Evaluating land administration systems: A comparative method with an application to Peru and Honduras

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ABSTRACT

This article develops a comparative methodology for the evaluation of national land administration systems. We propose a set of quantitative and qualitative indicators with benchmarks for each one of them that signal possible venues to improve the administration's structure and budgetary/management arrangements, in order to bring about the following goals: (1) to contribute to public sector financing through taxes; (2) to encourage the productive and sustainable use of land, and (3) to facilitate access to land for low-income citizens. This methodology was applied to the cases of Honduras and Peru in order to refine our draft evaluation indicators, while evaluating the systems of both countries. Here we present the final refined indicators and benchmarks, and the conclusions from both case studies.

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Introduction

There are many different definitions of what constitutes a land administration system. According to the United Nations (UN-ECE, 1996), the land administration system encompasses the "processes of recording and disseminating information about the ownership, value and use of land and its associated resources". Dale and McLaughlin (1999) add land use regulation and land tax collection to this definition. Therefore, these authors distinguish between the (broader) land administration system, and the land information system. In our case, we even extend this broader definition so as to also include land market regulations and land-related subsidies.[1] We find it convenient to use this extended definition because it is the entire system of public information, intervention, and regulation tools that enables the state to have an impact on land tenure, land use, and land value.

Also, we have to consider that the academic literature uses the term "land" with two different meanings. One takes the term "land" as it is commonly known, i.e. as any part of the earth's surface not covered by a body of water. Another uses it referring also to the buildings attached to it. In this article, we will use this second meaning because public administration laws, tools, policies and agencies normally target buildings and land as a whole. In this sense, the term "land" is similar to what is called real property.

Once we have defined what we mean by a land administration system, we need to address the question of why it is important to evaluate it. In this sense, we can certainly think of land as a crucial economic and social asset. For example, there is broad consensus on that access to shelter is a fundamental civil right, and one cannot conceive firms or investments without land. However, the need for a formal land administration system is subject to debate. There are, in fact, numerous studies that conclude that the formalization of land property rights does not have a significant economic or social impact in less developed regions that have developed sufficiently secure and transferable informal property rights (Migot-Adholla et al., 1993; Pinckney and Kimuyu, 1994; Katz, 2000; Otsuka and Quisumbing, 2001).

The results from these studies can be explained using some basic insights from economic theories that try to explain the fundamental mechanisms of economic development. In a less developed economy, where productivity and specialization are low and most exchanges take place on a personal basis, the need for a formal administration system is not demanding. However, in order to enhance specialization and productivity, and therefore economic development, it is necessary that market size grows based on impersonal exchanges. This, in turn, requires a formal public system that defines, regulates and enforces property rights so as to reduce transaction costs (North, 1990).

Having clarified the need for a public apparatus that administers the rights and obligations of an asset as fundamental to society as land is, it makes sense to consider whether this public apparatus is functional or not and whether it is fulfilling the objectives for which it is designed.

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[1] Land subsidies can be interpreted as a negative tax on land.

To date, and to our knowledge, there have been two important international efforts to cross-country evaluate land administration systems. In 2002, the World Bank and the United States Agency for International Development (USAID) financed a comparative study that included 17 developing countries and six developed countries (see Burns et al., 2006). This was the first international survey to elaborate indicators on several features of land information systems that could be used to make comparisons. However, the study had three important shortcomings. First, it was based on the limited UN-ECE definition of the land administration system and hence it does not include indicators related to key land intervention and regulation tools that a government has. Secondly, the study used a set of qualitative indicators with open questions lacking a benchmark framework. As a consequence, the qualitative section was basically descriptive, and could not be used to derive policy conclusions regarding effectiveness or efficiency of the systems. Finally, while the study included a set of quantitative indicators supported by an explicit benchmark framework, the data required for these indicators was difficult to collect, and was not available in most of the developing countries included in the sample.

The other study was jointly developed by the Melbourne University, the United Nations General Secretariat, and the International Federation of Surveyors (see Rajabifard et al., 2007 and http://www.cadastraltemplate.org). This research project used both quantitative and qualitative indicators to compare the national administration systems of 42 countries. Same as above, the project was restricted to the analysis of the information system, and it did not include a benchmark framework that would allow obtaining policy implications from the qualitative and quantitative indicators. However, in this case most quantitative data from developing countries was available, resulting in a very useful descriptive study of land information systems from 42 countries belonging to the five continents.

Finally, it is also worth mentioning the creation in 2004 of The Inter-American Alliance for Real Property Rights, financed by the USAID. The Alliance seeks, among other goals, to evaluate the land administration systems of the Latin American and Caribbean countries. In so doing, it has developed an evaluation tool with many indicators, the so called Alliance Blueprint, but there are no final results publicly available yet. In any case, the Blueprint has the same problems as the ones already mentioned (see http://www.landnetamericas.org).

Here we propose a methodology that is based on the experience derived from the abovementioned studies, and which seeks to address all these shortcomings. Therefore, we evaluate both the information tools – the Registry and Cadastre – and the intervention tools – taxes, subsidies and regulations –, using a broad set of quantitative and qualitative indicators which can be easily collected in developing countries, and compare each one of them with an explicit benchmark.

The principal goal of this article will then be to provide an evaluation methodology that enables the identification of aspects from national land administration systems subject to improvement according to international standards. Similar to the well known World Bank Doing Business database, the most important novelty is the use and justification of benchmarks for each indicator. Some of them can certainly be subject to criticism, but we believe that making them explicit is a necessary step in order to be able to derive policy implications from this type of studies. We believe that a debate on the benchmarks could move forward the applied research agenda on land administration issues and this article aims to be a step in this direction.

The methodology is then applied to Honduras and Peru in order to obtain specific policy conclusions for these countries, but also in order to test and refine the methodology itself. Due to space constraints, we only include the main conclusions and recommendations from these case studies.[2] Since the most important bottlenecks found were similar for both countries, we find it plausible that other developing countries face similar problems, and therefore we have included some final practical recommendations to improve land administration systems in developing countries.

A methodological approach to evaluate national land administration systems

In order to evaluate a system we must start defining its main *goals* or expected *results*, as well as the tools available to reach them. In our case, we present three results and four tools. The three results are as follows: (1) to contribute to public sector financing; (2) to encourage the productive and sustainable use of land, and (3) to facilitate low-income groups' access to land (including shelter). The available tools are: taxes, subsidies, regulations and the land information system. The first three tools are related to government intervention while the Registry and the Cadastre are the public information tools that enable the entire system to function properly (see Box 1).

Box 1: Land administration system: objectives and tools		
Objectives or expected outcomes	Tools	
	Intervention	Information
Government financing	Taxes	Registry
Productive and sustainable land use	Subsidies	Cadastre
Low-income citizen's access to land	Regulations	

The proposed methodology is divided into two separate parts. The first one is descriptive, explaining the basic properties and history of the land administration system, in order to provide the framework that will enable us to carry on the second part, which lays out the evaluation indicators and benchmarks.

First part: the description of the land administration system

Box 2 contains the index that we have used to carry on the description of the land administration system for each country. The first section summarizes how the government functions, paying special attention to the degree of government and fiscal decentralization. The goal is to explain the institutional framework in which the land administration system is inserted. The first chapters describe the government system at national and subnational levels, indicating principal responsibilities and available budgets for each level. The chapter on government financing breaks down the public budget, differentiating at least between own revenues, transfers from other government levels, and from public debt.

The second section describes land use, land access and land markets. The chapter on land use describes the evolution of agricultural, livestock, forestry, water, artificial, and any other soil potential use areas. The principal feature that we will try to analyze is whether there has been an intensification process of land use (towards more intensive crops or towards artificialization) and, if data on the optimum potential uses of the land is available, the quantification of land under and over used.

In the chapter on access to land and land markets, both urban and rural, we look for data on the proportions of each tenancy

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[2] Readers interested on the case studies can contact the corresponding author to receive full versions, written in Spanish.