



Briefing on the Agribusiness Enabling Environment



AgCLIR LESSONS FROM THE FIELD: REGISTERING PROPERTY



The business of agriculture occupies a critical space in most economies. Distinct and special among industries, agriculture is the dominant source of employment for a large share, even a majority, of the population in developing nations.

Accordingly, governments treat the regulation of agriculture and food differently than any other sector. Unlike the output of other sectors, many agricultural products are basic necessities: agriculture provides the food, fiber, fuel, and construction materials necessary to sustain human existence. Governments everywhere assume responsibility for assuring that the distribution of agricultural commodities is great enough and equitable enough to provide a reasonable quality of life for its citizens.

Agriculture and Agribusiness: Registering Property is a briefer that mirrors the analytical framework used by the World Bank Group's *Doing Business* series (www.doingbusiness.com) and adopted by USAID's *Business Climate Legal and Institutional Reform Project* (www.bizclir.com). Divided into four sections (Legal Framework, Implementing Institutions, Supporting Institutions, and Social Dynamics), this briefer highlights the specific issues that must be addressed in local legal, regulatory, and institutional environments if agribusiness is to be economically productive, contribute to environmental sustainability, and assure a safe and reliable food supply.

REGISTERING PROPERTY: KEY CONCEPTS

Three kinds of property are important in the agribusiness sector:

- real property (land or buildings);
- movable property (personal property such as equipment, inventory, or motor vehicles); and
- intangible property (a future harvest or intellectual property rights such as those embodied in a new seed variety).

Real property. Land is the real property asset most closely associated with crop and animal production. Stable ownership of land provides the rights to exclusively use and enjoy the property and the right to transfer all or part of such ownership rights through sale, gift, exchange, or inheritance. According to most analysts, clear property rights to farm land is the most essential factor in providing the incentives necessary for owners to invest their labor, capital, and management expertise in amounts adequate to maintain and improve its productivity.

For off-farm agribusinesses, buildings are critical real property. These include warehouses, processing plants, and offices. In principle, such real property ownership involves the issuance of a title, the registration of the title in some independently managed operation, and perhaps insurance against fraud or abuse. Registration of land in rural areas may be slightly more complex than in urban areas, but the advent of the global positioning system (GPS) has greatly simplified the surveying work involved.

In much of the developing world, however, and especially in Africa, agricultural producers do not own the land they cultivate or use for grazing or acquiring other agricultural

products (shea nuts or wood for charcoal, for example). They are, rather, granted tenure rights with differing levels of security guaranteed by either the community through traditional means or the state through various approaches to usufruct, leasing, or certification. While such tenure rights are often felt to provide adequate security, their non-heritability (especially by women) and the fact that they cannot serve as collateral for credit do not let them serve as a fundamental building block for social stability and economic activity.

Further, in some countries, multiple systems of land ownership persist. Some farmers and animal producers are able to secure ownership rights through modern titling systems while other farmers occupy land marginalized under insecure tenure conditions. Herding of animals on communal pastures can be threatened by encroachment of farmers for purposes of annual cropping. When such multiple tenure systems can no longer be sustained (as in Zimbabwe and Darfur), conflicts can result, with devastating impacts on the prospects for economic growth.

Natural resources held as community property—forests, lakes, ponds, grazing lands, and wildlife areas—serve as an additional real property asset for many participants in the agribusiness sector. Even where major conflicts of interest do not arise, equity of access and tenure security are common issues. Such community property is often legally set aside for communal use and management, but encroachment and destructive use reduce the value of the asset to both users and the nation as a whole. Stronger legal frameworks for sustainable use of such community property are needed if these are to continue to contribute economically.

Movable property (e.g., equipment, inventory, motor vehicles) can also serve as collateral for credit and the basis for secured transactions. Secured transactions pertain to the laws, procedures, and institutions designed to facilitate commerce by promoting transparency, predictability, and simplicity in creating and enforcing security interests in assets. For many participants in the off-farm agricultural marketing chain, movable property in the form of inventory is the most important asset. Warehouse space and transport services can be rented or leased as necessary, but unless credit can be secured against movable property, many agribusinesses specializing in trade can find themselves in a cash crunch. In some developing countries, however, banking law does not permit the use of movable property as collateral and does not provide a legal basis for its use as the basis for secured transactions. Traders have thus developed a reputation for exploiting producers by taking products against a promise of later payment—forcing producers to bear greater risks.

Donors have supported efforts to increase the use of stored crops (inventory) as the basis for borrowing. The history of community cereal banks (often associated with cooperatives or village associations) is fairly checkered, however, and they are not used widely as originally envisioned as the basis for managing commercial risks. More recently, attempts to develop more formal commercially oriented systems of warehouse receipts as the basis for expanding agricultural credit and offering farmers mechanisms for smoothing income and mitigating price risks have met with some success. A further extension of the warehouse receipt concept has been the development of commodity exchanges in which futures contracts or options to buy/sell can be negotiated. For most developing countries, these are still concepts that need considerable investment of time, money, and effort to become reality.

Intangible property (e.g., future harvests, intellectual property) is thought to be under-valued as an asset held by the agricultural sector in many developing countries. The pledging of crops in the field in exchange for cash advances is a well-known mechanism that can help farm enterprises cope with the seasonality of the agricultural cycle. When it works well, everyone wins—the buyer secures a planned volume of supply and the seller smoothes out her income stream. Often, however, this process is associated with horrific tales of exploitation by the creditor—implicit double-digit interest rates, under-valuing of the production due to alleged poor quality, and other abuses. There are also, of course, stories of producers accepting advance payments (or credit advanced in the form of production inputs such as seed, fertilizer, and pesticides) against set purchase prices through verbal contracts and then renegeing on these contracts at harvest time.

Over the millennia, farmers and herders have domesticated wild crops and animals, gradually developing their capacity to produce greater volumes of the products that humans want by carefully selecting specimens with the desirable characteristics and breeding them for greater productivity. Similarly, over the millennia, rural people have conserved many wild plants and animals as they have identified them as having beneficial uses as food, medicine, and fiber. The intellectual effort involved in both breeding and biodiversity conservation and management is now recognized as having an enormous value for current and future generations. The issue of rewarding past efforts has been a major point of negotiation in international treaties and conventions and remains largely unresolved.

Local populations, for example, are beginning to recognize their right to the economic benefits that can accrue when extracts from wild plants they have carefully conserved are used in a major cancer-treating drug. Pharmaceutical companies, on the other hand, see that their intellectual contributions of identifying and manufacturing (and often synthesizing) the extract are the critical ones and are less willing to share the economic benefit in ways perceived as fair.

Similarly, agricultural seed companies have grown increasingly skilled at extracting genetic information from the crops and animals (phenotypes) that were carefully selected by farmers and herders over the years. When new varieties are developed on the basis of this information, how should the original developers of this intellectual property or their heirs be fairly recompensed?

LEGAL FRAMEWORK

A considerable body of research exists that details the benefits of clear property rights. The foundation upon which agricultural enterprises grow is, of course, the real property that is used to grow crops or raise livestock. Clear legal recognition of movable and intangible rights is particularly important for access to finance and certain government-related services.

Field experience also suggests a handful of other lessons learned to allow a country to reach its agricultural potential. These lessons include:

- a legal and regulatory framework fosters active and non-discriminatory markets for assets used in agriculture;
- no statutory limits are applicable to the amount of agricultural land that can be exploited, or the uses for which the land may be placed;

- no statutory restrictions are applicable with regard to irrigated land that limit its accumulation or availability of use;
- preferential land allocation based on tribe, ethnicity, gender, political affiliation, or national origin is discouraged; and
- a clearly defined correlation exists between land rights and the water rights that accompany it.

Real property. The first legal barrier to agribusinesses' land ownership in many developing countries is generally constitutional: private ownership of land is prohibited for policy or ideological reasons. As a practical matter, however, even where the state legally owns all land, some legal means are generally established for users to gain access to land for productive purposes, with varying degrees of tenure security. The transformation of law mandating use rights and informal tenure into law providing ownership rights is, for many, a first step toward improving incentives to invest in and manage land with more economic efficiency.¹

Laws regarding land titling and certification, registration, insurance, and procedures for transfer through sale or lease form the foundation of a workable real property regime. A cadastral system of land registration and mapping provides the necessary informational infrastructure for a land administration system that provides security of tenure and supports lands markets, taxation, and the delivery of land-related services that underpin sustainable development.²

Not everyone defines the legal and regulatory requirements associated with the establishment and maintenance of cadastres in the same way. However, it is obvious that in countries just beginning the process, some prioritization of more economically critical areas is necessary, and the choice of technology used should reflect local capabilities and information needs. Ian Williamson of the University of Melbourne is more specific as to the need for adaptation of cadastral systems; he succinctly summarized his views in a keynote address at a seminar on Modern Cadastres and Cadastral Innovation sponsored by Commission 7, International Federation of Surveyors, at the Technical University of Delft, The Netherlands, May 16, 1995:

Important lessons learnt from investigating land issues and establishing and maintaining cadastral systems over the past decade, include:

- *efficiency ultimately requires formal recognition of individual land rights and the establishment of cadastral systems, where population densities cause land to be scarce, as farming becomes more commercialized, as farming technologies improve, and due to the emergence of land markets.*
- *the design of cadastral systems must be appropriate, systematic, sustainable and sensitive to the culture, needs, resources and level of development of individual countries. They should be designed for the needs of the land holders, not a central government bureaucracy. They should also be decentralised to the local or village level. They should be designed as processes associated with adjudicating, transferring and sub-dividing land rights, not stand alone entities such as land registries or cadastral surveying and*

mapping systems. Unfortunately many donors and policy makers have preconceived notions of the ideal cadastral system which sometimes results in the establishment of inappropriate systems.

- *the necessity and importance of an appropriate base map for the cadastral system which can also be used for many other purposes. It is essential that the base map is made freely available. However the cadastral system must be designed with the land registers having equal importance to the cadastral map. Simply the registers and the map can be considered "two sides of a coin" and as such cannot be separated and should be treated as one system.*
- *cadastral systems must be kept up-to-date otherwise there is little justification for their establishment.*
- *the appropriate use of new and enabling technologies to support the establishment and maintenance of cadastral systems, noting that while the use of computers, for example, may speed up some activities, such as the creation and maintenance of cadastral indexes, it may also slow down others, such as the creation of a base map if there is a desire to have the map fully computerized as part of a geographic information system, unless the country has an established information technology environment within government, has well trained professional staff to operate the systems and has access to local hardware and software maintenance, and system expertise. It must be remembered that effective and efficient land markets based on modern cadastral systems do not require computerized cadastral maps. The justification for computerized cadastral maps comes from the multi-purpose use of those maps.*
- *cadastral systems should be designed with a national focus, but should be sufficiently flexible to accommodate both urban and rural requirements.*
- *cadastral systems are not ends in themselves and are a tool designed to support a variety of purposes which usually includes the operation of efficient and effective land markets.³*

Clarifying property rights to communally held properties is similar to that of determining and allocating rights to individually held real property—but those ownership rights are more complex to manage over time. The challenge with communally held real property is in establishing collective governance mechanisms that foster sustainable use, provide sanctions for violations of use rights, and ensure transparency and equity for all community members. Expansion of crop cultivation into forest or grazing lands often pits individual landowners (or individual claimants) against the collective rights of communities seeking to use the property in a less-intensive way.

Secured transactions and movable property. Laws and regulations pertaining to movable property of importance to agribusinesses are most unique when it comes to inventory. Many developing countries have incomplete systems of grades and standards for agricultural products. Without these, there is no basis for operating markets or secured transactions in which

¹ See, e.g., Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, (New York: Random House, 2003). In this book, de Soto argues that property not endowed with formal ownership rights is "dead capital."

² See the presentation by Jude Wallace of the University of Melbourne at <http://www.sabt.gov.ir/Attachment/GnrDocuments/App/990625000003190.pdf>.

³ See <http://eprints.unimelb.edu.au/archive/00001306/01/Appropcadsystems.htm>.

personal inspection is not involved. Commodity exchanges and warehouse receipt systems offer great promise for increased efficiency in the trade of agricultural products but can only work when grades and standards are known and accepted.

Intangible property. The practice of selling or buying intangible property such as “future harvests” is reasonably well established in some developing countries. Buyers offer a set price, often combined with a cash advance against that price, in an effort to acquire inventories at harvest. Buyers risk the inability of the producer to deliver the anticipated volumes at the expected times; sellers absorb the price risk. Even where the practice is established in developing countries, however, typically there are few mechanisms for registering such purchases/sales, making contract enforcement problematic, especially for buyers.

Contract farming, in which the legal force of the contract binding producer and buyer is clearer and more enforceable, has been growing as the development of vertically integrated agricultural value-chains has grown. The growth of supermarkets in the developing world, and the expansion of international value-chains for perishable commodities (e.g., raspberries, cucumbers), have raised attention to contract farming. Strengthening of the legal and regulatory frameworks is likely to strengthen buyers' rights first, but attention should as well be paid to treatment of sellers (i.e., agricultural producers and processors).

The development of commodity futures markets, in which the financial risks of both buyers and sellers are more broadly shared with a wider range of actors, has been suggested as a way of further stabilizing agricultural markets. Few developing countries currently operate commodity exchanges capable of handling futures contracts for locally or regionally traded commodities, but there is potential for expansion to futures in existing exchanges for commodities such as coffee, cocoa, palm oil, etc.

The understanding of valuation, use, and management of intellectual property as an intangible property of critical importance to agriculture and agribusiness is evolving rapidly around the world. Still, international agreements such as the International Treaty on Plant Genetic Resources and the Convention on Biodiversity have not been universally accepted. The development of transgenic seeds for some crops (generally called GMOs or genetically modified organisms) has elicited highly negative reactions from many European non-governmental organizations, as well as some European governments, on the grounds that they involve unfair exploitation of small farmers by multinational agribusinesses and that they are potentially harmful to the environment. Most developing country governments have begun to develop laws and regulations regarding ownership of the genetic intellectual property in their agricultural sectors but few have complete and/or enforceable regimes in place.⁴

IMPLEMENTING INSTITUTIONS

Real property. Most developing countries set land policy at a national level but allocate the task of land registration and administration to local institutions. Where national policy does not permit private ownership of real property, lower levels of

government and the stakeholding public tend to set up informal—not legally sanctioned—systems. Some of these systems actually seem to work (for example, people construct buildings, undertake agricultural production, and connect to available infrastructure). However, as Hernando de Soto concluded, they are likely to result in less than optimal development, economically, politically, as well as socially.⁵ It is then a small wonder that significant attention has been paid to reforming real property systems, including through agrarian reform.

Palmer and McLaughlin noted, however, that “as countries foster market-oriented democracies, the institutions of property are being reappraised... the state's role is not to mandate ownership but to assist in managing the social record of ownership.”⁶ According to their analysis, government institutions need to be responsible for certain aspects, but private sector services are likely to be necessary as well. The institutional infrastructure encompasses those services that:

- define a person's property rights and enable that person to defend his/her claims against others or to re-allocate those claims through inheritance. Offices of land administration, land cadastre, or property or land registries are likely to be complemented by judicial organizations that can resolve ownership disputes and perhaps by private companies that make a business of registering titles to assure owners of their rights. Survey firms help to establish boundaries with technical accuracy and provide the basic maps.
- preserve and make available accurate public records on ownership and boundaries—again, a land or property registry.
- increase the certainty that investments in the property are recognized—the tax authorities perform evaluations, not only increasing government's revenue but defining new values for the property.
- establish systems to ensure that land goes to its highest and best use—by providing laws regarding sale, lease, and other transfer mechanisms.
- provide effective services and utility to support development of land and private investment in ministries of public works and ministries of transport.
- plan, manage, and enforce environmental and other regulations important to all citizens—i.e., ministry of environment or environmental protection agency.⁷

Unfortunately, developing country institutional track records in transforming real property systems is uneven. Traditional systems often maintain their validity at the local level, in spite of legislative or administrative changes from the top down. Not only does this limit the effectiveness of real property law innovations in fostering greater investment (and perhaps greater equity, often a great motivator for legal reform), but it also reduces the security of tenure among those in the traditional system and raises the potential for corruption.

Movable property. Institutions for implementing legal and regulatory changes with regard to movable property in the agribusiness sector include:

- vehicle registries;

4 Gregory Jaffe, *Regulating Transgenic Crops: A Comparative Analysis of Different Regulatory Processes* (Spring, 2004).

5 Hernando de Soto, *supra* note 16.

6 David Palmer and John McLaughlin, *Integrated Land Administration: Institutional and Technical Challenges* (Centre for Property Studies, University of New Brunswick 1996), available at <http://www.gisqatar.org.qa/conf97/links/f2.html>

7 *Id.*

- judicial agencies capable of enforcing surrender of movable property in settlement of disputes (e.g., capability to repossess and dispose of movable property); and
- public and private organizations involved in establishing and managing warehouse receipt systems or commodity exchanges.

Intangible property. National institutions charged with establishing and regulating intangible property include government institutions that provide market oversight (ministries of commerce or trade, ministries of justice, and/or commercial courts) as well as institutions that establish intellectual property rights, such as patent offices. Privately owned and managed commodity exchanges are generally under the jurisdiction of a public organization charged with oversight on securities.

SUPPORTING INSTITUTIONS

International organizations such as the World Bank and other donors have provided significant amounts of technology (e.g., surveying systems, registry systems) and technical assistance to launch reforms of real property law. Nonetheless, many agrarian reform programs have foundered before realizing the projected benefits. The support of local civil society and grassroots political interests has been shown to be a critical element of the reform package.

Supporting institutions critical to the success of a successful property system include, notaries, courts, non-governmental organizations (NGOs), banks, leasing companies, insurers, providers of credit information, local universities, and the legal profession responsible for dealing with property disputes and registration.

Banks and other financial institutions might be expected to be strong supporters of legal and regulatory reforms regarding property, as property is the underpinning of the concept of collateral in lending. However, support from financial institutions for reform of laws on real property has been weak in many developing countries. It is hypothesized that banks remain reluctant to lend to agriculture on the basis of real estate collateral, partly in recognition that confiscation of real property for non-repayment of loans, for example, could be a socially unacceptable action.

A real estate sector capable of brokering sales and leases of real property is critical to building efficient markets in real property once the legal framework is clear. Title search firms, mortgage insurance companies, and notaries or other agents who verify transactions are all key elements of this real estate system.

Support for movable title registration systems may include vehicle dealers, vehicle inspection services, commodity warehousing systems, and other transport and storage firms.

Institutions established to enhance and protect intellectual property rights relevant to agriculture range from the World Intellectual Property Organization (WIPO) to national institutions tasked with patenting innovations, protecting the rights of musicians or providing plant variety protection to local institutions claiming ownership of knowledge associated with preservation of wild plants and animals or with selective breeding of domesticated plants and animals over the centuries. Specialized organizations, such as the African Agricultural Technology Fund, have been established to help national researchers gain access to intellectual property that would otherwise not be available to developing countries.

SOCIAL DYNAMICS

Real property. In addition to the increasing recognition of the importance of property rights to economic growth, population growth in the developing world is perhaps the single most important factor driving revision of laws and regulations governing land ownership and tenure. In rural areas, farms have been divided among children for generations, resulting in farm sizes too small to succeed as viable commercial enterprises. Populations have encroached onto communally held lands, reducing the sustainability of all agricultural enterprises as watersheds have been destroyed, wind erosion has increased, and firewood for energy is no longer readily available. Additionally, rural workers have migrated to urban areas and have established themselves in unhealthy and unsafe shanty towns, drawing further attention to real property issues.

Widows seeking fairer rules on real property titling have become a vocal in Africa. Traditional systems establishing access to land have provided satisfactory tenure to most male farmers, but women farmers still find themselves in highly vulnerable positions when their marital relationship ends by death or divorce. Even though many developing countries are moving toward certification or titling systems (some of which simply provide greater security of tenure rather than the ability to buy or sell real property), gender equity is often not assured.

Countries with scarce rural land are under greater pressure to reconsider rules regarding the transfer of real property. Some permit land consolidation that would increase the economic viability of farm units, but few seem to be responding to the pressure in a proactive way. A number of reasons are apparent: fear that land sellers will become unemployed urban dwellers; fear that the politically powerful will acquire real property rights in rural areas but not use them fully for productive purposes; and concern that a potential upset to precarious ethnic balances will result.

Intellectual property. Private companies interested in introducing new technologies for agricultural production and processing have identified laws and regulations regarding intellectual property as critical. Research and development organizations are searching for greater clarity on laws and regulations regarding intellectual property. Groups such as the African Agricultural Technology Fund (AATF) are helping to articulate and facilitate resolution of this demand.

A number of NGOs, both local and international, are on the other side of the agricultural intellectual property rights issue. Many seek to stop the use of transgenic varieties of seeds (GMOs) for cultural, political, or environmental reasons. There are active advocacy movements regarding “farmers’ rights to save seed” that effectively counter the interests of multinational seed companies to sell improved seeds (e.g., hybrids, transgenics) that must be purchased anew each year because they cannot be propagated by the farmer.

Other NGOs seek to protect agricultural resources from external bio-prospectors, arguing that local traditional knowledge and the act of conserving wild plants have clearly established intellectual property rights that should be recognized and rewarded.

Still others seek to preserve local agribusinesses against the exploitation of external, large-scale investors (such as those in

mining and timber harvesting). National governments seeking greater export and tax revenues often grant concessions without sufficient recognition of local users' rights (whether individual or communal). This may amount to the exercise of "eminent domain," regarding both real property and intangible property (e.g., the intellectual property value of preserved plants and animals).

About AgCLIR:

AgCLIR is a unique agribusiness enabling environment diagnostic that provides a comprehensive method to diagnose the root causes and inefficiencies of an underperforming agricultural sector. AgCLIR is one of a series of sector specific diagnostics produced under the USAID BizCLIR project. BizCLIR, or the Business Climate Legal & Institutional Reform Project, is a multi-year initiative of the United States Agency for International Development (USAID) with the goal of improving the business enabling environments through sound analysis and strategic interventions. This series, Briefings on the Agribusiness Enabling Environment is intended to shed light on some of the most important, and least understood, components at the intersection of agribusiness and commercial law and institutional reform. All issues are available at www.bizclir.com.

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