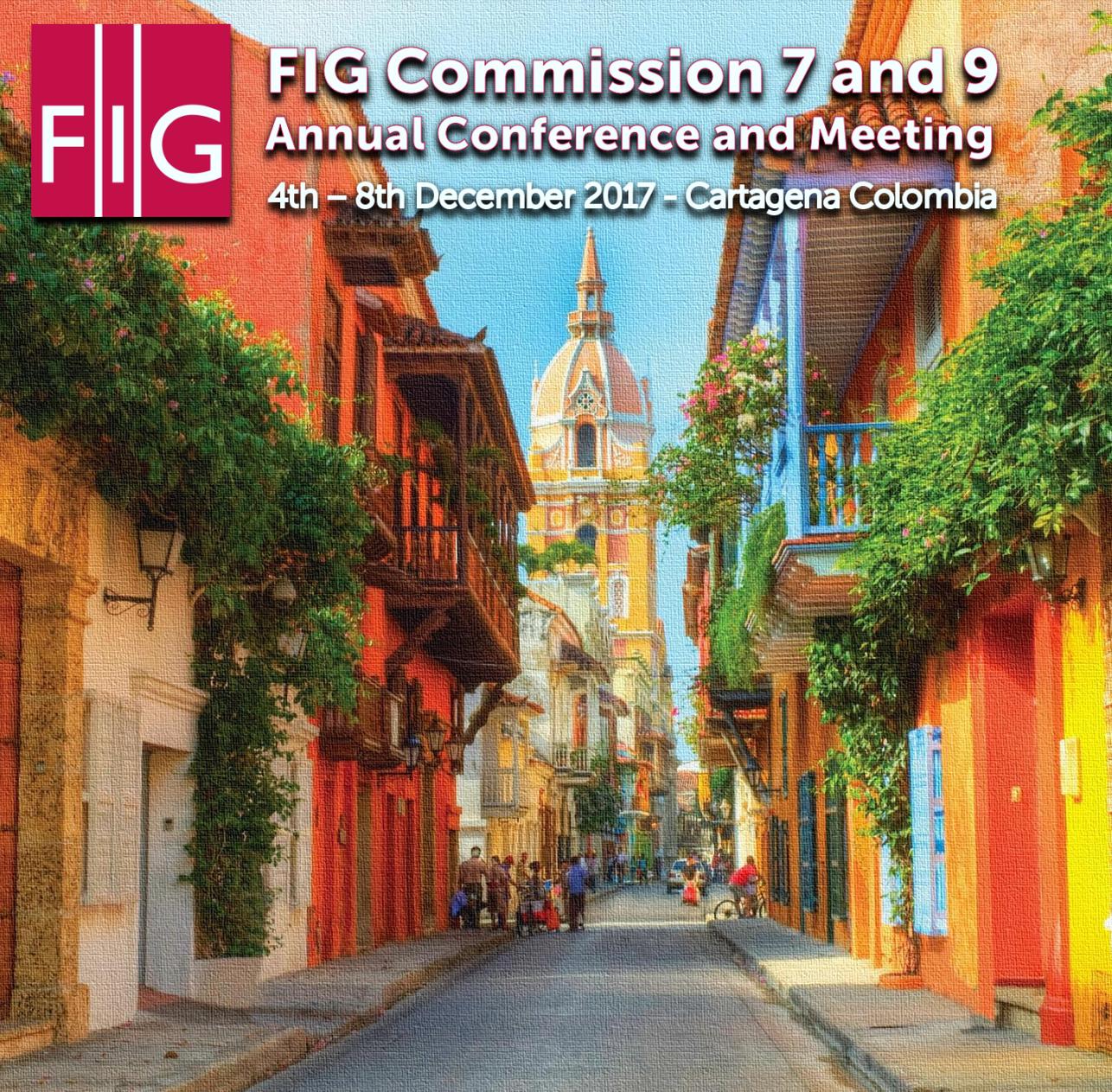




**FIG Commission 7 and 9  
Annual Conference and Meeting**  
4th – 8th December 2017 - Cartagena Colombia



# **Introducing fit-for-purpose land administration in Ecuador**

**Dimo Todorovski  
Faculty ITC  
University Twente**

# Introducing fit-for-purpose land administration in Ecuador

Dimo TODOROVSKI, the Netherlands, Rodolfo SALAZAR,  
Ginella JACOME, Antonio BERMEO, Orellana ESTEBAN,  
Fátima ZAMBRANO, Andrea TERAN, Raul MEJIA Ecuador

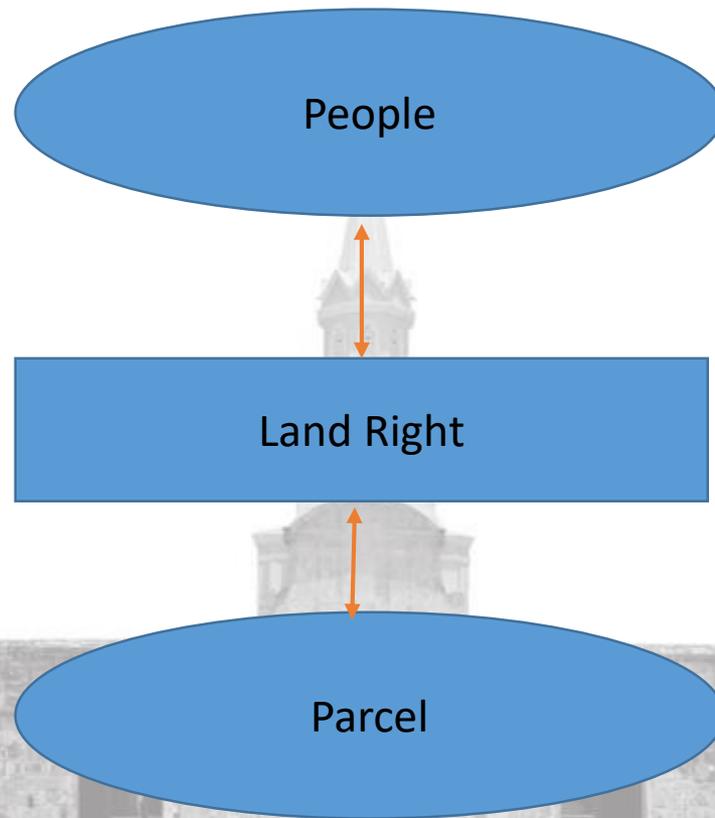


**FIG Commission 7 and 9**  
Annual Conference and Meeting  
4th – 8th December 2017 - Cartagena Colombia



Universidad de  
los Andes

# Land administration: people to land relationship



# Land administration

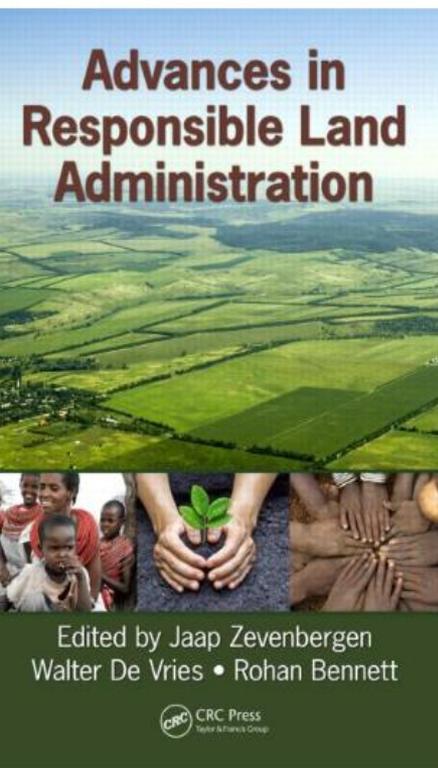
Several definitions:

Land Administration: *'the process of determining, recording and dissemination information about tenure, value and use of land when implementing land management policies'* (UN/ECE, 1996)

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 and McLaughlin, 1999)

The processes run by government using public- or private-sector agencies related to land tenure, land value, land use, and land development (Williamson, et al., 2010)

# Land administration



## Advances in Responsible Land Administration

Jaap Zevenbergen, Walter de Vries, Rohan Mark Bennett

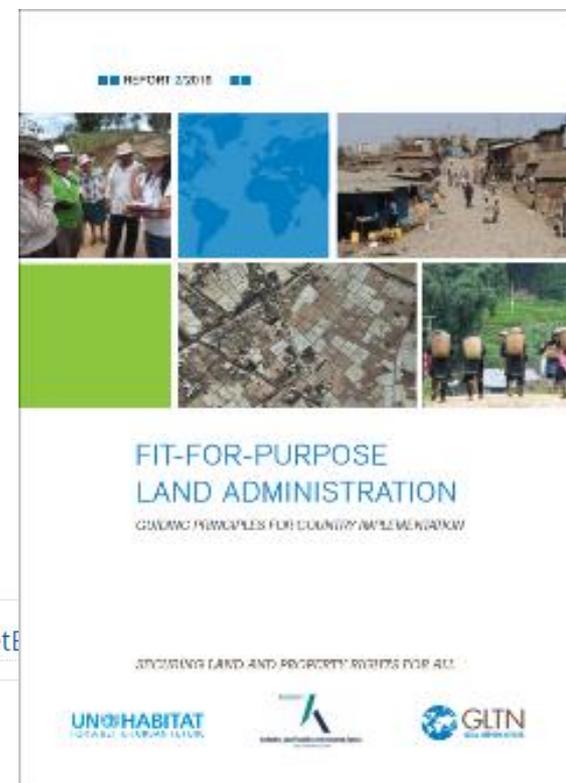
August 14, 2015 by CRC Press

Reference - 305 Pages - 24 B/W Illustrations

ISBN 9781498719599 - CAT# K25501

For Librarians

[Available on CRCnetE](#)



**FIG Commission 7 and 9**  
**Annual Conference and Meeting**  
4th – 8th December 2017 - Cartagena Colombia



**Universidad de los Andes**

# Land administration in the World

Only one quarter of the countries in the world maintain a complete land administration system – in regard of Land Tenure/Ownership, Land Use for Urban/Rural Planning and Land Value

Conventional land titling programs incapable of bridging the gap; they fail to support the provision of a minimum form of land tenure security for

- For all the citizens
- Including vulnerable ones



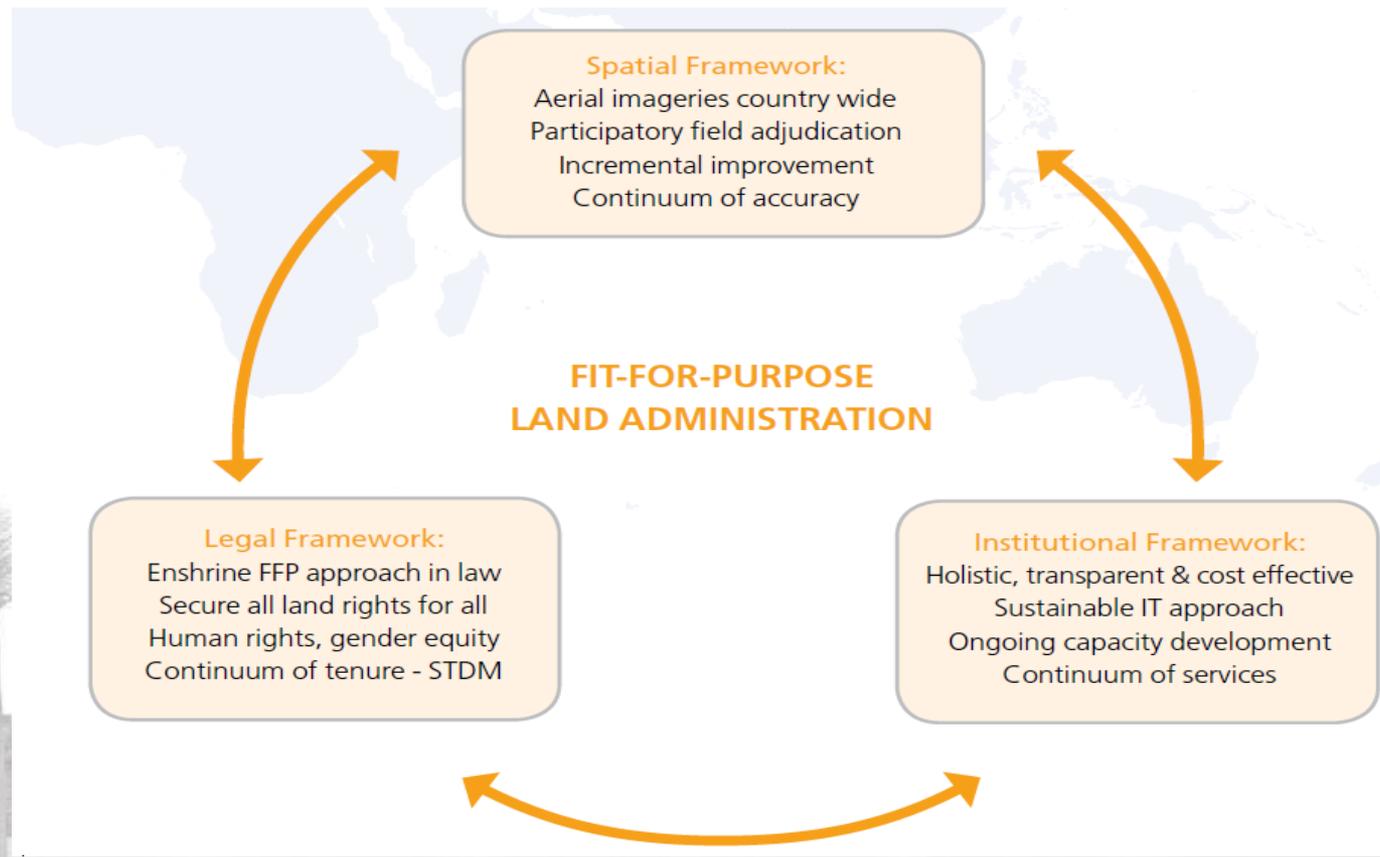
**FIG Commission 7 and 9**  
Annual Conference and Meeting  
4th – 8th December 2017 - Cartagena Colombia



Universidad de  
los Andes

# Fit-for-purpose land administration approach is needed

Figure no. 1: The Fit-For-Purpose concept (taken from Enemark, McLaren, and Lemmen (2016))



# Fit-for-purpose land administration approach is needed

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

## THE KEY PRINCIPLES OF THE FFP APPROACH

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

# Ecuador 2-13 October 2017



**ESPE**  
UNIVERSIDAD DE LAS FUERZAS ARMADAS  
INNOVACIÓN PARA LA EXCELENCIA



## Programme

For the Write-shop and Workshop on

Fit-For-Purpose Land Administration in Ecuador

University of the Armed Forces – ESPE, Ecuador

with Faculty ITC, University of Twente and Kadaster, the Netherlands

2-13 October 2017



**FIG Commission 7 and 9**  
**Annual Conference and Meeting**  
4th – 8th December 2017 - Cartagena Colombia



**Universidad de  
los Andes**

# What we did in Ecuador?

Aim was to: introduce and inform the land administration audience and stakeholder about the FFP land administration approach

**First week Write-shop** a study fieldwork visit to to MIDUVI (Min. for Housing), SIGTIERRAS (Min. of Agriculture) and Municipal Cadastral Office of Quito - the capital city of Ecuador

**Semi-structured Interviews with 14 land professionals**

**Write-shop: using the structure of AiRLA book and FFP LA Concept**

**Second week Workshop** on: fit-for-purpose land administration and modelling with lectures and guided practical's from ITC, Kadaster International and ESPE and 27 land professionals from all LA stakeholders including Municipalities affected by the Earthquake 2016

# Land administration in Ecuador

- LA is under the municipalities with focus on the urban cadastre, since 1940
- It includes six legally and socially accepted lands tenure types
- 2008 A new Constitution which identified need to create national cadastre (and support the municipal level)
- 2011 - A Presidential Decree: national cadastre would be composed of municipalities that will be governed by Ministry for Housing and Urban Development (MIDUUVI)

# Land administration in Ecuador

## - Two initiatives in parallel:

- **SIGTIERRAS** project supported by MAG
- **Ecuadorian State Bank**, has allowed the construction of urban cadastres in 140 municipalities

- Last two years MIDUVI has a lead in the standardization and subsequently construction of the national cadastral system

- 2016 - the Law of Territorial Order, MIDUVI is the governing body with a mandate to create and maintain the national cadastre of Ecuador



**FIG Commission 7 and 9**  
**Annual Conference and Meeting**  
4th – 8th December 2017 - Cartagena Colombia



**Universidad de los Andes**

# Land administration in Ecuador - urban

- The urban cadastre is also a competence of municipalities
- It is mainly used as a tax register to collect property taxes
- At present, **140 of the 221 municipalities: ~ 70%** 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 local urban cadastre standards and systems combined with the spatial component

# Land administration in Ecuador MAG/SIGTIERRAS

- Orthophotos R=1:5000, 89% of Ecuador, 2010-14
- MAG has a mandate, under the SIGTIERRAS
- For the survey, data collection, and establishment of the rural cadastre
- Project based concept 1 mil. Parcels in 54 Mun
- In 5 years 25% of the rural territory of Ecuador

# Land administration in Ecuador - rural



Photos credit MAG/SIGRIERRAS



**FIG Commission 7 and 9**  
Annual Conference and Meeting  
4th – 8th December 2017 - Cartagena Colombia



Universidad de  
los Andes

# Fit-for purpose land administration in Ecuador – first thoughts by Todorovski

Ecuador aims to have functional LA until 2021-possible only with FFP approach

- Legal Component – OK
- Spatial Component
  - More FFP usage of Orthophotos – visual boundaries
  - Participation OK – could improve in time
  - Less elements to measure/collect on field
- Institutional
  - IT System – OK
  - DB OK but too many attributes/classes to maintain
  - Adopt rules and regulations for FFP
  - Capacities development

# Thank you for your Attention



**FIG Commission 7 and 9**  
**Annual Conference and Meeting**  
4th – 8th December 2017 - Cartagena Colombia



**Universidad de**  
**los Andes**