The Emerging Land Management Paradigm
- A Major Challenge for the Global Surveying Community

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The Message
- The Land Management paradigm is complex and highly interdisciplinary. This paper attempts to build an overall understanding.
- Land and property must be viewed as an asset and a scarce natural resource. Proper management of land and properties is vital to achieving sustainable development.
- There is a need for institutional development to establish sustainable national concepts in this area. This includes the adoption of a holistic approach to land management.
- This calls for increased international co-operation towards enhanced educational and professional standards. FIG is prepared to meet that challenge.

Interests in land
You do not own land itself, but the right to use the land in conformity with community laws, practices and expectations

Rights
Responsibilities
Restrictions

Land is the most important and basic asset of any country

The Land Management Paradigm

The Increasing Role of Property Rights
“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

Importance of Land and Property
- Security,
- Social stability,
- Credit,
- Improvements to land,
- Productivity,
- Liquidity,
- Labour mobility,
- Land and property values,
- Land and property taxation,
- Public services,
- Resource Management, and
- Social development
Cadastral Systems

Cadastral Systems is about identification of land parcels for the purpose of securing land rights, assessing land values/taxation, and controlling the use of land.

The basic building block in any land administration system is the cadastral parcel.

The cadastre consists of two parts - the registers and the maps.

The Danish Cadastral System ...

The Cadastral register identifies the land parcels by number and area.

The Cadastral map identifies the land parcels geographically.

The Danske register secures the legal rights based on the cadastral identification.

The cadastral measurements identify the position of the property boundaries.

Source: Dale and McLaughlin (1999)
Evolution of Western Land Administration Systems

<table>
<thead>
<tr>
<th>Period</th>
<th>Land administration focus</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-industrial</td>
<td>Land as a commodity</td>
<td></td>
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<tr>
<td>Post-industrial</td>
<td>Land as a resource</td>
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<tr>
<td>Post-modern</td>
<td>Land as a community</td>
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Development of spatial applications
- Fiscal Capture
- Legal Capture
- Managerial Capture
- Multi-dimensional Capture

Land Information Management

Integrated Land-Use Management – a holistic approach

The Global Drivers

- Technology development: GPS, GIS, Internet
- Micro-economic reform: privatisation, decentralisation, downsizing, quality assurance
- Globalisation: from local to global
- Sustainable development: developments that effectively incorporate economic, social and environmental concerns in decision-making, meet the needs of the present without compromising the ability of future generations to meet their own needs

The Spatial Information Infrastructure
Land Management is the processes by which the resources of land are put into good effect.
A Land Management Vision

Facilitating Sustainable Development
Economic, Social, Environmental, Governance
Enhancing Quality of Life

Spatially Enabled Land Administration
Land Taxes, Land Value, Land Use, Land Developers

Country Context Institutional Arrangements
Capacity Building Education & Research

Services to Business & Citizens

What is a good property system?

- People in general can participate in the land market; widespread ownership; everybody can make transactions and have access to registration
- The infrastructure supporting transactions must be simple, fast, cheap, reliable, and free of corruption.
- The system provides safety for housing and business, and for capital formation

Only 25-30 countries in the world apply to these criteria.

Capacity Development

- In many countries, the national capacity to manage land rights, restrictions, and responsibilities is not well developed in terms of mature institutions and the necessary human resources and skills.
- This calls for increased international cooperation to face the challenges of the future:
  - The educational, professional, and institutional challenge.

The Educational Challenge ...

MEASUREMENT SCIENCE SPATIAL INFORMATION MANAGEMENT LAND MANAGEMENT

Design/build/manage the natural/ built environment and connected spatial/ legal rights

The Professional Challenge ...

- 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.
- Public-private partnerships must be promoted to support sustainable development
Develop in-country self assessment procedures to identify institutional capacity needs
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
Promote the understanding of land management as a highly interdisciplinary paradigm
Promote the need for an interdisciplinary approach to surveying education
Establish strong professional bodies
Promote the need for CPD activities

From playing a key role as geodetic engineers in exploring and measuring land and seas of the world
Today everybody can do precise measuring and advanced technology makes accurate maps

To playing a new key role as managers of land and properties
Eradicating poverty and achieving sustainability

The changing role of the surveyors

The surveying profession must:
Understand the wider importance of good property systems and good land administration systems
Recognise that we are in a service business – moving the focus from objects to services
Understand that the land market is dynamic and continuously changing

The Enlightened Globe

The Poor-Rich Projection of the World


Facing the Challenges

The Role of FIG

- Professional Development
  - Global forum for professional discussions and interactions
  - Conferences, symposia, commission working groups, ….
- Institutional Development and Capacity Building
  - Institutional support for educational, professional, and institutional 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
An Overall Conceptual Approach

- **Overall Land Policy**
  - Determine values, objectives and the legal framework in relation to management of land as a legal, economic, and physical object.
  - Basis for building sound land administration infrastructures.

- **Cadastral Systems**
  - Identification of land parcels and securing land rights
  - Facilitation of land registration, land valuation, and land-use control
  - Underpinning sound Land Administration

- **Land Administration Systems**
  - Administration of land tenure, land value, land-use, and land development
  - Facilitation of efficient land markets and effective land-use management
  - Underpinning sound Land Management

- **Land Management**
  - Management of processes by which land resources are put into good effect.
  - Facilitation of economic, social, environmental sustainability
  - Underpinning and implementation of sound Land Policies

Final Remarks

- Land and property must be viewed as an asset and as a scarce natural resource. Proper management of land and properties is vital to achieving sustainable development.
- There is a need for institutional development to establish sustainable national concepts in this area. This includes the adoption of a holistic approach to land management that combines the land administration functions with the land policies and land information infrastructures.
- The debate should be aware of the global trends in this area, while still recognizing that the design of such systems will always be country unique. This calls for increased international co-operation towards enhanced educational and professional standards.
- FIG is prepared to take a lead role

Time is up

Thanks for your attention