Land policies for growth and poverty reduction: Key issues and challenges ahead

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Abstract: This paper focuses on the broad conclusions from recent research on land issues. It argues that well-defined and secure land rights are critical to provide incentives for investment and sustainable resource management, to facilitate low cost transfers of land and credit access as the rural non-farm economy develops, and to allow provision of public services at minimum cost. At the same time, the fact that land issues are politically highly charged and controversial has often implied limited relevance in the policy dialogue, despite their importance. Based on a review of the historical evolution of property rights, the paper outlines channels through which the nature of such rights, the way in which they can be exchanged, affect economic growth, poverty reduction, and governance. For each of these areas, policy actions that can help to improve the security of land rights, reduce the cost of exchanging them, and promote socially desirable land use are outlined.

1. The importance of land rights

There is little disagreement that property rights to land affect economic growth and poverty reduction through a number of channels. In this section, we discuss a number of these and point towards evidence of increased awareness of the development community to these issues.

1.1 Economic growth

Land-related investment: In rural areas, farmers whose have only insecure or short-term land rights are unlikely to invest their full effort, to make long-term improvements attached to the land (including services), or to exchange it with others who may be able to make better use of it, thereby reducing productivity and possibly hindering emergence of a vibrant non-farm economy. The same is true for urban residents and it is now increasingly recognized that, as a consequence, land and the institutions governing its ownership and use are of great importance for broader economic growth and poverty reduction from a much broader range of perspectives.

General investment climate: Setting up or expanding a business requires physical space, i.e. land. Non-transparent, corrupt, or simply inefficient systems of land administration constitute a major bottleneck that makes it more costly for small and would-be entrepreneurs to transform good ideas into economically viable enterprises. Investment climate surveys indicate that access to land was the main obstacle to conducting and expanding business by 57% of the enterprises interviewed in Ethiopia as well as 35% in Bangladesh and about 25% each in Tanzania and Kenya.

Efficiency enhancing land transfers: If property rights are poorly defined or cannot be enforced at low cost, individuals and entrepreneurs will not only be compelled to spend valuable resources on defending their land, it will also be much harder to transfer such land between different uses. Secure land tenure facilitates transfer of land at low cost through rentals and sales, improving the allocation of land while at the same time supporting the development of financial markets. Without secure rights, landowners are less willing to rent out their land, something that may impede their ability and willingness to engage in nonagricultural employment or rural-urban migration, reducing the scope for structural change and reduce the productivity of land use in both rural and urban areas.

Credit markets access: Well functioning land institutions and -markets also improve the environment for investment because ability to use easily transferable land titles as a collateral reduces the cost of accessing credit for entrepreneurs, thus increasing opportunities for gainful
employment and contributing to innovation and the development of financial systems. Even in
developed countries, more than two thirds of small business loans are secured against land and
real estate. In Eastern and Central Europe, formal land titling, especially in urban and peri-urban
areas, helped to start mortgage markets that now comprise a large part of overall lending.

**Revenues for local governments:** With economic development, increased demand for land,
together with public investment in infrastructure and roads tends to increase land values. In many
cases, however, lack of well-functioning mechanisms to tax land implies that the potential for
society, especially local governments, to benefit from these increases is limited and that much of
the gains instead fuel speculation or end up as bribes. Effective decentralization may also be
hampered by lack of own revenue and accountability on the part of local governments. Both of
these could be increased by taxation of land. Colombia illustrates the potential for quick
increases in land taxes that can contribute significantly to local government revenue, thus helping
to match decentralization of responsibilities for service delivery with the needed resources.

### 1.2 Poverty Reduction

**Poor peoples’ wealth:** For most of the poor in developing countries, land is the primary means
for generating a livelihood and a main vehicle for investing, accumulating wealth, and
transferring it between generations. Land is also a key element of household wealth. For
example, in Uganda land constitutes between 50 and 60 percent of the asset endowment of the
poorest households. Because land comprises such a large share of the asset portfolio of the poor,
giving secure property rights to land they already possess can greatly increase the wealth of poor
people who, unlike the rich, are not able to afford the (official and unofficial) fees needed to deal
with the formal system.

**Gender aspects:** Control of land is particularly important for women, whose asset ownership has
been shown to affect spending, for instance, on girls’ education. Yet traditionally, women were
disadvantaged in terms of land access. Ensuring that they are able to have secure rights to one of
the households’ main assets will be critical in many respects, including challenges arising in the
context of the HIV/AIDS epidemic where absence of secure land tenure for women who have
lost their husband has been shown to be a key reason for costly conflict and additional hardship
to be suffered by widows.

**Social safety net:** The importance of land for economic development does not mean that it is
irrelevant for poverty reduction - quite to the contrary, access to even small plots of land to grow
crops can greatly improve food security and -quality. The case of China illustrates that broad-
based land access can provide a basic social safety net at a cost that is much below alternative
government programs, thus allowing government to spend scarce resources on provision of
productive infrastructure instead of safety nets. Also, having their basic subsistence ensured is
likely to have allowed Chinese households to take on greater risks in non-agricultural businesses
and, with policies to foster lease markets for land, contributed significantly to the emergence of a
vibrant non-farm economy.

**Accountability and transparency:** The ability of local leaders and authorities to control land has
traditionally been a major source of political and economic power. If the system to administer
such a significant part of overall wealth is perceived to be corrupt, overstuffed, and not
trustworthy, it will be difficult to maintain confidence in the rule of law and the competence of
the state. Improving land administration can thus contribute to broader public service reform as
in the state of Karnataka (India) where computerization of 20 mn. land records within a short
period of time resulted not only in a reduction of corruption and improved satisfaction with public service delivery but, because it was financially self-sustaining, also provided a basis for reforms beyond the narrow realm of land.

Longitudinal analysis of standard indicators of human development in countries characterized by very similar conditions but stark differences in land distribution and the resulting institutions can illustrate these social and economic costs. To do so, we compare between Colombia and Costa Rica on the one hand and El Salvador and Guatemala on the other. Even though all of these countries share a common colonial history, language, religion, climate, topography, factor endowments, and technology, they reacted in very different ways to the coffee boom of the 19th century. In El Salvador and Guatemala, large landowners who depended on a repressive labor regime to remain economically viable prevailed, and the boom led to land expropriation, especially from Indian and indigenous communities, and concentration of land on a massive scale. 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, two countries characterized by small-scale landholdings where elites depended on trade rather than on large-scale agriculture, the boom led to the emergence of a smallholder coffee economy. As a consequence, literacy rates, as well as other indicators of socio-economic development, differed sharply between the two groups of countries from the late 19th century and continue to do so into the present (table 1). Most surprisingly, note that the establishment of democracy occurred about 40 years later in the countries characterized by dominance by large landlords compared with those that relied on a smallholder production structure.

To complement this evidence with a cross-country perspective, figure 1 graphically highlights the impact of an unequal land ownership distribution in the 1960s on economic growth during the subsequent four decades in a large number of developing countries. One notes that countries that were characterized by a more unequal initial land distribution tended to show clearly lower rates of economic growth. It appears that the unequal access to economic and social opportunities which underlies this unequal asset distribution is quite inimical to long-term and sustainable development. Even though the data do not contain sufficient structure to allow inferences on 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 have an important role.

1.3 Awareness of the importance of land policies in the development community

Policy makers all over the world are increasingly aware that lack of an appropriate legal and administrative basis for land administration, or gross mal-distribution of land assets which markets are not able to overcome, can provide a serious obstacle to long-term and sustainable economic development. In fact, a large number of countries have, during the last decade, enacted innovative pieces of land legislation and initiated institutional reforms to increase the security of land tenure and the ease of transferring it between users. There is also growing recognition that, even though it is necessary, legal reform by itself will not be sufficient to improve tenure security and transferability of land and that successful reform will require a vision of the overall goal, a country-specific prioritization of issues, and a long-term commitment that is part of a broader consensus. Finally, countries as diverse as Brazil, South Africa, Honduras, Guatemala, India, and Mexico have started to implement programs to expand, complement, or “complete” past efforts of land reform. It is now recognized that, unless land inequality is attended to in an
appropriate way, it can easily escalate into much bigger conflicts. In many contexts, from Afghanistan to Colombia, East Timor, and Sudan, land issues are emerging as central elements to a peaceful resolution of conflicts.

For all of these reasons, and following a long time when land was virtually off the development agenda, donors have also renewed their interest in the issue, recognizing that, even though land is complex and multi-faceted, it is an issue which in many cases is too important to be ignored. With significant support from other donors, the World Bank, has, in 2003, issued a Policy Research Report on “land policies for growth and poverty reduction” that revises some of the positions taken in the last official policy pronouncement, which dates from 1975. In fact, the World Bank’s land-related portfolio has seen a significant increase during the last decade and stands now at close to $1 bn.

2. Key issues on tenure security

Land a key asset for the rural and urban poor that provides not only a foundation for economic and social development but also helps to empower them to adjust to the challenges posed by recent trends of globalization in a number of ways. Focusing on the main forces shaping the evolution of land rights, possible sources of tenure insecurity, and ways in which action by the community or the government can help to reduce such insecurity and provide a basis for more effective land utilization that will be critical for countries to utilize the resources at their disposal in the most effective fashion and thus promote growth as well as poverty reduction.

2.1 Origins and Evolution of Property Rights

Land rights are social conventions that regulate the distribution of the benefits that accrue from specific uses of a certain piece of land. A number of arguments support public provision of such rights. First, the high fixed cost of the institutional infrastructure needed to establish and maintain land rights favors public provision, or at least regulation. Second, the benefits of being able to exchange land rights will be realized only in cases where such rights are standardized and can be easily and independently verified. Finally, without central provision, households and entrepreneurs will be forced to spend resources to defend their claims to property, for example through guards, fences, etc. which is not only socially wasteful but also disproportionately disadvantages the poor, who will be the least able to afford such expenditures.

Historically, one reason for property rights to evolve was in response to increased payoffs from investment in more intensive use of land due to population growth or opportunities arising from greater market integration and technical advances. Land rights are of little importance in situations where land is plentiful. In the course of development, the need to sustain larger populations will require investments in land that cultivators will be more likely to make if land rights are secure (Boserup 1965). There is abundant evidence suggesting that, while appropriate institutional innovations can lead to a virtuous cycle of higher population and greater investment in land, economic growth, and increased welfare (Hayami and Ruttan 1985). At the same time, failure of the institutions administering land rights to respond to these demands can lead to conflict, and can undermine societies’ productive and economic potential.

In addition to this evolution, the imposition of property rights to land by outside forces or local overlords has affected the nature of such rights in many countries of the developing world (Binswanger et al. 1995). The goal of such intervention was to obtain surpluses from smallholder
populations or to force them into wage labor. To do so, a variety of mechanisms, often supported by distortions in other markets, was used. Not surprisingly, such imposition of rights often disrupted the evolution of land rights as a response to population growth or has, by co-opting local institutions or changing how they functioned, implied vast changes in the way land was allocated and managed at the local level.

In view of the fact that the historical evolution of property rights is not a response to purely economic forces, it is not surprising that the arrangements found in many countries are often not the ones that would be optimal from either an economic or a social perspective. For example, in Africa, the vast majority of the land area is operated under customary tenure arrangements that, until very recently, remained outside the formal law. In Eastern Europe, collective production structures have failed to contribute to rural growth. In Latin America and parts of Asia, highly unequal land ownership and access to assets have made it difficult to establish patterns of growth that are truly inclusive of the poor thereby avoiding that growth will widen pre-existing inequalities. Despite such shortcomings, sub-optimal and economically inefficient property rights arrangements have often remained in place for long periods of time. In fact, far-reaching changes of land relations have generally been confined to major historic transitions. ** Need to indicate what are the desirable characteristics.

2.2 Desirable Characteristics of Property Rights to Land

Property rights to land need to have a horizon long enough to provide investment incentives and be defined in a way that makes them easy to observe, enforce, and exchange. They need to be administered and enforced by institutions that have both legal backing and social legitimacy and are accessible by and accountable to the holders of property rights. Even if property rights to land are assigned to a group, the rights and duties of individuals within this group, and the way in which they can be modified and will be enforced has to be clear. Also, as the precision with which property rights are defined will tend to increase with resource values, the institutions administering property rights need to be flexible to evolve in response to changing requirements.

As one of the main purposes of property rights is to facilitate investment, the duration for which such rights are awarded needs to at least match the time frame during which returns from possible investments may accrue. Clearly this depends on the potential for investment, which is higher in urban than in rural areas. While indefinite property rights are the best option, giving long-term rights that can be renewed automatically is an alternative. Given the long time spans involved, attention to the way in which such rights can be inherited is particularly warranted and has in fact often proven to be critical to enhance women’s ability to control land on their own.

Property rights to land should be defined in a way that makes them easy to identify and exchange at a cost that is low but commensurate to the value of the underlying land. With limited land values, low-cost mechanisms of identifying boundaries, such as physical marks (hedges, rivers, and trees) that are recognized by the community, will generally suffice while higher resource values will require more precise and costly means of demarcation. Similarly, where land is relatively plentiful and transactions are infrequent, low-cost mechanisms to record transactions, such as witnessing by community elders will be appropriate. More formal mechanisms will normally be adopted once transactions become more frequent and start to go across traditional boundaries of community and kinship.

The key advantage of formal, as compared to informal, property rights is that those holding formal rights can call on the power of the state to enforce their rights. For this to be feasible, the
institutions involved need to enjoy legal backing as well as social legitimacy, including accountability to and accessibility by the local population. Yet in many countries, especially in Africa, the gap between legality and legitimacy has been a major source of friction, something that is illustrated by the fact that in Africa overall more than 90% of land remain outside the existing legal system. Failure to give legal backing to land administration institutions that enjoy social legitimacy can undermine their ability to draw on anything more than informal mechanisms for enforcement. By contrast, institutions that are legal but do not enjoy social recognition may make little difference to the lives of ordinary people and have therefore often proven to be highly ineffective. Bringing legality and legitimacy together is a major challenge for policy that can not be solved in the abstract.

Whether it is more appropriate to give property rights to individuals or to a group will depend on the nature of the resource and on existing social arrangements. Group rights will be useful in situations characterized by economies of scale in resource management or if externalities exist that can be managed at the level of the group but not the individual. The advantage of group, as compared with individual, land rights will generally decrease in the course of development because of a number of factors. Technical progress reduces the risk of crop failure while at the same time increasing the potential payoff from investments; development of the nonfarm economy provides access to more predictable income streams and greater access to physical infrastructure reduces not only the risk, but also the cost, of publicly providing property rights. Thus one would expect to see a move toward more individualized forms of property rights with economic development. At the same time transformation of property toward increased individualization is not automatic. To the contrary, it will be affected by political and economic factors, and thus often coincide with major conflicts, upheavals, or power struggles.

Exogenous demographic changes, especially in the absence of economic development, can increase the scarcity and value of land. This can challenge traditional authorities and institutions who, earlier, had unquestioned authority over land allocation and resolution of disputes. Land conflicts often generate large, negative, external effects that can undermine the state’s authority and effectiveness by setting up a multiplicity of parallel institutions, as illustrated by the fact that unresolved land conflicts have in some cases escalated into an important contributor to state failure. To avoid this, the institutions managing land rights will need to be able to re-interpret traditions and social norms authoritatively and in a way that protects the poor and vulnerable from abuse of their rights by those with political power and economic resources.

2.3 Evidence on the Impact of Tenure Security

In many countries of the developing world, insecure land tenure prevents large parts of the population from realizing the economic and non-economic benefits such as greater investment incentives, transferability of land, and improved credit market access, more sustainable management of resources, and independence from discretionary interference by bureaucrats, that are normally associated with secure property rights to land. More than 50 percent of the peri-urban population in Africa and more than 40 percent in Asia live under informal tenure and therefore have highly insecure land rights. While no such figures are available for rural areas, rural land users are reported to make considerable investments in land as a way to increase tenure security (Platteau 2000, Otsuka 2001), illustrating that tenure security is highly valued.

A first benefit from increased tenure security that can easily be measured is the increase in land users’ investment incentives. Some studies have reported a doubling of investment, and values
for land with more secure tenure are reported to be between 30 and 80 percent above those for land where there is a higher probability of losing land (Feder 2002). Transferability of land will increase this effect and is important in situations where the scope for transacting land between less and more productive producers has increased, for example, because of increased development of the nonagricultural economy and rural-urban migration (Deininger et al. 2003). Higher tenure security will also reduce the time and resources individuals need to spend on securing their land rights, allowing them to invest these resources elsewhere.

Finally, where effective demand for credit exists, giving formal title to land can help producers gain access to credit and improve the functioning of financial markets. It has long been noted that the impact of such credit access may be differentiated by size of landholdings and that therefore attention to the anticipated equity effects will be required (Carter and Olinto 2003). In situations where the credit effect associated with title is unlikely to materialize in the near future, a more gradual and lower-cost approach to securing land rights and improving tenure security, with the possibility of upgrading once the need arises, will allow provision of most, if not all, the benefits from increased tenure security at lower cost.

Ensuring secure land tenure will be of particular relevance for groups who were traditionally discriminated against. Attention to women’s rights will be warranted where women are the main cultivators, where out-migration is high or control of productive activities is differentiated by gender, or where adult mortality and unclear inheritance regulations undermine women’s livelihood if their husband dies, as in Africa with HIV/AIDS (Deininger & Castagnini 2002).

2.4 Ways to Increase Tenure Security

The findings described in the previous section imply that governments have a role to play in providing secure tenure to owners and users of land. Even though formal title will increase tenure security in many situations, experience indicates that it is not always necessary, and often not a sufficient condition for optimum use of the land resource. The goal of providing tenure security for the long term, administered in a cost-effective way through institutions that combine legality with social legitimacy can be achieved in a variety of ways, depending on the situation.

In customary systems, legal recognition of existing rights and institutions, subject to minimum conditions, is often more effective than premature attempts at establishing formalized structures. Legally recognizing customary land rights subject to a determination of membership and the codification or establishment of internal rules and mechanisms for conflict resolution can greatly enhance occupants’ security. Demarcation of the boundaries of community land can remove the threat of encroachment by outsiders while drawing to well-defined procedures within the community to assign rights within the group. Conflicts historically often erupt first in conjunction with land transfers, especially with outsiders. Where such transfers occur and are socially accepted, the terms should be recorded in writing to avoid ambiguity that could subsequently lead to land-related conflict (Lavigne Delville et al. 2002).

Occupants on state land have often made considerable efforts to increase their level of security, in some cases through significant investments, but often remain vulnerable to eviction threats. Due to their limited land rights they often cannot make full use of the land they occupy. Giving them legal rights and regularizing their possession is therefore important, along with ensuring that appropriate means are in place for resolving any conflicts that may arise in the process. In many situations, political or other considerations may preclude the award of full private property rights. If existing institutions can credibly commit to lease contracts, giving users secure,
transferable, long-term lease rights will permit realization of most, if not all, the investment benefits associated with tenure security. In these cases, recognition of long-term peaceful occupation in good faith (adverse possession) and award of long-term land leases with provisions for automatic renewal will be the most desirable option. If the leases awarded by state institutions are not credible, full privatization may be required to give users sufficient security of tenure and the associated benefits. An indicator for limited credibility of leases is that financial institutions will not accept long-term leases as collateral, despite strong demand for credit.

Where individual title will be the option of choice, inefficiencies in the land administration institutions are responsible for demarcation of boundaries, registration and record keeping, adjudication of rights, and resolution of conflict can still preclude the realization of many of the benefits of secure tenure. If these institutions are not working well, are poorly coordinated, inefficient, or corrupt, transaction costs will increase thus reducing the level of transactions below what would be socially optimal and in many cases excluding the poorer completely. In the extreme, lack of clarity about who is responsible for specific areas or infighting between institutions has evolved into a major source of insecurity that undermined the value and authority of titles or certificates of land ownership that were distributed. In such situations, institutional reform, including improved coordination within the government and with the private sector, will be a precondition for the state’s ability to effectively deliver property rights.

Even though most countries mandate equality of men and women before the law in principle, the procedures used by land administration institutions often discriminate against women, explicitly or implicitly. To overcome this, a pro-active stance in favor of awarding land rights to women by governments, together with rigorous evaluation of innovative approaches aiming to accomplish greater gender equality in control of conjugal land on the ground would be warranted.

3. Land Transactions

Even though rural dwellers normally access land through a wide variety of different channels (de Janvry et al. 2001), land transactions can play an important role by allowing those who are productive but are either landless or own little land to access land. Land markets also facilitate the exchange of land as the off-farm economy develops and, where the conditions for doing so exist, provide a basis for the use of land as collateral in credit markets. Capital market imperfections and policy distortions have, in many instances, prevented land sales markets from contributing to increased levels of productivity or reduced poverty. This has led some observers to take a negative stance on any type of land market activity and to support government intervention in land markets, despite the considerable scope of rental markets and the evidence on limited effectiveness of government intervention in such markets.

3.1 Conceptual Foundations

To understand why in some cases land transactions may fail to contribute to improving productivity and equity, it is necessary to review the conceptual foundations that underlie the operation of land markets and how some of the market imperfections frequently encountered in rural areas of the developing world will have a differential impact on land rental and sales.

Imperfections in labor and credit markets, and the scope of economies of scale in production, will affect the way in which land markets function. A large literature has demonstrated that unmechanized agriculture generally does not exhibit economies of scale in production (Carter
1984, Benjamin 1995, Deininger and Feder 2001), even though economies of scale from marketing may in some cases be transferred back to the production stage. At the same time, the need to closely supervise hired laborers implies that owner-operated farms are more efficient than those that rely predominantly on large numbers of permanent wage workers. However, rationing and collateral will be needed to overcome imperfections that are inherent to credit markets. This favors farmers who own larger amounts of land, and in environments where access to credit is important, can lead to the appearance of a positive relationship between farm size and productivity, possibly counteracting the supervision cost advantage of small owner-operated farms. These factors will have different implications for rental as compared to sales markets.

Rental markets are characterized by low transaction costs and, in most cases where rent is paid on an annual basis, require only a limited initial capital outlay. This, together with participants’ ability to adjust contract terms so as to overcome market failures in capital and other markets, implies that rental is a more flexible and versatile means of transferring land from less to more productive producers than sales markets (Sadoulet et al. 2001). Renting is thus more likely to improve overall productivity and, in addition, can provide a stepping stone for tenants to accumulate experience and possibly make the transition to land ownership at a later stage.

The importance of tenure security for rental markets is illustrated by the fact that, where land tenure is perceived to be insecure, long term contracts are unlikely to be entered in. In fact, relatively insecure tenure has been claimed to be one of the key reasons for the virtual absence of long-term rental contracts in most countries of Latin America.

The literature has long pointed out that rental arrangements based on fixed rather than share rent are more likely to maximize productivity. Poor producers may, however, not be offered fixed rent contracts because of the risk of default. In these circumstances, sharecropping has emerged as a second-best solution. Whether or not sharecropping contracts are associated with sizeable inefficiencies and whether government action could lead to an improvement has been subject to considerable discussion. In practice, the efficiency losses associated with sharecropping contracts were found to be relatively small, and improving on them through government intervention has proven to be difficult, if not impossible. In view of the fact that the contracting parties have considerable flexibility to adjust contract parameters so as to avoid inefficiencies, for example by entering into long term relationships or through close supervision, the general view is that prohibition of sharecropping or other forms of rental contracts is unlikely to improve productivity (Otsuka et al. 1992). The welfare impact of rental contracts depends on the terms of the contract, which in turn are affected by the outside options open particularly to the weaker party. Efforts to expand the range of options available to tenants, e.g. via access to infrastructure and non-agricultural labor markets, are likely to have a more beneficial impact on land rental market outcomes and rural productivity than prohibition of certain options.

Transfer of land use rights through rental markets can go a long way towards improving productivity and welfare in rural economies. At the same time, the ability to transfer ownership of land will be required to use land as collateral in credit markets, and thus to provide the basis for low-cost operation of financial markets. This advantage comes at the cost that sales markets will be more affected than rental markets by imperfections in credit markets as well as by other distortions such as subsidies to agriculture.

Activity in land sales markets will depend on participants’ expectations regarding future price movements, creating a potential for asset price bubbles that are not justified by the underlying
productive value as well as a tendency towards speculative land acquisition by the wealthy in anticipation of major capital gains. Ample historical evidence also shows that in risky environments where small landowners do not have access to credit markets, distress sales of land by the poor can occur, with consequent negative equity and efficiency impacts over time. The impact of such distress sales is magnified by the fact that, where, as in most rural areas, land sales markets are thin, land prices can fluctuate considerably over time. High transaction costs associated with land sales, which are often further increased by government intervention, can result in the segmentation of such markets whereby certain strata only deal with each other or sales remain informal. All these factors imply that land acquisition by the poor through the land sales market will be difficult, and that as a consequence, the potential for productivity-enhancing land redistribution through sales markets is likely to be very limited.

3.2 Policy Implications

To realize the full benefits that can accrue from rental markets, governments need to ensure that tenure security is high enough to facilitate long-term contracts, and eliminate unjustified restrictions on the operation of such markets. Limitations on the operation of land sales markets may, in some cases, be justified on theoretical grounds. In practice, efforts to implement such restrictions have almost invariably weakened property rights with the result that often the unintended negative consequences of sales market restrictions have far outweighed the positive impacts they were intended to achieve. With few exceptions in the case of rapid structural change, there is little to recommend such restrictions as an effective tool for policy.

Short-term rental contracts will only provide limited incentives for users to undertake land-related investment. For longer-term contracts to be feasible, long duration of land rights and high levels of tenure security are critical and finding ways to ensure such tenure security is a key policy issue. Another constraint on land rental markets has been the imposition of rent ceilings or the award of implicit ownership rights to tenants. While effectively implemented tenancy regulation can benefit sitting tenants, it is costly and may thus not be an efficient way of transferring resources to the poor, even in the short term. In the longer term, such restrictions will reduce the supply of land available to the rental market and undermine investment, directly hurting the poor. Evidence from countries that have eliminated such restrictions suggests that doing so can improve access to land via rental markets and increase households’ participation in the non-farm labor market and, by reducing the discretionary power of bureaucrats, improve governance. A policy issue is thus how to sequence the elimination of such restrictions in a way that does not undermine equity and, in particular, protects sitting tenants.

Credit market imperfections will affect the functioning of sales markets and may lead to situations where government intervention could, in a hypothetical world of perfect implementation, lead to outcomes that would improve efficiency and equity. Implementing such interventions has, however, proved to be exceedingly difficult in practice. In the vast majority of cases restrictions on land sales markets have undermined tenure security and ended up making things worse than they were at the outset.

Restrictions on the transferability of land imposed by a central authority have generally limited credit access and often only pushed such transactions into informality. Except in situations of rapid economic transition, they are unlikely to be justified. Local communities are more likely to be able to appreciate the costs of limiting the transferability of land to outsiders or the benefits of eliminating them than central government bureaucrats. As long as such decisions are reached in a
transparent way, aware of costs and benefits, allowing communities to decide on whether to maintain or drop the restrictions on land transactions with outsiders that generally characterize customary systems of land tenure may be more effective than unenforceable central restrictions.

Land ownership ceilings have generally been ineffective as a means to facilitate the breakup of large farms, and instead have led to red tape, spurious subdivisions, and corruption (Appu 1997). Where they were low, they have apparently had a negative impact on investment and land owners’ ability to access credit, as in the Philippines. The only situation where they can be justified is where high enough land ceilings may help to limit the speculative acquisition of land, something that may be relevant in some CIS countries.

High levels of fragmentation, caused either by successive subdivision in the course of inheritance or by the desire to award at least one plot of a specific quality or use type to each producer in the process of land distribution, are often thought to lead to inefficiencies in agricultural production. The magnitude and importance of such inefficiencies increases as agricultural production becomes more mechanized. Dealing with fragmentation case by case based on individual initiative may incur high costs of negotiation, something that has provided the justification for governments to adopt programs to complement market mechanisms in an effort to facilitate more rapid consolidation of holdings at lower costs. Although high benefits from such programs are reported from Western Europe, the programs have been slow. Evidence from China highlights that, in environments where administrative capacity is limited, programs aiming at consolidation can run into great difficulties and fail to yield the expected benefits. Rigorous evaluation of the costs and benefits of different approaches to consolidation in Eastern Europe would be very desirable and will be required before wider adoption of such measures can be recommended.

4. Socially Desirable Land Use

Decentralized transactions based on secure land rights are likely to be more conducive to efficiency and equity while offering less scope for corruption and other undesirable side effects than administrative intervention, especially as the number of exchanges increases and the contractual details become more complex. At the same time, governments have a clear role to play in a number of respects. Government needs to help establish the legal and institutional framework within which land markets can function and create a policy environment that rewards transactions which will increase productivity and welfare rather than the opposite. Where the land distribution is highly unequal and large amounts of productive land are un- or underutilized, governments may find it necessary to deal with fundamental issues related to the distribution of asset endowments which markets will not be able to address. Governments have fiscal and regulatory instruments at their disposal to provide incentives for land use that maximizes social welfare, for example by helping to internalize effects that are external to individual land users. Their lack of administrative capacity notwithstanding, many developing countries rely disproportionately on a regulatory approach, often with the result of encouraging discretionary bureaucratic behavior. Awareness of the rationale for specific intervention, the different mechanisms and the most appropriate level for doing so can help to promote an approach that could produce more satisfactory outcomes, both in terms of compliance, and in terms of reducing the red tape private entrepreneurs have to deal with.

4.1 Land Reform
The fact that in many countries the current land ownership distribution has its origins in discriminatory policies rather than in market forces has long provided a justification for adopting policies aimed at land reform. The record of such policies is mixed. Land reforms have been very successful in Asia (Japan, Korea, Taiwan [China]) and positive impacts have been reported from some African countries such as Kenya and Zimbabwe in the early phases of their post-independence land reforms (Gunning and et al 2000, King 1977, Jeon and Kim 2000). At the same time, land reforms in Latin America failed to live up to their objectives and remain incomplete in many respects (de Janvry and Sadoulet 1989). A key reason for such limited impact was that reforms were often guided by short-term political objectives, and that an “agrarian” emphasis on full-time farming increased their cost while reducing the number of potential beneficiaries and the reforms’ impact on poverty.

Where extreme inequality in the land distribution and underutilization of vast tracts of productive land co-exist with deep rural poverty, a case for redistributive measures to increase access to land by the poor can be made, both politically and from an economic perspective. Even in such cases, a number of different instruments (ranging from expropriation with compensation to activation of rental markets) to affect the transfer of land will normally be appropriate and, to ensure productive use of the land, land reform needs to be combined with other programs at the government’s disposal. To ensure success, access to nonland assets and working capital and a conducive policy environment are essential (Deininger 1999). Those benefiting from land reform need to be able to access output markets as well as credit, the selection of beneficiaries needs to be transparent and participatory, and attention needs to be paid to the fiscal viability of land reform efforts.

Governments are more likely to meet these challenges if they use the mechanisms at their disposal in concert and with the objective of maximizing synergies between them. This also implies a need to integrate land reform into the broader context of economic and social policies aimed at development and poverty reduction, and to implement programs in a decentralized way with maximum participation by potential beneficiaries and at least some grant element. Given the continuing relevance of the issue, the often heated political debate surrounding it, and the lack of quantitative evidence on some more recent approaches, rigorous, open, and participatory evaluation of ongoing experiences is particularly important.

4.2 Land Conflict

Increasing scarcity of land in the presence of high rates of population growth, possibly along with a historical legacy of discrimination and highly unequal land access, implies that many historical and contemporaneous conflicts have their roots in struggles over land. This suggests a special role for land policy in many postconflict settings. An ability to deal with land claims by women and refugees, to use land as part of a strategy to provide economic opportunities to demobilized soldiers, and to resolve conflicts and overlapping claims to land in a legitimate manner, will greatly increase the scope for postconflict reconciliation and speedy recovery of the productive sector, a key for subsequent economic growth. Failure to put in place the necessary mechanisms can keep conflicts simmering, either openly or under the surface, with high social and economic costs especially because, as time goes by subsequent transactions will lead to a multiplication of the number of conflicts which can result in generalized insecurity of land tenure.
Although discussion of the issue in the literature is still limited, even comparatively “minor” conflict over land can significantly reduce productivity and, as it is likely to affect the poor disproportionately, equity (Deininger and Castagnini 2002). Such conflicts are likely in situations of rapid demographic or economic transition. In such cases existing institutions must have the authority and legitimacy to re-interpret rules and thereby prevent relatively minor conflicts from evolving into large-scale confrontation. Instead of opening up parallel channels for conflict resolution, something that has often contributed to increasing rather than reducing the incidence of land-related conflict, building on informal institutions that have social legitimacy and can deal with conflicts at low cost may be preferable.

4.3 Land Taxation

Local governments’ lack of adequate sources of own revenue may affect not only their financial viability, but also limit their responsiveness and accountability to the local population. Land taxes have long been identified as a source of own revenue for local governments that is associated with minimal distortions and at the same time can encourage more intensive land use. Even though the extent to which land taxes are used varies widely across countries, actual revenues are generally well below their potential. Reasons for this include deficient incentive structures and neglect of issues relating to assessment, tax administration, and tax rate setting, in addition to the political difficulty of having significant land taxes.

The high visibility of land taxes implies that establishing them may be difficult politically, especially in settings where landlords still wield considerable political power. In addition to democratic election of local governments and administrative support to the different aspects of tax collection, schemes to encourage fiscal responsibility and tax collection at the local level, for example a matching of taxes collected with central funds, can help to appropriately design and subsequently collect land taxes. This can have a significant impact on incentives for effective land use, local government revenues, the type and level of public services provided, and governance.

4.4 State Land Ownership and Land Use Regulations

In many developing countries, the state has proven not to have the capacity to bring land to its best use. Nonetheless, surprisingly large tracts of land continue to be under state ownership or management. In peri-urban areas, unoccupied land of high potential often lacks investment and is subject to bureaucratic red tape, nontransparent processes of allocation, and corruption. Experience demonstrates that privatization of such land could not only yield significant amounts of resources for local governments, but also increase investment and the effectiveness of land use. If public land has been occupied by poor people in good faith for a long time and significant improvements have been made, such rights should be recognized and formalized at a nominal cost to avoid negative equity outcomes. In cases where state land of high potential, especially in urban areas, is unoccupied, auctioning it off to the highest bidder will be the option of choice, especially if the proceeds can be used to compensate original land owners or to provide land and services to the poor at the urban fringes at much lower cost.

Governments should have the right of compulsory land acquisition, with compensation, for broader public benefit. At the same time, the way in which many developing country governments exercise this right, especially for urban expansion, undermines tenure security and, as often little or no compensation is paid, also has negative impacts on equity. In a number of cases anticipation of expropriation without compensation has led landowners to sell their land in
informal markets at low prices, thereby not only forcing them to part with a key assets at a fraction of its real value but also encouraging unplanned development and urban sprawl that will make subsequent provision of services by the government harder and more costly.

The disappointing experience with state management of land has led to a general preference for regulation in order to reduce undesirable externalities, to help maintain availability of public goods such as landscapes, historical values, or to facilitate more effective provision of services by the government. Where externalities from land use arise, limits on landowners’ discretion with respect to land use are justified. The questions that need to be answered in trying to deal with these are whether such measures should be imposed by central or local authorities and how specific interventions should be designed.

In general, zoning and other land use regulations should be established based on a clear assessment of the capacity needed to implement them, the costs of doing so, and the way in which both costs and benefits will be distributed. Failure to do so has often implied that centrally imposed regulations could either not be implemented with existing capacity, that doing so was associated with very high cost that were predominantly borne by the poor, or that they degenerated into a source of rent seeking. Too little thought has often been given to providing mechanisms that would allow local communities to deal with such externalities in a more decentralized and therefore less costly way. Gradual devolution of responsibility for land use regulation to local governments, if coupled with capacity building, could make a significant contribution to efforts towards more effective decentralization.

5. Implications for donors

Given that there has been considerable convergence among stakeholders on the substantive issues to be addressed by land policies, the issue is not so much whether or not to address land but rather relates to the “how” of doing so. We point to three areas that could help in achieving this goal, namely (i) development of tools that could help to address issues in the area of land that developing countries are regularly confronted with in an equitable, effective, and efficient manner; (ii) policy development, in particular the necessary analytical work to integrate land issues into PRSPs and national strategies to identify key areas where intervention is desirable, a priority, and has a high economic payoff; and (iii) rigorous monitoring and evaluation of in-country interventions as well as land policy indicators on a cross-country basis.

3.1 Tools and examples of equitably and effectively dealing with common situations

If knowledge on how to address land policy issues in practice, rather than ideological or other prejudice, is the most effective way is the key constraint to dealing with land-related issues, providing examples of how these constraints can be addressed or have been overcome in other situations will be an effective way for intervention. We illustrate a number of areas in which doing so will be important.

Pro-poor land administration: It is now well recognized that, in many settings where land is rather abundant, full title may neither be needed nor be the most cost-effective way to secure the land rights of small producers. While a number of countries have started experimenting in this area, and interesting experience is accumulating, there are as of yet few models that can be easily scaled up to deliver tenure security at sufficient speed and scale to be widely replicable. Developing such an instrument would require to evaluate more closely (i) legal and technical
tools to recognize occupancy rights by individuals and groups in a way that can be integrated with existing land administration systems, and that allows upgrading over time based on a transparent set of rules; (ii) participatory adjudication mechanisms (including conflict resolution and legal assistance) to convert existing documents (e.g. tax receipts) into legal evidence of ownership; (iii) low-cost ways of for keeping registry/land record information up to date; (iv) ways recognizing and documenting secondary rights especially these of women; (v) means to manage land records and ensure that they remain up to date following periods of systematic adjudication. This would in particular include attention to the land rights of women as well as the secondary rights of populations, such as nomads, who have traditionally been excluded.

**Increasing the contribution of land rental markets:** Even though land rental markets make a contribution to greater productivity in a large number of countries, their potential to stimulate structural change has thus far been limited by the fact that most of the contracts have been of a short term nature. Various countries are now taking measures to explore ways, ranging from adjustments in the legal and regulatory framework, to investment-grants for long-term renters, that aim to maximize the contribution of land rental markets to enhancing structural change within the agricultural sector while at the same time contributing to the emergence of a rural non-farm sector in the affected areas (as the Chinese example aptly demonstrates).

**Exploring new mechanisms for land reform:** Even though many land reforms in Latin America fell far short of expectations, the fact that in settings where land and the other economic opportunities associated with it are distributed in a very unequal fashion even healthy overall growth can lead to a widening of overall inequality has led to the re-emergence of the issue in a number of settings and within the rule of the law. All of these approaches rely on ways of dealing with the issue in a way that recognizes the importance of land as one among a number of different assets in households’ portfolio, the importance of market- and non-market mechanisms for accessing land, and the fact that land reform can be sustained in the long term only if the new land owners are able to make productive use of their new asset. In general, all the approaches used are much more decentralized and rely on incentive-compatible mechanisms to complement, rather than substitute for, the operation of land markets.

**Securing the possible equity and efficiency gains from past land reforms:** While the renewed interest in land reforms in some countries can help to deal with situations where the extent of such reform has been insufficient, there is a much greater number of situations where the reforms have left a legacy of legislation (e.g. land ceilings and tenancy regulation) that may actually reduce the scope for land access by poor people. At the same time, the rights given to reform beneficiaries have often remained incomplete (e.g. rewarding only usufruct rights with the land owner or the government retaining ownership rights), thus limiting investment incentives and the ability of the beneficiaries to access credit markets. The fact that, in a significant number of cases, tenants have started buying out former landlords or vice versa suggests that clarifying the ownership situation of such plots may lead to significant gain in efficiency. Programs to facilitate this in a more systematic manner could help to extend these benefits to those who are not able to muster the necessary resources on their own, and could thus combine the efficiency gains with significant equity benefits.

**Institutional reform of the registry:** Even in contexts where the ownership distribution of land is not an issue, institutional inefficiencies such as a large number of uncoordinated institutions imply high cost of registering land that preclude realization of the potential benefits from the land administration system. There are by now a number of best practice examples of institutional
reform that can be drawn on to learn lessons on this, including the use of technology as a means to an end rather than an end in itself.

Decentralization of land administration institutions: There is agreement that decentralization of land administration services can help to bring such services closer to the customers and thereby improve the ability of poor land owners to access services and thus reduce the transaction cost involved in dealing with the land administration system. At the same time, the rules to be followed in this process have to be clear to prevent that local agents use discretionary power to undermine the security of land rights as seems to have happened most clearly in the case of China or in the case of Indonesia and Sri Lanka where local actors are resisting changes in the land administration system that are advantageous for equity and efficiency. Documenting the challenges involved in decentralized delivery of land administration services and the benefits from doing so is a major challenge.

Conversion of land from rural to urban uses: With increasing urbanization, greater demand for such conversion is to be expected. However, the processes through which most countries deal with the issues are both highly inequitable and inefficient. As small land owners are often expropriated with little or no compensation, with adverse impact on their long-term welfare, they often resort to informal sales in anticipation of expropriation, which would allow them to at least reap some gains from their asset. This leads to an expansion of informality, and often provides opportunities for outsiders, in some cases including government officials, to appropriate large rents, with negative impacts on governance. To the extent that they often address symptoms rather than underlying causes, government regulations, although well-intentioned, often exacerbate the problem rather than helping to resolve it. At the same time, there are promising experiences that can be shared.

Access to rural land by outside investors: Despite evidence on the productive efficiency of small producers, policy makers in many developing countries think that, in order to attract the resources needed to develop the agricultural sector, it will be necessary to have a structure of land use based on large-scale production. This is often used as an excuse to give very generous land concessions at conditions very favorable to the awardees. Of course, there is a real issue on how to provide access to the links, in terms of marketing and processing, that are necessary for small producers to make the optimum use of their land and to choose a model for the organization of production that helps to maximize economic efficiency, especially in very land-abundant settings such as Mozambique or Cambodia. Models for that do exist but need to be developed further.

3.2 Integrating land into PRSPs and broader development strategies

Because of differences in the historical evolution and actual patterns of land use and ownership, the nature of land rights and institutions varies significantly across countries and even regions within the same country. This implies that, more than in other areas, land policy and institutional reform will (i) involve a series of actions that need to be based on careful analysis of local conditions rather than abstract principles; (ii) have to be sequenced in a way that combines objective need with political acceptability; and (iii) once the broad policy guidelines are established, will need financial support to establish needed infrastructure. This increases the duration and complexity of land policy and, because land is often closely linked to vested interests, generally makes land policy reform controversial politically, implying that the benefits from action need to be clearly laid out in the country’s strategy.
Even though many countries have started to address land issues, such awareness is by no means universal, resistance to reforms by vested interest remains an issue, and in some cases the scope as well as the policy dialogue supporting them remains narrow. Even though land touches upon issues of equity, investment climate, financial market development, governance, local government revenue, gender, conflict, environmental sustainability, and the productivity of the economy, analysis of the related policy issues is largely absent from documents such as the PRSP. Donors can help broaden the policy dialogue and provide the analytical basis to transform general awareness of the importance of land into specific policy recommendations based on empirical study. The fact that a number of multilateral institutions have recently developed land policy guidelines and that collaboration between them and with bilateral donors on the issue is a useful first step that should be followed up with additional action in this respect.

One powerful mechanism of complementing monitoring of localized experiences and also of raising awareness for land issues is to compare standard indicators for land policy development across different countries. In 2004, the World Bank’s “Doing Business” project has started to include a section on land registration in its annual survey of global business conditions that has not only pointed towards the huge differences in conditions across different countries but that has also proved to be extremely effective in drawing countries’ attention to shortcomings in their land administration system. Complementing this with indicators that are related to equity or gender equality would be a very worthwhile exercise that could eventually be linked to ongoing efforts of operationalizing the MDG of secure tenure.

3.3 Monitoring and evaluation

Given the political sensitivity of land issues, the long-term nature of any interventions, the fact that there are no patent recipes that can be transferred easily across countries, and in particular that land is normally perceived as a zero-some game, it is critical to carefully monitor and evaluate such interventions. Doing so will not only allow to assess the extent to which the desired benefits are actually achieved but also provide valuable inputs into the policy dialogue between relevant stakeholders whose support will be critical to ensure implementation, in addition to generating valuable lessons for others who may consider similar interventions. A well-designed can perform a number of useful function at different stages in the process of implementing land policy reform. The long-term nature of land-related interventions implies that, in some situations, rigorous evaluation may be useful not only ex post, i.e. after an intervention has been completed, but already at earlier stages so as to inform the policy dialogue. Ex ante, analysis of possible impacts can help to assess the benefits that would be expected from specific interventions, the way in which these will be distributed among social groups, existing demand for such interventions, and implications for cost recovery and institutional design. If accompanied by a broad and inclusive policy dialogue, this can help generate consensus and make it easier to implement reforms in a cost-effective fashion. During or in preparation of an ongoing intervention, an evaluation of pilots can help to make the case for expansion of a particular model or to establish benchmarks for performance that can be used to enhance accessibility and eliminate the scope for elite capture during full roll-out. This can also allow to learn from differences in performance across regions or other units of analysis, to adjust implementation to ground realities, and often (as in the case of land reform) to improve the institutional design based on the innovations developed by beneficiaries. Ex post, it will be possible to draw the broader lessons through rigorous quantitative assessment of costs and benefits incurred in a way that will benefit the design of interventions in other settings or the
integration of specific approaches into regular government programs (e.g. to ensure the sustainability of titles that have been given out under a systematic program).

Many of the above examples provide evidence that, despite popular perceptions to the contrary, land policy reform need not be a zero sum game, an argument which M&E can strengthen by drawing on other countries’ experience. A legal basis that is less ambiguous and thus reduces conflict, introduction of more efficient processes of land registration, a reduction in the transaction costs of exchanging land or providing services related to it are all measures that will benefit all those who access land. Even redistributive land reform that helps to make more productive use of land will leave society better off and therefore need not be a zero-sum game. Analysis can provide tangible evidence for such effects in a given country setting. Having a way to assess the impact during the implementation process based on demonstrated impact makes it easier to utilize political windows of opportunity even with a less than perfect design and make corrections along the way. The above implies that the methodology has to be rigorous but also transparent and well communicated and that, especially in situations where local conditions differ significantly from those incurred in other countries, incorporates the comparison of different design options as an integral element.

Land policy deals with structural issues that, in the longer term, will need to be addressed in order to ensure that the economic opportunities opened by other policies changes will benefit the broad majority of the poor. Measures to increase land tenure security, reduce the transaction of transferring land rights, and establish a regulatory framework to prevent undesirable externalities do, however, cut across traditional boundaries with institutional responsibilities dispersed among ministries, e.g. environment, land reform, urban planning, and lack of coordination and capacity. To overcome compartmentalization that may result from such arrangements, it will be essential to have a long term vision and to include land issues in the framework of a broadly backed development strategy. The extent to which goals are achieved should be monitored independently, and jointly with other government programs aimed at poverty reduction and economic development.

In addition to cutting across institutional boundaries, issues of land policy are complex, country-specific, of a long-term nature, and often controversial politically. This demands particular attention to the sequencing of reforms as well as their political economy. Even if land-related interventions will make society better off, they may be challenged by vested interests who derive considerable benefits from the status quo. To make policy reform feasible, an open and broadly based policy dialogue, carefully chosen and evaluated pilots, and sharing of experience across countries will be essential and can at the same time help build local capacity for policy formulation and implementation.
### Table 1: Impact of Land Ownership distribution in four Latin American Countries

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

a. Gross domestic product.
b. Purchasing power parity.

Figure 1: Initial land distribution & economic growth, selected countries

Average GDP growth, 1960-2000

Note: GDP = gross domestic product. The land distribution is measured using the Gini coefficient. The coefficient measures the degree of concentration (inequality) of a variable in a distribution of its elements. It compares the Lorenz curve of a ranked empirical distribution with the line of perfect equality. This line assumes that each element has the same contribution to the total summation of the values of a variable. The Gini coefficient ranges between 0, where there is no concentration (perfect equality) and 1, where there is total concentration (perfect inequality).

Source: Authors' calculations based on World Bank data, Deininger and Squire (1997).
References:


