



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
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LAND ADMINISTRATION IN ECUADOR; CURRENT SITUATION AND OPPORTUNITIES WITH ADOPTION OF FIT-FOR-PURPOSE LAND ADMINISTRATION APPROACH

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Abstract

The aim of this paper is to explore current land administration situation in Ecuador and identify opportunities for fit-for-purpose (FFP) land administration approach that could improve the land administration functions for the country and its citizens. In this paper, initially literature about land administration, guidelines to improve and assessment frameworks for land administration are presented. The FFP land administration basic concept with three frameworks which are: spatial, legal and institutional frameworks are reviewed. In addition, a fieldwork for collecting data about the status of land administration in Ecuador is performed. Results from the fieldwork in Ecuador are observed in reflection of the basic concept of FFP land administration. Here, positive developments and areas for improvement are identified. Finally recommendations based on the outcome of this paper are presented.

Key Words: approach, Ecuador, fit-for-purpose, FFP, land administration

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Introduction

The importance of the land and its administration, is recognized and embedded in the United Nations (UN) Sustainable Development Goals (SDG). The SDGs were agreed by the world leaders during the HABITAT III Conference, at the end of 2016 in Quito, Ecuador. Eleven out of seventeen SDGs have relation with the land component, which gives clear guidelines for sustainable future. Land administration is considered as a critical success factor in economic growth, food security, natural conservation and poverty reduction. Even though security of land rights is now at the top of the global agenda, there is a “security of tenure gap” between countries that have efficient and effective land administration systems in place and those that do not. Observing globally, 75 percent of the world’s population lacks access to formal and documented land rights. Most of the world population lives in developing countries, among these there are many poor and vulnerable. Poor and vulnerable get even more affected during the events of natural disasters, like earthquakes, hurricanes, tsunamis, volcano eruptions, etc.

Consequently, an approach that meets the requirements like economic, fast and sustainable method of land mapping, registration of land rights and titling is needed which can address all land tenure types including informal tenure effectively as well as aid in the recovery and reconstruction processes after disasters. Fit-for-purpose (FFP) land administration is emerging as acceptable and affordable concept.

Ecuador is an emerging economy, currently employing several systems of land administration, using the conventional method by covering many elements of land survey, registration and provision of land administration products and services. Land administration function is under the municipalities, responsible for cadastre, especially for the urban cadastre, since 1940. Ecuador has an approximate coverage of 70-75% of the urban cadastre and 25% of the rural cadastre. If it continues in the same pace and speed it will take many years to finish its full land administration coverage. Performing like this, it is not fully supporting the economic growth, food security, natural conservation, reconstruction after disasters and poverty reduction in Ecuador. Therefore, a FFP land administration approach could be considered to accelerate the land administration coverage by focusing on the core benefits for its stakeholders.

This paper presents activities, with aim to introduce and inform the land administration audience in Ecuador about the FFP land administration approach. Initially literature about land administration, guidelines to improve and assessment frameworks for land administration are presented. The FFP land administration basic concept with three frameworks which are: spatial, legal and institutional were reviewed. Each of the three frameworks contains four principles of FFP land administration. In addition, a fieldwork for collecting data about the status of land administration in Ecuador is performed. The results from the fieldwork are presented in this paper in the structure of FFP land administration approach for both rural and urban cadastre. Having this said the FFP land administration approach is presented in Ecuador and in the preliminary discussions several possible principles of the FFP land administration are identified that could have possible inclusion in the FFP land administration spatial and institutional component.



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Land administration

In the literature and publications about land and land administration, several definitions about land administration can be found. According to (UN/ECE, 1996) land administration is defined as ‘ the process of determining, recording and dissemination information about tenure, value and use of land when implementing land management policies’. Another definition is: land administration is the process of regulating land and property development and the use and conservation of the land; the gathering of revenues from the land through sales, leasing, and taxation; and resolving of conflicts concerning ownership and use of land (Dale & McLaughlin, 1999). Later in 2010 Williamson, Enemark, Wallace, and Rajabifard (2010), provided the following definition: the processes run by government using public- or private-sector agencies related to land tenure, land value, land use, and land development.

In order to increase understanding of land administration worldwide a ‘Continuum of land rights’ is designed, which provides a range of possible forms of land rights, where the continuum has varying sets of rights, degrees of security and enforcement. The informal land rights though have a social legitimacy are not recorded officially in many countries of Asia and Africa. Some countries have customary or communal tenure which may not be recorded by the formal systems and laws, but still they prevail and the transaction in them continues informally (UN-Habitat, 2008). A continuum of land rights offers a practical recordation of land rights that allows people to get onto this tenure rights ladder. It provides an incremental approach of upgrading land rights over time in response to available technology and resources (Zevenbergen et al., 2012). Continuum of land rights is presented in the Figure no. 1 as follows:

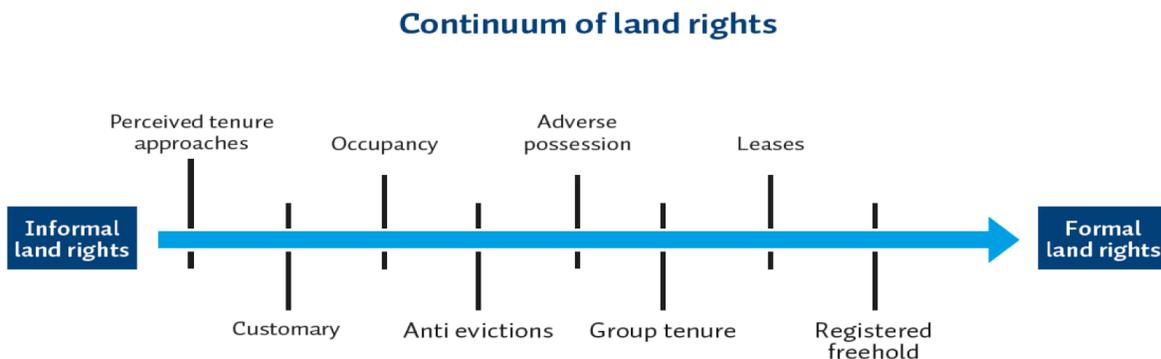


Figure no. 1: Continuum of land rights (UN-Habitat, 2008)

Additionally, international organisations working on the land topic developed voluntary guidelines and assessment frameworks. The Voluntary Guidelines seek to improve governance of tenure of land, fisheries and forests. They seek to do so for the benefit of all, with an emphasis on vulnerable and marginalized people, food security, poverty eradication, sustainable livelihoods, social stability, housing security, rural development, environmental protection (e.g. earthquakes, hurricanes, tsunamis, volcano eruptions) and sustainable social and economic development (FAO-VGGT, 2012). “The Land Governance Assessment Framework (LGAF) is a diagnostic instrument to assess the status of land governance at the country or sub-national level using a highly participatory and country-driven process that draws systematically on local



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expertise and existing evidence. LGAF was created under the leadership of the World Bank in collaboration with other multilateral and bilateral development agencies and experts from private consulting firms, research institutions, and civil society organizations” (The World Bank, 2015).

In the previous decade we were witnessing many developments in the land administration literature and publications. There were several books (Williamson et al., 2010; Zevenbergen, de Vries, & Bennett, 2016), international guidelines, evaluation and assessment frameworks presented and published. Organizations like the World Bank, the Food and Agricultural Organization (FAO) of UN, UN-Habitat, United Nations Initiative on Global Geospatial Information Management (UN-GGIM), the International Federation of Surveyors (FIG) and other land-related professional bodies have a key role. From these publications and initiatives we can derive that a conventional land administration system has several limitations. It is based on a western style over centuries that focus on fixed boundaries survey, accurate mapping and surveying; it has complex bureaucratic procedures and involves advanced technologies, which does not perform well with the developing countries needs and services. Conventional land administration does not provide proof of ownership to those who are informal land right holders. Since majority of the population of developing countries lack tenure security, they are unable to prove their land ownership and land rights when it is required to execute resettlement and reconstruction services after natural disasters.

The concept of fit-for-purpose land administration

Therefore, an approach that meets the requirements like economic, fast and sustainable method of land mapping, registration and titling is needed which can address all land tenure types including informal tenure effectively as well as aid in the recovery and reconstruction processes after disasters. An approach that fits the purpose of the society more importantly than being in line with the existing rules and methods of conventional land administration is needed. FFP land administration is emerging as acceptable and affordable concept. This is because it is approaching land administration system designed for serving the basic purposes such as including all land; provide secure tenure for all; control of the use of land; developing a land administration system which is not being fully guided by high tech solutions and costly/time consuming field survey procedures. Elements of FFP approach are flexible, inclusive, participatory, affordable, reliable, attainable and upgradable (Enemark et. al., 2016). The FFP land administration basic concept is presented in the following figure no. 2:



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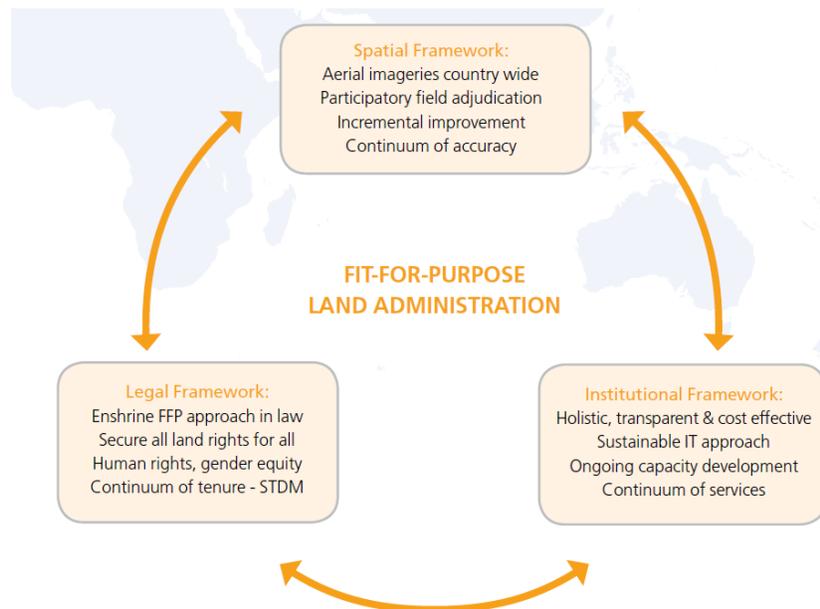


Figure no. 2: Fit-for-purpose concept (taken from Enemark, McLaren, and Lemmen (2016))

The concept includes three interrelated core components that work together to deliver the FFP approach: the spatial, the legal and the institutional frameworks. The spatial framework supports recording the way land is occupied and used. The scale and accuracy of this representation should be sufficient for securing the various kinds of legal rights and tenure forms recognized through the legal framework. The institutional framework is designed to manage these rights and the use of land and natural resources and to deliver inclusive and accessible services. The FFP approach includes four core principles for each of the three frameworks. See the Table no.1 below showing the overview of the “Key Principles of the FFP Approach”.

THE KEY PRINCIPLES OF THE FFP APPROACH

KEY PRINCIPLES		
Spatial framework	Legal framework	Institutional framework
<ul style="list-style-type: none"> • Visible (physical) boundaries rather than fixed boundaries. • Aerial/satellite imagery rather than field surveys. • Accuracy relates to the purpose rather than technical standards. • Demands for updating and opportunities for upgrading and ongoing improvement. 	<ul style="list-style-type: none"> • A flexible framework designed along administrative rather than judicial lines. • A continuum of tenure rather than just individual ownership. • Flexible recordation rather than only one register. • Ensuring gender equity for land and property rights. 	<ul style="list-style-type: none"> • Good land governance rather than bureaucratic barriers. • Integrated institutional framework rather than sectorial silos. • Flexible ICT approach rather than high-end technology solutions. • Transparent land information with easy and affordable access for all.

Table no.1: The Key Principles of the Fit-For-Purpose Approach (taken from Enemark et al. (2016))



Data collection and methods

In the first half of October 2017 fieldwork activities were performed in Quito, Ecuador, where the aim was to introduce and inform the land administration audience and stakeholder about the FFP land administration approach. Fieldwork activities included a) identification of land administration stakeholders in Ecuador, b) meetings for interviews and c) write shop.

Identified main land administration stakeholders in Ecuador that were included in these activities are: MIDUVI (Ministry for Housing) a ministry with a mandate to establish and enforce the national cadastre; SIGTIERRAS (Ministry of Agriculture (MAG)) a project under MAG for establishment and maintenance of rural cadastre in 47 municipalities; Municipal Cadastral Office of Quito - the capital city of Ecuador; one Municipality affected by the earthquake and University ESPE as representative from academia. Identification of the stakeholders and organizing the meetings and the write shop was in close cooperation with University ESPE.

Meetings for interviews were organised during the first week. Fieldwork visit to the higher mentioned organizations was arranged with an aim to get familiar with the overall land administration situation in Ecuador via semi-structured interviews. Fourteen (14) land administration professionals were involved in the semi-structured interviews. Fieldwork visit facilitated data collection in regard of the land administration situation in Ecuador.

Write shop was organised and performed in the premises of the University ESPE. It contained a theoretical and practical part. During the theoretical part lecture presentations from the latest literature on land administration were presented and consequently FFP land administration approach as a trend. The practical write shop included presentation of the structure, which was the structure used for chapters of the book *Advances in Responsible Land Administration* (Zevenbergen et al., 2016) after which presentation participants break out in groups. Each group had a task to write about their organisation activities in the frame of the FFP basic concept and its principles. Result from this write shop was an Abstract for the World Bank Conference 2018 and this paper.

Land administration in Ecuador

Ecuador is currently employing several types of land administration, using the conventional method by covering many elements of land survey, registration of land rights and provision of land administration products and services (Manual Urban, 2015; Manual Rural, 2013). This section is based on the interviews and input from land administration stakeholders during interviews and the write shop in Ecuador.

Land administration in Ecuador is a function performed by municipalities. Since 1940, municipalities are responsible for land administration especially for the urban cadastre. It includes six legally and socially accepted lands tenure types. In 2008, Ecuador enforced a new Constitution (Ecuador, 2008), which identified the need for creation of a national cadastre that will support the service and information provision on municipal level. The need for creation of a national cadastre was based on the fact that previously municipalities were creating and maintaining cadastre without unified standards for the whole state. According to the new Constitution, a Presidential Decree was issued in 2011 (President of Ecuador, 2011),



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stating that the national cadastre would be composed of municipalities that will be governed by Ministry for Housing and Urban Development (MIDUVI). At the same time, there are two main governmental initiatives to support creation of the national cadastre. The first one is the SIGTIERRAS project supported by MAG; project that has collected information for one million rural properties. The second one, financed by Ecuadorian Development Bank, has allowed the construction of urban cadastral systems in 140 municipalities. Both initiatives have contributed into the generation of a parallel cadastral coverage of the country under existing regulation. In the last two years MIDUVI has a lead in the standardization and subsequently construction of the national cadastral system, mainly with providing of national level standards that that will support municipalities to establish unified national cadastre. Under different legislations, since 1983, later in 2011 and recently since 2016, with the approval of the Law of Territorial Order - SAN-2016-1196 (Law 1196, 2016), MIDUVI is the governing body with a mandate to create and maintain the national cadastre of Ecuador. MIDUVI performance is supported with the Superintendence of Territorial Planning - established in 2016 (with a mandate for control and regulatory role for cadastre in Ecuador), for all 221 municipalities.

Land administration in Ecuador is organised in two types: rural and urban. In the period of 2010-2014 an aerial survey was carried out which resulted with orthophoto coverage for 89% of the whole territory in a scale of 1:5000. Orthophoto's are used for cadastral purposes and the aerial survey produced a digital terrain model of the country as well. MAG has a mandate, under the SIGTIERRAS project, for the survey, data collection, and establishment of the rural cadastre to legalize the land rights and guide the agricultural public policy. In the first stage of the project, one million rural properties were surveyed and rural cadastre was established for 47 municipalities which represents around 25 % of all municipalities in Ecuador. After the establishment of the rural cadastre, cadastral data, maps, and knowledge are transferred to municipalities and they have a mandate to maintain and keep up-to-date rural cadastre.

The urban cadastre is also a competence of municipalities, and is mainly created and used as a tax register to collect property taxes. At present, 140 of the 221 municipalities have been implementing projects of georeferenced urban cadastral updating based on the definition of each municipality among the urban areas of the rural areas. 34 municipalities (out of 221) do not have georeferenced urban cadastre systems. 33 municipalities, on the other hand, have their own local urban cadastre standards and systems combined with the spatial component. All municipalities in Ecuador have previously managed at least alphanumeric systems for land administration at the urban level. However, with the support of the Ecuadorian Development Bank to finance cadastral projects with standardized, systematic and georeferenced approach, adequate link between spatial component and the alphanumeric system has been accomplished.

Opportunities with adoption of fit-for-purpose land administration approach in Ecuador

In this section the results, data collected during the fieldwork and write shop in Ecuador, are observed in reflection of the basic concept of FFP land administration. This reflection is done with an aim to identify positive developments in land administration in Ecuador and areas for improvement.

During the interviews in MIDUVI it was acknowledged that Ecuador aims to have functional national land administration system and full coverage of the territory with land administration until end of 2021. It is



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very positive that there is a commitment from the highest political level, with the idea to perform this as a project. On the other hand, this is possible only with having into consideration some of the FFP land administration approach principles because with current conventional method of land administration it would take more time than end of 2021.

In regard Spatial Framework, according to the interviews and the write shop, it was mentioned and demonstrated that orthophotos are used in many ways from multiple stakeholders. Understanding the fact that based on current rules and regulations a method of fixed boundaries is mandatory, possibilities of demarcation of visual boundaries on orthophoto maps, especially for rural areas, were discussed based on relating the accuracy to purpose rather than technical standards. Participation of citizens and related stakeholders was acknowledged as a positive practice which could improve with the time. It was identified that a big number of elements are measured/collected during on fieldwork for land surveying, therefore a smaller number of elements for data collected was discussed as and overall speeding factor.

In regard Legal Framework, during the write shop, it was acknowledged that the law includes six legally and socially accepted lands tenure types as well as ensuring gender equity for land and property rights. Perhaps a flexible framework designed along the administrative rather than juridical lines could be taken in consideration when aiming at speeding up the registration and maintenance procedures. Legal framework is also very important if/when any changes are planned in the current way of doing land administration, those should be backed up with legal background, by-laws or new regulations.

In regard Institutional Framework, based on the interviews and the write shop, it was identified that overall ICT System and the structure of the Database satisfies the requirements of the current processes. In regard of the fact about the big number of elements collected on the field during the land survey, it was discussed and recommended that many elements during collection require more expensive creation and maintenance of the Database. Integrated institutional framework rather sectorial silos was considered and discussions were in direction of adaptation of new rules and regulations for FFP land administration. All those higher mentioned FFP opportunities would require adequate capacities and resources development.

Conclusions

Having this said, we can summarize that Ecuador has an approximate coverage of 70-75% of the urban cadastre and 25% of the rural cadastre. If it continues in the same pace and speed it will take many years to finish its full land administration coverage. Performing like this, it is not fully supporting the economic growth, food security, natural conservation, reconstruction after disasters and poverty reduction in Ecuador. Therefore, a FFP land administration approach is required to accelerate the land administration coverage by focusing on the core benefits for its stakeholders.

FFP land administration approach is presented in Ecuador and in the preliminary discussions few possible principles of the FFP land administration were identified that could have possible inclusion in the spatial and institutional component.



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