Extended models

Colombian LADM Profile as support of land use planning
The Land Challenges

**Why?**

**COMPLEX INSTITUTIONAL SETTING**
many institutions with responsibilities about land issues and Data

**LEGAL INDEPENDENCE**
The current legal framework requires legal independence: each theme of land administration must be managed separately from another

**INCOMPLETE INFORMATION**
The official information does not shows the complete situation of land right and restrictions. (Cadaster 2014)

**REDUCED DATA INTEROPERABILITY**
Missing standards and inconsistent data. The institutions do not want to exchange land information
MODULARITY
Core module and extended modules for each topic of land administration. Each institution is responsible for its own model.

Extended LADM_COL models
Semantic interoperability through Colombian ISO 19152 profile. It includes informal rights and describes different types of restrictions.

Models association
Models of different thematic areas are connected through the spatial component.
What do we need to integrate?

- Cartography
- Cadastre
- Registry

What

The environment model

Public Rights

Private Rights

Continuous - Administrative

Legal - Declarative

RRR
LADM – COL model
How?
The extended LADM models

Modules of Colombian LADM profile

- Land Valuation
- Cadaster and Registry
- Spatial Planning
- CORE MODEL
  - Specialized Common Classes
  - Natural Parques
- ISO 19107
  - LADM-EN

A uses B
A traduce B
B
Interoperability of Models

LADM-COL-POT

Spatial relation

LADM-COL-CM
Geoportal query
LADM-Based Models of Protected Areas National System
How

The model process
Modelling methodology

• Interinstitutional meetings

• Workshops with international experts

• Review and permanent adjustments
Models implementation flow

Thematic approach

Technician approach
Spatial Data Infrastructure for Land Administration
Conclusions and Recommendations

The introduced “Modularity” of the LADM-COL helped to meet the required legal independence, an institutional reality in Colombia.

LADM-COL-OT model is currently under validation by the governmental institutions, This model will allow the integration and articulation between the different sectors (environment, housing, agriculture, culture) and its impact on the territory.

Interrelation between models can be achieved thanks to the use of standardized LADM semantics, it is possible to navigate between the different relationships among the BA-Units and the RRRs defined for each model.

The SDI for Land Administration allows the exchange between models of different thematic.

Existing tools allow analysis of issues related to land administration and can be considered as a generic infrastructure easily deployable with LADM as a base model.
Links

https://github.com/AgenciaImplementacion

https://www.proadmintierra.info/

https://youtube.com/agenciaimplementacion

https://ide.proadmintierra.info/