The Evolving Role of Cadastral Systems in Support of Good Land Governance

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THE DIGITAL CADAstral MAP
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A beautiful setting

Setting the scene

The people to land relationship is dynamic and reflects the cultural and institutional setting of the country or jurisdiction

Evolution of the land administration discipline

Evolution of Western Land Administration Systems

The FIG Agenda ...

1996 FIG Statement on the Cadastral Concepts and standards
1996 Bogor Declaration FIG/UN initiative on the role of cadastral infrastructures
1998 Cadastre 2014 A FIG vision in six statements for future cadastre systems
1999 Bathurst Declaration FIG/UN initiative on land administration in support of sustainable development

Land Registration Systems around the World

Deeds System (French/Latin/USA style): A register of owners; the transaction is recorded – not the title.
Title System (German, Torrens/English style): A register of properties; the title is recorded and guaranteed.
The concept of the multipurpose cadastre

The Digital Cadastral Map

- The approach of digitisation vary for the three different style of systems
- There is a tension between relative accuracy (cadastral graphics) and absolute accuracy (topo data).
- No matter the origin of the system the digitising process serves the same purpose of combining the cadastral graphics with the topo information.
- Survey accurate cadastral data is normally not an option. Therefore, in most systems successful use of the digital cadastral database depends on the degree of educated use of the map.

Strengths:
- Countrywide; based on the national grid
- Metadata
- Dynamic updating and upgrading

Weaknesses:
- Accuracy varies
- Tension between the (legal) cadastral map and the (physical) topographic map
- Demand for an educated use - understanding the nature and the origin of the cadastral map
Limitations of formal cadastral systems

"Civilised living in market Economies is not simply due to greater prosperity but to the order that formalised property rights bring"

Hernando de Soto — 1993

Formal land rights can be recorded in traditional cadastral systems

Informal rights cannot be recorded in traditional cadastral systems

Limitations of Cadastral Systems

- More than 70 per cent of the land in many developing countries are outside the formal systems of land registration and administration
- This relates especially to informal settlements and areas governed by customary tenure
- Traditional cadastral systems do not provide for security of tenure in these areas.

The Social Tenure Domain Model: Closing the Gap

Modeling the relation between Parties – Spatial unit – Social Tenure

Parties (who): Not only a legal person – but a range of subjects such as person, couple, groups of people, unidentified group, authority, etc.

Spatial Unit (where): Not only an identified (measured) parcel – but a range of objects such as land parcels, buildings, etc and identified in various ways such as one point, street axes, photos, etc.

Social tenure (what): Not only ownership and formal legal rights – but also range of informal, indigenous and customary rights as well as financial issues such as group loans and micro credit.

Land Administration Systems

Land Administration is about:
the processes of determining, recording, and disseminating information about the ownership, value, and use of land, when implementing land management policies

The focus on information remains, but modern land administration systems should act as “an enabling infrastructure for implementing land policies and land management strategies in support of sustainable development”
LAS provide the infrastructure for implementation of land policies and land management strategies in support of sustainable development.

**Land Tenure:** the allocation and security of rights in lands; the legal surveys of boundaries; the transfer of property through sale or lease; and the management; adjudication of disputes regarding rights and boundaries.

**Land Value:** the assessment of the value of land and properties; the gathering of revenues through taxation; and the management and adjudication of land valuation and taxation disputes.

**Land Use:** the control of land use through adoption of planning policies and land-use regulations at various levels; the enforcement of land-use regulations; and the management and adjudication of land-use conflicts.

**Land Development:** the building of new infrastructure; the implementation of construction planning; and the change of land use through planning permission and zoning of permits.

**Land governance**

Land governance is about the policies, processes, and institutions by which land, property, and natural resources are managed. This includes decisions on access to land; land rights; land use; and land development. Land governance is about determining and implementing sustainable land policies.
A land management vision

Spatially Enabled Government

A spatially enabled government organises its business and processes around “place” based technologies, as distinct from using maps, visuals, and web-enablement.

The technical core of Spatially Enabling Government Is the spatially enabled cadastre.

Significance of the Cadastre

The role of FIG

Intend to play a strong role in building capacity to design, build and manage Land Governance systems in response to Climate Change and in support of the Millennium Development Goals

“The capacity for taking the land policy agenda forward in a partnership with the UN agencies and the WB”

The FIG Agenda

Flying High

• Global partnership with the UN-agencies incl. the World Bank in support of the global agenda such as the MDGs

Keeping the feet on the ground

• Professional and institutional development at regional, national, and local level in support of the needs of our member associations and individual surveyors.

Key message

Simply put, sustainable development requires sustainable land administration systems

Land professionals play a key role
Thank you for your attention