

Land Administration Reform: Economic Rationale and Social Considerations

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ABSTRACT

Systems for the administration of land issues are a common public service at the local or national level in most states of the world. Such organizations have evolved or have been established at different times in different societies, but their emergence in such diverse situations suggests that they fulfil an essential public service function which is quite uniform. The economic and social rationale that underlies the evolution and emergence of formal land administration systems is essentially universal, once certain levels of economic, social and political complexity have been reached. The paper outlines the economic rationale for local administration systems, pertaining to (i) the incentives for investment brought about by enhanced tenure security, (ii) the more efficient operation of land markets due to reduced uncertainty regarding ownership, and (iii) the facilitation of improved credit markets through better collateral options. The paper then outlines potential risks of negative social outcomes related to unfair advantages that may be exploited by wealthier and better informed individuals. The paper concludes with a derivation of implications for public policy and the design of reforms in land administration systems.

Keywords and phrases: land admin reform, land markets, security

I. INTRODUCTION

Systems for the administration of land issues are a common public service at the local or national level in most states of the world. Such organizations have evolved or been established at different times in different societies, but their emergence in such diverse situations suggests that they fulfil an essential public service function which is quite uniform. Various combinations of public sector and private sector systems can be found in modalities of land administration around the globe. Yet, the economic and social rationale that underlies the evolution and emergence of formal land administration systems is essentially universal, once certain levels of economic, social and political complexity have been reached.

In this paper, the economic underpinnings of land administration systems are presented, followed by a discussion of social perspectives. The implications for public policy and for design of interventions are then considered.

II. ECONOMIC UNDERPINNINGS

The basic economic theory underlying the emergence of land administration systems (consisting of cadastral, registration and titling systems and the associated enforcement mechanisms) is by now well established. (Feder et al., 1988 Feder and Nishio, 1998). The theory is derived from the basic tenets of economic behavior, whereby economic agents attempt to optimize their utility given various information constraints and risk considerations. For the purpose of this discussion it is assumed that the society already has a system of land rights, although it may not be formal.

1. TENURE SECURITY:

Individuals or groups who utilize land in the pursuit of production or consumption activities (e.g., farming, residential) will eventually perceive a merit in undertaking investments to improve or protect the usefulness of the land resource which they operate. In some cases, an initial investment is needed to make the resource useful at all (e.g., the construction of a house or drainage of a swamp). Because investments imply the commitment of resources at present with the expectation of a stream of improved economic or consumption benefits over time, the degree of certainty associated with the stream of benefits is a key factor in determining the incentives of economic agents to undertake such investments.

Societies have recognized, since the dawn of history, the importance of reducing the uncertainty concerning the benefits accruing over time to those groups or individuals who undertake investments, hence, the emergence of customs, rules, and legislations specifying the allocation and retention of land rights. In most cases (but not all), land rights have been specified in a manner ensuring that incentives to undertake investments are generally enhanced, compared to a situation before such rules were specified. In other words, customs and laws have been designed to enhance tenure security to a reasonable level.

Land administration systems evolved in part as a tool for implementing rules, customs, and laws enacted to secure tenure. In societies where most economic activity takes place within relatively cohesive communities, formal land administration systems are not necessary, and indeed are not typically observed. This is because within communities, information is usually quite symmetric, transactions and acts of economic consequence are viewed as part of a multi-faceted range of interactions, and community institutions and rules are generally accepted as reflecting the general interest of the group. In such an environment, challenges to an individual's or a subgroup's property rights are less likely, as the dispute and tensions involved will impinge negatively on other interactions (both economic and social) which agents can anticipate to have to undertake in future periods. The registration and titling of land is not quite necessary in such situations, as members of the community generally recognize, and are familiar with, the specific rights that various members (or groups of members) have in different tracts of land.

The merits of more formal systems of land administration and titling become apparent when economic and social activities increasingly take place within larger groups which are less cohesive, or across a larger number of communities. In such situation, the authority of traditional community authorities diminishes, and the self-

discipline imposed by the multi-faceted transactions among economic agents plays a lesser role. The larger number of agents involved introduces another difficulty for informal systems as information becomes asymmetric when the interacting agents are geographically more dispersed. The rules and laws which govern property rights become more formal, and require more formal land administration systems to implement them. Such systems are more accurate, introduce uniformity across a large geographical phase, and enable authorities (whether at the local or national level) the protection of property rights. Thus security of tenure is enhanced, and incentives for investment are improved, allowing a greater productivity of the land resource. The realization of greater productivity is of benefit not only to the individuals or groups who possess the property rights, but to society as a whole (subject to some qualifications due to equity concerns which will be discussed in a subsequent section).

2. LAND MARKETS:

Considerations similar to those which were expounded above also imply that the need for better operation of land markets will require, at a certain stage of development, a more formal land administration system. Land markets, under ideal conditions, serve an important function in allocating land to its best uses and to better operators. Thus, at any given point in time, some land may be owned by individuals or groups who can make a less productive use of the land as compared to others, who due to better skills, knowledge, or possession of complementary resources can make a more productive use. A well functioning land market would transfer the land to better operators, who can bring about a higher productivity utilization. Such operators can offer a higher price (or a higher rent) than the land's value to the original owner. As long as the majority of land transactions are conducted among members of cohesive communities, where members are also inter-linked by network of social and other economic interactions, formal systems of land administration are not necessary to facilitate land market transactions. But with population growth and economic expansion, potential profitable transactions with individuals and groups from other communities emerge with increasing frequency. The extent to which such transactions can actually materialize is constrained by the asymmetric information which divides seller and buyer, when the latter is not a member of the seller's community. The buyer faces the risk of paying for land rights which are not quite within the seller's possession, or which are presently under a challenge unknown to the buyer. If such risks materialize, then the returns that the buyer can expect to derive from the land would be lower, and a loss may in fact be incurred. Such uncertainty would tend to deter transactions which would otherwise be profitable to both buyer and seller. The outcome in these circumstances is not as beneficial to society as it could be with less uncertainty to buyers.

Formal land administration systems serve to reduce the asymmetric information between buyers and sellers by providing a more reliable verification as to the extent of the seller's land rights, the presence of challenges and encumbrances, and the location of boundaries. While the changes in the nature of interactions in the land market (increased potential for cross-community transactions) which make formal systems useful seem similar to the changes that reduce tenure security at the individual or group level, it is quite possible that tenure security is reduced even before extensive potential land markets could emerge. This raises the prospect of

land administration system of varying degrees of sophistication and uniformity. Some systems can tackle certain aspects of tenure insecurity and asymmetric information, but not with equal effectiveness.

3. CREDIT MARKET LINKAGES:

The increased formalization of land administration systems provides also a solution to a problem of asymmetric information which afflicts credit markets. Lending is inherently risky in the sense that the lender transfers resources to the borrower with anticipation of repayment in the future, with interest. The repayment may not take place, may be partial, or may be delayed, thus reducing the profit to the lender. Another aspect of lending, which increases the risk to the lender, is the fact that typically borrowers will have a much better knowledge of the true potential for repayment, and may provide partial or even misleading information on this matter. To counter that lenders engage in collecting information about the borrowers and their activities, but the acquisition of information is costly. While informal lenders (money lenders, relatives, friends) do not face some of the risks and the costs discussed above, formal lenders (banks, businesses providing suppliers' credit) encounter risks which they try to mitigate by employing various devices. Credit rationing (Stiglitz and Weiss, 1981) is one such device. But a common device that evolved since ancient times to reduce lenders' risks is the use of collateral i.e., the conditional pledge of an asset that will be transferred to the lender if the loan is not repaid.

The function of a collateral in lending is discussed extensively by Binswanger et al. (1985), Barro (1976), Benjamin (1978), and Plout (1985). Land is a very suitable collateral asset as it cannot be removed (unlike a piece of equipment or livestock), and its economic potential (and hence value) cannot be easily tampered with. However, the usefulness of land as a collateral requires that the lender be assured that the borrower is indeed the possessor of rights of transfer. Such information would not be necessary for credit transactions among equally informed agents, such as members of a cohesive community. But with the emergence of formal credit systems, better systems of assurance regarding the validity of land collateral pledges are increasingly needed, in particular for longer-term credit and for large loans. Land administration systems provide assurance of possession of rights to transfer, and record conditional claims (liens) by lenders, so as to avoid multiple pledging of the same land collateral. In fact, it is likely that certain types of lending operations would not develop much in the absence of a reliable land administration system to implement the recording of collateral (e.g., home mortgages).

The deepening and expansion of credit markets is an important requirement of economic development, hence the development of effective land administration systems is also an important contributor to development.

III. SOCIAL PERSPECTIVES OF LAND ADMINISTRATION SYSTEMS

The forgoing discussion would lead readers to conclude that the introduction of formal land administration systems is inherently a beneficial endeavor, once the underlying economic circumstances evolved in a certain manner. However, societies need to be (and often are) concerned with potentially negative consequences

to sub-groups within society which may come about with the introduction of more formal systems.

Changes in land administration systems are typically introduced at the time when rights over land are defined more formally. Both these changes require that individuals and groups acquire information regarding the procedures and implications of the modified system so as to protect the rights they had hitherto, or to claim new rights that they are entitled to. But information is not equally available, and typically the wealthier and more powerful members and classes of society have better access to information. Furthermore, if the acquisition of information, or the implementation of the procedures required to make use of the modified land administration system require significant up-front expenditures (e.g., surveying costs, notary fees), the poorer and weaker segments of society will have difficulty in protecting their rights or claiming rights. The discrepancies in access to information and to services can give rise to the occurrence of land grabbing, whereby the powerful and better connected lay claim, under the modified system, to land over which poorer individuals and groups have some or all rights under an earlier, less formal system. For example, areas which were hitherto been considered available for common use, will be claimed and registered by few individuals who will then foreclose these lands and bar the rest of the community from uses which they were entitled to in the past (e.g., grazing). The incidence of such inequitable outcomes has been observed frequently enough throughout history to warrant attention and protective measures, as will be discussed in a subsequent section.

A related phenomenon, somewhat less nefarious yet inequitable in its consequences, is the concentration of land acquired by wealthy or well-connected individuals from poorer and less informed individuals and group. Superficially these could be viewed as transactions that transfer land to more efficient individuals, but the efficiency gain may not actually be there (the larger operators may even be less efficient), as the main reason enabling the purchaser to offer an attractive price is the information regarding the procedures required to register or title the land, (or even information that titling is feasible in the area). Registration and titling increases the value of the land (Feder et al., 1988). If information were equally available, the possessors of informal rights would demand a price closer to that which would prevail upon registration and titling, and hence the terms of transactions will be more equitable.

A third way in which potentially undesirable social and economic outcomes follow the establishment of formal land administration systems is to be expected if credit markets are artificially distorted in favor of larger and wealthier operators (e.g., when interest rate subsidies are available to such groups). Such operators may actually be less efficient than smaller operators. But with the differential favorable access to subsidized credit, they take advantage of the more efficient land market brought about by formal land administration systems to acquire land from smaller operators and increase the size of their (less efficient) enterprise. One could construe similar outcomes as associated with distorted access to tax breaks and to input markets.

IV. IMPLICATIONS FOR POLICY

Generally, all of the potential inequitable outcomes described in the preceding section can be handled by introducing appropriate policies and design features in land administration systems. The ameliorative measures need obviously to focus on the aspects that cause differential access: information and cost. But some more basic reforms in the underlying socio-economic structures may be needed to diminish the risk of socially undesirable excessive concentration of land and unequal advantage taken by already privileged groups.

A key factor in limiting inequitable outcomes is providing ample information to all those who are directly or potentially affected by modified land administration systems. In fact, because the poor have less linkages to sources of formal information, special information campaigns need to be designed which focus on poorer groups. Such campaigns need to take in account constraints related to literacy, access to different forms of mass media, and general distrust of formal systems. The information should be provided essentially at no cost, to ensure the widest coverage.

The transaction cost associated with accessing a formal land administration system should be low. Thus, survey costs, titling fees and charges for registration of modifications should be kept low. To reduce the actual cost of access to the land administration system suggests that the design and technology involved need to be considered from this perspective at the outset. Furthermore, procedures need to be as simple as possible, because complexity adds to the transaction cost, both in terms of cash required and the time that needs to be devoted by potential users. Complexity also adds to the information costs, as it makes it more difficult for less educated (and presumably poorer) groups to comprehend what they need to do in order to protect or claim land rights. Differential pricing, whereby access to the land administration is free or cheap for the poor, is often feasible. The subsidization of access for poor stakeholders is not likely to be associated with the distorted and wasteful economic decisions which typically accompany the subsidization of goods and economic services.

Two examples of elements of land administration systems which strive to address the considerations outlined above are the so called "systematic" approach to adjudication and titling adopted by a number of South-East Asian governments (the Thailand example is best known), and the simplified titling system originally introduced by Hernando De Soto and associates in Peru in parallel to the cumbersome and costly traditional land registration system. The systematic approach to titling (to be distinguished from the "on-demand sporadic" system) encompasses an information campaign that precedes the arrival of a surveying and adjudication team in a community. The adjudication team conducts its work in a participatory manner for the whole community in a given location within a specified short time period, thus giving equal opportunity to all concerned. The economies of scale entailed in this approach also reduce the costs. The parallel land registry introduced in Peru circumvents the complicated and time-consuming procedures of the traditional system, and in particular eliminates the requirements for public notary inputs (an expensive ingredient given the limited number and cartelized nature of this group in Peru). This provides for a speedier and cheaper land registration process,

benefiting mainly the millions of poor inhabitants of formerly squatter settlements in Peru's larger cities.

Potential inequities emanating from distortions in other (not land-related) arenas of the economy such as in the credit system or the tax code, need to be tackled in a broader context. Yet progress on these fronts is sometimes necessary before or simultaneously with land administration reform, to avoid the undesirable outcomes discussed in the preceding section. The inter-linkages of these aspects tend often to be overlooked by the more specialized experts and administrators that deal with land administration systems. An ex-ante multidisciplinary analysis of the implications of reforms in land administration is thus a necessary element of a reform program. Sensitivity to socio-economic consequences of reforms in land administration has been growing over the past three decades, and many governments and international development agencies have included such analyses as a preliminary step before designing changes in land administration systems.

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