A Cadastral tale

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Denmark in Europe

Denmark at a glance
43,000 sq km
5 mill inhabitants
One third lives in the capital area
Flat country
70 % agriculture
10 % urban
7000 km coastline

The Danish Way - bridging the gaps

Wonderful Copenhagen

The Surveyors House - the FIG home base
The Message

- A well-tailored Cadastral System is acting as a backbone in society.
- Cadastral Systems are country unique but seem to merge into a global Land Administration Model serving some basic societal needs within: land tenure, land value, land-use, and land development. This paper attempts to build an overall understanding.
- There is a need for capacity development in terms of establishing the necessary educational, professional and institutional standards in the field of land administration.
- Land Administration Systems therefore need high-level political support and recognition.

A Global Effort

The Aguascalientes Statement

- Foster modern land policies and associated SDI to better support social, economic and environmental sustainability
- Determine policies and programs for educational and institutional capacity building
- Develop appropriate institutional, legal, and technical processes to integrate land administration, cadastral, and land registration functions with topographic mapping programs within the context of a water national strategy for SDI.

Cadastral Systems

- The identification of land parcels in the cadastral system provides the basic infrastructure for running the interrelated systems within the areas of Land Tenure, Land Value, and Land Use.
- Even though cadastral systems around the world are clearly different in terms of structure, processes, and actors, they are increasingly merging into a unified global model.
- This is due to some global drivers: globalization and technological development. These trends supports establishment of multi-functional information systems with regard to land rights and land-use regulations.
- A third global driver is sustainable development with its demand for comprehensive information on the environmental conditions in combination with other land and property related data.

Land Information Management
"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

Comparing Land Registration Systems

Parameters for comparison:

- Property Definition
  - Where and how is it defined
  - Legal/economic/physical concept
- Property Determination
  - Generalized boundaries
  - Determination process
- Property Formation
  - Process, institutions, and actors - who does what
  - Role of the surveyors
- Property Transfer
  - Process, institutions and actors - who does what
  - Legal consequences

A worldwide Comparison of Cadastral Systems

Evolution of Western Land Administration Systems
### Evolución de los sistemas de ordenamiento territorial en el mundo occidental

<table>
<thead>
<tr>
<th>Fase del ordenamiento</th>
<th>Feudalismo</th>
<th>Bienes rústicos urbanos</th>
<th>Reconstrucciones de paisaje</th>
<th>Reconstrucciones informáticas</th>
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*Evolution of land management systems in the Western world.*

#### Sistemas de ordenamiento territorial...

**Land Tenure:**
- The allocation and security of rights in lands;
- The legal surveys to determine the parcel boundaries;
- The transfer of property or use from one party to another through sale or lease;
- The management and adjudication of doubts and disputes regarding rights and parcel boundaries.

**Land Value:**
- The assessment of the value of land and properties;
- The gathering of revenues through taxation;
- 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 national, regional, federal, and local levels;
- The enforcement of land-use regulations;
- The management and adjudication of land-use disputes.

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

#### ...Land Administration Systems

- A Framework of must include:
  - Define an distinguish between different legal forms of land tenure
  - Define how to establish and secure legal rights in land
  - Establish administrative systems and clear responsibilities for: land transfer, property formation, mortgage and forced sales
  - Coordinate legislation for: planning, land use, land value, land registration
  - Specify the administrative role of the agencies and actors involved
The Land Management Paradigm

- The organizational structures for land management differ notably between countries. Within this country context, the land management activities can be described by three components in support of sustainable development.
- Land policies are part of the national policies on promoting objectives such as economic development, social justice, equity and political stability. Relates to security of tenure, efficient land markets, real property taxation, land use control, environmental management etc.
- The operational component of the land management paradigm is the range of land administration functions that ensure proper management of rights, restrictions and responsibilities.
- The land administration functions are based on and facilitated by land information infrastructures that provide complete and up-to-date information about the built and natural environment.

Capacity Building – what is it ? …

- Capacity Building is a complex issue
- The conventional concept is closely related to education, training and Human Resource Development
- Capacity is the ability of individuals and organizations or organizational units to perform functions effectively, efficiently and sustainable (UNDP, 1998)

… Capacity Building – what is it ?

It is two-dimensional:

- Capacity Assessment
  A structured and analytical process whereby the various dimensions of capacity are assessed within the broader systems context, as well as evaluated for specific entities and individuals within the system.
- Capacity Development
  The process by which individuals, groups, organisations, institutions and society increase their ability to:
  - perform core functions, solve problems, define and achieve objectives;
  - understand and deal with their development needs in a broader context and in a sustainable manner (OECD Definition).
Capacity Development

- Educational standards
- Professional standards
- Institutional standards

Educational Standards

- Professional structures must reflect the new land management paradigm
- National associations will have to develop structures that accommodate a modern interdisciplinary profile.
- This includes adoption of ethical principles and model codes of professional conduct suitable for performing this modern role.

Professional Standards

- Institutions are "the rules of the game". Property right is such an institution in society – the cadastre is a facilitator to make it work
- Promote adoption of comprehensive land policies and a holistic approach to land management
- Establish a clear split of duties and responsibilities between national and local government based on the principles of good governance
- Develop appropriate institutional, legal and technical processes to integrate land administration and topographic mapping programs within the context of a wider national land policy

Institutional Standards

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The role of FIG

What is the role of FIG in this regard?

The International Federation of Surveyors

Organizational Structure

www.FIG.net
The Role of FIG

- Professional Development
  - Global forum for professional discussions and interactions
  - Conferences, symposia, commission working groups, …
- Institutional Development
  - Institutional support for educational and professional development at national and international level
- Global Development
  - Cooperation with international NGO’s such as the UN agencies, World Bank, and sister organisations
  - Joint activities and common policy-making to reduce poverty and enforce sustainable development

FIG Publications

WWW.FIG.NET

Final Remarks

- The objective of this paper is to build an overall understanding of the land management paradigm.
- Land administration systems, in principle, reflect the social relationship between people and land. Such a system is not just a GIS; it is the manager of property assets, natural resources and environmental conditions in urban as well as rural areas.
- Land administration systems are not an end in itself but facilitate the implementation of land policies within the context of a wider national land management framework.
- There is a need for capacity development in terms of establishing the necessary educational, professional, and institutional standards.
- Land administration therefore need high-level political support and recognition.
- This calls for increased international cooperation. FIG is prepared to invest in such corporate efforts.

Last Remark

Thanks for your Attention