into landlords and rich peasants versus tenants and agricultural laborers, and the distribution of land became highly unequal⁶.

In *zamindari* areas, rural society was even more hierarchically divided between landlords, tenants with hereditary rights (*raiyats*), sub-tenants, sharecroppers and agricultural laborers, and land distribution was even more unequal than in *ryotwari* areas. Early tenancy legislation (Bengal Rent Act, 1859; Bengal Tenancy Act, 1855) established occupancy rights for *raiyats* in *zamindari* areas, and attempted (with little success) to limit rents paid by sub-tenants and sharecroppers to 50 per cent of gross produce with written agreement and 25 per cent if not. In *ryotwari* areas, however, tenancy was not officially recognized or regulated by the colonial regime and no action was taken to stem the flow of distress sales, dispossessions and evictions until the Bombay Tenancy Act, 1939. By the time of independence, some 40 per cent of the total rural population of India were landless agricultural laborers.

Table 2 presents a typology of states according to the type of tenure system they inherited. Data are also shown on the growth of agricultural production over the period 1970-94. The intention is not to suggest that the legacy of former land settlements has any direct causal relationship with contemporary agricultural performance. It does reveal, however, that former *ryotwari* and *mahalwari* areas of South and West India have tended to show higher rates of agricultural growth than have former *zamindari* areas of North and East India. There are notable exceptions, of course, since agricultural performance is influenced by many factors other than

⁵ Initial assessments were so high that they often constituted the entire economic rent from land. Re-assessments made in 1860 in Bombay and 1855 in Madras (which continued until 1937) led to even higher land revenues, resulting in famine and prompting agrarian revolts (Sharma 1992a).

⁶ The Royal Commission on Agriculture, 1924-25, reported that in Bombay, 86 per cent of the cultivated area was held by 12 per cent of the cultivators. In Punjab by 1939, 2 per cent of land owners held 38 per cent of cultivated land.

inherited tenure systems. Two notable land reform states stand out as outliers: Kerala has performed less well than most former *ryotwari* areas, while West Bengal has performed better than all other former *zamindari* areas and *ryotwari* areas. Nonetheless, the contention that the legacy of inherited tenure systems can have lasting impacts is also borne out by micro-level evidence from village studies. In Gujarat, for example, the consequences of the green and ‘white’ (dairying) revolutions have been shown to be more equitable and pro-poor in former *ryotwari* villages than in former *zamindari* villages (Singh 1985). The evidence from Orissa also suggests that land records tend to be more accurate in *ryotwari* areas as compared with *zamindari* areas (Mearns and Sinha 1998).

Table 2 Typology of states by tenure system and agricultural growth rate

<i>Tenure system, State</i>	<i>Average annual growth in agricultural production, 1970-94 (%)</i>
Zamindari (57% cultivated area)	
Uttar Pradesh (except Avadh & Agra)	1.9
Bihar	1.5
Orissa	2.6
West Bengal	4.4
Rajasthan	1.1
Andhra Pradesh (Telengana)	-
Ryotwari (38% cultivated area)	
Karnataka	2.7
Gujarat	2.0
Tamil Nadu	1.6
Kerala	0.7
Maharashtra	2.7
Madhya Pradesh (60% area)	1.6
Andhra Pradesh (except Telengana)	2.7
Assam	-0.4
Rajasthan (Jaipur & Jodhpur)	-
Mahalwari (5% cultivated area)	
Punjab	4.5
Haryana	2.4
Madhya Pradesh (40% area)	1.6
Orissa (9% area)	-
Uttar Pradesh (Avadh & Agra)	-
All-India	2.1

Sources: Sharma (1992a) for tenure systems; Fan, Hazell and Thorat (1998) for agricultural production data

POLITICAL ECONOMY OF LAND REFORMS

Land was made a 'state subject' by the Government of India in 1935. As a result, under the Indian Constitution, land reform is the responsibility of individual states, although central guidance is offered at federal level. The nature of the legislation, the level of support or otherwise from existing or new institutional arrangements, and the degree of success in implementation have varied significantly from state to state. Annex 1 summarizes some key features of land reform legislation by state, focusing chiefly on ceilings on agricultural holdings⁷, some of the key provisions concerning tenancy, and progress in land consolidation. This brief review is by no means exhaustive, however. Further work is required to understand the practical operation of land legislation in selected states and its consequences for the rural poor and socially excluded.

Broadly speaking, three major types of land reform legislation have been enacted after independence, though not all of these have been enacted in all states: the abolition of intermediary tenures; regulation of the size of holdings (through ceiling-surplus redistribution and/or land consolidation); and the settlement and regulation of tenancy (Ray 1996, Appu 1997). The stated intentions of these reforms, justified on grounds of both social justice and economic efficiency in agriculture, were to transfer land 'to the tiller' (often entailing a *de jure* if not *de facto* ban on landlord-tenant relations), to increase security of tenure for tenants (through registration of informal, oral tenancy agreements; conversion of continuous tenancies into ownership rights), and to regulate rents paid by tenants.

The political reality behind these reforms, however, is that they were generally promulgated by ruling elites composed of or electorally dependent on the upper echelons of agrarian society (Herring 1983). The **abolition of intermediaries** during the 1950s was more completely and easily achieved than subsequent reforms owing to political expediency: it brought substantial gains to many at relatively low political cost. Paradoxically, many of the beneficiaries of the abolition of intermediaries (former upper and middle caste tenants) are now among those politically visible, larger landowners who bitterly oppose ceilings on land holdings (Ray 1996). Moreover, the cost of the abolition of intermediaries was high: the heavy compensation paid to former *zamindars* enabled many of them to become rich agro-industrialists, and many acquired ownership rights over land they did not previously own. These early reforms left substantially unchanged the inequalities in land holdings and the precarious position of sharecroppers and agricultural laborers.

It is conventionally thought that **ceiling-redistributive reforms** in India have achieved little. For example, Ray (1996) estimates that over a period of 35 years ceilings have been enforced and land redistributed on less than 2 per cent of the total operated area. Ceilings were frequently set too high in relation to the average size of household operational holdings to have much impact on the agrarian structure in most states. Various exemptions and loopholes left by individual states allowed landlords to retain control over land holdings, most infamously through *benami* transactions whereby village record-keepers (*patwaris*) could be bribed to register holdings in the names of deceased or fictitious persons. The lack of accurate, updated records of rights in land is widely noted to be a major constraint on the effective implementation of ceiling-

⁷ All land ceilings acts have a sliding scale of ceilings according to land quality; only the lowest ceiling is indicated here. In Rajasthan, for example, ceilings in desert areas are as high as 70 ha.

redistributive and tenancy reforms. However, the threat of ceilings does seem to have prevented the further expansion of large holdings, and there is little doubt that the redistribution of even very small plots of homestead land has brought substantial benefits to the poor. Some states have achieved much greater progress than others in implementing ceiling-redistributive reforms: Jammu and Kashmir has redistributed 17 per cent of its operated area, West Bengal 6 per cent, and Assam 5 per cent.

A relatively neglected issue in the massive literature on Indian land reforms is state-initiated **land consolidation**. Not all agree that it constitutes true 'land reform', as by design it usually attempts scrupulously to leave unchanged the distribution of land. Without redistribution, land consolidation stands to benefit those with larger land holdings more than those with smaller holdings, since the opportunity costs of land fragmentation are higher the larger the farm. Where agroecological conditions and institutional design have been conducive to success, however, as in Uttar Pradesh, land consolidation programs have reportedly led to reduced dependency for many farmers, and have increased the economic viability of many farms (Oldenburg 1990). Overall, around a third of the total operated area in India was reported to have been consolidated by the mid-1980s, almost all of which was in Punjab, Haryana, Uttar Pradesh, Maharashtra and Madhya Pradesh (Thangaraj 1995)⁸. In these states, land consolidation was achieved through state programs. The legacy of *mahalwari* tenure systems may have made the task of land consolidation easier in Punjab and Haryana, although agroecological conditions here were also more favorable. In other states (Tamil Nadu, Kerala) no legislative provision exists for land consolidation, yet some consolidation has been achieved through spontaneous exchanges by farmers themselves in the land market.

The implementation of **tenancy reforms** has generally been weak, non-existent or counterproductive, resulting in the eviction of tenants, their rotation among landlords' plots to prevent them acquiring occupancy rights, and a general worsening of their tenure security (Appu 1997)⁹. Legislation that attempts to ban tenancy (leasing) outright, as in Uttar Pradesh, Orissa and Madhya Pradesh (albeit with certain exceptions), has particularly perverse effects. It inevitably leads to concealed tenancy arrangements that tend to be even more informal, shorter (increasingly seasonal), and less secure than they had been prior to reform. In other states (Bihar, Rajasthan), although tenancy is not prohibited, no legal provision exists to record informal tenancies. The registration and protection of informal tenancies has taken place only in West Bengal, and to a lesser extent in Tamil Nadu and Vidharbha area of Maharashtra. By 1992, according to one commentator, ownership rights had been conferred and tenancies protected on no more than 4 per cent of the total operated area (chiefly in Assam, Gujarat, Himachal Pradesh, Karnataka, Kerala, Maharashtra, and West Bengal). The net result of tenancy reforms is said to have been the loss of access by the rural poor to around 30 per cent of the total operated area (Ray 1996).

⁸ Official data on progress with land reforms are often suspect, however, as our study in Orissa shows (Mearns and Sinha 1998). While the administrative process may have been completed, there may still be resistance to the actual exchange of plots among farmers.

⁹ International experience suggests that tenancy reform without the credible threat of enforcing ceilings on land holdings usually harms the poor (e.g. Philippines), but usually benefits the poor where ceilings are enforced (e.g. Taiwan, South Korea).

But this does not mean that legal reforms designed to increase tenure security for tenants are bound to fail, provided sufficient attention is paid to the institutional conditions required for their successful implementation, and provided the balance of power shifts sufficiently in favor of tenants. The success of Operation Barga in West Bengal after 1977, through which tenants could exercise the right to register their tenancies and have their legal entitlement to higher crop shares enforced, has been widely acclaimed as the principal cause of the rapid growth in agricultural productivity in the state since the early 1980s (Banerjee and Ghatak 1996, Lieten 1996)¹⁰. In the West Bengal case, the most notable aspect of the reform process was not legislative change - many of the central provisions had been on the statute books since the 1950s - but political change at the state level, reinforced by effective institutions at local level. With popular support from panchayati raj institutions and local political representative bodies, well-publicized land settlement camps moved from village to village, updating land records and offering tenants the right to register their tenancies at the same time. This concerted effort between government and citizens' representative bodies helped to bring about a significant shift in the bargaining power of tenants in relation to landlords which was ultimately the key to success¹¹.

Tenancy reforms are clearly of continuing relevance in reducing poverty. Two elements are of particular importance, involving both legal and institutional reforms. First, deregulation of land-lease markets is important where attempts are made to ban tenancy outright, since this exacerbates tenure insecurity for tenants. Second is the registration and protection of informal, concealed tenancies along the lines of the West Bengal model. More generally, three critical ingredients of success in implementing reforms in land administration stand out: the importance of collective action at local level, the public nature of proceedings, and state power exercised on behalf of the socially excluded. This is as true of land consolidation in Uttar Pradesh as it is of tenancy reforms in West Bengal, and offers valuable lessons from which to learn in broader efforts to improve land settlement, adjudication and registration.

In the first quantitative study of its kind in India, Besley and Burgess (1998) investigated the relationship between land reforms and poverty reduction at state level, using panel data for the sixteen major states. Their main conclusion is that land reforms do indeed appear to have led to reductions in poverty in India. In their analysis, the authors controlled for other factors that may be associated with poverty reduction, in order to rule out the possibility that land reform activity merely serves as a proxy for other policies¹². Their detailed analysis finds that while skepticism is warranted with respect to the prospects for redistributing land through land ceilings, the abolition of intermediaries and tenancy reforms (at least in some states) appear to have been more successful in reducing poverty. These findings accord reasonably well with existing, empirically based assessments of the relative success of Indian land reforms.

¹⁰ This is disputed by some (e.g. Harriss 1993) who suggest that productivity growth is attributable more to rising private investment in groundwater irrigation than to land reforms.

¹¹ It is also suggested that sharp caste polarization in West Bengal allowed reforms to be promulgated as 'class' reforms without becoming embroiled in the more contentious arena of caste politics (T.V.Somanathan, pers. comm.).

¹² The specification of the land reform variable in their analysis raises concerns, however. States are 'classified as high land reform or low land reform depending on whether they had more or less than a total of three land reforms (of any type) during the 1958-92 period'. Thus, the cumulative volume of legislation enacted is taken as the measure of actual change in practice.

A NOTE ON DATA

Most published accounts of the size distribution of rural land holdings (e.g. Sharma 1994) use aggregate data from the National Sample Survey (NSS). Aggregate data from agricultural censuses and surveys (e.g. NSS), however, do not present a reliable picture of land distribution, the extent of tenancy, or the terms of tenancy contracts, since landlords tend to under-report size of holdings and extent of tenancy and to over-report the crop share of tenants¹³. Village studies report more land under tenancy than does the NSS, and show a smaller excess of reported leased-in over leased-out land (Jayaraman and Lanjouw 1998). Aside from questionable accuracy owing to reporting biases, survey data tend to overstate land inequality and need to be corrected for household size and land quality. Households with smaller holdings also tend to have fewer members, which relates in part to the lifecycle effect of subdivision upon inheritance. Smaller holdings tend to be cropped more intensively and have a higher percentage of total area under irrigation. Inequality in income potential is therefore reduced within a given region than the aggregate data suggest, while differences in agro-ecological potential mean comparisons between regions are also suspect.

Data on landlessness need to be interpreted with care. There are four main definitions: households owning no land, those who operate no land, those who neither own nor operate any land, and rural households who rely principally on wage employment. These categories typically overlap but are not identical; the differences are important with respect to control over assets and livelihood sources, and in terms of their policy implications. It is important to distinguish underlying causes of landlessness in terms of push factors (demographic pressure inducing some marginal landowners to lease out or sell their land, distress sales owing to indebtedness or other contingencies, ejection of tenants to evade provisions of tenancy acts or to allow landlords to resume self-cultivation using new technology), or pull factors (growth in non-farm employment opportunities). Some (e.g. Singh 1990) suggest that the growth in landlessness during the 1970s in agriculturally progressive states (Punjab, Haryana, Gujarat) is no cause for alarm on the grounds that it merely reflects the growing dynamism of the rural non-farm sector.

The aggregate data also fail to offer insights into the operation of land markets. Land transfers come about through subdivision (legal and customary), gifts (usually within families, see Rosenzweig and Wolpin 1985), sales, and redistribution under land reform legislation, but these are difficult to distinguish in aggregate data. To understand land transactions fully, longitudinal village studies are required, tracing who transfers land to whom, why, and on what terms, informed by local histories of changing agrarian conditions (Jayaraman and Lanjouw 1998).

SIZE DISTRIBUTION OF RURAL LAND HOLDINGS

Gross inequities in land ownership in rural India have persisted since independence in spite of the tendency for population pressure to bring about a more even distribution of holdings¹⁴. But

¹³ Indian data, however, are generally believed to be better than those for other South Asian countries (Singh 1990).

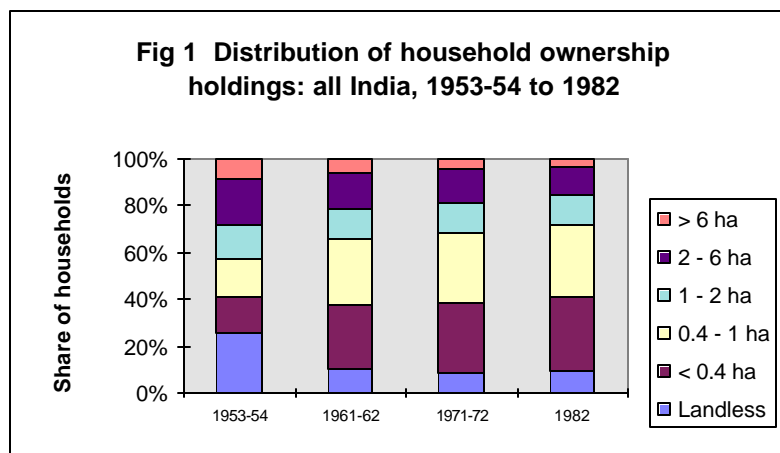
¹⁴ Besley and Burgess (1998) found that the gini coefficient for land distribution declined from 0.686 in 1953/54 to just 0.669 in 1982, even in 'high land reform' states. This places India in the middle range of land inequality by

this should not divert attention from the important structural changes that have taken place: the number of small/marginal owners, the total area they owned, and the average size of their holdings have increased, while the importance of large farms has decreased. The number and proportion of households owning no land has declined significantly since independence, mostly due to the abolition of intermediaries during the 1950s. Little real change in landlessness has taken place since then. It is generally agreed that subdivision of landholdings and the sale/purchase of land have been more important in bringing about structural redistribution than have redistributive land reforms, although land reforms have brought substantial gains to many poor rural households, particularly in Kerala (with mixed effects) and West Bengal. Indeed, the land redistribution that has been brought about through the market is partly attributable to land reforms, where there has been a credible threat of ceilings enforcement. Table 3 summarizes some salient features of India's agrarian structure. Figures 1 and 2 illustrate the relative shifts in distribution of ownership holdings and share of owned area by size of holding since independence.

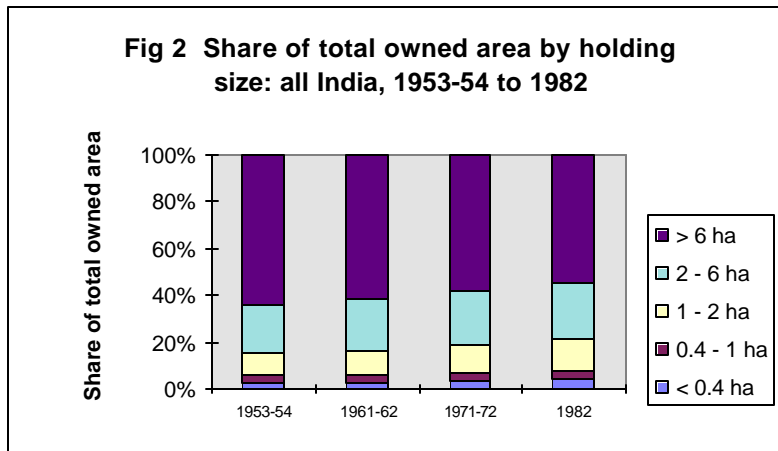
Table 3 Key parameters in India's agrarian structure

<i>Parameters</i>	<i>1961-62</i>	<i>1971-72</i>	<i>1982</i>	<i>1992</i>
Estimated number of rural households (millions)	72.5	77.8	93.9	n/a
Share not owning any land (%)	11.7	9.6	11.3	n/a
Share not operating any land (%)	26.8	27.0	24.0	n/a
Gini coefficient for ownership holdings	0.73	0.71	0.71	n/a
Gini coefficient for operational holdings	0.58	0.59	0.63	n/a
Share of landowning households leasing out (%)	7.0	9.9	6.2	n/a
Share of owned area leased out (%)	4.4	5.8	4.3	5.0
Share of operating households leasing in (%)	23.8	25.2	14.7	15.0
Share of operational area leased in (%)	10.7	10.6	7.2	9.0

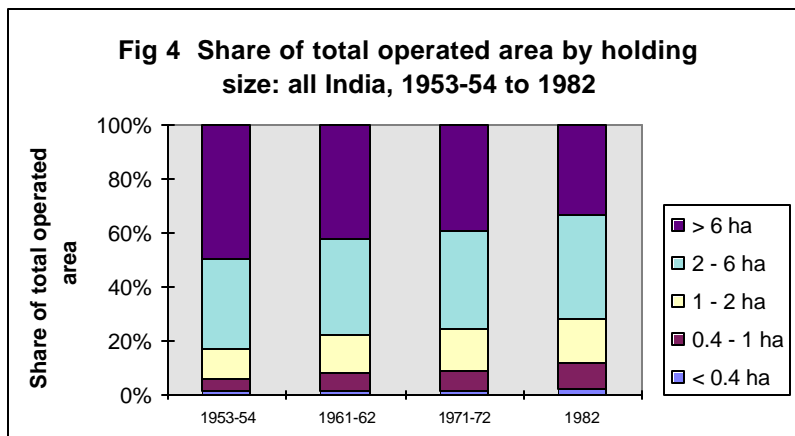
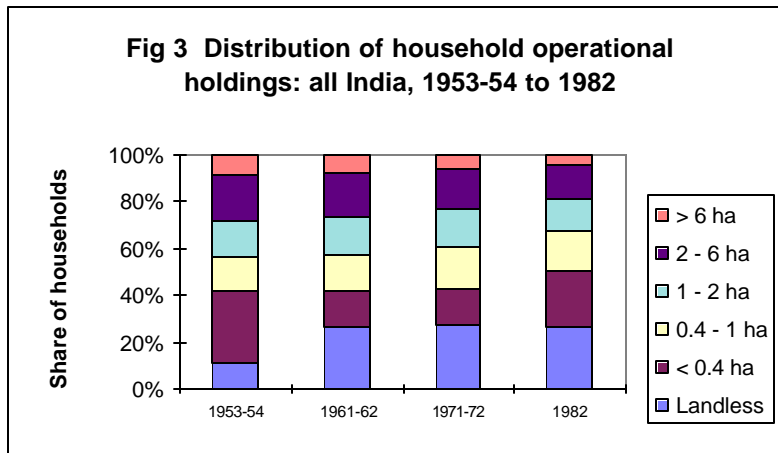
Sources: Vaidyanathan (1994), based on data from *Sarvekshana* 11(2), 1987, and 12(1), 1988; and GOI (1997b)



international standards. Latin American countries generally have much higher land inequality (Deininger and Squire 1996).



One would expect the distribution of operational holdings to be less skewed than ownership holdings, on the assumption that larger owners generally rent land to smaller ones. While this is generally true, ground reality is more complex, and landlords and tenants cannot be divided into mutually exclusive classes (cf. Neale 1990). Many with relatively large operational holdings lease-in land from smaller owners (the phenomenon of so-called ‘reverse tenancy’). Where there has been rapid technological change (Haryana, Punjab) operational holdings have become more concentrated owing to the displacement of tenants, increase in hired labor, and diversification of assets away from land, especially in irrigated areas. At least until the early 1980s, the following trends could be observed from all-India data. Although operational land remains very unequally distributed, inequality has lessened over time. The number of small and marginal operational holdings has increased owing to population growth and subdivision, particularly in the northern (former *zamindari*) states of Uttar Pradesh, Bihar, Orissa and West Bengal, but the average size of marginal holdings also increased. Larger holdings fell proportionately in number and area but their average size did not decline. The most significant net gains overall were for medium holdings, except in Kerala. Figures 3 and 4 illustrate the changing structure of operational holdings and share of total area operated by size of holding since independence.



LANDLESSNESS AND ABSENTEE LAND OWNERSHIP

There is a widespread perception that landlessness has increased over the last few decades. While this is true in terms of absolute numbers, in relative terms the incidence of landlessness has not changed significantly since the 1960s in terms of ownership or operational holdings (see Table 3). For India as a whole, the share of households not owning any land remained at around 11 per cent in 1982, while the share of households not operating any land fell slightly from 27 per cent to 24 per cent. However, the share of households owning sub-marginal holdings - often simply homestead land - doubled between 1961-62 and 1982 (from 17 per cent to 32 per cent), in part through the redistribution of ceiling-surplus land.

Commentators vary in their interpretations of the significance of these trends. Chadha (1994), for example, recalculates NSS data on the share of households *owning* no land to include those with only homestead land but no arable land. On this basis he finds that functional landlessness has increased in relative terms since 1953-54 in most states, particularly in agriculturally progressive states (Punjab, Haryana, Tamil Nadu, Gujarat, Andhra Pradesh, Maharashtra), and has fallen only in Assam, Kerala, and Rajasthan. On this view, land reforms have had little net impact, as they tended to redistribute only very small land parcels, while

increased land market (sale-purchase) transactions in the 1970s (by recipients of ceiling-surplus land, among others) added to the share of rural households owning no arable land. Others (e.g. Agarwal 1994) draw attention to the fact that households owning even tiny holdings are significantly less likely to experience absolute poverty. A land base, however small, is argued to offer some security, collateral, and opportunities to increase incomes through livestock production or other land-based activities.

Lipton (1985) finds that it is only with respect to reliably watered land that even tiny holdings significantly reduce poverty risk (e.g. in states such as Andhra Pradesh or West Bengal). Using NSS data, confirmed by village studies, Lipton argues that where land is of poor quality or is ill-watered (as in Rajasthan or Gujarat), households with unirrigated, sub-marginal holdings still face a significant risk of transient poverty associated with variable rainfall. The clear implication is that land reform is most needed precisely where it is opposed (i.e. where land is best). Nonetheless, the incidence of chronic poverty among landless farm laborers is still much higher than among average landed persons.

The share of households owning but not operating any land also remained constant at around 17 per cent over 1961-62 to 1982. This generalization masks considerable variation between states and between types of households within states, however. It is a misnomer to refer to this group as a 'rentier class' as it includes households owning but leasing out very small holdings in order to work as wage laborers in or outside agriculture (and for whom the transaction costs of leasing-in additional land prove prohibitive), as well as larger, absentee landowners. In 1982, the share of non-operating landowners was large in Punjab, Haryana, Tamil Nadu, and Andhra Pradesh, at around a quarter of all households, and small in Kerala and Rajasthan (5 per cent or less). However, it grew in size only in three states (Gujarat, Maharashtra, Tamil Nadu) between 1961-62 and 1982; elsewhere it declined¹⁵. This implies an increasing trend towards self-cultivation and is likely to reflect constraints in land-lease markets. These constraints appear to be most severe for those without land or with only sub-marginal holdings who wish to lease-in land, and signal the need for the deregulation of lease markets.

The proportion of households neither owning nor operating land is considerably smaller, and remained constant at around 9 per cent between 1961-62 and 1982 for All-India, having fallen slightly in the intervening years. Again, the All-India average masks considerable variation between states. The relative strength of this group showed a marked decline in Uttar Pradesh, Tamil Nadu and Assam; fell slightly in Punjab, Haryana, Bihar and Kerala; remained unchanged in Karnataka, Orissa and West Bengal; and increased elsewhere. For this group, it is clear that wage employment opportunities need to increase substantially, and it is likely that the rural non-farm sector will have an increasingly decisive role to play.

In Kerala, most agricultural laborers also own some land. Elsewhere, agricultural labor households are fairly evenly divided between those with land and those without, although in agriculturally progressive states (e.g. Punjab, Haryana, Gujarat, Tamil Nadu) they generally do not own land. The absolute number and share of population primarily dependent on wage employment have increased over time practically everywhere, partly owing to population increase and partly

¹⁵ Since 1982, it is reported that absentee landownership in Tamil Nadu has fallen sharply, signifying the loss of control of land by upper castes, while it has increased in Kerala (Vaidyanathan 1994).

owing to downward mobility. There is a high correspondence between this group of households and the incidence of rural poverty, particularly in states in which agricultural growth is low.

FARM SIZE AND PRODUCTIVITY

There is mounting evidence from around the world that agricultural productivity is inversely related to farm size, on the grounds that small farms using family labor have significant advantages in reducing labor-related transaction costs and achieving higher intensity of work effort per hectare (Berry and Cline 1979, Feder 1985, Lipton 1993). However, the Indian literature is replete with studies that arguably contest this inverse relationship (e.g. Bhalla and Roy 1988). Much of the confusion stems from the fact that pervasive policy distortions in Indian agriculture have led to continuing biases towards large farmers in infrastructure development, support services and markets for credit and complementary inputs, thus disguising the underlying relative efficiencies of small versus large farms. Many holdings in India are simply too small to be economically viable in the existing policy environment, and given indivisible inputs (family labor, draft animals). Little research has been carried out that controls sufficiently for the effects of policy distortions¹⁶.

Taking policy distortions into account, the conventional wisdom is that the Green Revolution sabotaged the inverse relationship (IR) between farm size and productivity in rural India. It appeared from aggregate data for the 1970s that there were significant economies of scale in agriculture that enabled large farmers to be more productive per unit area than small farmers. However, assessments based on more recent data suggest that this reflected the earlier adoption of new agricultural technology by large farmers, and that as the benefits of the Green Revolution trickled down to small farmers during the 1980s the IR has been restored. While large farmers face lower capital-related transaction costs, the new agricultural technology in India now appears to be scale-neutral, and the advantages enjoyed by small farmers in reducing labor-related transaction costs are thought to be of greater overall significance, enabling them to show higher productivity per unit area (corrected for land quality).

One recent study found that after government spending on agricultural research and extension, relative equality in the distribution of operational holdings was the second most important determinant of total factor productivity in Indian agriculture (Desai 1997). Greater equality in ownership holdings was also an important, though less significant factor. These results are consistent with the IR between productivity and farm size and support the case for improving access to land by the rural poor as part of a strategy for rural growth-with-equity. A priority for future research is to disentangle the effects of policy distortions using recent data so as to permit an overall assessment of the relationship between farm size and productivity in the Indian context¹⁷.

¹⁶ A separate but still relevant issue is to consider the size-profitability relationship, and the link with high rates of farmer suicide in commercial areas of Andhra Pradesh (Reddy 1993).

¹⁷ Fan, Hazell and Thorat (1998) have examined interlinkages between government spending, growth and poverty in rural India and find, for example, high returns to investment in rural roads, both for growth and for poverty reduction. They did not examine the influence of land distribution over growth and poverty reduction, however, owing to the lack of recent data. The IFPRI team expects to obtain data on land distribution up to the early

4 KEY POLICY ISSUES

LAND MARKETS

If small yet economically viable, family farms are more efficient than large farms, one would expect the land market to re-allocate land in their favor, whether permanently (through sale or purchase) or temporarily (through leasing or other forms of tenancy). The matching of land, labor and capital endowments could, in theory, be brought about through activity in one or more of these markets. In rural India, however, such markets are highly incomplete, imperfect and often (though decreasingly) interlinked, resulting among other things in the persistence of marginal and sub-marginal operational holdings which can neither be easily added to nor disposed of¹⁸. Most notable among the land market imperfections, and which appear to offer most feasible promise of reduction through public action, are those that result from legislative restrictions on leasing and tenancy, ostensibly designed to protect the poor but frequently having precisely the opposite effect; and the heavy transaction costs in land sale-purchase markets that fall disproportionately on the rural poor. The high cost of land market transactions is discussed below in relation to records of rights in land.

In addition to transaction costs, a further reason why land sale-purchase markets in India are so 'sticky' is related to the broader social value of land which considerably exceeds its direct economic value in terms of capitalized farm profits. There are several dimensions to this. Land is the most durable of assets, and land prices have considerably outstripped the rate of inflation. Land is valued as collateral and provides security against natural hazards (droughts, floods) and other contingencies (dowry, funeral costs). It is of symbolic importance, and land ownership brings a sense of identity and rootedness within a village (Agarwal 1994). However, land is also a source of political power (Neale 1969), which in turn 'provides the means to enhance the return from land' (Faruqee and Carey 1997: 13). It is this power structure that underlies continuing price distortions and institutional biases towards large farmers, whether in infrastructure provision (notably water) or access to credit, inputs or support services, and at the same blocks attempts to

1990s later this year, which will enable them to test the hypothesis that more equal land distribution generates both higher growth and greater poverty reduction.

¹⁸ See Binswanger and Rosenzweig (1986) for the theoretical explanation why under poorly developed capital markets land is sold mainly for distress reasons, and why it tends to accumulate with those already having large holdings.

reform the land market. This combination of factors explains why there are so few willing sellers of land under prevailing conditions in rural India¹⁹.

Given these rigidities in the land sale-purchase market in much of rural India, one would expect the lease market to play an important role in matching land, labor and capital endowments (Bell 1990, Melmed-Sanjak 1998, Sadoulet *et al.* 1998). Land leasing or tenancy may take the form of fixed rentals or sharecropping arrangements, in which rents are paid in cash, in kind, or a combination of the two. Regardless of the type of tenancy contract, what is the evidence on the changing significance of land-lease markets in rural India? Tenancy has declined substantially in rural India since independence when it accounted for around 75 per cent of the total cultivated area (Sharma 1992a). While the under-reporting of tenancies means aggregate data (as shown in table 3) are of doubtful value in assessing the changing significance of tenancy, there is little doubt that real rates of tenancy have declined, in part owing to legislative regulation; and in part owing to technological change in agriculture, leading to the resumption of self-cultivation by larger landowners, and the leasing-out by marginal owners as holdings became non-viable in the context of new agricultural technology²⁰.

Nonetheless, lease markets remain of great importance for the rural poor (Sadoulet *et al.* 1998). Of an estimated 19 per cent of rural households that lease-in land, over 90 per cent are landless or marginal owners (Parthasarthy 1991). Most of those leasing-out land are also small owners, either because they have too little family labor or draft power to operate the land, or because they have access to alternative, non land-based livelihood opportunities. However, the numbers of landless, marginal and small operators seeking to lease-in land far outweigh those marginal and small operators that lease-out land. Half of the total area leased-in is by landless and marginal operators (significantly exceeding the area of ceiling-surplus land redistributed) and a further 20 per cent by small owners (Parthasarthy 1991). The ratio of land leased-in to owned land is much larger for smaller farmers than for larger farmers; in spite of growing reverse tenancy, therefore, leasing out by larger operators remains the dominant pattern. Discriminatory policies have had important consequences for the extent and character of lease markets, and not only in those states that legally prohibit leasing or tenancy (Uttar Pradesh, Madhya Pradesh). Many more households would lease land if legal restrictions were eased and transaction costs lowered, subject to supply/demand factors which vary by season, and according to individual capabilities and other attributes. Olson Lanjouw (1998), for example, demonstrates that farming skill can be a significant factor influencing how much land may be leased-in.

¹⁹ Carter and Mesbah (1993) consider other possible explanations for missing land market transactions (which they term the 'Chicago question') in addition to land market imperfections. These include: the feudal hypothesis (lack of interest in profit maximization); the price distortions hypothesis (distorted price policy lends an artificial competitive advantage to large-scale agriculture); the inadequate farm savings hypothesis (small farms cannot generate surplus over subsistence requirements); and the capital constraints hypothesis (operating capital is required as well as capital for land purchase, which weakens the IR in imperfect capital markets). All apply, to varying degrees, in India.

²⁰ The acquisition of ownership rights by tenants has not been widespread, was limited to a few states (e.g. Kerala, Maharashtra, Gujarat, Telengana in Andhra Pradesh after peasant struggle in the 1950s), and benefited better-off rather than poorer tenants even in these places (Herring 1983).

The extent and character of land-lease markets vary widely between states and regions of India. Two groups of states account for the highest tenancy rates. Most significant of all are the less agriculturally developed, former *zamindari* states of North and East India (Uttar Pradesh, Bihar, Orissa, West Bengal) which account for 65 per cent of all tenants, and which also generally record a higher than average incidence of rural poverty. Share tenancies tend to predominate in these states, although the trend is towards fixed-rent tenancies²¹. The second group includes the agriculturally progressive states of Punjab, Haryana and Tamil Nadu. As markets develop, and in the absence of legal restrictions, sharecropping tends to give way to the leasing of land on a cash basis, as has happened in these agriculturally more progressive states (Singh et al. 1991). States with low rates of tenancy include: Rajasthan, Madhya Pradesh, Himachal Pradesh, Jammu and Kashmir, Kerala and Gujarat. Other former *ryotwari* areas fall in between these extremes (Assam, Karnataka, Andhra Pradesh and Maharashtra).

Much tenancy legislation has its origins in the still widely held misconceptions that share tenancy is necessarily inefficient and that landlord-tenant relations are necessarily exploitative. A substantial literature now corrects these misconceptions (Otsuka and Hayami 1988, Singh 1990): share tenancy represents a second-best response to missing, thin and imperfect markets for land, credit, labor, management, information, and insurance, and performs some very important functions which would otherwise have to be fulfilled by other institutions; it is neither necessarily inefficient nor a barrier to the adoption of new technology; tenancy contracts are often part of a series of interlinked, interdependent contracts in a number of factor markets (land, labor, credit). They are not necessarily exploitative, but where they are, owing to the unequal bargaining power between agents, attempts to 'fix' relations in one sphere can lead to compensatory shifts in other contracts to leave tenants net worse off.

Rather more is known about why sharecropping persists than is known about the determinants of its relative efficiency in different environments (Faruqee and Carey 1997). Nonetheless, according to Singh (1990), the weight of evidence suggests that share tenancies are likely to show inefficiency where tenancies are small (less than 2 ha), cost-sharing is minimal, technical change and productivity increases are slow, markets of all kinds are imperfectly developed, and semi-feudal, patron-client systems are prevalent. Such conditions are to be found predominantly in the former *zamindari* areas of northeastern India, particularly where share tenancies are very small and account for half or more of the total cultivated area, as in Bihar, Orissa, Uttar Pradesh and West Bengal. But this generalization overlooks important differences between these states. In Uttar Pradesh, owing to the prohibition on land-lease markets, tenancies are concealed and highly insecure. In West Bengal, by contrast, a significant proportion of tenancies are registered and protected, which has had a marked impact on agricultural performance. Cost-sharing tends to be more prevalent in the former *ryotwari* areas of southern and western India, and is increasing in importance in areas significantly affected by the Green Revolution²².

²¹ Under fixed-rent tenancies, rents may still be paid in kind. Legal restrictions may apply to such arrangements: in West Bengal rents are compulsorily payable in kind, whereas in Mumbai they must be paid in cash.

²² The relative complexity of cropping systems is also relevant to the nature of tenancy contracts. Sharecropping may be more suitable under simpler cropping systems, such as paddy production, than in more complex farming systems with several crops in rotation, in which fixed-rent contracts are more likely. The companion study in Orissa considers variations in tenancy contracts under different cropping systems (Mearns and Sinha 1998).

Historically, it is thought that land markets have operated to the detriment of small and marginal farmers in rural India. The imposition of British colonial rule and 19th century land settlements brought new markets for agricultural products, freely negotiable land rights in *ryotwari* areas, and oppressive taxation. This combination of factors resulted in the dispossession of heavily indebted small cultivators through foreclosures to money lenders in credit markets that were newly delinked from land and labor markets, leading to a rise in land concentration²³. Downward mobility of rural households is often presumed to predominate over upward mobility on the grounds of repeated partitioning of holdings among multiple heirs, but theoretically this pressure could result in land distribution becoming either more or less concentrated, depending on the characteristics of buyers and sellers, the reasons for sale-purchase transactions (e.g. extent of distress sales), and access to non land-based income sources.

Recent evidence from longitudinal village studies, however, suggests that by and large land markets in rural India have operated in favor of small and marginal farmers rather than against them. Annex 2 distills findings from several studies of sale-purchase transactions over periods of several decades. While these findings cannot be generalized, several observations are of broader relevance. Only one study (in Madhya Pradesh) found that sale-purchase transactions had resulted in more unequal holdings; in this case land transactions were infrequent and, for small and marginal farmers, were largely distress sales (Sarap 1995). Others observed rather more active land markets, even in semi-arid areas; identified both upward and downward mobility of households over time (Attwood 1979); and found little net change in land concentration (Walker and Ryan 1990, Balabh and Walker 1992, Mani and Gandhi 1994).

Annex 3 reviews the findings from studies of land-lease markets in both agriculturally progressive areas and semi-arid areas with a lower incidence of irrigated land. Active lease markets were observed in virtually all cases, even where leasing is legally prohibited (as in Uttar Pradesh). Households in all holding size groups lease out land, generally to take advantage of non-agricultural employment opportunities, particularly where household endowments of labor and draft animals preclude self-cultivation and other markets do not compensate. Reverse tenancy (larger operators leasing land from smaller owners) appears to be particularly important in more progressive areas (Punjab, western Uttar Pradesh), while land-labor market interlocking (larger landowners leasing to landless and marginal farmers in order to take advantage of their family labor) remains significant in less progressive areas (Bihar, Orissa).

Similarly, households in all holding size groups lease in land, although in many cases small and marginal operators are disproportionately represented, often but not always linked to labor contracts. One study explicitly addressed transaction costs as a possible constraint on leasing-in land, and found that small and marginal farmers were less likely than large farmers to lease-in as much land as they would have wished, owing to the heavy burden of transaction costs they faced (Skoufias 1995). Faruqee and Carey (1997) suggest that access to credit may be the most serious constraint on access to land for smaller operators. One study in Uttar Pradesh found some evidence, though weak and statistically insignificant, that households with access to credit are more likely to lease-in land, although access to credit in turn was shown to be determined by other

²³ In fact there is no evidence of increasing land concentration in rural India since the mid-19th century (Cambridge Economic History of India, cited in Heston and Kumar 1983).

variables reflecting farm productivity: notably amount of irrigated land and extent of plot fragmentation (Kochar 1992). Very little interlocking of land and credit markets was observed in the studies reviewed (Annex 3). In agriculturally more progressive areas, larger operators with sufficient family labor, capital, and access to irrigation accounted for a significant share of households leasing in land. In some of these areas, a slight increase in land distribution towards larger farmers was observed, but generally land-lease markets appear to have led to a more equal distribution of operational holdings.

FRAGMENTATION OF HOLDINGS

The fragmentation of operational holdings into multiple plots is commonly perceived to be a serious constraint on agricultural productivity in India. High direct and opportunity costs in cultivation are frequently ascribed to fragmentation, including: the time and energy expended in moving labor, draft animals, seed, manure and irrigation water from one plot to another, and bringing harvested crops to a common point; supervision of labor; increased expenses of irrigation and drainage; difficulty of access to scattered plots; and loss of land in boundaries. The Indian Planning Commission, for example, estimated that as much as 7-10 per cent of land in rural India was lost to boundaries in 1957. Those who draw attention to the potential costs of fragmentation suggest that it could account for the loss of around 3-10 per cent of net returns to farming, although farm management studies based on field observations show that adaptive farming practices significantly reduce these potential costs in practice (Heston and Kumar 1983).

There are differing views on the real significance of fragmentation. Singh (1990), for example, believes it is a serious problem that warrants serious public policy attention in its own right, while others (Vaidyanathan 1994, Thangaraj 1995) point out that the process of fragmentation has been slowing considerably since the 1960s, particularly where land markets are more active and less regulated. While the number of plots per holding tends to increase with holding size, all-India data on operational holdings show that the average number of parcels per holding has declined from 5.7 in 1961-62 to 4.0 in 1982. Given the rate of population increase over this period (see table 2), this is quite a remarkable decline. However, given that total operated area has changed little, the average size of each of these parcels of land has also declined from 0.47 ha in 1961-62 to 0.41 ha in 1982. For operational holdings, there is evidence that land-lease markets enable farmers to overcome the effects of fragmentation (Ballabh and Walker 1992, Vaidyanathan 1994).

The chief cause of fragmentation by far is the subdivision of holdings on inheritance. As with other personal laws, different laws governing inheritance apply to different religious groups, but both Hindu and Muslim law provides for equal inheritance among sons as heirs. Since their reform after independence, Hindu personal laws also provide for inheritance by women, but social norms and customs tend overwhelmingly to prevail, and in practice women's legal rights in their parental land tend to pass to their brothers (Agarwal 1995). Various institutional mechanisms have tended to counteract the driving force of population growth and partible inheritance, most notably joint family arrangements. Other institutional rules have been important in dampening fragmentation in particular regions. For example, one system enforced until the 1940s in parts of the British Central Provinces stipulated that a farmer had to obtain a declaration certificate from each of his brothers before he could sell his land, and brothers had the first option on prospective land for sale. This practice, known as *agrah kriya* ('on request') raised the cost of transacting

land, and stimulated voluntary consolidation through the market (Ballabh and Walker 1992). Overall, in spite of the fact that joint family holdings have increasingly been divided in recent years, the rate of fragmentation has lagged significantly behind the rate of population increase.

Four main hypotheses have been advanced to explain the persistence of fragmentation:

(i) **risk-spreading** is the most common: where soils are spatially heterogeneous or where there are other reasons for high variance in yields between plots, it makes sense to hold a diversified portfolio of land parcels to maintain higher net yields over time, and to minimize the risk of zero or very low yields in the worst years, thus reducing the risk of distress sales and indebtedness;

(ii) **labor-spreading**: diversification between plots reduces peaks in labor demand throughout the year, on the expectation that crops in different plots may be at different stages in the cropping cycle at any given time. This hypothesis is less plausible where cropping cycles vary little between plots within particular localities, as in paddy rice producing areas (South India, West Bengal);

(iii) **thin land markets**: land serves as an asset or a source of security against contingencies as well as having productive potential, particularly where land and other markets are poorly integrated or highly regulated. Holding several, fragmented parcels enables owners to sell or mortgage discrete portions of their total holdings at any one time;

(iv) **high transaction costs**: heavy costs in transacting land make it more difficult to achieve voluntary land consolidation through market exchange. Such costs include the uncertainty associated with land transactions in heavily regulated markets, where records of rights in land are inaccurate or falsified, and the costs of producing certified copies of documents, and so on. In the context of poorly developed land markets, voluntary exchanges are also made more difficult in the absence of reliable information to enable both parties agree on equivalent values of plots (Heston and Kumar 1983)²⁴.

There is significant regional variation in the incidence of fragmentation, and in the likely explanations for its evolution and persistence. The major contrast is between the Northern plains (e.g. Punjab, Haryana, Uttar Pradesh) where the spatial heterogeneity of soils is comparatively low, and the dry Deccan Plateau (e.g. Karnataka, Maharashtra, Gujarat) where it is high. The risk-spreading hypothesis applies with greater force to the dry Deccan plateau than to the Northern plains, owing to the higher variation in yields between plots in drier areas where soils are more heterogeneous (Ballabh and Walker 1992). Certainly by the time of independence, the extent of fragmentation was a more severe problem in North India than in other parts of the country. Prior to the successful land consolidation programs in Punjab, Haryana and Uttar Pradesh, for example, initial holdings were typically made up of 15 to 20 plots, in contrast to areas of the

²⁴ It is worth noting that different methods for land valuation have been used in land consolidation programs. Market prices are of little use where there are thin markets. During the early stages of land consolidation in Uttar Pradesh, revenue rates also proved to be highly controversial as a guide to land values: farmers frequently contested the absolute valuations attached to individual land parcels. A significant degree of success was subsequently achieved using a scoring system to award relative rather than absolute values to different plots within a village on the basis of perceived differences in productivity, implemented through an open and transparent process with the involvement of both local farmers and land settlement officers (Oldenburg 1990).

Deccan Plateau holdings were made up of only 3 to 5 plots. By the late 1970s, fragmentation remained highest in Bihar, Orissa, Uttar Pradesh and West Bengal, where small and marginal holdings recorded up to 8-10 plots (Singh 1990).

Historical and institutional factors, as well as ecological ones, underlie this regional contrast. It has been suggested that the pattern of British land settlement in northern *zamindari* and *mahalwari* areas led to rapid division of plots, whereas in other areas adaptive mechanisms prevented excessive fragmentation (Heston and Kumar 1983). Kessinger (1974) argues that 19th century land settlements in *mahalwari* areas (Punjab, Haryana) made the task of voluntary land consolidation much more difficult, as it raised significantly the transaction costs of transferring land. At the same time, it is possible that administrative land consolidation programs subsequently found greater acceptance in *mahalwari* areas (e.g. Punjab since the 1930s), since the notion of establishing equivalent values of diverse plots was already familiar to local farmers.

By the mid-1980s, around a third of the total operated area in India had come under some sort of administrative land consolidation program, almost all of which was in Punjab, Haryana, Uttar Pradesh, and Maharashtra (Thangaraj 1995). Of the more recent programs, Maharashtra has made less progress than Uttar Pradesh, perhaps because in Maharashtra soils tend to be more heterogeneous and because the extent of fragmentation was lower to begin with, thereby reducing effective demand for consolidation from farmers. Some work towards administrative land consolidation has been carried out in Madhya Pradesh, Gujarat, Karnataka, Andhra Pradesh, Bihar, Orissa (Mearns and Sinha 1998) and Rajasthan, and almost none in West Bengal and Assam, in spite of the fact that supporting legislation has already been enacted. In South India, it is suggested that there may be less to gain from administrative land consolidation because the extent of fragmentation is lower, voluntary consolidation has more easily been achieved, or because there are sound ecological reasons for its persistence (cf. Farmer 1960). Notably, Tamil Nadu and Kerala made no legislative provision for land consolidation programs, but in both states spontaneous consolidation has been possible through the land market (Thangaraj 1995). Everywhere, however, the high transaction costs of land transfers (discussed below in relation to records of rights in land) are significant constraints on voluntary consolidation of ownership holdings. Overall, it appears that measures to deregulate land markets may indirectly result in more land consolidation than would further administrative efforts to implement land consolidation programs directly.

GENDER AND LAND RIGHTS

No discussion of constraints on access to land for socially excluded groups in India can be complete without considering the lack of effective, independent land rights exercised by women. A focus on rural poverty reduction alone will fail to uncover the full extent of the social exclusion of women in gaining access to land, whether through inheritance, through state land redistribution, or through the market. Female workforce participation rates, rather than property rights, are widely used as the main indicator of women's economic status in India (Agarwal 1995). But while better employment opportunities may complement land-based opportunities, they cannot substitute for land. Efforts to diversify livelihoods of asset-poor rural households through small-scale livestock production and sericulture, for example, generally require some land base, however small.

In India, separate personal laws apply to different religious groups. In most cases, women enjoy rather far-reaching legal rights to inherit and own land. This is especially true for Hindu women following the introduction of the gender-progressive Hindu Succession Act 1956, which provides for the daughters, widow and mother of a Hindu man dying intestate to inherit property equally with his sons in his separate property²⁵. In practice, however, significant and persistent gaps persist between women's legal rights and their actual ownership of land, and between the limited ownership rights women do enjoy and their effective control over land. Women's legal rights in land conflict with deep-seated social norms and customs, and are rarely recognized socially to be legitimate. There are strong pressures on women to forfeit their legal rights in favor of their brothers, reinforced by social stigma, seclusion practices, and other sanctions. Given the lack of alternatives, women tend to be dependent on their brothers for economic and social support in the event of widowhood or marital breakup. As a result, women tend to internalize the social norms which lead them to forfeit their legal rights in land even without overt pressure from their relatives. These social obstacles to the exercise of legal rights by women are strongest in North India (e.g. Rajasthan, Uttar Pradesh) and weakest in South India. Even where women do enjoy ownership rights in name, they may not exercise effective control over land, being unable, for example, to determine how the land should be used, or to lease, mortgage or dispose of the land or products from it.

Why is it important that women should have independent land rights? The case in favor rests on three types of argument: welfare, efficiency, and equality or empowerment (Agarwal 1994a). On welfare grounds, gender-based inequities in well-being are well documented (e.g. Dreze and Gazdar 1996 for Uttar Pradesh). Women's lack of control over independent sources of income has implications not just for their own well-being, but also for their children's well-being, since it is known that child nutritional status is more closely related to women's than men's income. To the extent that women's income is land-based, women's lack of access to and effective control over land may therefore threaten the well-being of many household members. Poverty and well-being are not necessarily closely correlated: women in better-off and higher-caste households are also disadvantaged in this respect by their lack of access to and control over land. On efficiency grounds, women are often the sole or de facto heads of households and, on the assumption that greater tenure/ title security provides production incentives, granting them independent title to land is likely to lead to higher agricultural output. However, this is only true to the extent that existing gender biases in agricultural support services and factor markets are corrected. Indeed, recent experience with savings and loans groups in India suggests that women are frequently better credit risks than men.

The equality and empowerment arguments concern women's access to land relative to that of men, rather than their access to land in absolute terms. Strengthening women's relative access to land will help increase their bargaining power and ability to challenge male dominance both within the household and within the wider community. Some of the most persuasive

²⁵ Significant gender biases persist both in land reform legislation and in personal laws, however. Agricultural land subject to tenancy is exempt from the Hindu Succession Act, and is governed by state-level acts. In states such as Uttar Pradesh where tenancy is officially banned, this precludes most arable land. In the case of land ceilings acts, additional land may be kept in the case of adult sons but not adult daughters. Also, in assessing 'family' holdings, holdings of both spouses are considered, but women's holdings are often arbitrarily declared as surplus land while men's holdings remain untouched (Agarwal 1995).

arguments relate to women's ability to escape situations of marital abuse and physical violence. A common complaint from women against joint land titles, for example, is that they will remain bound to their husband even in the case of marital breakup. Various social norms and pressures reinforce women's relative lack of access to and control over land. In addition to those already mentioned, intimidation, the threat of violence, and litigation are widely invoked by relatives to prevent women from pressing legal claims over land (Agarwal 1994a, 1995). The logistics of dealing with the bureaucratic obstacles to land transfers are particularly formidable for women who are already disadvantaged through illiteracy, seclusion, social stigma and lack of political voice. Local government officials also represent major impediments: for example, village record keepers may refuse to register land holdings in the sole name of widows, only jointly with their sons. There is evidence that Operation Barga in West Bengal was also biased towards the registration of male rather than female tenant farmers (Gupta 1993), in spite of its success in other respects.

In view of such deeply embedded obstacles, what policy approaches hold most promise in securing better access to and control over land for women in rural India? Further legal reform may be worthwhile in some cases. Much land reform legislation was enacted before women's land rights were considered worthy of policy attention in their own right, during the 1980s (Agarwal 1994a). No mention of women's land rights was made until the Sixth Five-Year Plan (1980-85). The Eighth Plan (1990-95) called for a change in inheritance laws to accommodate women's rights but gave few specifics, and called upon state governments to allot 40 per cent of ceiling-surplus or state-redistributed land in the name of women alone, with the remainder to be joint titled. In practice, however, the amount of arable land subject to ceiling-surplus or state redistribution is insignificant by comparison with potential land transfers through inheritance or through the market. Any future efforts towards land registration more generally should certainly attempt to expand the incidence of independent land titles held by women.

While these are steps in the right direction, such legal and policy reforms do little or nothing to challenge the underlying social norms and customs that inhibit women's access to land. Agarwal (1994a, 1994b) suggests that granting land rights to groups of landless women is perhaps the most promising course of action, with NGOs playing a central catalytic role. Some precedents do exist, such as the Deccan Development Society in Andhra Pradesh, or Sewa Mandir in Rajasthan, and there is evidence that through such collective action the bargaining power of women can be strengthened considerably. Joint ownership or leasing of land by groups of women need not imply joint management or joint cultivation, although following successful models with women's self-help and savings and loans groups, it is likely that collective action (e.g. in making joint investments in irrigation or inputs) will increase women's bargaining power in dealing with government officials or in factor markets.

ACCESS TO AND ENCROACHMENT ON COMMONS

One way in which the rural poor and other socially excluded groups compensate for their lack of access to and control over privately owned arable land is through access to common and public land. While common-pool resources (CPRs) are not a major focus of the present study, it is important to be aware of their changing significance and the consequences for the rural poor, for several reasons: (i) commons are particularly important in the livelihoods of the rural poor and other socially excluded groups, including women and tribal populations; (ii) CPRs complement private land and other asset holdings; (iii) threats to the extent and quality of CPRs harm the poor

and socially excluded relatively more than they do better-off and more powerful groups; (iv) of these threats, various forms of institutional change in recent decades have undermined local capacity to manage CPRs through customary arrangements without replacing them with effective alternative arrangements (state, private, or civil society). In such an environment of institutional uncertainty, non-poor groups with a stronger ability to influence rural institutions in their own favor have managed to encroach on commons with impunity, while the landless, who may be legally entitled to acquire occupancy rights over a plot of cultivable 'wasteland', may be unable to realize their legal claim in practice. Efforts to improve land administration could make matters worse rather than better for socially excluded groups if lessons from this experience are not learned and acted upon.

In rural India, some of the most important village commons include community forests, pasture or 'wasteland', river banks, river beds, ponds and tanks. Forest department land may also form *de facto* commons, whether or not local inhabitants have legal rights to its products. In total, commons may account for around 20 percent of India's total land area. Commons provide a wide range of physical products (e.g. food, fuel, fodder), income and employment benefits (e.g. supplementary crops or livestock, drought period sustenance, off-season activities), and broader social and ecological benefits (e.g. groundwater recharge, drainage, renewable resources, maintenance of a favorable microclimate). It has been well-documented at least for India's dry regions that CPRs are of particular importance for the rural poor. Based on a survey of 82 villages in 21 districts of seven states²⁶, Jodha (1986, 1995) showed that 70-80 per cent of total fuel and grazing/ fodder requirements were met from CPRs for poor households, compared with no more than 30 per cent for non-poor households with better access to private land holdings. While 130-200 days of employment per year were met from CPRs for poor households, the corresponding figure for non-poor households was around 30-60 days. In total, an estimated 14-23 per cent of household income was met from CPRs for poor households, compared with only 1-3 per cent for the non-poor.

Although the household was taken as the unit of analysis in Jodha's survey, other studies have shown that women (in non-poor as well as poor households) depend relatively more on commons than do men, owing to socially assigned roles for meeting household fuel and food requirements and for raising at least some livestock (Agarwal 1989). The degree of dependence on commons tends to be inversely related to the extent of private land holdings. Nonetheless, access to CPRs complements private land and other asset holdings such as livestock, and allows asset-poor households to diversify livelihoods and reduce risk, as Chopra et al. (1990) demonstrate for the lower Shivaliks of Haryana and Punjab.

Numerous studies have documented the dramatic rates of depletion and degradation of commons in rural India over recent decades (Jodha 1990; Chopra, Kadekodi and Murty 1990; Arnold and Stewart 1990). In Jodha's seven-state survey, it was found that the area of village commons declined on average by around 31-55 per cent over the period 1950-52 to 1982-84. The share of total village area accounted for by CPRs fell from an average of 18-41 per cent in 1950-52 to 10-24 per cent in 1982-84 (Jodha 1986). Given their relative and absolute dependence on CPRs, this harms the poor and other socially excluded groups more than it does the non-poor. Longitudinal assessments of the degradation (as opposed to depletion) of commons in India are

²⁶ Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu.

harder to come by, owing to the absence of adequate baseline data, but are suggested by indicators of declining biodiversity, such as the number of products derived from commons, the number of tree and shrub species, and the relative shift from cattle to sheep and goats.

Various institutional factors underlie this decline in the extent and quality of CPRs over recent decades, and the relative shift in the distribution of benefits from commons (or former commons) from the rural poor to non-poor groups. Some highlight the manner in which land reform legislation has been implemented, the transfer of 'wastelands' and other common lands to the jurisdiction of panchayati raj institutions (Bromley and Chapagain 1984, Shanmugaratnam 1996, Blair 1996). Others have documented the weakening of customary CPR management practices at village level over recent decades, including levies on CPR use, penalties for transgressions of agreed rules, seasonal restrictions on harvesting, requirements on community members to contribute labor for the upkeep of commons, provision of watchmen, etc. (Wade 1988, Chopra et al. 1990, Blaikie et al. 1992). With isolated exceptions (Saint 1993, Singh 1995), attempts to introduce formal management regimes through state- or NGO-initiated watershed development or community forestry schemes (sometimes in partnership with panchayati raj institutions) have generally been rather ineffective to date in providing an adequate institutional basis for endogenous forms of collective action in natural resource management. Common failings are inability to foster meaningful forms of local participation²⁷, and the tendency for village management committees or panchayati raj institutions to be 'captured' by factional politics (Blair 1996, Ahluwalia 1997).

The depletion of village commons has been brought about by various processes operating in parallel. Owing to the failure of land ceiling laws to bring about any significant redistribution of privately owned ceiling-surplus land in practice, many states have instead sought to redistribute some public land ('wastelands') to landless households. Such *de jure* privatization of commons has not always led to *de facto* control over land by the landless. In Orissa, for example, the very act of pressing a claim to such land is regarded as illegal in the first instance, so that the rights are practically impossible to 'regularize' (Mearns and Sinha 1998). Although significant benefits have accrued to the recipients where land has been redistributed, in spite of the small size of land parcels allocated, much of the land redistributed is of low quality and generates low and uncertain crop yields. Many beneficiaries do not have access to the complementary resources (labor, capital, draft animals) required to make more productive use of such land. Moreover, state land redistribution has often disproportionately benefited non-poor rather than poor households. In Jodha's survey, for example, the disparity in land holdings between poor and non-poor widened as a result of the privatization of village commons in Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Rajasthan (Jodha 1986).

Alongside such *de jure* privatization there has also been a parallel process of *de facto* privatization or encroachment on commons in many areas, involving the permanent or seasonal annexation of formerly common land for private crop production. Often it is the relatively higher value patches of land (e.g. moist depressions in drylands) that are encroached first, which leads to a reduction in the benefits to other users out of proportion to the share of common land lost. Those

²⁷ Financial subsidies or matching grants are commonly used to induce people to contribute their labor for various purposes, which does little to ensure the sustainability of interventions once the subsidies are withdrawn (Kerr et al. 1996, Kolavalli 1998).

who encroach on commons tend to be non-poor farmers with more family labor and access to complementary inputs to enable them to farm the land effectively, and who are able to persuade or bribe the local *patwari* to manipulate the record of rights in land in their favor (Ahluwalia 1997). The lack of clarity regarding local land records, and the high cost and long duration of litigation, leaves other land users and panchayati raj institutions with few options in challenging instances of encroachment²⁸. As and when efforts are made to update land records in revisional surveys and to improve land administration systems (e.g. through title registration where appropriate), it is essential to consider ways of handling common land so as to be better able to prove instances of encroachment. If attention is not specifically paid to the inclusion of commons in a unified land administration system, efforts to improve land conveyancing systems may actually facilitate rather than hinder further encroachment on commons by the non-poor at the expense of socially excluded groups.

The companion study of social exclusion and land administration in Orissa considers further aspects relating to encroachment on commons, particularly in relation to the land rights of tribal communities (Mearns and Sinha 1998). For example, Land alienation through indebtedness and the mortgaging of land has long been of concern in scheduled tribal areas, and persists in spite of legislation designed to prevent it. Given the weak bargaining power of tribal communities, the most promising policy options to mitigate some of the practical consequences of these forms of social exclusion concern public awareness-raising and access to information. Some NGOs in Orissa have been effective in pursuing public interest litigation in order to defend the land rights of tribal communities against various forms of encroachment by others.

RECORDS OF RIGHTS IN LAND

The question of records of rights in land has been relatively neglected in contemporary literature on land reforms and agrarian relations in India²⁹. Remarks are often made in passing that records of rights in land are inaccurate, out of date, and wilfully manipulated by large landlords with the connivance of rent-seeking *patwaris*, but it is rarely regarded as a subject of policy concern in its own right. Successive Five-Year Plans have underlined the need for the updating of land records as mandated by legislation, but implementation has been woefully inadequate, not least because land administration is itself a non-plan activity and therefore receives little investment. Primary records of rights in land are maintained by *patwaris* at village level, and are usually recorded in local languages and dialects using various and non-standard measures. The physical documents, including village maps, deteriorate over time through continuous handling, and become illegible owing to marginal notations following mutations, to the extent that these are recorded at all. Legislative requirements for regular land settlements and updating of land records are rarely met.

²⁸ Judicial interference has been suggested to be even more important in inhibiting successful challenges to instances of encroachment. Courts have become accustomed to granting 'interim stay orders' preventing the eviction of a private party, without the opportunity for local voices to be heard. Whether or not they are poor, private parties (e.g. individual farmers) are generally perceived by higher-level courts to be the 'underdog' in cases concerning government land. A whole category of lawyers specializes in stay orders and constitutes an important stakeholder group in its own right (T.V.Somanathan, pers. comm.).

²⁹ This is not true of literature based on historical research, however; see Smith (1996) in particular.

It is widely acknowledged that the costs involved in carrying out land transactions in India are enormous. Under the Transfer of Property Act 1882 a seller of land is obliged to produce documents of title but these are private documents, and are not guarantees of title certified by the state. The Indian Registration Act 1908 provides for the registration of deeds in the case of transfers of immovable property. However, such registration is voluntary rather than compulsory and the validity or otherwise of the documents to be registered is not the concern of the registering officer (Wadhwa 1989). As a result, any person wishing to purchase land is more than likely to incur substantial costs in obtaining notaried copies of documents, in land valuation and conveyancing fees (e.g. stamp duty), in associated transport costs, in bribes to patwaris and others, and in legal fees, either to investigate title in the property in advance of purchase or in litigation costs thereafter, since documentary evidence of title is so often defective or forged. It is by no means uncommon for a buyer to find that 'their' land has already been purchased by someone else, particularly in urban areas where information asymmetries between buyers and sellers are high. Court cases over land disputes frequently drag on for decades, and seriously over-burden the judicial system. Probably the bulk of all pending court cases concern land disputes, both in civil courts and in assault or public order cases³⁰.

Land-related transaction costs are onerous for all, but are often prohibitive for the poor. They are a serious obstacle to better access to land for the rural poor and socially excluded. The companion study in Orissa includes an empirical assessment of the formal and informal transaction costs involved in the land market (Mearns and Sinha 1998). While formal transaction costs (e.g. registration fees and stamp duties) amount to around 17 percent of the value of the land transacted, it is estimated that informal transaction costs (e.g. making repeated visits to tehsildar's and registrar's offices, side-payments to expedite issuance of relevant documents, etc) amount to at least as much again, without taking into account the time and other opportunity costs involved. The process of effecting a mutation in land records frequently takes a decade or longer.

The case for improving the system of land administration and records management so as to reduce land transaction costs appears strong. It is strengthened yet further by the trends discussed in this paper: demographic pressure; rising activity in land markets owing to social and economic mobility; latent pressure for further growth in market activity; and increasing demand from landless, marginal and small operators to lease-in land. The potential advantages to both buyers and sellers of land include simpler, cheaper and more secure conveyancing procedures; better access to affordable, institutional credit (Brandao and Feder 1996); and less litigation. State governments also stand to gain from reduced litigation and from more accurate records of rights in land as a basis for planning, for the implementation of land reforms legislation where appropriate, and to help in preventing encroachment on public land.

Several types of improvement in land records management and land administration are possible, including the computerization of land records and land registration (and the integration of the two), and institutional reforms in land settlement and adjudication. Some of these are considered in greater detail in the Orissa study (Mearns and Sinha 1998). A One-Man Committee

³⁰ A similar situation is reported for Sri Lanka where, in addition, it is claimed that three quarters of all murder cases - in a country which suffers one of the highest murder rates in the world - result from land disputes (Lynn Holstein, BTO, November 6, 1997).

on Records of Rights in Land under the Indian Planning Commission has proposed that a pilot land title registration program be established in one or two districts of selected states, beginning with areas in which revisional surveys have recently been conducted and in which records of rights in land are therefore more up-to-date (Wadhwa 1989). This proposal has met with widespread written support from leading judges, Chief Justices, academic and practicing lawyers, former ministers of finance, revenue, and urban development, planning commissioners, and managing directors of housing and urban development corporations³¹. The major components of such a pilot program would include the amendment of legislation, provision for a responsible public agency, and appropriate institutional strengthening. Other types of legal reform may need to be considered as preconditions, particularly where legislative restrictions on land transactions are unusually cumbersome. Under this proposal, the current, 'presumptive' titles (based on revenue records) would be registered as conclusive titles during revisional surveys. It is recommended that the process start with undisputed titles, and that land settlement be conducted systematically from village to village within a given district. Given the expected volume of disputes, one possibility may be to establish special courts for land adjudication, to relieve some of the existing burden on civil courts.

Little practical progress has been achieved in implementing this proposal to date, however. The Chief Minister of Bihar is reported to have attempted to introduce title registration but failed owing to opposition from rural landlords who feared loss of land to tenants. A former Revenue Minister of Maharashtra was also supportive but a change of government thwarted any practical action. The director of the National Housing Bank proposed to the Chief Minister in 1990 that pilot activities be implemented in urban areas of Madhya Pradesh, on the grounds that title registration would reduce credit constraints to housing development. Madhya Pradesh was felt to be an appropriate choice of state, as it was sufficiently large for such a pilot yet urbanization was 'manageable', and some moves had already been made to computerize land records in the state. Overall, the most promising states for pilot activities in different parts of the country appear to be: Maharashtra or Gujarat (West); Karnataka, Tamil Nadu or Kerala (South); Haryana (North); and Madhya Pradesh (Central)³².

The range of possible stakeholders in records of rights in land is large, however, and is not restricted to those with interests in rural land affairs. Conclusive title is likely to be particularly attractive to urban as well as rural stakeholders, including potential purchasers of residential property, housing and urban development corporations, and financial institutions that extend credit for housing development (Bijlani and Rao 1993). Table 4 provides a very rough first attempt to indicate some of the relevant stakeholders. It groups stakeholders according to the potential importance of the proposed reforms to respective stakeholder groups, and the relative degree of influence the stakeholders may be expected to have over the outcome (whether to support or oppose reforms). Provided certain safeguards are built into the process of land settlement and title registration to protect the urban poor and socially excluded groups including those legally regarded as 'squatters', improvements in land administration could also assist in the more effective

³¹ File of correspondence held by Professor D C Wadhwa.

³² Professor D C Wadhwa, personal communication. Criteria for this selection included: expectation of support from state government, and current status of records of rights in land (e.g. recent revisional surveys conducted).

implementation of policies concerning resettlement and rehabilitation in urban (and rural) development.

Other stakeholders are likely to oppose reforms in the existing system of land conveyancing and land administration, unless specific steps are taken to make reforms more attractive to them. Such stakeholders include the village record keepers (*patwaris* or revenue inspectors), large land owners who manage illegally to evade land ceilings, those in the legal profession who stand to profit from litigation, and urban development corporations with vested interests in the circulation of so-called 'black money' to facilitate developments that evade legal regulations (e.g. the Urban Land Ceiling and Regulation Act). The legal profession, for example, could be expected to benefit from the additional work generated by land adjudication under revisional surveys for some considerable time to come. It is difficult to make generalizations about the likely balance between those supporting reforms and those opposing them, but it is essential that this type of stakeholder and institutional analysis be conducted to guide the preparation of concrete proposals in selected states. To the extent that pro-reform stakeholders in urban areas have greater political voice than those in rural areas, urban-rural coalitions are likely to prove useful in galvanizing support for reforms in land administration.

General consensus has emerged from preliminary work on urban land markets in India that the legal and regulatory framework - chiefly the Land Acquisition Act 1894 and the Urban Land Ceilings and Regulation Act 1976 - is over-complex, impedes urban development, and severely constrains access to serviced land by the urban poor (Bijlani and Rao 1993, Muttagi 1996). Evasion is widespread, and it is common practice to delay land acquisitions through protracted litigation. Although there is a trend away from a regulatory approach towards a more market-orientated approach (e.g. public/private partnerships involving private developers and community-based organizations; use of fiscal instruments such as vacant property tax and/or luxury tax), progress to date has not generally been promising. For example, an experiment with a US-influenced model of Transferable Development Rights (TDRs) in Mumbai, which allows for negotiated land purchase by providing incentives to existing owners rather than compulsory acquisition, has done little to accelerate land acquisition for low-income housing or infrastructure development. Stakeholder analysis reveals opposition by those with formal land rights under the existing legal framework, and by municipal bureaucrats, to what they perceive to be the illegitimate acquisition of land rights by private sector developers on the one hand, and by

Table 4 Potential stakeholders in reform of land registration

		Relative degree of influence	
		High	Low
Relative importance	High	<ul style="list-style-type: none"> • <u>Large landowners (owner-operator and absentee)</u> • <u>Revenue Inspectors</u> • <u>Judiciary?</u> • <i>Potential buyers and sellers of urban property</i> • <i>Housing development corporations (public and private)</i> • <i>Finance institutions providing credit for housing development</i> 	<ul style="list-style-type: none"> • <i>Prospective buyers and sellers of rural land</i> • <u>Lawyers?</u>
	Low	<ul style="list-style-type: none"> • <i>Rural credit institutions</i> 	<ul style="list-style-type: none"> • <i>Private sector surveyors</i> • <i>NGOs & CBOs promoting interests of rural poor</i> • <i>Agencies involved in R&R (including donors)</i>

Note: Stakeholders shown in *italics* expected to support proposed reforms; stakeholders underlined expected to oppose reforms

‘squatters’ in informal settlements on the other (Muttagi 1996). In this overall debate, it recognized that poor land records are one of several obstacles to progress. There are strong incentives for both sellers and purchasers of land to avoid registration of transfer documents, since this is likely to incur substantial one-off taxes including: stamp duties on sale or lease, capital gains tax, land value increments, and transfer duties. Instead, most sellers/purchasers adopt cheap and simple practices for transferring de facto ‘title’, including the General Power of Attorney, Agreement to Sell, and Wills, none of which is legally required to be registered, and all of which is to a greater or lesser extent uncertain (Bijlani and Rao 1993).

Several lessons emerge from Bank-supported and other international experience with land titling and registration schemes over the last 10-20 years (Hanstad 1996, Holstein 1997). Experience from projects implemented during the 1980s showed that performance was poor

where multiple objectives were sought within a multi-agency institutional framework, and where government commitment was lacking (Wachter and English 1992). Projects initiated during the 1990s tend to have a clearer focus on the principal objective of issuing registered titles to land holders. A single agency approach is preferable where possible, in which the agency concerned is responsible for base mapping for cadastral purposes, and takes the lead in adjudication, cadastral surveying and registration functions. Land settlement and adjudication needs to be conducted in as transparent a manner as possible, preferably in the field with maximum community involvement (including local representation on settlement teams)³³. It is essential that transparency and accountability also be promoted by means of a well-funded, long-term public information and disclosure campaign, which is particularly important to reach socially excluded groups (e.g. currently unregistered tenants). Staff incentives and training often prove to be critical, particularly where public salaries are low and opportunities for rent-seeking are widespread. Consideration needs to be given to what aspects of land administration may be more efficiently contracted out to the private sector, and mechanisms to ensure quality and professionalism.

International experience also shows systematic (e.g. village by village) rather than sporadic (on-demand) registration to be preferable, since it is likely to achieve faster and more complete coverage, economies of scale, and greater transparency. It is not without attendant risks and disadvantages, however: systematic registration requires government to be proactive, the cost burden falls to government, and the timing of adjudication may not suit land holders (e.g. with respect to inheritance). Regarding tenure security, major concerns should include: the substance of tenurial rights to be registered (e.g. transferability, rights to lease, mortgage etc.) rather than their name (freehold vs. leasehold); recognition of *de facto* or prescriptive rights (whether or not they are formally documented); and the identities of rightholders (e.g. joint titles or independent titles for women as well as men). Finally, caution should be exercised in the introduction of computerized information technology (IT). Current failures may lie in unclear objectives and methods, faulty manual systems, and a lack of skilled staff, in which case the introduction of IT alone will not solve existing problems. In such situations it is usually better to introduce incremental improvements, and to support the computerization of land registration by starting with new parcels and subsequent transactions, with manual and computerized systems operating in parallel for some time.

Several circumstances discussed in this paper suggest that improving land registration in India may be desirable: both rural and urban development is believed to be constrained by insecurity or uncertainty of land title; in many places there is a developing land market, a high incidence of land disputes, and growing demand for credit; and the stated desire exists to implement redistributive land reforms. But land registration is by no means a panacea (Simpson 1976). It is important to weigh carefully the expected costs and benefits of land registration, and to take steps to ensure that socially excluded groups do not become worse off as a result. For example, formal land registration systems have had regressive gender consequences in numerous cases (e.g. Kenya, Zimbabwe) by reinforcing women's lack of effective, independent land rights. In India, in spite of the fact that Hindu women, at least, have legal rights to inherit land, social customs tend to prevail and these rights are normally assigned to male relatives. In the introduction of a land registration system, it is important to provide policy support for the possibility of women's

³³ The Orissa study highlights some of the ways in which conventional land survey and settlement operations discriminate systematically against the rural poor and other socially excluded groups (Mearns and Sinha 1998).

independent land rights, to correct gender biases against women inheriting parental land, and against women as tenant farmers. The possibility of alternative institutional arrangements could also be considered to enhance women's effective control over land, such as group land ownership/land-pooling, together with collective investment in tubewells (Agarwal 1998). Similarly, if careful attention is not paid in advance to the status of public and panchayat-owned common lands, land registration may simply legitimize or accelerate existing, de facto encroachment on commons by more powerful groups at the expense of those without effective voice.

This is probably the most serious potential danger of land registration: it may provide opportunities for 'land grabbing' by those who are more powerful, better informed, and who have better access to officials and greater financial means (Feder and Nishio 1997). The potential for land grabbing is probably greater when registration is sporadic rather than systematic. Nonetheless, where conditions suggest that the benefits of registration for poorer and socially excluded groups may outweigh the costs, certain safeguards may be built in to guard against such potential dangers. The importance of public information campaigns is paramount, in order to inform all those with interests in land of their legal rights. Other possible measures include: strict contract and notice requirements for documents pertaining to land transfer (though this may do little to prevent delays by courts), legal aid for low-income or illiterate persons, and possible moratoria on sales for several years after title is granted (Hanstad 1996)³⁴.

5 SUMMARY AND POLICY OPTIONS

A number of guidelines for policy emerge from this review paper, and are briefly summarised below. More specific suggestions for policy are outlined in the companion paper with particular reference to Orissa (Mearns and Sinha 1998).

- ***Selective deregulation of land-lease (rental) markets:*** Under the Ninth Plan, the Government of India is considering the possibility of a middle ground between past, regulatory approaches towards tenancy reforms/ lease contracts, and total liberalization. Regulatory approaches came about within a particular post-Independence context in which lease contracts were perceived to be a means for the rich to exploit the poor. This situation was probably not typical even when 'land to the tiller' reforms were introduced, and evidence suggests that it is now rare in India. On the contrary, rental markets are an important means

³⁴ Moratoria on post-titling sales may do little to prevent land-grabbing, as the western US experience of homesteading showed.

by which the poor gain access to land. However, evidence suggests that the deregulation of rental markets will benefit the poor only where there is a credible threat of ceilings enforcement, and where there is a possibility of clearly defined and enforceable contracts. Overall, still too little is known about land rental markets in particular states, and comparative empirical studies across several states are needed to identify the likely consequences of selective deregulation under varying conditions.

- ***Reduction of transaction costs in land markets:*** Transaction costs in land sale-purchase markets include both the official costs (e.g. registration fees, stamp duties and surcharges) and informal costs (e.g. bribes to expedite transactions, fees to informal land valuers, etc), which together may amount to a third of the total value of the land transacted. These high costs are onerous for all, but are prohibitive for the rural poor, and explain in large measure why so many land holders do not hold effective title to their land. The risk of losing land through encroachment by others, and through lack of transparency in settlement and consolidation operations, is considerably higher where land holders lack clear title to their land. This is most likely to be true for the rural poor and other socially excluded groups. Measures to improve the efficiency of land records management and land registration generally focus on computerization. This is not a panacea, particularly if incentive structures within land management agencies are not simultaneously addressed. However, provided there is close coordination between the computerization of registration and of land records, it offers high potential for reducing transaction costs in obtaining title to land, and thereby helps facilitate access to institutional credit. Of utmost importance is the ‘backwards integration’ of land registration into land records management, so as to permit more or less simultaneous mutation of the official record.
- ***Critical reassessment of land administration agencies:*** Reforms in land administration will be ineffective if the incentive structures within which the relevant government officers work are not simultaneously addressed. Rent-seeking is widespread, and is usually a reflection of the fact that landholders are willing to pay a price to receive the kind of service they have a right to expect. Where this creates difficulties is that it tends to lead to the systematic exclusion of the rural poor from gaining more secure access to land, since the rural poor are least likely to be able to bear the high transaction costs involved in pressing for legal protection of their existing rights, or in acquiring new rights. Rent-seeking serves to ration access to government services. Day-to-day incentives and promotion opportunities for revenue inspectors and other low-level government officers are not performance-related. While reforms in land administration that aim to promote transparency and public access to information are essential, coupled with the countervailing influence of strong civil society institutions, it is equally important that the land administration officers are regarded as allies rather than obstacles to reform, and ways devised to see that they also benefit.
- ***Promotion of women’s independent land rights:*** the clearest way to begin challenging embedded social norms and customs that prevent women from exercising their legal rights to hold land is through policy measures that aim explicitly to increase the bargaining power of women within the household and within wider society. Women’s access to land may come about through inheritance of parental property, government allotment of ceiling-surplus land, and clear contractual access through tenancy and access to commons. In some states, gender biases in tenancy laws need to be removed, as do certain biases in the Hindu Succession Act

of 1956. Legislative measures alone will be insufficient, however, and will do little to challenge discriminatory norms and customs. Even limited steps such as joint land title over ceiling-surplus land and house-sites, for example, which are already accepted at the policy level, have yet to be implemented on any substantial scale. A complementary approach towards realizing women's land rights directly would be to grant land to groups of women, with access to credit for complementary investments and inputs such as tubewell irrigation. Such collective approaches, often with NGOs playing a catalytic role, have demonstrated advantages in strengthening women's bargaining power, which might then allow them more scope to challenge customary restrictions on their independent property rights.

- ***Transparency and public access to information:*** A principal reason for high observed rates of rent-seeking by government officers in land administration, and for patterns of discrimination against the rural poor and other groups with weak bargaining power, is the very complexity of the legislative framework governing land reform and land administration in many states. In spite of well-meaning provisions ostensibly designed to protect the poor, this complexity allows considerable scope to those – usually the non-poor – who are best able to exploit legal loopholes to their own advantage. Our Orissa study reveals some of the ways in which access to land by the rural poor is inhibited by the practical functioning of land survey and settlement operations, land consolidation programs, the failures in implementation of legislation to prevent encroachment on revenue land, and in land records management more generally. While these findings cannot be assumed to apply to all states, they do suggest hypotheses that may be tested through further state-level studies. Overall, it is suggested that the legislative framework governing land administration in many states warrants considerable simplification (e.g. bringing together of numerous laws into a unified structure), and that investments be made in the wide public dissemination (e.g. local-language manuals, made available through gram panchayat meetings) of information regarding people's land rights, and how to go about pressing legal claims to land.
- ***Strong civil society institutions:*** Strong civil society institutions are the other side of the coin to transparency and public access to information. Where there has been most success in tenancy reforms (e.g. West Bengal) and land consolidation (e.g. Uttar Pradesh), common ingredients have included broad-based participation through strong representative bodies (e.g. panchayats) or community-based organizations. NGOs have achieved wide and justified acclaim for their efforts in defending tribal land rights, women's land rights, and pursuing public interest litigation to prevent illegal encroachment by non-poor groups on land intended for redistribution to the landless. In all these cases, awareness-raising, monitoring, and pressure from strong civil society institutions ensures that there are checks and balances on inappropriate uses of state power, and that safeguards for the poor are upheld in law enforcement. Perhaps most important is to support the emerging competencies of the constitutionally mandated panchayati raj institutions, which hold most promise over the medium- to longer-term of performing this 'watchdog' role in relations between state, the private sector, and civil society.

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Annex 1 Land reform legislation in India, by state

<i>State</i>	<i>Ceilings act</i>	<i>Lowest ceiling (for irrigated land producing two or more crops a year)</i>	<i>Act provides for ceiling only, or both ceiling and tenancy reforms?</i>	<i>Type of holding to which ceilings apply</i>	<i>Key legal provisions concerning tenancy</i>	<i>Comments on progress with land consolidation</i>
Andhra Pradesh	AP Land Reforms on Agricultural Holdings Act, 1973	4 ha	Ceiling only	Owned and tenanted	Informal tenancies not recorded. Leasing is permitted but regulated (minimum lease period 6 years). No fair rent legislation	Legislation exists, little progress in implementation
Assam	Assam Fixation of Ceilings on Land Holdings Act, 1956	7 ha	Ceiling only	Owned	Conforms to national guidelines	Legislation exists but no progress
Bihar	Bihar Land Reforms (Fixation of Ceiling Area and Acquisition of Surplus Land) Act, 1961	6 ha	Ceiling only	Owned and tenanted	No legal provision for informal tenancies to be recorded	Legislation exists, little progress in implementation
Gujarat	Gujarat Agricultural Lands Ceiling Act, 1960	4 ha	Ceiling only	Owned and tenanted	Conforms to national guidelines	Legislation exists, little progress in implementation
Haryana	Haryana Ceiling on Land Holdings Act, 1972	7 ha	Ceiling only	Owned and tenanted	Definition of 'personal cultivation' of landlord so broad as to encompass all distant relatives. No fair rent legislation. Minimum lease period 3-7 years	Consolidation completed
Himachal Pradesh	HP Ceilings on Land Holdings Act, 1972	4 ha	Ceiling only	Owned and tenanted	Conforms to national guidelines	Legislation exists, some progress
Jammu and Kashmir	J&K Agrarian Reforms Act, 1976	9 ha	Ceiling and tenancy	Owned and tenanted	Conforms to national guidelines	n/a
Karnataka	Karnataka Land Reforms Act, 1961	4 ha	Ceiling and tenancy	Owned and tenanted	Ambiguity persists regarding status of 'registered occupants'	Legislation exists, some progress
Kerala	Kerala Land Reform Act, 1963	6 ha	Ceiling and tenancy	Owned and tenanted	'Landlord' - 'tenant' relation abolished in law	n/a (no legislation exists)
Madhya Pradesh	MP Ceiling on Agricultural Holdings Act, 1960	7 ha	Ceiling only	Owned and tenanted	Leasing/ sharecropping prohibited, leaving status of tenants very insecure (e.g. no fair rent legislation)	Substantial progress
Maharashtra	Maharashtra Agricultural Land Reforms (Ceiling on Holdings) Act, 1961	7 ha	Ceiling and tenancy	Owned	Some recording of informal tenancies in Vidharbha area; rent compulsorily payable in cash in Bombay area	Substantial progress
Orissa	Orissa Land Reforms Act, 1960	4 ha	Ceiling only	Owned	'Tenancy' not recognised, therefore	Legislation exists but no

					no provision for recording of informal tenancies. Status of tenants very insecure. Leasing prohibited	progress
Punjab	Punjab Land Reforms Act, 1972	7 ha	Ceiling only	n/a	Definition of 'personal cultivation' of landlord so broad as to encompass all distant relatives. No fair rent legislation. Minimum lease period 3-7 years	Consolidation completed
Rajasthan	Rajasthan Imposition of Ceiling on Holdings Act, 1973	7 ha	Ceiling only	Owned and tenanted	Overly complex legislation. No provision for recording informal tenancies. Since tenants are entitled to a written lease, oral tenancies are ignored. Minimum lease period 1 year or 5 years, depending on type	Legislation exists but little progress
Tamil Nadu	Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act, 1961	5 ha	Ceiling only	Owned and tenanted	Unlike in other states, does not provide for resumption of land for personal cultivation by landlord, nor for conferring ownership rights on tenants. Once land leased out, however, tenant cannot be evicted (as in West Bengal)	n/a (no legislation exists)
Uttar Pradesh	UP Imposition of Ceiling on Land Holdings Act, 1960	7 ha	Ceiling only	Owned	Total prohibition of leasing except for 'disabled persons' (including unmarried, separated, divorced women and widows). Even for these groups, no legal protection of lease terms. Absolutely no protection for all other tenants (e.g. fair rent legislation). Landowners not even required to cultivate land personally as in other states	Consolidation largely completed
West Bengal	West Bengal Land Reforms Act, 1955 (last amended 1986)	5 ha	Ceiling and tenancy	Owned	Unique feature is to bring all land (not just agricultural land) under ceiling law. Continuous tenants acquire permanent, heritable rights in law, but these cannot be transferred to others (e.g. mortgaged). Tenants have option to register tenancies. Sub-letting is prohibited, and tenants cannot be evicted. Rents must be paid in kind	Legislation exists but no progress

Sources: based on Behuria (1997) and Thangaraj (1995)

Annex 2 Studies of land sale-purchase transactions in rural India

<i>Study area</i>	<i>Data, source</i>	<i>Active land market?</i>	<i>Characteristics of sellers/ reasons for sale</i>	<i>Characteristics of buyers/ reasons for purchase</i>	<i>Increase in land concentration?</i>	<i>Comments</i>
Jangalpur village, Madhya Pradesh	patwari records/ survey of all transactions 1950-93 (Sarap 1995)	No (approx 2 sales/ purchases per year); strong preference for holding land (high personal and socio-cultural value, hedge against inflation)	small/ marginal farmers: mainly distress sales (esp. in drought years); medium/ large farmers: migration to town, capital purchase	39% from outside village (including those from village but working elsewhere), for both ag and non-ag purposes (e.g. option to establish factories); source of funds: service/business income (rarely farm income or credit); consolidation of holding a major motivating factor for large farmers	Yes (from small/ marginal farmers to those with diversified income sources and medium/ large farmers)	Little irrigated land; fixed tenancies increasing
Meerut district, western Uttar Pradesh	survey of 400 buyers and 400 sellers (Mani and Gandhi 1994)	Yes, very (approx. 5,000 sales per year)	51% sales by marginal farmers 25% by small farmers 22% by medium farmers 3% by large farmers (proportions correspond closely to frequency distribution of holdings)	14% by landless (mainly for non-ag purposes) 30% by marginal farmers 21% by small farmers 30% by medium farmers 6% by large farmers	Not significant (only slight bimodal shift from marginal and medium farmers towards small and large farmers)	Progressive agricultural area, 92% sown area is irrigated
10 villages in semi-arid areas in Andhra Pradesh, Madhya Pradesh, Maharashtra, and Gujarat	panel data (1950-82) from ICRIAT village study program plus survey (Walker and Ryan 1990, Ballabh and Walker 1992)	Yes, fairly (particularly where land/population ratio was lowest) (NB. Contradicts Jodha's (1984) findings that sales tend to be scarce and limited to distress sales)	Less than a third were distress sales (no clustering of sales in 'bad' years); many sellers migrated away from village; for those who did not migrate away, raising dowry and purchase of non-land assets were most reasons for sale	Tend to be richer farmers; land consolidation was a salient motivating factor in about half of all cases	No, and declining landlessness; mean farm size declined sharply. Farm size inversely correlated with productivity	Level of fragmentation did not change appreciably, and was not observed to be an economic liability (even increased productivity in some cases)
Village in Maharashtra	Analysis of village records and oral history over	n/a	44% of households owning land in 1920 had become landless by 1970; repeated	25% of households (or their heirs) that were landless in 1920 had acquired land by 1970	n/a	Both upward and downward mobility observed

	period 1920-70 (Attwood 1979)		partitioning a major cause of downward mobility			
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Annex 3 Studies of land-lease markets in rural India

<i>Study area</i>	<i>Data, source</i>	<i>Active land lease market?</i>	<i>Characteristics of lessors/ reasons for leasing-out</i>	<i>Characteristics of lessees/ reasons for leasing-in</i>	<i>Increase in land concentration (operational holdings)?</i>	<i>Comments</i>
Meerut district, western Uttar Pradesh	survey of 240 lessors and 240 lessees (Mani and Gandhi 1994)	Yes, very (typically converting owned holdings to operational holdings)	All size groups lease out land, but especially small and marginal land holders (47% of small & 87% marginal farmers lease out all their land)	62% are marginal farmers, 17% are landless; few small/medium and very few large farmers lease in land Net impact: sharp reduction in marginal holdings and large increase in small holdings	No: considerable improvement in equity of land distribution	Findings suggest new technology and markets favor small farmers and enable marginal farmers to improve their position
Balasore district (progressive) and Kalahandi district (backward), Orissa	75 hh sampled in each of 2 villages in each district (Mohapatra 1994)	Not clear	Larger operators lease out to landless/ marginal farmers as tenants to obtain their family labor, especially in irrigated villages (greater inequality in lessor-lessee relations in more progressive areas)	Relatively higher proportion of marginal/small operators lease in, often interlinked with labor contracts, particularly in more progressive areas (these arrangements do not significantly seem to affect productivity, but much higher poverty among interlocked tenants)	No	Very little (and diminishing) land-credit market interlocking, in contrast with prevalence of land-labor market interlocking
Punjab (3 regions distinguished by irrigation/ cropping patterns)	216 holdings sampled in 1971-72; 226 holdings in 1987-88 (Singh et al. 1991)	Yes, and increased over time: 26% holdings leased-in land in 1971-72, 34% leased-in 1987-88. Leased-in area as share of total operated area increased from 9% to 13%	Small land holders leaving farming and leasing-out land to larger operators (in all 3 regions), also widows and those working in non-agricultural activities	Larger operators with sufficient family labor and capital, and who have made investments in machinery and irrigation structures. Over 92% leases on cash terms	Yes (presumably, though not analysed) Total operated area fell substantially, as farming intensity rose	Less lease-market activity in drier, canal-irrigated areas; productivity grew fivefold over 1971-72 to 1987-88, while land prices grew fourfold; land rents grew only threefold, making it rational to lease-in rather than buy land
Midnapore district, West Bengal	survey of all lessees in 12 villages (3 from each of 2 blocks in West and East	Yes (sharecropping remains dominant but is declining, while fixed rent tenancies increasing in	Lessors tend to be involved in non-agricultural activities (but a relatively higher share of those leasing to recorded tenants)	All size groups lease in land, to predominantly mixed holdings (tenants also owners): smaller unrecorded lessees lease from smaller lessors, larger lessees preferred by	No	No evidence of interlocking of land and credit markets, but some linking of land-lease and labor contracts

	Midnapore, ref. period 1986-87) (Bhaumik 1993)	importance, especially in more progressive areas during Boro season on fixed-rent terms)		large lessors; recorded tenants tend to be traditional sharecroppers/ laborers of lower caste/ tribal backgrounds, unrecorded tenants higher social status, often new entrants to land-lease market		
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6 villages in semi-arid Andhra Pradesh and Maharashtra	ICRISAT panel data for 1975-1984 (Skoufias 1995)	Yes: 83%-99% area sharecropped (often for less than a year); 76% leased area in Aurepalle (AP) on fixed-rent terms owing to high landlord absenteeism	Households with lower endowments of family labor and bullocks	Households with higher endowments of family labor and bullocks; NB. higher transaction costs associated with leasing-in cf. leasing-out land; around 73% of demand for leased-in land was met (cf. Bliss and Stern 1982) Jodha (1981): in 4 of the 6 villages, large farmers had largest share of total land leased in (34%-69%)	No	Almost all households were either pure lessors or lessees (only 15 of 1,611 observations leased-out and leased-in simultaneously)
Uttar Pradesh	survey of 2,400 hh throughout state (Kochar 1992)	Most active in most progressive areas (Western UP) and least progressive (Bundelkhand) - 27% of all hhs lease-in land in each region – which mirrors all-India pattern	Not analysed	Predominantly small farmers (account for 78% of hhs leasing-in, but only 58% share of sample); but a significant number of large farmers also (especially in more progressive areas of Western/ Central UP, where they account for a disproportionate share of total area leased-in)	Slight shift in land distribution toward larger farmers in more progressive areas	Some evidence, though weak/ statistically insignificant, that those with access to formal credit are more likely to lease-in land
Bihar and Punjab (comparison)	NSS data, 1982 (Parthasarthy 1991)	n/a	n/a	Bihar: marginal/landless 19% semi-medium 7% medium 4% large 3% Punjab: marginal/landless 17% semi-medium 41% medium 26% large 18%	Yes in Punjab, no in Bihar	Incidence of 'reverse' tenancy (large land holders leasing from small land holders) suggested to be more common in regions of high agricultural productivity owing to better access to formal credit

