

Land Policy Reforms

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This chapter is a source on key land policy issues for practitioners and policy makers. It aims to provide information about the way Poverty and Social Impact Analysis (PSIA) can be used to explore hypotheses to address these issues properly. To be effective, PSIA must explicitly take into account the needs and priorities of stakeholders in an ongoing policy dialogue. The chapter therefore identifies the requirements so that PSIA can fit into an ongoing policy dialogue or, if there is no such dialogue, generate one on a topic of particular land policy relevance. The discussion of substantive and methodological subjects related to PSIA is brief as these are examined in more detail elsewhere (Bourguignon and Pereira da Silva 2003; Deininger 2003).

The chapter focuses on two key land policy interventions: securing land tenure and improving access to land. The section on securing land tenure highlights ways to enhance tenure security and the impact of greater tenure security on investment, conflicts over land, and land market participation. The section on access to land covers the principles that affect the functioning of land markets and discusses policies to expand land access, particularly by the poor, by improving the functioning of markets or through direct transfers.

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PSIAs depend on quantitative information that is often not available through standard household surveys. For this reason, the chapter considers practical questions about sampling and questionnaire design so that household and community surveys can make meaningful and quantifiable contributions to the land policy dialogue.

BACKGROUND

The relevance of land policy

Inappropriate land policies constitute a serious constraint on economic and social development in a number of respects that are significant to developing countries. Insecure land tenure, outdated land laws, and slow or dysfunctional institutions of land administration can restrict private investment, undermine good governance, and reduce the ability of local authorities to raise taxes. Highly skewed distributions of landownership and patterns of land access that discriminate according to gender or ethnicity limit the ability of decentralized market mechanisms to put land to its best uses; shrink economic opportunities among disadvantaged groups, including the ability to use land as collateral; and foment social conflict and violence.

While the importance of land tenure and access to land for agricultural production and for shelter and housing has long been clear, recent research surpasses this recognition by emphasizing the significance of secure property rights over land as a precondition for sustainable pro-poor economic growth. This perspective is based on several considerations.

Investment climate

Nontransparent, corrupt, or inefficient systems of land administration and allocation add substantial costs to the efforts of small entrepreneurs to transform good ideas into viable enterprises. Indeed, in investment climate surveys conducted by the World Bank, poor access to land was identified as the main obstacle to business by 25 percent of enterprises in Kenya as well as Tanzania, 35 percent in Bangladesh, and 57 percent in Ethiopia.

Credit market access. Well-functioning land institutions and markets and the opportunities they create to use easily transferable land titles as collateral can help reduce the cost of acquiring credit, thus contributing to the development of enterprises and financial systems.

Local government revenues. Greater demand for land, together with public investment in roads and other infrastructure, tends to boost land

values. In many cases, inadequate mechanisms for taxing land mean that the opportunity for local governments and local residents to benefit from such increases in value is constrained. Instead, the gains fuel speculation or end up as bribes.

Accountability and transparency. In most developing countries, more than half the wealth of households is in land and real estate. If the system to administer such a significant portion of national wealth is perceived to be corrupt, inefficient, and untrustworthy, it is difficult to maintain confidence in the rule of law and in the competence of the state.

Social peace. The importance of land for economic growth does not reduce its relevance for poverty reduction. Even access to small plots of land can improve household welfare and act as a safety net. In situations where land has been expropriated during a colonial past, land reforms are generally economically and socially desirable.

Longitudinal analysis of standard indicators of human development in countries exhibiting similar conditions, but showing stark differences in land institutions, illustrate the social and economic costs of inappropriate land institutions. Comparing Colombia and Costa Rica with El Salvador and Guatemala provides an example. Although these countries share a common colonial history, language, religion, climate, topography, factor endowment, and technology, they reacted in very different ways to the coffee boom of the nineteenth century.

In El Salvador and Guatemala, large landowners depended on a repressive labor regime to remain economically viable, and the boom led to land expropriation and the massive concentration of land in the possession of a few, to the detriment especially of indigenous communities. Landlords held a monopsony on power in the labor market, which allowed them to pay their workers the bare subsistence minimum, thereby eliminating any incentives for human capital accumulation.

By contrast, in Colombia and Costa Rica, which are characterized by small landholdings, elites depended on trade rather than the revenue from large agricultural plantations, and the coffee boom led to the emergence of a smallholder coffee economy. As a consequence of these distinct reactions to the boom, literacy rates, as well as other indicators of socioeconomic development, have differed sharply between the two sets of countries since the late nineteenth century (Table 5.1). Perhaps most revealing, the establishment of democracy occurred about 40 years later in the two countries where large landlords exercised such dominance.

To complement this evidence with a cross-country perspective, Figure 5.1 illustrates the impact of unequal landownership distribution in the

TABLE 5.1 The Impact of Landownership Distribution in Four Latin American Countries

<i>Indicators</i>	<i>Colombia</i>	<i>Costa Rica</i>	<i>Guatemala</i>	<i>El Salvador</i>
<i>Structural characteristics</i>				
Land privatization	1870–80	1820–40	1870s	1870s
Coffee farms smaller than 10 hectares (%)	61.0	42.2	13.1	13.5
Coffee farms larger than 50 hectares (%)	14.0	37.5	79.5	57.1
<i>Coffee in exports (%)</i>				
1900	49	76	56	83
1929	55	58	77	93
<i>Social and economic development</i>				
GDP per capita (PPP US\$, 1995)	6,130	5,850	3,340	2,610
<i>Adult literacy (%)</i>				
1900	34	36	12	26
1910	40	50	13	26
1930	52	67	18	27
1980	85	91	54	64
Human Development Index (rank)	51	33	117	112
Democracy since	1958	1948	1996	1992

Source: Nugent and Robinson 2002.

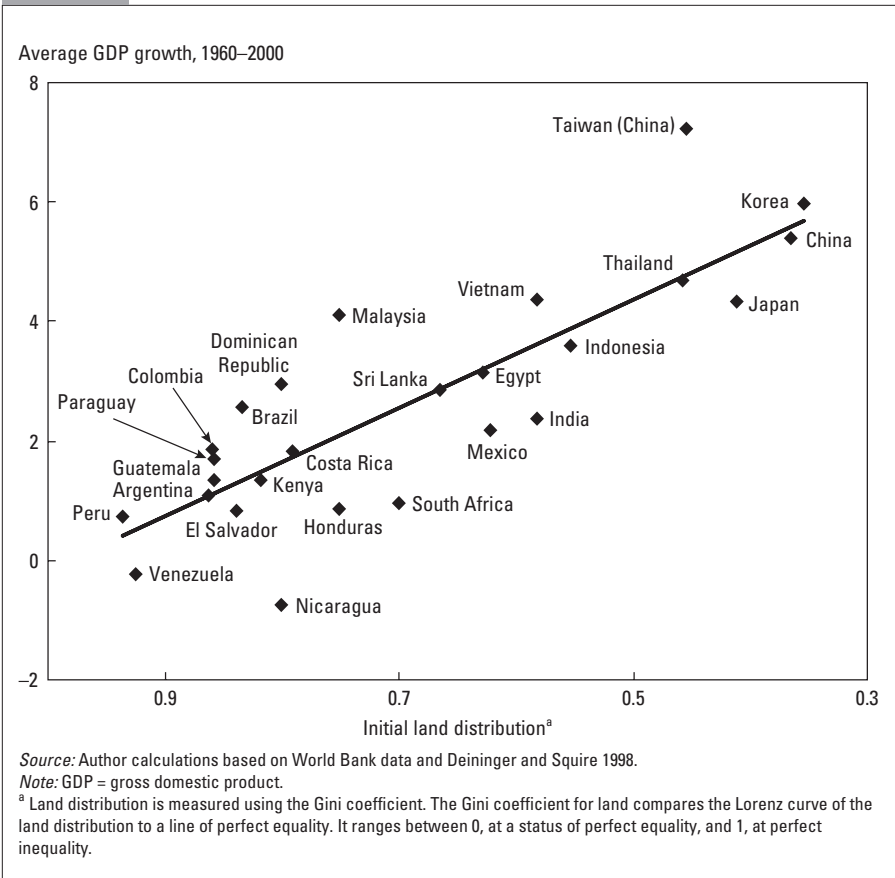
Note: GDP = gross domestic product; PPP = purchasing power parity.

1960s on economic growth during the subsequent four decades in a large number of developing countries. Countries characterized by more unequal initial land distribution tended to show lower rates of economic growth.

It appears that the unequal access to economic and social opportunities that underlies this unequal asset distribution is inimical to sustainable long-term development. Although the data do not contain sufficient structure to allow inferences on the channels through which such an impact would come about, they suggest that, in the process of economic development, policies to improve access to assets and overcome structural inequalities may play an important role.¹ In fact, this is consistent with the revival of interest in land by developing country governments, as well as bilateral and multilateral organizations, after the issue had virtually disappeared from the development agenda in the 1970s.

Applying PSIAs to land policy issues

Major areas of land reform that should be considered and evaluated through PSIAs include improving the security of land tenure and facilitating broadbased access to land. Regarding improved security of tenure,

FIGURE 5.1 Initial Land Distribution and Economic Growth, Selected Countries

key issues focus on measures to establish legal foundations that are less ambiguous and reduce conflicts over land, the introduction of efficient land registration procedures, and the creation of effective institutions that allow registration of land, as well as the transfer of land across users at low cost. Regarding access to land, ways to enhance the functioning of land rental and sales markets, as well as direct interventions to render land use more productive, such as reforms involving land redistribution, may also be examined.

Because of differences in the historic development and current patterns of land use and landownership among countries, the nature of land rights and the related institutions tends to vary significantly across countries and even across regions within individual countries. This suggests that

land policy reform and the related institutional reform should entail actions that are based on a careful analysis of local conditions rather than an attempt to realize abstract principles. These actions should be sequenced to address objective needs, as well as concerns about political acceptability, and they should be supplied with sufficient financial support for the establishment of the required infrastructure. These steps increase the duration and complexity of the course of reform and, because land is often an important issue for vested interests, generally makes land policy reform politically controversial.

PSIAs can assist in linking the general justification for land policy reform and the specific interventions that would be required to bring about changes on the issues. The availability of a method to assess the effects of policy reform based on a review of experiences with specific measures and demonstrated impacts in other countries makes it easier to take advantage of windows of political opportunity even if the policy must then be adjusted along the way. To achieve this outcome, the PSIA methodology will have to be rigorous, however, and it will have to be implemented in a transparent manner so that the results can be communicated and debated widely among all stakeholders. This approach will allow the PSIA to become a practical tool to guide policy makers during the design, implementation, and evaluation of land policy interventions.

The great deal of time often required before land policy interventions show their effectiveness means that, in some situations, a PSIA may already be useful at early stages of the policy dialogue. Thus, before the implementation of a policy, a thorough analysis can highlight the existing demand among target groups for specific measures, the feasible policy alternatives, the implications in terms of cost recovery and institutional design, the benefits that may be expected, and the way these benefits might be distributed among the population.

This can contribute to the generation of a consensus on the best path forward. Examples from Zambia (Jorgensen and Loudjeva 2004) and elsewhere demonstrate the possibility for employing PSIAs to evaluate the position of various stakeholders toward reform options, identify policy interventions for the benefit of the poor, determine the most appropriate sequence of initiatives, and reduce the potential for capture of the benefits by elites during full policy rollout.

In ongoing interventions, a PSIA evaluation conducted in a participatory manner can be used to assess the effect of pilot policy applications, make the case for the expansion of a particular model, fine-tune sequencing, make adjustments in implementation, improve the institutional design based on the innovations developed by beneficiaries, learn from differences

in performance across regions or other units of analysis to establish benchmarks for performance, and identify winners and losers to determine fresh options for dialogue and application.

After a policy reform has been fully implemented, it will be possible to draw out broader lessons through, for example, assessments of the extent to which the expected impacts on the poor have materialized, as well as scrupulous quantitative evaluations of costs and benefits. These lessons then can be incorporated into the design of interventions in other settings or regular government programs, for example, to ensure the permanence of the land titles that have been assigned during a systematic program of land distribution.

LAND TENURE SECURITY

The importance of the security of land tenure is widely recognized. The public provision of a framework that allows households or individuals to obtain and possess secure rights to the land they use or occupy has obvious benefits. These benefits include enhanced investment incentives, reduced potential for conflict, the use of land as collateral, and improved equity through increased bargaining power among social groups that have been traditionally marginalized. The establishment of such a framework requires legal recognition of land tenure rights; the social legitimacy of those rights; land institutions that are accessible, efficient, and responsive to clients; and incentives and structures to manage conflicts over land.

Principles

Land rights are complex multidimensional constructs that determine how the benefits of land use are distributed among various claimants. Access to and ownership of land historically have been marks of both economic and social status in communities. Indeed, discriminatory land policies have been a crucial element in attempts by colonists and others to impose their economic will and exclude parts of a country's population from economic opportunities. Countries such as Brazil, Guatemala, the Philippines, South Africa, and Zimbabwe have been saddled with inequitable landownership regimes. Another consequence has been the monopoly of the power of the bureaucracy over land rights in a much larger number of countries, where legal procedures are not transparent and there is little local accountability.

In addition to the economic dimensions, land access often performs an essential role as a social safety net. In this case, access to land is fre-

quently mediated through such social structures as tribes or clans, and the ability to access land forms an important part of the social and cultural identity of community members, making land much more than merely a commodity.

The control over land rights often resides with the community or with individual household members rather than with the household. The way in which this control over land (and other assets) is regulated within the household or the extended family affects the bargaining power and long-term security of other household or family members and, thus, their ability to manage and use resources. Numerous studies show that, within the household and the family, greater bargaining power among women normally translates into higher spending on nutrition, education, and children's welfare. Additionally, women who know they will be allowed to inherit ownership rights over the land belonging to the household upon the death of a husband are more likely to engage in independent economic activity and, thus, to support their families as equal partners. This is particularly relevant in Africa, where customary institutions act as barriers to the independent control over land by women despite the rampant spread of HIV/AIDS, which has decimated adult family members and led to a rise in the frequency of inheritance cases.

Land rights that provide tenure security for a period of time sufficiently long that landowners can reap benefits from their rights represent an important incentive for households to invest in the productive capacity of their land. Studies show that a shift from insecure to more secure forms of tenure can raise returns on land investments by more than 50 percent and boost land values by between 30 and 80 percent. Secure tenure, including the knowledge that tenants will not be able to claim the land, is required so that owners can temporarily or permanently transfer their land to outsiders who may be able to make better use of it and subsequently pursue activities, such as migration or local self-employment, that offer greater immediate economic benefits. In fact, sufficiently high levels of tenure security are required even for transfers (at no cost) to relatives or friends.

Because it is immovable and nearly indestructible over the short term, land represents an ideal type of collateral. The ability to draw on a formal registry to verify landownership can dramatically reduce the cost of providing credit relative to, say, microlending schemes, which rely on social pressure or other more costly sorts of collateral to ensure repayment. If there is a latent demand for credit-financed investment, the availability of formal land title can improve the operation of financial markets and enhance the access of producers to credit. At the same time, although eco-

conomic development is generally associated with a decline in the importance of land as an input into (agricultural) production, the importance of land as collateral for financial markets tends to rise with economic development. In advanced economies such as the United States, more than two thirds of small business loans are secured against land (Ibbotson, Siegel, and Love 1985). The ease with which the ownership of land can be verified and the reasonableness of the cost at which it can be transferred can have a major impact on the price of credit and, thus, the business environment for small and medium enterprises even in relatively advanced economies.

Public guarantees for property rights and land titles to ensure the security of tenure are justified because the public sector alone can readily and willingly bear the high fixed cost of the infrastructure needed to establish and enforce property rights. In this case, the abstract concepts of, for example, private ownership or full marketability are less important than the issue of whether, in a specific context, the rights provided to households offer an adequate level of tenure security at a realistic cost. This implies that the most appropriate land tenure system is likely to vary with time and location, that is, no single approach will always be relevant irrespective of specific needs and conditions.

In developing countries, the rapid growth of populations and the nonagricultural demand for land increase the potential for conflicts over land, which are unproductive and risk favoring inequitable solutions. The existence of sound, well-recognized arrangements for dealing with such conflicts quickly and decisively offer several advantages. First, conflict—and the prospect of losing land through the arbitrary pathways conflict implies—undermines the guarantees that encourage investment by users and outsiders in land, particularly the most productive tracts, thus depriving the economy of part of its resources for growth. Second, if people cannot trust the state to enforce their property rights or resolve conflicts over land, they will take measures to do so themselves, often in ways that are inefficient, drawing resources from more productive activities (for example, building walls and fences instead of planting perennials and establishing irrigation), and perpetuating the vicious circle of violence. Third, conflict tends to favor the powerful and wealthy, who normally have better access to the information and resources needed to sustain and resolve conflict. Finally, given that conflicts over access to land are frequently linked closely to issues of race, ethnicity, gender, or class, they can easily escalate into larger clashes (Colombia, Côte d'Ivoire, and Zimbabwe, for example), with damaging and far-reaching social and economic consequences.

Specific interventions

Interventions that can improve tenure security clearly provide significant and tangible benefits. However, the context-specific nature of land rights implies that merely transferring approaches among countries, especially if there are vast differences in culture or economic development, rarely will be appropriate. Indeed, unless they are adapted to local realities, interventions designed to enhance tenure security may well prove costly, bypass the poor, or, by countering local customs that work reasonably well, even increase insecurity.

A PSIA can draw attention to methods for establishing a proper legal framework in a specific situation, suggest ways that land administration institutions might implement needed measures in an efficient manner, and highlight mechanisms to resolve conflicts quickly and cost effectively. A PSIA demonstrates the potential or actual costs and benefits of these initiatives, making an important contribution to the policy dialogue.

Legal interventions to improve land tenure security

For guaranteeing property rights, several options are available that are easy to apply and enforce, facilitate the transfer of ownership, and offer a sufficient time horizon to represent an investment incentive. It is critical, however, that legal provisions be consistent with one another, be unambiguous, supply a menu of possible approaches depending on circumstances, and define the procedures for the transitions between different arrangements (for example, between customary rights and private property rights). In all parts of the world, ambiguous land legislation is a major source of conflict and inequality. The fact that individuals with sufficient means to hire lawyers may win, perhaps merely to settle personal vendettas, undermines the security of property rights and private investments. Although households and entrepreneurs are normally willing to spend scarce resources to fend off unjustified property claims, doing so is often socially wasteful, eats up capital, and detracts from more productive pursuits.

In many developing countries, the reach of the state is limited, and the allocation of land is governed by traditional institutions. This can result in gaps between formal and informal land systems. In such situations, the poor are often restricted to the informal system and deprived of the ability to use their assets as capital (de Soto 2000). For example, in Africa, titles to only 2 to 10 percent of the total land area are recognized formally, and the majority of urban and peri-urban settlements are in the informal system (Österberg 2002).

This should not be interpreted as an indication that there is no demand for more secure tenure. Nonetheless, it does demonstrate that, in some places, responding to the need for more secure tenure rapidly and at low cost may require a flexible approach consisting of several alternatives. Some of these alternatives may not involve full title, but rather offer the advantage of being easily and quickly implemented and expanded later to more formal systems. The challenge then would be to combine legal recognition with social legitimacy following, for instance, awareness campaigns and legal aid initiatives.

Regarding *customary systems*, the legal recognition of existing rights and institutions may be more effective as a first step rather than attempting to establish formal structures. Based on eligibility according to community membership and the creation or codification of internal rules and mechanisms for conflict resolution, the legal recognition of customary systems can significantly enhance the rights of the occupants of the land. The demarcation of community lands can remove threats of encroachment by outsiders. In this way, although private ownership rights might not be recognized, lease terms can be extended and leases can be inherited. The admission of oral evidence in customary proceedings can help open these processes to the participation of illiterate people and allow access to vacant land by outsiders (as in Mozambique). Recordkeeping on public customary transactions, even if they are informal, can remove a major source of uncertainty over contract terms later. Conflicts often erupt in connection with land transfers, particularly to outsiders. Where such transfers occur and are accepted, the terms of the transfers can be written down to avoid the ambiguity that may subsequently lead to conflicts over land (Lavigne Delville et al. 2002).

In many developing countries, a surprisingly large amount of good land remains the property of the state, which generally does not adequately exploit the land for productive purposes. Occupants of this land sometimes have undertaken efforts to increase the security of their tenure, in some cases through significant investments, but frequently remain vulnerable to the threat of eviction. Because of their limited rights, they may not be able to make full use of the land.

Giving these people the means to regulate their possession of parcels of land sufficient to support their families, but not large enough to encourage widespread corruption, can have substantial advantages. It can increase the welfare of these households and allow them to obtain services or undertake other investments. The importance of this principle, which rests on the assumption that land must be improved, is illustrated by the fact that most of the colonization of the western part of the United

States occurred in this fashion. Interventions to enhance tenure security are appropriate where informality or extralegality is substantial, such as in peri-urban areas of Asia and Africa where 40 percent or more of the population live under precarious informal arrangements.

Political and legal considerations may preclude the award of full private property rights. Nonetheless, bona fide long-term peaceful occupation of the land might be recognized, and the occupants might be assigned transferable, long-term leases, with provisions for automatic renewal, that would permit the realization of most, if not all, the benefits of ownership (Baker 2001). However, the privatization of ownership may be required if state institutions at the central or the local level cannot credibly commit to honoring lease contracts or are unwilling to enforce them.²

Traditional tenure regimes often fail to recognize women's rights. Specific attention to these rights can be paid in at least two ways. One low-cost approach that can greatly enhance the welfare of women is the provision of a secure legal basis for the joint ownership of land by spouses or, at least, the prevention of the disposition of a household's land assets by husbands without the consent of their wives. The second approach would involve the establishment of legal instruments so that women can maintain their rights to land upon the death of their spouses. Because many of the values represented by the traditional rules governing land use and land allocation are deeply engrained in society, the equality of women's rights to land cannot easily be legislated by the state or imposed by the stroke of a government official's pen. Instead, awareness must be raised and assistance should be supplied where needed until a legal space can be created for the equality of rights by, for example, constitutional recognition.

Enhancing the efficiency of land administration

Inefficiencies in the public institutions that administer land and are responsible for the demarcation of boundaries, land registration, record-keeping, the adjudication of rights, conflict management, and dispute resolution can forestall the realization of many of the benefits of secure land tenure. In most developing countries, the institutions responsible for administering rights to land are poorly coordinated and often have a reputation for being overstaffed, ineffective, and rife with corruption. If these institutions are not functioning properly, the related transaction costs will increase, and the poor will be excluded from the services they offer.

Overlapping or ill-defined institutional responsibilities; infighting among institutions; and the potential for arbitrary behavior, which arises if there are no clear boundaries in the role of bureaucracies, undermine confidence in the institutional framework and the value and authority

of titles and other certificates of ownership. Thus, in many countries, governments expropriate land without adequate compensation; government institutions establish incompatible claims or enforce contradictory regulations over the same pieces of land; and, because of unclear responsibilities, conflicts over land linger and litigious people search for institutions likely to be favorable to their cause or pursue several claims in parallel.

In such situations, institutional reform, including better coordination within the government and with the private sector, is required before institutions can effectively deliver property rights. Circumscribing the state's ability to intervene haphazardly and clarifying the responsibility of the various institutions are critical. The efficiency of land administration institutions can be significantly improved by drawing on the private sector, for example, in surveying.

Reducing conflict and the potential for conflict

A surprising number of conflicts over land involve members of single households. Disputes related to inheritance or the disposition of family land inundate land courts, which typically lack the resources, enforcement capacity, or consistent law with which to settle them. Moreover, land disputes often constitute a majority share of the civil caseload of an already overloaded judiciary. Consequently, judicial systems may achieve more by putting their weight behind mediation among the parties in disputes and encouraging negotiation based on compromise, mutual interest, and formal recognition of the results.

To deal with conflicts appropriately no matter the forum, three elements appear to be crucial: (1) the development of an incentive structure that rewards the settlement of conflicts and requires informal resolution as a first step; (2) the ability to confer legal validity on agreements reached as a result of these informal settlements; and (3) a system of conflict monitoring and information distribution to establish norms of acceptable behavior to assist individuals in resolving conflicts on their own.

Because land has been an important element in these conflicts, attention to land issues is critical in any postconflict reconciliation. Thus, attention must be paid to those whose control over land has been compromised by a conflict, particularly orphans, widows, and women who head households. In the context of the resolution of far-reaching strife over land, it may be necessary to address needs created by breakdowns in traditional social structures and the associated systems of informal secondary land and resource rights; the needs of refugees and other people who have been driven from their homes and whose documents have been destroyed or

lost; the livelihood needs of demobilized soldiers; and the needs caused by ongoing military operations or the presence of landmines.

Impacts of improved land tenure security

The economic and social advantages of improving the security of land tenure, making institutions more accessible, and reducing the incidence and impact of conflict have been demonstrated in numerous studies.

An early-1980s project in Thailand awarded land titles in areas where there was significant demand for credit that could only be satisfied through informal channels. The project helped increase land values, investment, and access to credit (Feder, Tongroj, and Tejaswi 1986). A large number of subsequent studies indicated that greater security in land tenure can double investment and boost land values by between 30 and 80 percent (Feder 2002).

The literature since the 1980s illustrates that availability of full title is not always necessary to raise tenure security. For example, in Ethiopia, it was the perception of more secure tenure, rather than formal titles, that was associated with productivity-enhancing investments (in terraces) (Deininger et al. 2003b). These and other cases demonstrate that such investments translate into higher levels of productivity and that households are willing to expend their own resources to improve tenure security, as was the case in Zambia (Deininger and Olinto 2000). This does not imply, however, that titles are irrelevant. In Nicaragua, for example, in an environment characterized by substantial tenure insecurity and pervasive conflict over land, the availability of registered land titles significantly augmented the propensity of households to undertake productivity-enhancing investments, and land values rose (Deininger and Chamorro 2004).

There is growing evidence in the literature that the control of greater shares of household assets, including land, acquired by women upon marriage influences household consumption patterns, especially in terms of food, education, and other welfare expenditures on children (Doss 1996; Fafchamps and Quisumbing 2002; Haddad 1997; Leroy de la Brière 1996). In Honduras and Nicaragua, the amount of land women own has a significant and positive impact on food expenditure, as well as on children's educational attainment (Katz and Chamorro 2002). The specific measures to give women greater tenure security are often quite simple technically, for example, as in Vietnam (World Bank 2004). They may rely more on effective awareness and capacity building.

The availability of a formal title registry to verify landownership may greatly reduce the cost of providing credit. Likewise, formal land titles

that are transferable at low cost can improve the access of producers to credit (Brits, Grant, and Burns 2002; Feder 1988). However, because the impact is likely to be differentiated by land size, distributional aspects, as emphasized in a PSIA, need to be taken into account (Carter and Olinto 2003). The effect of more efficient means of transferring land titles on the ability to access institutional credit in urban and peri-urban areas has been impressively demonstrated in transition countries. In the Kyrgyz Republic, for example, mortgage lending, which is confined to urban areas, has caught on quickly since the implementation of land titling in 2001. Although the latter initiative is still ongoing, land-backed mortgages already account for US\$4 million, or 3 percent of gross domestic product (Cook 2004).

One factor that was overlooked in earlier literature on land issues is the contribution of even moderate improvements in land rights. The computerization of 20 million land records in Karnataka, India, narrowed the scope for petty corruption and also raised the confidence rural dwellers felt in the government, although the records do not represent unambiguous legal certification and do not include precise boundary information (Bhatnagar and Chawla 2004). The modest fees charged for the delivery of certified copies of records allow the government to make a net profit through the computerized system. The privately run computer site used for the retrieval of the land records also acts as a center for a host of other services in rural areas. That such services to secure tenure and facilitate land transactions can be remunerative is illustrated as well in El Salvador, where the land register generates significant revenue.

Adequate tenure security reduces the need of a household to establish its land rights and fend off claimants. In Peru, the enhanced security of informal land rights increased participation in the formal labor market by up to 50 percent and contributed to a sharp drop in household enterprises. This increased participation was due to the fact that household members were no longer obliged to stay home as a precaution against squatters (Field 2002). Evidence on Uganda shows that conflicts over land often impose high costs in terms of foregone productivity among land users and that, similar to other African countries, legal and institutional innovations to reduce the potential for new conflicts and make it easier to resolve existing ones can have a large payoff, especially among women and widows, who are more likely to be affected (Berry 1997; Deininger and Castagnini 2004).

In Mexico, the creation of an accessible nationwide network of 42 special agrarian courts to deal with land conflicts, along with strong emphasis on formal and informal mechanisms to foster peaceful conflict resolution,

has reduced the enormous number of conflicts and the danger that these conflicts would cause more widespread social and political unrest among communities. The court system accepts only cases in which prior, non-judicial attempts to reach a settlement have failed. As part of the far-reaching legal changes, the government has launched an intensive program to provide legal assistance and make people aware of their rights. Despite the reduction in the number of cases, the judiciary has spent more than four years dealing with the accumulated backlog (Zepeda 2000). Nonetheless, the ability to limit the scope of arbitrary interference by village officials reportedly has been a key benefit of the improvements in land registration and in addressing conflicts over land (World Bank 2002).

In Mozambique, the government could quickly achieve the resettlement of about 5 million people following the peace agreement in that country because, instead of drawing up elaborate national plans, it relied on local institutional mechanisms to resolve related land conflicts as they emerged. Once the resettlements had been completed, the right to occupancy on the land by rural families, as well as the strong role for local institutions, was enshrined in a new land law, which was the subject of extensive public debate involving approximately 200 nongovernmental organizations and 50,000 individuals (Negrao 2002). Local people and outsiders recognize that the new law has contributed greatly to social and economic stability (Tanner 2002). Similarly, in Ethiopia, the ability to redistribute land quickly has played an important role in the rapid reintegration of demobilized soldiers into the economy (Ayalew, Dercon, and Krishnan 2000). The reliance on land rights granted through occupation and rapid resettlement was critical in Cambodia, where announcements calling on land users to register claims resulted in the lodging of nearly 6 million initial claims. Observers repeatedly identified the ability to deal quickly with these claims as an important element in the postwar reconstruction (Zimmermann 2002).

LAND REFORM, ACCESS TO LAND, AND LAND USE

Although it can contribute to the more efficient operation of markets for renting or leasing land, improving land tenure security works primarily to the advantage of those who already have access to land. Thus, it provides only limited benefits if the initial distribution of land is highly inequitable. If the current patterns of landownership and land use have not emerged voluntarily, but are the result of intervention by powerful landlords or the state, mechanisms for restitution and compensation should be debated. Greater emphasis should be placed on mechanisms to

transfer land in ways that help the poor and favor more appropriate and productive land uses.

Few topics have generated more passionate discussion than the issue of land markets. Land rental and sales markets are examined separately below; the focus then shifts to land distribution reform and land use regulation.

LAND RENTAL MARKETS

There is clear evidence in the literature that owner-operated family farms are more productive than farms operated by wage labor. For this reason, although the desire to obtain incomes comparable to the average incomes in the nonagricultural sector may push farmers to expand their farms during periods of economic growth, thus increasing average farm size, there may be less of a conflict between the objective of equity and the goal of efficient land use than is commonly thought. The example of China, where the average household has a per capita endowment of less than one-tenth or one-fifteenth of a hectare distributed over seven or eight plots, demonstrates that small farmers can achieve high levels of productivity and that broadbased access to land can act as a social safety net, but also drive growth in the nonfarm economy. The superior performance of individual owners relative to collective ownership, irrespective of the public goods that may be provided through the latter, is confirmed by the case of agricultural collectives throughout Eastern Europe before the 1990s.

If owners are old, ill, or nonfarming heirs; lack cash themselves; or wish to take advantage of opportunities in nonagricultural markets or temporarily migrate to cities or foreign countries, land rental offers considerable opportunities to transfer land to more productive users, while continuing to profit from land assets. Because the transaction costs are low, it is fairly easy to adjust the land area under cultivation in light of unexpected natural or market events without renouncing ownership and the advantages associated with it.

Rental markets require only modest initial capital outlays by the renters, especially if rents are paid after harvest (sharecropping, for example) or on a seasonal basis. Contractual arrangements can be flexible and made to suit the need that poor producers may have to use their limited working capital for production. This tends to increase the possibilities open to landless or land-poor farmers, allowing them to gain access to land, accumulate experience, and perhaps begin the transition toward landownership. Even in areas in which it was once outlawed, land rental can evolve rapidly if there is sufficient tenure security, the opportunities

exist, it is more effective than government programs in increasing land productivity and targeting the poor, and it can contribute to the evolution of nonfarm labor markets.

Rental provides large productivity benefits, but the associated equity benefits are normally more restrained than those obtained through land-ownership. Indeed, policy makers have been concerned that rental may lead landlords to exploit tenants who have few other alternatives, permitting the tenants only the minimum incomes required for survival. Such behavior is well documented, although reductions in farm sizes through inheritance and government intervention, as well as economic growth and the expansion of nonagricultural employment, suggest that the number of settings in which a monopolistic landlord can drive down the welfare of tenants to the absolute minimum may be decreasing. Moreover, to prevent exploitation, governments in many countries impose limits on the amount of rent that can be charged by landlords or are protecting tenants from eviction and strengthening their tenure rights.

Three considerations are relevant in this regard. First, implementing restrictions on the behavior of abusive landlords is not easy. Limits on rents, for example, only work if they are accompanied by additional protections for current tenants. Otherwise, rent ceilings are likely to prompt landlords to evict the poor tenants whose lot the ceilings are meant to improve. This was the case in Latin America and India following the passage of new tenancy laws.³ It has been shown that, possibly by increasing the bargaining power of potential tenants, such laws have a positive impact on equity (Besley and Burgess 2000). In cases where these laws have been implemented effectively, they have also helped raise productivity with respect to the prereform situation (Banerjee, Gertler, and Ghatak 2002). However, there is little evidence of the costs of implementation, and it would be useful to possess pertinent economic evaluations and a comparison of the benefits of this land reform over the short and longer term relative to the corresponding benefits of other interventions.

Second, even if such laws have a positive impact in the short term, this impact may be largely confined to tenants who were renting when the laws went into effect. The positive initial impact may eventually be outweighed by a negative reaction in land market activity and investment as the rent ceilings and other restrictions begin to cut into the rental and investment incentives for landlords. Consequently, landlords may seek other uses for their land and no longer rent land to the landless and the extremely poor for farming and housing.⁴ Policies to increase the bargaining power of potential tenants, for example, by expanding the range of livelihoods available to them through the provision of improved access to nonagricultural

labor markets, may be more sustainable and beneficial in the long term. Additional research should be conducted on this issue through PSIAAs.

Third, the productivity and equity impact of land rental will depend on the number of transactions. If land tenure rights are not secure or if households have little information about land rental prices and contractual alternatives, the transaction costs to enter into rental contracts will increase, reducing the number of efficiency-enhancing transfers. Governments can respond by improving tenure security to encourage a more open and competitive rental market; educating households about types of rental contracts and the obligations they involve; reducing the cost of establishing rental contracts through, for example, standardized contracts; and making information on rental prices more widely available to potential tenants.

For example, producers who rent land for only one year will not be able to make any significant investments or changes in land use. Thus, because most rental contracts in developing countries are limited term contracts (that is, annual), the opportunity is minimal for using land rentals as an effective tool for generational and structural change in rural areas. The promotion of long-term rentals can therefore be an important avenue for change.

Land sales markets

Because of its special characteristics, land tends to increase in value beyond the value of the profits gained by using it productively. For example, land values might rise because of an expansion in demand because of growing population density; the addition of public infrastructure, including transportation infrastructure; and the emergence of new uses besides agriculture. Furthermore, land tends to store its value despite recurring episodes of inflation and other economic and market phenomena. Thus, land sales transactions may be easily driven by speculation rather than a straightforward desire to tap into a profit stream derived from current productive uses.

To ensure survival, poor households that experience illness or disease, accidents, or bad harvests may be forced to sell their land at prices below fair market value. During widespread local calamities, substantial supply and low demand can lead to sharp swings in land prices. In these two cases, unscrupulous moneylenders and land speculators are provided with the possibility to amass vast amounts of land they do not plan to use productively.

The existence of these factors means that the prospects for productivity enhancements are of a different nature in land sales and land rentals.

The potential for redistribution for the benefit of the poor and landless is affected in the case of land sales not only because the poor are less likely to obtain financing for mortgages, as opposed to rental payments, but also because the sales market includes demand exerted by those who wish to employ the land for nonagricultural purposes. Additionally, sales are more readily affected than rentals by imperfections in other markets.

Regulation may undermine the potential positive impact of land sales markets because, even if they are justified on conceptual grounds, restrictions add to the transaction costs associated with land sales. These restrictions are significant in most developing economies because of limits on private sector participation, lack of capacity, and excessive implementation costs. The extra transaction costs may drive transfers of land away from the formal market system.

Most restrictions on land sales tend to undercut tenure security and investment incentives, and they increase the scope for arbitrary action by bureaucrats. The rationale for these measures has to be weighed carefully, taking into account not only the conceptual justifications but also the ability of enforcement and the costs of compliance.

Local communities, which are often more aware of the associated costs and benefits, sometimes impose their own restrictions on land transfers and land market sales that are otherwise in compliance with the law. This practice is similar to that of condominium associations with regulations that are binding only on their members. The restrictions may be customary and usually represent a means to preserve community identity and prevent landlessness among community members. In such communities, there may be little potential for efficiency-enhancing (as compared with speculative) land transactions. If the benefits of efficiency-enhancing transactions become more apparent and the costs go down, the community restrictions may be eliminated anyway without the need for outside intervention.

Whether or not land sales to foreigners should be allowed is a hotly debated issue in many locations. Doing so offers a number of advantages, including better access to capital through foreign direct investment and the technology that normally comes with it. However, if landownership by foreigners is politically contentious, there are many methods, especially long-term leases, that tend to work as well and, if handled appropriately, do not pose an obstacle to investment.

Redistributive land reform

Measures that do not rely on land sales markets probably will be needed to open access to land and bring about land redistribution for the bene-

fit of the poor. This is particularly true in situations in which inequities in the distribution of landownership and in productive opportunities translate into inefficiencies in the use of vast tracts of land in poor rural areas. Government interventions to prevent undesirable outcomes could, in principle, lead to efficiency and equity gains.

Policy makers have sometimes tried to impose ceilings on the amount of land that can be owned to force the breakup of large farms. If they could be enforced, such ceilings could help to achieve redistribution in a decentralized fashion. In most cases, however, they are easily circumvented. If ownership ceilings remain in place for a long time, they tend to undermine financial markets. Lenders who want to repossess land will be subject to similar restrictions and, even if they are exempted, will face greater difficulty in subsequently transferring the land. The ceilings also add to red tape and corruption. In India, ceiling legislation that has been in place for more than 30 years in most states has made available no more than 2 or 3 percent of the total land area even in states where the distribution of landownership is most unequal. Together with the experience of countries of the former Soviet Union in the aftermath of decollectivization, this supports the hypothesis that ceilings, even if they are set high (say, in thousands of hectares), are rarely effective in fostering land redistribution, although they may reduce the attractiveness of speculative land accumulation.

Meanwhile, at the other extreme, governments are also concerned about the breakup of landholdings. Zimbabwe still possesses laws that prohibit or complicate the subdivision of large farms. (The laws were originally enacted by colonists as a means to prevent blacks from gaining access to land.) However, there are sound reasons for controlling such fragmentation, which can increase the amount of land required for paths and roads and, through small plot sizes, may negatively affect the ability to mechanize agriculture. Minimum farm sizes and inheritance regulations have been imposed, generally with little impact, because they do not address the reasons leading owners to subdivide their holdings. Consolidation programs that aim to reduce the related transaction costs, and frequently provide infrastructure and spatial and land use planning, have been successful in some industrial countries and are currently being tested in the states acceding to the European Union. At lower levels of local income, such programs are unlikely to have an important role. This is illustrated by the case of China, where a high level of fragmentation has not prevented sustained growth and where consolidation programs have not always been successful. Reducing transaction costs for sales by building capacity and allowing private sector participation might be a better option.

As numerous successful land reforms show (for example, in Japan and Korea and in Taiwan, China), while the impact of such interventions can be far-reaching, they may face political and practical obstacles. Moreover, land speculation and land sales by households under duress, for example, are often symptoms of broader structural problems. Legislation that regulates land sales without confronting these problems may only drive the transactions out of the public eye and force those affected to engage in actions that are even less advantageous to them.

It is therefore important to choose appropriate instruments. Normally, this means reliance on a combination of measures—divestiture of state lands, land taxation, capital gains taxation, expropriation with compensation, support for land markets, direct negotiation, the provision of safety nets to cover household distress in certain situations, and so on—to maximize synergies, foster cost transparency, and set clear goals and performance indicators that make hijacking the process difficult. Governments need to ensure that the poor can use rental and other mechanisms, ideally in a way that is coherent with other reform initiatives. For example, the rental of a plot for one or two seasons might be made an eligibility requirement for land reform grants, boosting land rentals and eliminating spurious claimants who later sell the land.

If it is to be successful, land reform must establish secure, transferable rights to land. Those benefiting from land reform need to be able to access technology, output markets, working capital through grants and credit, and other nonland assets and infrastructure. The possible movement out of agriculture by the children in beneficiary households should be considered. The selection of the beneficiaries of reform should be transparent and participatory.

Rigorous, open, and participatory evaluation of ongoing experiences is important. This normally requires strong training and capacity-building components, as well as provisions for complementary investments to make land productive. These investments include incentives to maximize productivity gains, for example, by selecting underused land or favoring labor-intensive modes of land use.

Attention should be paid to fiscal viability, for instance, by financing parts of reform through land tax revenue. The cost of land reform can be substantial. Land may represent only a fraction of the total cost (often about one-third). To justify such an expense, redistributive land reform needs to be viewed and analyzed as an investment in sustainable poverty reduction. Indeed, land reform should be integrated into the broader context of economic and social development. A conducive policy environment is essential.

There are many examples of governments trying to avoid the costs of land reform by directly or indirectly expropriating from landowners. This tends to reduce the overall security of property rights and a country's attractiveness for (foreign) investment and to increase social conflict. Nicaragua and Zimbabwe offer examples. Often, because of the repercussions, the step is only undertaken on marginal lands. This does not mean that landowners should not contribute to the cost of reform, but a more transparent procedure, such as a land tax, will probably be less disruptive than expropriation.

Considerable amounts of land have been transferred through reform in recent decades (Table 5.2). Putting the land involved to productive use and dealing with the institutional legacies of reform—large agrarian reform institutes, the restrictions imposed by land reform legislation, and assisting beneficiaries to obtain working capital and skills that enable them to take proper advantage of their assets—are clearly not uncommon experiences.

There are several reasons for careful monitoring and evaluation of such initiatives. First, few good models exist upon which to draw, implying that fresh interventions will have to be refined. A transparent, rigorous evaluation system can contribute by providing information for adjustments during implementation. Second, history has shown clearly that land issues and land reform, in particular, are highly susceptible to political interference at all levels. Monitoring and evaluation are the only way to counter the tendency toward corruption and ensure that it is held in check. Third, monitoring and evaluation help prevent land reform from focusing only on beneficiaries and neglecting those people, such as farm workers, who may be negatively affected. In Zimbabwe, for example, workers on farms that were subjected to redistribution constitute one of the most vulnerable social groups. Integrated into a long-term effort at monitoring and evaluation, PSIA's can play an important role.

Adopting appropriate land use regulations

Governments have an array of fiscal and regulatory instruments at their disposal to supply incentives for land uses that maximize social welfare. They can ensure the availability of historic values, effective public service provision, and public goods such as landscapes, and they can prevent harmful externalities such as pollution associated with specific land uses. The case for government intervention resides in the argument that the aggregate social benefit is larger than the cost of regulation and the presumption that public action can enforce regulations at a minimum cost.

TABLE 5.2 Extent and Characteristics of Selected Land Reforms

Country	Area Total (hectares, '000s)	Arable land (%)	Beneficiary households			Years
			Number ('000s)	Rural households (%)	Area of land (hectares)	
<i>Africa</i>						
Egypt	390	15.4	438	10.0	0.89	1952–78
Kenya	403	1.6	34	1.6	11.85	1961–70
Zimbabwe	2,371	11.9	40	3.1	59.28	1980–87
<i>Asia</i>						
Japan	2,000	33.3	4,300	60.9	0.47	1946–49
Korea, Republic of	577	27.3	1,646	45.5	0.35	1948–58
Philippines	1,092	10.8	1,511	24.2	0.72	1940–85
Taiwan, China	235	26.9	383	62.5	0.61	1949–53
<i>Latin America</i>						
Bolivia	9,792	32.3	237	47.5	41.32	1953–70
Brazil	13,100	11.3	266	5.4	49.32	1964–94
Chile	9,517	60.1	58	12.7	164.09	1973
El Salvador	401	27.9	95	16.8	4.22	1932–89
Mexico	13,375	13.5	3,044	67.5	4.39	1915–76
Nicaragua	3,186	47.1	172	56.7	18.52	1978–87
Peru	8,599	28.1	375	30.8	22.93	1969–79

Sources: Eckstein and Horton 1978; El Ghonemy 1990; Grindle 1990; Hall 1990; Hayami, Quisumbing, and Adriano 1990; McClintock 1981; Powelson and Stock 1987; Prosterman, Temple, and Hanstad 1990; Scott, MacArthur, and Newbery 1976.

This implies that zoning and other land use regulations that promote relevant land uses should be supported by careful assessments of the nature and distribution of costs and benefits, the local conditions, and the implementation capacity available.

Concerning the distribution of costs and benefits, there are two considerations. On the one hand, land use restrictions may be highly regressive, forcing small landowners or the poor to make sacrifices (or even depriving them of their land) to the benefit of the wealthy (foreign investors, for example). On the other hand, benefits and costs change over time, and affordability plays a major role. Many developing countries maintain regulations that were imposed under completely different conditions (often by their colonial predecessors) and that may no longer serve the original purpose. Their removal may be opposed by landowners with vested interests, who are able to derive handsome advantage by using them as a source of rents. These owners with vested interests may

have to be confronted to establish a new regulatory regime, although the benefits, especially for the poor, can be significant.

It may not be necessary to implement regulations uniformly across all parts of a country. Attempts at land use planning should start with mechanisms benefiting the local communities that bear the costs, perhaps making a contribution to more effective decentralization, particularly because centralized bureaucracies often lack sufficient familiarity with local needs and issues to supply effective services and supervise the bureaucrats mandated to deliver them. Many developing countries rely on a regulatory approach that encourages arbitrary bureaucratic behavior. Greater reliance on fiscal instruments, such as fees and taxes or tradable permits, possibly in collaboration with the private sector, can help reduce the difficulties involved in monitoring and supervision.

The provision of infrastructure (roads, electricity, water, sewage, and so on) increases land prices and thus benefits those who own the land. The provision is much less expensive in planned settlements than it is in unregulated areas. This is a justification for zoning, particularly in urban areas, in which the government considers issues such as hydrology, congestion, air quality, traffic flow, and public safety. To reach decisions on these issues in an open and participatory manner is therefore appropriate, and, to finance the infrastructure, it is also appropriate to use fees and other charges levied on landowners, such as taxes on real estate improvements.

Land taxes have a number of conceptual advantages. They cause minimal distortions and are less regressive than taxes levied on consumption, which normally hurt the poor; they tend to discourage speculative accumulation and encourage more intensive land uses; and they strengthen the accountability of local governments before the public, thus enhancing fiscal discipline at the local level and making landowners pay for at least part of the benefits they receive because of local government investments in the land. Although the extent to which land taxes are used varies, revenues are generally well below the potential (Bird and Slack 2002). Greater emphasis on land taxes can have a significant impact on owners' incentives to put their land to the most effective use, as well as for the receipt of local government revenues, the type and level of public services provided, and governance. These taxes can help prevent decentralization from degenerating into a competition for rents from the central level.

The state should also be able to exercise its right of eminent domain to acquire land, with fair compensation, for broader public purposes (for example, for the construction of roads). However, the way many developing country governments exercise this right, particularly for urban expansion or to provide land to private entrepreneurs, undermines the principle

of tenure security. If no compensation is paid, which occurs frequently, the equity impact is negative, often leaving households landless. The possibility of expropriation without compensation can lead landowners to sell their property on informal markets at low prices, encouraging unplanned development and shady real estate practices down the line. The conditions under which the government can exercise its right should be explicit, as should the procedures for supplying fair compensation and the mechanisms for appeal.

In many developing countries, state ownership and public institutions have failed to ensure the protection of fragile lands and adequate land management in peri-urban areas. Large tracts of land continue to be held under unplanned arrangements, with far-reaching implications. In peri-urban areas, land with high potential productive value is unoccupied and remains unimproved because of bureaucratic tangles, mysterious title procedures, and corruption. Privatization through auctions would yield significant revenue for local governments and increase the effectiveness of land use. Likewise, if public lands have been occupied and improved by poor people acting in good faith, the rights of these people to the land should be recognized and formalized at nominal cost.

Examples

Macroeconomic distortions have a significant impact on land prices and activity in land rental markets. In Brazil, for example, land prices dropped by up to 70 percent in the early 1990s (Reydon and Plata 2002), making it easier to acquire land for productive purposes and providing the backdrop for a huge expansion in the government's land reform program. Over a period of less than five years, the government acquired and redistributed more land than it had acquired during the previous 30 years.

In some industrial countries, more than 70 percent of the cultivated land is rented, partly because renting lowers capital requirements and allows users greater flexibility. Rental was also important in the transfer of land during the initial phases of the transition to a market economy in Eastern European countries. It continues to show potential where land plots have been returned to original owners who have little inclination for farming, but where local economic uncertainty and shallow financial markets have slowed the development of land sales markets. In Moldova, for example, an emphasis on leases has enhanced the ability of the land market to develop more rapidly compared with the market in Estonia, which has discouraged the use of leases. More than 80 percent of the 440,000 registered private farms in Moldova operate through some type

of leasing arrangement (Lerman, Csaki, and Moroz 1998). Meanwhile, the purchase price for land has risen significantly above the capitalized value of possible agricultural profits. These price increases are caused by government restrictions that drive up land prices, as well as speculation about the benefits of joining the European Union and the demand for land among foreigners that might materialize with accession by Eastern and Central European countries. While peri-urban land markets and mortgage lending are starting to develop, agricultural land sales market activity remains moderate (Deininger, Sarris, and Savastano 2004).

In eastern Africa, because they are generally pro-poor and beneficial for women, temporary land transfers have had a positive impact on equity (Place 2002). Sales and rentals of land appear to be relatively active and are contributing to a rise in more equitable access to land even in terms of ownership, as confirmed in the case of Uganda (Baland and Platteau 1998; Carter and Wiebe 1990; Platteau 1996). The evidence from Uganda also suggests that activity in rental markets can rise sharply with economic liberalization and the associated growth of opportunities in the nonfarm economy. Indeed, in Uganda, the share of households renting land climbed from 13 percent in 1992 to 36 percent in 1999. By transferring land to more productive producers, rental markets are facilitating greater allocative efficiency in rural areas (Deininger and Mpuga 2002). Evidence from Ethiopia indicates that restrictions on land rental not only reduce the opportunity for more productive land use, but also may constitute an effective obstacle to the development of the nonfarm sector, because farmers who took nonfarm jobs perceived a significantly higher risk of losing land through redistribution than did those who engaged in cultivation (Deininger et al. 2003a).

Rental markets, including markets for long-term transactions that are often similar to sales, are active in West Africa, although they are mostly informal there. Land rentals have also started to emerge in Asian countries, such as China and Vietnam, characterized by the egalitarian distribution of land and the liberalization of land tenure. In China, where rental was not needed until recently because of frequent land reallocations, the share of households participating in land rentals rose from 2.3 percent in 1995 to 9.4 percent in 2000. Moreover, 22.4 percent of households indicate that, at the current market rental rate, they would be willing to rent (Deininger and Jin 2002). This suggests that, with economic development and the emergence of off-farm opportunities, there is considerable potential for further increases in rental market activity.

Analysis shows that decentralized market transactions have been more effective than state-sponsored redistribution at transferring land to

households exhibiting greater productivity and, surprisingly, have been better at targeting the poor (Deininger and Jin 2002). The case of Vietnam, where similar increases have been revealed in the incidence of land rentals, illustrates the differences between land sales markets and land rental markets. The share of rural households participating in rentals climbed from 3.8 percent in 1992 to 15.8 percent in 1998, a much more pronounced rise than the one occurring in the sales market. Although both renters and buyers tended to be more productive, the total magnitude of the effect of the greater productivity is bigger for the rental market. Additionally, there is evidence that, in situations in which credit markets were not functioning well, households that had been experiencing significant income losses were more likely to sell than to rent (Deininger and Jin 2003).

Although the highly unequal distribution of land in Latin America, where the distribution of landownership is known to be one of the most inequitable in the world, would make a mechanism to transfer land among different types of owners extremely relevant, rental activity is actually quite limited in many countries of the region. This may be due to informational imperfections and the resulting high transaction costs, as well as the effect of past restrictions on rental markets, which have weakened the perception of the security of property rights among landowners. The impact of rental restrictions has been significant in Brazil, for example, and also in Colombia, where the area of land rented through formal contracts decreased from 2.3 million hectares in 1960 to 1.1 million hectares in 1988 following the imposition of rent ceiling legislation (Jaramillo 2001). In 1998, more than a decade after the rental restrictions had been lifted, tenancy rates in Colombia were still only about 11 percent, well below the level of the 1960s, highlighting that the restoration of confidence in tenure security takes time. Also, rental markets have been more effective than government-sponsored land reforms in supplying land to poor, but productive producers (Deininger, Castagnini, and Gonzalez 2004), suggesting that government redistribution programs should build on mechanisms such as rental rather than trying to substitute for them.

Land sales markets in Latin America are active, with average annual turnovers of 5 percent in Colombia, 1.4 to 2 percent in Ecuador, 1 percent in Honduras, and 2 to 3.5 percent in Venezuela (Jaramillo 2001).⁵ However, markets are often found to be highly segmented, meaning that sales involve either transfers from large producers to other large producers, or from small producers to small producers, but rarely are such groups divided according to farm size. Similar segmentation also occurs in other Latin American countries (Carter and Zegarra 2001). This segmentation is due to the high transaction costs of subdividing large landholdings and

to the lack of long-term financing for the poor associated with the continent's dualistic landownership structure (Barham, Carter, and Sigelko 1995). Thus, although the sales market does not normally provide a mechanism of land access for labor-abundant, capital-constrained households, agents who are not capital constrained can translate the relative technical efficiency of the markets into effective demand for more land (Carter and Salgado 2001).

Land reforms in Japan and Korea and in Taiwan, China, all of which were accomplished under external pressure, have improved welfare and often also productivity (Jeon and Kim 2000). In India, the abolition of the land rights of rent-collecting intermediaries is widely judged to have been successful, in contrast to the more limited success of land ceilings and tenancy legislation (Appu 1997). In Kenya immediately after independence, the so-called million-acre scheme distributed about 300,000 hectares of large, formerly white-owned estates to small farmers, with positive economic results (Scott, MacArthur, and Newbery 1976). The program gathered momentum through, for example, the formation of groups by farmers to purchase larger farms. Nonetheless, the government discontinued it, partly for political reasons (Kinsey and Binswanger 1993). Following independence in the early 1980s, Zimbabwe initiated a land reform program that redistributed about 250,000 hectares. Participation in the program improved crop incomes and the ability of households to accumulate assets, and it reduced overall inequality (Deininger, Hoogeveen, and Kinsey 2004; Gunning et al. 2000). The first phase of land reform in the Philippines, based on a 1972 law, benefited about 500,000 households. Aided by the availability of green revolution technology, the reform led to significant improvements in household welfare and long-term effects on investment and human capital accumulation of considerable magnitude (Deininger, Maertens, and Olinto 2001; Otsuka 1991).

KEY CONSIDERATIONS ABOUT PSIAS

To make a PSIA as effective as possible, it is necessary to build on not only general principles and the experience of other countries but also on existing survey information for the country that is undergoing examination. Fortunately, standard surveys similar to the Living Standards Measurement Studies are now available for most of the countries where PSIAS on land issues are likely to be undertaken. Although the amount of relevant information is limited in most of these country surveys, using them can be helpful. They may provide important background information on the distribution of land among various income groups, on

land market activities, and on the productivity of land that can be employed to guide the formulation of hypotheses and the design of the PSIA approach.

Likewise, to be able to draw out the distributional implications of interventions, it is essential to have information on consumption that is sufficiently detailed to allow construction of an expenditure aggregate that can be related to a nationally representative survey and the poverty line. Collecting this information can significantly increase the cost of a PSIA given the time involved in administering expenditure modules. If a household survey is available, it may be possible to use the information from this source to identify a set of variables that can predict consumption, which would obviate the need to apply a full-blown consumption module.

In some instances, it may be possible to work with national agencies to obtain existing survey samples as a basis for PSIA. This would represent a considerable cost savings, as illustrated by the cases of China and Eastern Europe. One might then capitalize on the natural complementarities between standard household surveys and the analysis of land issues. At the same time, given the importance of land as a household asset, it would be quite easy to obtain information on land transactions and ownership over the years. The heads of most rural households usually know the amount of land they had when they started their families and are usually able to give a fairly accurate account of ownership changes that have occurred since then. Alternatively, one might build on earlier surveys to construct panel data, which could greatly enhance the possibility for many types of analyses.

Although existing data can further an understanding of the general conditions in a country, analysts wishing to carry out a good PSIA will invariably want to use quantitative and qualitative methods that complement each other. Initial quantitative data need to be complemented by more detailed information about the policy issues under discussion and the potential target groups. Focus group discussions, personal interviews, and other types of qualitative methods will be essential in plumbing the views of actual and potential beneficiaries to formulate or confirm hypotheses on the impacts of specific interventions or the demand or need among various groups for the interventions. These tools provide the flexibility to probe more deeply into, for example, the reasons for certain patterns of behavior that may appear to be inconsistent with expectations and to gain the sort of understanding that cannot be obtained through quantitative data, which do not provide the necessary cues to explain such unexpected behavior and therefore are not useful for policy makers.

The areas selected for qualitative study should be sufficiently diverse to encompass the various segments of the target population (by ethnic

group, size of landholding, poverty status, type of land use, and so on). The possible characteristics of interventions that may be relevant in subsequent analysis should also be considered. If the interviews are organized among similarly relevant groups (by gender, by agricultural and nonagricultural activity, and so on) that likely will be affected by the intervention in different ways, this will help ensure that the research team gains an appreciation of the potential impacts, can formulate and prioritize hypotheses on this basis, and can identify the questions to be employed to test these hypotheses.

Although often overlooked in practical applications, to be most effective, PSIA's should be based on a thorough understanding of the local political economy and the proposed arrangements for specific interventions. If the evaluators are unfamiliar with the expected outcomes of specific interventions and the politically feasible ways of bringing these about—or, in the case of *ex post* evaluations, with details on the procedures followed in project implementation, including beneficiary eligibility criteria—it will be difficult for them to conduct analyses that supply a basis for robust methodological conclusions on impacts and that speak to the needs of policy makers.

Methodological considerations

Importance of a baseline. Analysts must possess solid baseline information on the areas of intervention and other areas against which they can compare project outcomes. In addition to providing a yardstick for assessing impact, the availability of a baseline assists in the identification of intervention strategies that are adapted to the conditions at hand and respond to the needs of target groups.

The value of a control group. Like any good evaluation, a PSIA should demonstrate that the changes observed among the target population can be attributed only to a specific intervention rather than to other factors. For example, even if living standards, productivity, or other characteristics of interest may have declined among the target population, the intervention may have helped avoid a larger decline, as observed in a control group, and thus had a positive impact. Similarly, positive outcomes among the target group may be attributable to a general increase in living standards or in productivity rather than to the intervention. Of course, the control group must be selected to be similar to the group that is to be exposed to the intervention.

Random selection versus self-selection. Many analyses merely compare the value of certain variables before and after an intervention, while failing to account for the self-selection of beneficiaries, that is, the fact that interventions tend not to be targeted entirely randomly among an eligible population. It is likely that many of those who seek to benefit from an intervention aimed at facilitating the acquisition of land titles, for example, are people who already own high-quality land, have access to credit and markets, or are simply more entrepreneurial and willing to take risks to reap greater rewards. Any estimate of the benefits of an intervention that neglects to control for such inherent idiosyncrasies in the beneficiary selection process may overstate the positive impact. If the intervention is then expanded to other areas where the target groups exhibit fewer favorable initial qualities, the expected impacts may not materialize.

To deal with this issue, an effort might be made before program implementation to choose the members of the target group randomly among the applicants. However, because of political or ethical considerations, this may not always be feasible.

An attractive alternative, especially if the budget is limited, is to select beforehand one entire area as a target and a similar area as a control. This approach should work well for reforms, such as legal reforms, that have a nationwide outreach but require local inputs, such as the establishment of local offices or land tribunals. In this case, the control areas would subsequently be phased in as target areas.

If the PSIA is being undertaken to evaluate a program or a reform that has already been implemented and the generation of additional data is not appropriate, instrumental variable techniques can be employed. This requires the identification of instruments that are highly correlated with program participation but that do not affect outcomes, which may be difficult if program eligibility has not been tightly defined and enforced. This difficulty may be overcome through propensity score matching, which is increasingly being used for project evaluation in a wide range of settings (Ravallion 2001).

Questionnaire design. Changes in the ability of rural households to gain access to land or to ensure land tenure security have an impact on labor market participation, as well as on other variables that, at first sight, may seem unrelated to land issues and thus may not have been anticipated by project staff. For example, in a project in Peru, the formal recognition of informal settlements had little impact on the use of land as collateral by settlement households, the main expected benefit of the project, but significantly increased local participation in formal labor markets, an

impact that was rather unexpected (Field 2002). The participation of households in the labor market and the ability of households to access other factors of production have been shown to affect household decisions to participate in certain types of programs, for example, programs aimed at farm privatization in the countries of the former Soviet Union (Lerman, Csaki, and Feder 2002).

Surveys that do not place land-related issues into a broader framework of household behavior may arrive at erroneous conclusions or, at the least, errors of emphasis. Therefore, analysts must anticipate expected impacts and then adopt and implement questionnaires sufficiently broad to capture the relevant variables, including ones that may be only narrowly related to land.

Sample design. If the purpose of the PSIA is to evaluate the impact of an intervention targeted at a specific subset of the population, it may be more efficient and less costly to design the sample in a way that increases the probability of including the subgroup in a meaningful way. To the extent that the PSIA aims to trace the gender-differentiated impact of interventions, for example, it may be appropriate to split the household questionnaire into two parts: one administered to men and the other administered to women. Likewise, phenomena that may be of interest for a PSIA, such as conflicts over land or land transactions, may be infrequently experienced among the overall population, and, because of the limited survey budget, it may be cost-effective to stratify the sample into households that have bought land, have rented land, and have done neither. While doing so does not preclude the use of standard procedures for the selection of first-stage sampling units, it will require a listing among the selected primary sampling units that then serves as the basis for the selection of a household sample in the appropriate proportions, as well as the construction of sampling weights.

Specific elements of questionnaire design

The paucity of land-related surveys that can be drawn on by those interested in performing a PSIA may constrain the ability to design a good survey instrument. This might limit the scope of a policy-relevant analysis. This section therefore presents the elements of a questionnaire that would allow the collection of the information needed for much of the PSIA effort. Because the design of standard household questionnaires is covered in great detail in the available literature (Grosh 2000), the focus here is only on issues specifically related to land. Of course, only some of the

modules examined will be relevant in any given situation, and the analysts would have to make the proper selection and combine the information from the land modules with the information from the rest of the instrument, particularly production and credit.

Household questionnaire

In most cases, there are significant differences between the types of tenure under which land may be held (leasehold, freehold, customary, without a certificate, and so on), the modalities through which it was acquired (purchased, inherited, cleared, simply occupied, and so on), and the type of documentation that is available to demonstrate ownership (title, sales receipt, tax receipt, and so on). The PSIA team therefore needs to collect information on *plot characteristics* on a plot-by-plot basis, including a plot roster. If there are gender differences in land rights, the team also needs to identify in whose name documents for any specific plot are issued and whether the current user (or owner) has the right to transfer land through lease, sale, mortgage, and so on. In addition to tenure characteristics, plot-wise information on land quality and topography are of great importance. Of course, to the extent that one expects plot-specific land tenure arrangements to affect productivity, it is essential to ensure that information on production is obtained at the same level of disaggregation and can be linked to specific plots.

Historically, one of the main reasons for introducing more secure property rights has been to produce incentives for investment in maintaining land productivity. At the same time, land-related investments in improvements, such as fences or trees, can be used to establish and secure property rights in an environment in which enforcement by the state is perceived to be ineffective.

Surprisingly, the treatment of this issue in many questionnaires and, as a consequence, in many analyses of the topic is quite weak. It could be strengthened considerably by observing a few basic principles. First, although the details of the investments to be considered are likely to be specific to any given region or country, the basic categories of the investments in improvements—perennials; simple measures to maintain soil fertility for more than one year (bunding, leveling, drainage, irrigation, de-stoning, mulching, leveling); and the building of structures attached to a particular piece of land, such as animal sheds, processing facilities, and wells—are likely to apply for most situations. Second, it is necessary to distinguish the stock of structures from the amount of resources spent to maintain these and to assess the two separately. Third, if the aim is to evaluate the impact of an exogenous intervention in terms of a land-

related investment, information on at least two time periods is needed. The preparation of a good investment section requires familiarity with local practices, but the result should permit an assessment of the impact of tenure security on different types of investments (such as visible versus invisible ones). If an appropriate production section is included, the results should provide an empirical estimation of the impact of these investments on productivity.

Even in environments in which the frequency of land market transactions is limited, household members normally have a good idea of the price they would receive if they were to sell or rent their land to others. Such information on hypothetical land prices can be used to assign values for specific plot characteristics in a hedonic regression, allowing one to obtain a crude measure for the change in land values caused by restrictions on marketability or the benefits of more secure tenure. This would supply a rough-and-ready estimate that may be of great interest to policy makers who are concerned about designing a system that is self-sustainable. It would also allow one to assess differences in the ability to pay among the various groups in a population. If a project is eventually to award or update land titles or certificates, it may be worth considering this topic through direct questions about the demand of households for (updated) certificates and their willingness to pay for these on a per-plot basis. In this way, some of the biases that may affect hedonic estimates can be avoided.

Women's rights to control land and benefit from the associated income streams are often constrained by law or, in cases in which the law mandates gender equality, actual practice. In situations where this is relevant, one should obtain more detailed information about gender issues, that is, who normally works on a plot, who determines what outputs and inputs to apply, who decides how output is employed, and who benefits from the proceeds. In many customary systems, widowed and divorced women will not be able to obtain ownership rights to their share of the land or, in some cases, to continue using the land. This clearly affects their long-term economic security, but, because there may be differences between the letter of the law and actual implementation, their perceptions of the situation under the current regime may be important. However, to uncover gender differences systematically in inheritance and the extent to which these may be compensated through the transfer of non-land assets, one must ask about the inheritance of the assets of all parents among all children.

To obtain reliable estimates of conflict-related issues from a reasonably sized sample, the oversampling of households affected by conflicts

over land is necessary. Although a simple question about whether a plot is currently the subject of a conflict can, in situations where the level of conflict is sufficiently high, allow one to gauge the reduction in land values caused by conflict, it does not reveal much about the dynamics of the phenomenon. To accomplish the latter, additional information is needed on past conflicts, when the conflicts began, the consequences of the conflicts, how they were tackled, the formal and informal costs, whether the conflicts were resolved, and, if so, when they were resolved. This information should also be plot specific. Aggregating plot-level information to reveal the incidence of conflicts over land at the household level (for example, by gender or poverty status) can represent a key contribution to a land-related PSIA. It is not possible to ascertain the productivity impact of land conflict—an issue of great interest to policy makers—unless plot-level data are available.

Even in environments in which land markets are thin, information on the lifetime trajectory of land accumulation by each household can be descriptive of the way land stocks have evolved over time. Although the econometric analysis that may be performed employing this information may be limited because information on other variables from the same period is normally not available, there are a number of possible uses. In particular, such trajectory data would allow one to test whether only people with more substantial land assets at the beginning of the period were able to accumulate land during the period. One could likewise use the data to determine the extent to which tenants were able to acquire land or make the transition to landownership.

Information on current land rentals, including separate listings for the same plots considered as property rented by a landlord and property rented by a renter, can often be collected quite easily using the same plot-level format that is used for land currently under cultivation. For the landlord perspective, information on the landlord (total amount of land owned, social position, residence, occupation, and so on) and the rental contract (fixed or rent sharing, registration, duration, and date of commencement) provides a basis for a much richer characterization of the land rental market. For the renter perspective, information could be obtained about the social and economic characteristics of the renter and about the rental period for the current tenant or other tenants. Information on the titles for plots that have been rented out and for those that are being cultivated by the owners can be helpful in assessing whether insecure tenure is limiting the ability of households to engage in land transactions.

For current land sales, purchased plots automatically appear on the plot roster (unless they have been sold or otherwise transferred in the

meantime). This is not the case for land that has been sold or transferred in other ways. Although meaningful analysis of land sales markets invariably requires panel data to control for initial conditions and the characteristics of the land, a modest substitute can be obtained by the team. By asking questions about the reasons for the sale and by including a section on shocks (defined as events that have led to a loss of assets exceeding some minimum value, say, three monthly salaries), the team can make inferences at least about the sequence of events.

Fixed time limits on tenancy may lead to a rotation of tenants on a plot that is inconsistent with the goal of maximizing productivity and investment. Nonetheless, legislation that increases the security of sitting tenants, but prohibits them from subleasing, may reduce the supply of land available for potential tenants. Similarly, high transaction costs because of cumbersome procedures that are difficult to comply with, for example, may drive a wedge between what tenants pay and what landlords receive. As a result, even tenants who are willing to pay more than what the landlord would want to receive may not be able to get access to land through the rental market.

The collection of quantitative evidence on the importance of such restrictions, and thus the benefits of abolishing them, requires questions about hypothetical land market transactions. Questions include whether households have been trying to participate in rental markets, but have not been able to find land on offer, and whether households might rent more or less land if rental prices were to change. Similarly, if the government plans to conduct a program of redistributive land reform, the team could explore the willingness of potential beneficiaries to deploy resources to obtain land, whether they have a preference for land over other assets of similar cash value, and their plans for using the land should they acquire it. This data could provide important insight into the appropriate design and targeting of the government program.

In peri-urban settings, an important issue that rarely receives the attention it deserves is the expropriation of land by local or central bureaucracies. The neglect of this activity is partly due to the fact that this practice can constitute a major source of revenue (and corruption). Moreover, in a simple random household sample, one is unlikely to encounter a large number of such incidents. This suggests that one might wish to draw a specific sample of cases of expropriation. If this is possible, obtaining information for policy makers on the transaction costs involved (that is, the difference between the net value of compensation received by owners and the price paid by current land occupants) and the use to which the lands are now being put could be helpful in at least two respects. The

process could provide quantitative information on the amount of red tape with which outside investors must deal. If placed into the public domain, this information could enhance accountability and supply an impetus for initiatives to set local government finances on a sound and sustainable footing. This would represent a challenge to the myth that, in order to attract outside investment, the government must expropriate or nationalize land. The process would also highlight the extent to which the disposal of land that has already been acquired by the state could be offered to investors.

Considerable knowledge on the collection of land taxes and other fees could be gained by determining the amount paid directly by households. Similarly, asking household members their opinion about paying, under current circumstances, to update registries, records, land surveys, and other land-related documentation would provide insights into the extent to which the services that should be provided by land administrations respond to the needs of the public and whether users trust these institutions. Evidence on such administrative issues can be invaluable in arguing for bureaucratic downsizing based on client demand. If there is a value in assessing the impact of specific reforms that have already been implemented (as in the case of Mexico's *ejido* reform), then questioning households about their confidence in land certificates or the land administration (before and after the reform) can provide useful information for policy analysis. In environments in which the government still has the ability to redistribute land or intervene in land markets in other ways, questioning households about their perceived level of tenure security (for example, whether they expect still to possess the same plot of land in five years) has helped complement more tangible measures of tenure security (titles, for instance) to understand whether such documents are associated with tenure security.

In many developing countries, land laws are passed relatively easily, but there is little interest in implementing them; spreading awareness about them; or ensuring that old legislation, perhaps containing contradictory provisions, is abrogated. A direct way to expose such gaps is to assess the knowledge of the law among households, for example, by asking a series of simple questions about key legal provisions. Given that it is the beliefs revealed by the answers that are likely to affect day-to-day behavior, showing that men and women are ill-informed about land regulations can demonstrate the need for efforts to spread awareness and identify the target groups for such an effort. These answers, particularly among village leaders, can offer valuable hints about the ways such efforts should be structured.

Community questionnaire

A well-planned community questionnaire can provide a wealth of information about the procedures, regulations, and constraints encountered by individual economic actors before any changes may have been implemented. This information can be useful in explaining behavior. Furthermore, a comparison of the regulations and the perceptions of people about these regulations make it possible to assess the extent to which individuals (or village officials) are aware of the legal provisions, but also the effectiveness of the provisions from the point of view of the users.⁶

Exploring the institutional infrastructure of the land administration, including the way in which land administration services are delivered at the local level (staffing, fee structures, accessibility) and how the quality of delivery is perceived, allows one to overcome the supply-side focus of many current studies that give scant, if any, attention to the views of the public. Because only a fraction of households are likely to use these services at any point, a community survey is an appropriate tool to examine this issue. The survey could also identify changes over time in the functions performed by local and central institutions, their staffing and funding, and the accessibility of these services to the local population. Such a picture of institutional change is a precondition for gaining a precise estimate of the impact of the change.

The questions about the administrative services might be complemented by questions about the obligations incurred by property owners within the community (tax rates, the way taxes are assessed, zoning, and so on). Ascertaining changes in these variables over time should be relatively easy, and this may be revealing in situations in which there have been far-reaching shifts in the social, political, and institutional environment.

Rules and regulations related to land—such as inheritance laws, the access to land by women, and the conversion of land from public to private use or from agricultural to nonagricultural uses—normally vary significantly across localities. Some communities even impose restrictions on land transfers, especially through sales (Deininger 2003). The nature of the rules and changes in them over time have clear implications for land use decisions by individual households. Information about these rules could be combined with a general assessment of the characteristics of local land market activity that could be compared with the perceptions of households about this market.

A household questionnaire normally supplies information about whether a specific household has been affected by redistribution, expropriation, or conflict involving land. In a random household sample, however, there are usually few if any households from which land has been

expropriated. Nonetheless, one or two expropriations without proper compensation are probably sufficient to raise serious doubts in an entire community about the security of land tenure. It is therefore worthwhile to focus on this and other such administrative actions in community questionnaires.

How the capabilities of land administration institutions have been affected by administrative or institutional reforms in general governance is a key question of interest in PSIAs in many settings (for example, decentralization or the replacement of central government appointments by the democratic election of village leaders). Providing informed estimates of the impact of such reforms requires great familiarity with the underlying context. Therefore, a community questionnaire is an ideal tool.

Local leaders often have considerable discretion in decision making on land management issues. Lack of knowledge among these leaders about the proper legal provisions means that there is greater opportunity for legal inconsistencies, confusion, and abuses, especially if laws have changed recently. Testing the knowledge leaders possess about laws through straightforward questions represents an efficient method to determine whether, at the policy level, there may be a need for increased efforts at fostering awareness and capacity building. Indeed, the instrument might serve as a means to create awareness about legal provisions and a host of other land-related issues at the local level.

CONCLUSION: JOINING THEORY AND PROCESS

Reforms in land policy are an attractive candidate for PSIAs. They clearly have far-reaching distributional implications and consist of rather discrete interventions or policy changes that lend themselves to the type of before-and-after analysis that can be accommodated within the PSIA framework. Because land policy reform is often controversial politically and must usually be sustained beyond the term of individual governments, information from PSIAs can be employed to build a consensus and establish and monitor clear performance indicators to limit the possibility of corruption in the reform process.

To maximize the value and impact of PSIAs on land policy, the PSIA team should observe a few basic methodological principles. Drawing on the design experiences reflected in this chapter may also help reduce the costs and increase the credibility of the analysis performed. To have an impact on policy, the PSIA team should rely on the input from various stakeholders to identify the appropriate questions and develop indicators that command a broad consensus. The PSIA must be conducted and the

results of the analysis communicated in a transparent and credible way that is suitable so that it may contribute to the broader policy discussion. This chapter has achieved its purpose if it focuses managers' attention and energies on identifying the proper methodology so that the PSIA can reach the goal of improving policy.

NOTES

1. Studies that analyze the problem of an elite preventing human capital accumulation by the masses include Bourguignon and Verdier (2000) and Acemoglu and Robinson (2000). Although investments in human capital are socially and individually profitable and although actors who are unconstrained in credit markets are easily able to undertake these investments (Eckstein and Zilcha 1994; Galor and Zeira 1993), poor people who do not have access to assets may become caught in poverty traps. These people fail to escape poverty not because they are unproductive or lack skills, but because credit market imperfections prevent them from ever getting the opportunity to use their innate abilities. In such a situation, increasing the asset endowment of the poor can lead to permanently higher levels of growth (Aghion, Caroli, and Garcia-Penalosa 1999; Bowles, Bardhan, and Gintis 2000).
2. The commitment to such leases can be tested by ascertaining whether financial institutions accept the leases as collateral.
3. The numbers involved may have been quite large. In India, tenancy reforms are estimated to have been associated with the eviction of more than 100 million tenants (Appu 1997).
4. This result is illustrated by the case of Bombay, where, as a consequence of rent controls, real estate prices have shot up. Such a steep rise in prices forces people to commute from less-expensive residential areas (with the attendant cost in pollution, infrastructure, and so on) and makes it more difficult for entrepreneurs to establish enterprises based on less-expensive labor. In rural areas, the poor and landless are obliged to rely on more shadowy rental markets, for example, by subleasing from protected tenants, depriving themselves of the protections the law provides and also becoming accomplices in illegal activity (Bertaud, Buckley, and Owens 2003).
5. Activity varies considerably across regions of Venezuela. The share of land area involved in sales transactions is as high as 12 percent in places recently cleared for farming, about 2.5 to 3 percent on private lands, and only 1.5 to 2 percent on lands that have been subject to agrarian reform (Delahaye 2001).
6. The discussion here is limited to variables not typically covered in standard reference works. Note that community surveys are even more context specific than are household questionnaires. This means that the survey instruments should be subjected to thorough pretesting. It is possible to obtain a surprisingly large amount of accurate information even through retrospective questions if the survey definition of the community is unambiguous and

administrative records are kept that respondents can draw on to fill in the survey instrument. This will be impractical in situations where these conditions do not hold.

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