Land Administration:

Facilitating Spatially Enabled Government and Supporting the Global Agenda

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4th LAND ADMINISTRATION FORUM FOR THE ASIA AND PACIFIC REGION
BEYOND SPATIAL ENABLEMENT: LAND ADMINISTRATION TO SUPPORT SPATIALLY ENABLED GOVERNMENT
MELBOURNE, 9-22 OCTOBER 2009
Land administration
• Some core principles

Land governance
• The land management paradigm

Spatially enabled government
• The significant role of the cadastre

Supporting the Global Agenda
• Land administration in support of the climate change challenge, poverty reduction, and sustainable development
A global land management perspective

Land Administration Systems provide the infrastructure for implementing land policies and land management strategies in support of sustainable development.

Land Tenure: Allocation and security of rights in lands; legal surveys of boundaries; transfer of property;
Land Value: Assessment of the value of land and properties; gathering of revenues through taxation;
Land-Use: Control of land-use through adoption of planning policies and land-use regulations at various levels;
Land Develop: Building of new infrastructure; implementation of construction works and the change of land-use.
Part 1  Introducing land administration
•  Setting the scene
•  People and land administration

Part 2  A new theory
•  The discipline of Land administration
•  Land administration processes
•  Modern land administration theory

Part 3  Building modern systems
•  Building land markets
•  Managing the use of land
•  Martine administration
•  SDI and technology
•  World wide land adm. Activities

Part 4  Implementation
•  Capacity building and institutional development
•  Land administration tool box
•  Project management and evaluation

Part 5  The future of land administration.
•  Future trends
1. LAS provide the **infrastructure** for implementation of land polices and land management strategies in support of sustainable development.

2. The **land management paradigm** provides a conceptual framework for understanding and innovation in land administration systems.

3. LAS is all about engagement of **people** within the unique social and institutional fabric of each country.

4. LAS are the basis for conceptualizing **rights, restrictions and responsibilities** related to people, policies, and places.
5. The **cadastre** is at the core of any LAS providing spatial integrity and unique identification of every land parcel.

6. LAS are **dynamic**.

7. LAS include a set of **processes** that manage change.

8. **Technology** offers opportunities for improved efficiency of LAS and spatial enablement of land issues.

9. Efficient and effective land administration systems that support sustainable development require a **spatial data infrastructure** to operate.

10. Successful LAS are measured by their ability to manage and administer land **efficiently, effectively and at low cost**.
Benefits to society

<table>
<thead>
<tr>
<th>TABLE 1.1 – TRADITIONAL BENEFITS OF LAS</th>
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<tbody>
<tr>
<td><strong>Support for governance and rule of law</strong></td>
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<tr>
<td><strong>Alleviation of poverty</strong></td>
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<td><strong>Security of tenure</strong></td>
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<td><strong>Support for formal land markets</strong></td>
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<td><strong>Security for credit</strong></td>
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<td><strong>Support for land and property taxation</strong></td>
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<td><strong>Protection of state lands</strong></td>
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<td><strong>Management of land disputes</strong></td>
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<td><strong>Improvement of land planning</strong></td>
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<tr>
<td><strong>Infrastructure development</strong></td>
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<tr>
<td><strong>Management of resources and environment</strong></td>
</tr>
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<td><strong>Information and statistical data</strong></td>
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Williamson, Enemark, Wallace, Rajabifard, 2010
Outline of presentation

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Supporting the Global Agenda
• Land administration in support of the climate change challenge, poverty reduction, and sustainable development
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.
Understanding the land management paradigm

Sustainable Development
- Economic, Social & Environmental

Land Policy Framework

Land Administration Functions
- Land Tenure, Land Value
- Land-Use, Land Development

Country Context
- Institutional Arrangements

Land Information Infrastructures
Land Governance

FIG and WORLD BANK, 2010

FAO, 2007
Good governance is:

- **Sustainable and locally responsive**: It balances the economic, social, and environmental needs of present and future generations, and locates its service provision at the closest level to citizens.

- **Legitimate and equitable**: It has been endorsed by society through democratic processes and deals fairly and impartially with individuals and groups providing non-discriminatory access to services.

- **Efficient, effective and competent**: It formulates policy and implements it efficiently by delivering services of high quality.

- **Transparent, accountable and predictable**: It is open and demonstrates stewardship by responding to questioning and providing decisions in accordance with rules and regulations.

- **Participatory and providing security and stability**: It enables citizens to participate in government and provides security of livelihoods, freedom from crime and intolerance.

- **Dedicated to integrity**: Officials perform their duties without bribe and give independent advice and judgements, and respects confidentiality. There is a clear separation between private interests.

Adapted from FAO, 2007
Corruption perception index

Corruption Perception Index 2011
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A land management vision

Spatially enabled land administration

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

Land Policy Framework
Country Context
Institutional Arrangements
Capacity Building
Education & Research

Services to Business & Citizens
Everything happens somewhere

“If we can understand more about the nature of “place” where things happen, and the impact on the people and assets on that location, we can plan better, manage risk better, and use our resources better.”

Location Strategy for United Kingdom, 2008

“Heading toward spatial enabled society”
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 (land parcel mapping)
Significance of the Cadastre

1. Multipurpose Cadastre (German style)
2. Title or deeds tenure style Cadastres (Torrens/English style)
3. Taxation driven cadastre (French/Latin/USA style)

Cadastral engines...

SDI
Mapping agencies and other data providers

Land management paradigm
Parcels Properties Buildings Roads
Tenure Value Use Development

Integrated functions

Spatially enabled government
Incorporating:
- Land policy
- Spatially enabled LAS
- Services to business and public
- Country context

Sustainable development
- Economic
- Environmental
- Social
- Governance

Better decision making
Outline of presentation

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The Global Agenda

Climate Change 2010’s
- Natural disasters
- Food shortage
- Environmental degradation

MDGs 2000’s
- Poverty alleviation
- Human health, education
- Global partnership

Sustainable Development 1990’s
- Economic
- Social
- Environmental
Facing the challenges

- Climate change
- Food shortage
- Energy scarcity
- Urban growth
- Poverty reduction
- Environmental degradation
- Natural disasters
- Global financial crisis

All these challenges relate to governance and management of land

Good Land Governance is fundamental for addressing the new challenges and achieving the MDGs
Climate change will affect the basic elements of life for people round the world – access to water, food production, health and the environment.

(UN-Habitat 2009)

Climate change is a fact - but it is not new…

What is new is….. that it is enforced by humanity

Global warming
Drought
Environmental degradation

A range of impacts and indicators

Sea level rise
Flooding
Natural disasters

Climate change will affect the basic elements of life for people round the world – access to water, food production, health and the environment.
Climate Change: Processes, characteristics and threats
Source: UNEP/GRID-Arendal

Loss of Land, Livelihoods, Lives
Climate change - The world in terms of carbon emission

Climate change - The world in terms of increased mortality
No matter the inequity in terms of emissions and climate change consequences..... there is a need to develop relevant means of adaptation to climate change in both the rich and the poorer countries.

**Poverty reduction is - in itself - a means of adaptation to climate change**

**Sustainable and integrated land-use management is another means**
Geo-information management

...creates a strong foundation

...for sustainable action

Source: ESRI
Sustainable Land Administration Systems should serve as a basis for climate change mitigation and adaptation as well as prevention and management of natural disasters.

**Land Governance and Climate Change**

Incorporating climate change into current land policies

- Adopting standards for energy use, emissions, carbon stock potential,
- Identifying prone areas (sea level rise, drought, flooding, fires,...)
- Controlling the use of land in relation to climate change and disaster risks
- Introducing carbon footprint assessments in relation to land use developments
- Controlling building standards and emissions in relation to climate change
- Improving resilience of existing ecosystems vulnerable to climate change
Goal 1, target 1:

TARGET
Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day

Sustained growth in developing countries, particularly in Asia, is keeping the world on track to meet the poverty-reduction target.
## Urban Growth – sustainable cities

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>1975</th>
<th>2007</th>
<th>2025</th>
<th>2050</th>
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<tbody>
<tr>
<td>World Urban Population (million)</td>
<td>737</td>
<td>1,518</td>
<td>3,294</td>
<td>4,584</td>
<td>6,398</td>
</tr>
<tr>
<td>Percentage</td>
<td>29.1%</td>
<td>37.3%</td>
<td>49.4%</td>
<td>57.2%</td>
<td>69.6%</td>
</tr>
<tr>
<td>More Developed Region (million)</td>
<td>427</td>
<td>702</td>
<td>916</td>
<td>995</td>
<td>1,071</td>
</tr>
<tr>
<td>Less Developed Region (million)</td>
<td>310</td>
<td>817</td>
<td>2,382</td>
<td>3,590</td>
<td>5,327</td>
</tr>
</tbody>
</table>


Close to 1 billion people, or 32 per cent of the world’s urban population, live in slums in inequitable and life-threatening conditions, and are directly affected by both environmental disasters and social crises, whose frequency and impacts have increased significantly during the last few decades.

*Planning Sustainable Cities*

UN-Habitat, 2009
Kibera, Nairobi, 250 ha, 1 mill+ people
Sustainable **Land Administration Systems** should serve as a basis for poverty reduction, social equity, and economic growth.

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<tr>
<th>Incorporating a pro-poor and environmentally resilient approach into national land policies</th>
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<tbody>
<tr>
<td>Incorporating all land into the formal land administration systems (70% of the land in most developing countries are currently outside)</td>
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<tr>
<td>Incorporating all rights – formal as well as informal – into the land administration systems</td>
</tr>
<tr>
<td>Adopting innovative approaches to identification of land rights – such as the Social Tenure Domain model</td>
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<td>Avoiding land grabbing and the attached social and economic consequences;</td>
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<tr>
<td>Avoiding informal development through sustainable land use planning and control.</td>
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<td>Guarantee good, transparent, affordable and gender responsive governance of land</td>
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It is all about:

People, human rights, engagement and dignity

Politics, land policies and good governance

Places, shelter, land rights, and natural resources

and Power, decentralisation and empowerment
The land professionals must be able to take a lead and explain the relevance of land administration, land parcel mapping, SDI and spatial enabled society in relation to the global agenda. 

“Building the capacity for facing the global agenda”

This is the way forward for achieving political recognition for developing and implementing the technical solutions.
Thank you for your attention

Beautiful Melbourne