

# Indigenous Communities' Property Rights: Initiative in Bolivia

Marcelo VISCARRA, BOLIVIA

**Key Words:** Pro-Poor Tenure System

## SUMMARY

Uncertainty about land ownership and occupancy rights not only complicates development planning for governments. It can also increase vulnerability, especially of poor and marginalized groups. Moreover, it undermines incentives to take actions that are essential to improving incomes and conserving scarce resources over the longer term. This is the case in Bolivia, where approximately, 62 percent of the total population is considered to be indigenous (comunarios). The comunario Quechua and Aymara ethnic groups make up the great majority of the population in the northern parts of the Altiplano region. At least half of that population lives in rural communities, away from asphalted roads or basic services such as supply of running water and electric power. Despite many attempts through different administrations to provide individuals with property titles, most of those communities still lack a formal property registry system. The reasons are varied and include the very large number of land disputes, not only between individuals within a community, but between communities which in some cases are the cause of continuous, and at times hostile conflict, handed down from one generation to the next.

In an effort to improve this situation, a Bolivian government agency was created in 1996—the Instituto Nacional de Reforma Agraria—INRA (National Institute of Agrarian Reform), whose aim is to identify all rural properties in Bolivia and settle disputes. In less than a 10-year period, INRA was able to successfully cover 37 percent of the land in Bolivia. However, that number has not risen since 2007. This is due to various issues including the number of seemingly irreconcilable disputes which has overwhelmed the process. This situation has been identified in a number of private and public sector studies as one of the causes for the slow economic development in the poorest sections of Bolivian population—in many cases women and children are the ones that work, while the men stay home to guard their undocumented property.

This paper describes how OpenTitle™ from Thomson Reuters, Inc. a Pro-Poor tenure system for mapping and documenting land rights, is currently being used by a Non-Governmental Organization (NGO) who for more than 20 years has been working in land tenure issues with Altiplanic comunario communities. OpenTitle is used to collect spatial and ownership information, identify and document disputes and settle them with the individuals and/or communities directly involved—in real-time while in front of computer screens, and with the participation of community members who facilitate and warrant the accuracy of settled disputes.

# Indigenous Communities' Property Rights: Initiative in Bolivia

Marcelo VISCARRA, BOLIVIA

## 1. INTRODUCTION

Bolivia is a large country defined by extremes in geography, land distribution and the socioeconomic status of its population. While a third of the country is semiarid and half of its land covered with forests, this mountainous, land-locked country's productive agricultural land covers less than 10 percent of its territory.

Income disparity in Bolivia is the highest in South America, with 65 percent of the population classified as poor. Despite the large numbers of people migrating to urban areas, Bolivia's population, and especially its population of poor, 90 percent of which are comunarios, remains significantly rural—83 percent of them living below the poverty line. This gap in income is exacerbated by inequality in land distribution and access to productive resources, serving to perpetuate the deep divisions between the wealthy and the poor.

The Bolivian government recognizes that the clear, secure, and negotiable rights to land and resources are an essential foundation and a key component of economic growth. When land registration, property titling and other governance systems protect these rights, individuals, communities, and other entities can make investments in labor and capital because they are more confident of future returns. Yet, while provisions in the 2009 Constitution and the land-titling and registration undertaken by the Instituto Nacional de Reforma Agraria—INRA (National Institute of Agrarian Reform), reflect attention to these goals, many challenges remain. Progress in providing land access and tenure security for the country's comunarios remains very slow because the present process for titling of property is cumbersome. In addition, in many areas the process has been halted due to serious, and what seem to be insurmountable conflicts over land rights involving individuals and comunario communities. Bolivians generally consider land rights to be insecure. In rural areas drivers of tenure insecurity include a history of inequitable and exclusionary relationships with regards to access and rights to land, multiple unresolved claims over the same land and violent conflict over land and territorial rights. To add to this unstable situation, Bolivia's land registration process requires multiple procedures to review and clarify the land ownership and physical properties and confirm, authenticate, amend or annul existing property title. Those are some of the reason it takes a long period of time to register land and why it is costly—as much as 5 percent of the property's value.

To help solve this problem, Mercy Corps, a global humanitarian agency, is helping to implement a pilot program through Fundación TIERRA (Taller de Iniciativas en Estudios Rurales y Reforma Agraria), a Bolivian non-governmental organization (NGO) to capture the information needed to issue property titles to residents. OpenTitle software from Thomson Reuters is being used by Fundación TIERRA as they work with local communities to record property details. The system has been configured to use Fundación TIERRA's methodology as the model for data collecting, collating of images and data, and producing land and property rights maps that will define land boundaries, settle land disputes and provide property titling in Bolivia's Altiplano.

## 2. BOLIVIA'S LAND ADMINISTRATIONS CHALLENGES

Land tenure security is a critical issue and widely recognized as a potential catalyst for economic growth in Bolivia. INRA—Instituto Nacional de Reforma Agraria—is responsible for verification, administration and management of land information. Yet, after a very good start in 1996—they have produced land titles to 37 percent of untitled property—INRA has been at an almost standstill since 2008, with an additional production of land titles of less than one percent. There are multiple issues contributing to this situation. First, the 37 percent of titled land is mostly in the eastern part of Bolivia. This area consists of large tracts of land and richer agricultural areas which have been easier to title due to clearer available documentation. Unlike the eastern part of the country, much of the undocumented land is in the mountainous Altiplano region. There, for generations, comunario communities have occupied and worked the land near the capital of La Paz. However, they've had limited or no legal means to prove the land they work or possess is rightfully theirs. The comunarios' property holdings have traditionally been passed down to each succeeding generation based, in most cases, on oral history which serves to describe the characteristics of the holdings—*“from this tree, south to the river, the land belongs to us.”* But even if they are aware of the correct steps to take, there are numerous other obstacles they must overcome in order to legally register their property. First is the relatively high cost of initiating the registration process. It includes official fees, plus the cost incurred by traveling to-and-from government offices. Compounding this situation is the relative complexity and the need for citizens to contract private sector professionals, such as lawyers and surveyors to complete the process. Finally, there is a lack of tools and equipment needed to effectively accomplish the task.

## 3. DEFINING THE TECHNOLOGICAL CHALLENGE

Because of the lack of land administration systems in Bolivia, a simple-to-use, effective and ready to implement technology solution for effectively providing property titles was a high priority for Mercy Corps and Fundación TIERRA. They agreed that whatever system they would use it would have to meet certain criteria, including being:

- User Friendly.** Able to manage all sorts of land and registry data, the system had to be easy to operate by individuals with only a basic knowledge of computer systems and no previous knowledge of land administration systems.
- Mobile.** Because of the rural nature of the properties involved, it was important that the system be mobile, allowing staff to collect available field document data.
- Spatially Capable.** Any registry is of limited value without a spatial component. Therefore, the proposed system would have to be able to tie property records to a specific location in order to better discover overlaps and areas of possible dispute.
- Adaptable.** Because of the special land titling needs of the region, the system needed to be extremely flexible and highly adaptable to provide a wide range of applications expected to be used during the pilot program.
- Fast to Deploy.** Because of the urgency to solve the ongoing problem, the system needed to be rapidly configured and implemented to meet the demands on the ground.
- Tested & Verified.** A custom built solution although attractive, was not financially nor

timeline feasible. However, the chosen system still needed to support business features while capable of easily and quickly accessing updates and technical support. —**Cost Effective.** While lower cost and superior functionality are usually not associated with each other, the system had to provide both in order to be a viable option.

#### **4. THE SOLUTION**

Mercy Corps chose OpenTitle because it met the technological challenge. Presently, Fundación TIERRA is using the system in the recently launched pilot program. After being awarded the contract, the OpenTitle staff responded to the need to start the pilot program as quickly as possible. In six months the equipment and software was installed and customized to the specific configuration needed by Fundación TIERRA. During the months of July and August of this year, Bolivian based OpenTitle staff conducted train-the-trainer sessions with Mercy Corps staff, who in turn trained Fundación TIERRA. And, while according to Matthew Alexander, program director and Bolivia country representative for Mercy Corps, “there have been some challenges,” he praised OpenTitle’s Bolivia support team for their knowledge and dedication and their “commitment to do what was needed to get the project successfully launched.” Presently, OpenTitle is helping in the process of providing property titles which will give landowners the ability to pass the land to their children, sell it, or use it as collateral. According to Alexander this will create economic opportunities, stability, and a better quality of life for all Bolivians.

#### **5. OPENTITLE—AN OVERVIEW**

OpenTitle supports robust business features and has been designed to be highly adaptable providing a wider range of uniform application features and benefits than most custom-built systems—at a much more affordable cost of acquisition and ownership. OpenTitle is easier and faster to deploy, helping to reduce the time and project management cycle from installation to operation.

##### **5.1 Based on The Social Tenure Domain Model (STDM)**

OpenTitle is an all-inclusive and affordable desktop solution that uses the STDM international standard data model documenting land rights inventories. It integrates document management with mapping capabilities to provide an easy-to-use registry and cadastre tool. It also offers robust features to easily record property rights for any community—with minimal training and investment.

##### **5.2 Mapping Tools**

OpenTitle provides geographic information systems and mapping tools to digitize features on an aerial or satellite image background and link displayed spatial information on maps to document owner/occupier evidence and their rights. OpenTitle combines Esri’s ArcGIS® mapping components with an integrated and robust document management system for the capture and maintenance of land and property information, such as documents and videos. It delivers essential mapping tools, including the ability to digitize new features and link spatial units to documentary evidence on the owner/occupier and their rights. OpenTitle’s document storage

system (which combines secure file and relational database storage based on SQL Server Express) includes version control to track changes in land rights over time.

### **5.3 Modular Design**

OpenTitle's modular design with key functional areas, such as indexing and searching, scanning and image manipulation, mapping, importing and manipulating spatial data, allows individuals to quickly learn details of the entire system or only tasks that apply to them. Tasks such as geo-referencing a sketch or site plan of a property, importing GIS data and linking property records to a point or parcel, usually require only two to three days of training. While the training for mapping system is a bit more complex, most individuals are able to become familiar with OpenTitle in about a week, including the time spent during on-the-job training.

### **5.4 Spatially Enabled**

Spatially enabled, OpenTitle serves as more than just a database for digital information. It also allows the records in the system to be associated with geographic data, in the form of points and parcels. These can be collected with GPS devices, formal surveys, or merely identifying locations on satellite imagery. A Mapping tab enables users to digitize new spatial units and link these to natural/non-natural persons or rights. Users can also use geo-referencing tools to reference raster data as a backdrop against which spatial units can be captured.

## **6. OPENTITLE FEATURES & BENEFITS**

As in Bolivia, OpenTitle is being used in many parts of the world to help governments and non-government agencies streamline the use of technology for documenting and mapping land rights. It is the system's functionality and easy-to-use features which makes OpenTitle unique.

### **6.1 Data Collection**

OpenTitle is providing Fundación TIERRA an easy to use data collection system that allows them to easily digitize land records by making information capture simpler. Available information includes cadastral surveys, maps, scanned documents or images, aerial imagery, photos, videos, and GPS boundary readings. Fundación TIERRA's staff is able to geo-reference and input coordinate information so that all collected property information is correctly mapped.

### **6.2 Editing**

With a full suite of editing features which include adjustments of brightness, contrast and tone, plus a "despeckle" or "deskew" as well as standard rotation features, OpenTitle helps to greatly improve the quality of images and documents that Fundación TIERRA is generating.

### **6.3 Land Mapping**

One of the key features and benefits of OpenTitle is land-mapping. It provides Fundación TIERRA, with multi-user cadastral and background data management, with job and version management. The workflows allow for time-saving and easy editing, map services for editing,

and web services for 3rd party application integration.

#### **6.4 Property Package**

By grouping information related to property, peoples, and rights into a single property package, OpenTitle significantly expedites the registration or certification of land.

#### **6.5 Reports**

OpenTitle's reports feature offers many tools to generate, view and print reports. This helps increase efficiency by allowing Fundación TIERRA to analyze reports on staff productivity and time spent on processing and collecting information.

#### **6.6 Administration**

Fundación TIERRA uses OpenTitle's administration feature to create and manage users, permissions, settings, dictionaries and reports. Using this feature, system administrators can determine who can access the system and what information they may access.

### **7. CONCLUSION**

OpenTitle is helping Mercy Corps and its partner, Fundación TIERRA, to expedite the process of providing accurate property titles to Bolivia's comunarios. In doing so, it is hoped that a new era of equitable land ownership rights and economic development is being ushered in the Altiplano. After the end of the pilot program, Mercy Corps plans to review all aspects of the program and develop a scaling strategy to expand the program to other areas throughout Bolivia and to neighboring Colombia.

## REFERENCES

Chumacero R, J.P., (2011, July), *Territorios Indígena Originario Campesinos entre La Loma Santa y La Pachamama*. Fundación TIERRA

Central Intelligence Agency, (2012, October), *The World Factbook: Bolivia*. Retrieved October 22, 2011, from: <https://www.cia.gov/library/publications/the-world-factbook/geos/bl.html>

The Heritage Foundation (2012) *2012 Index of Economic Freedom* Retrieved October 23, 2012, from: <http://www.heritage.org/index/country/bolivia>

USAID Land Tenure, (2011, January), *Bolivia Property Rights and Resource Governance Profile*, <http://usaidlandtenure.net/bolivia>

World Bank, (2011, April), *Land Tenure Policy* [http://siteresources.worldbank.org/INTSDNET/Resources/Land\\_Tenure\\_Results\\_Note\\_2011.pdf](http://siteresources.worldbank.org/INTSDNET/Resources/Land_Tenure_Results_Note_2011.pdf)

Pichel, F. (April, 2012), *Implementing an Affordable, Rapid Deployment Land Records Management Solution for Liberia*, Annual World Bank Conference on Land and Poverty

## CONTACTS

Marcelo Viscarra  
Director of Market Development  
Tax & Accounting - Government  
Thomson Reuters, Inc.  
Edificio Torre Norte, Piso 4, Oficina F  
Cochabamba, Bolivia  
Phone: +1 301 587 7531 ext 223  
+591 4 448 5159 ext 13  
[marcelo.viscarra@thomsonreuters.com](mailto:marcelo.viscarra@thomsonreuters.com)  
[www.thomsonreuters.com](http://www.thomsonreuters.com)