Land Governance: Supporting the Global Agenda and Serving Society

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Outline of presentation

The global agenda
• Facing the Millennium Development Goals

From measurement to management
• The changing role of the surveyors

Land governance
• Managing land rights, restrictions, and responsibilities

Spatially enabled government
• The significant role of the cadastre

The new Challenges
• Climate change, natural disasters

The role of FIG
• Professional, institutional and global development
Do Surveyors have a role to play in the global agenda?

Yes!

Simply, no development will take place without having a spatial dimension

And no development will happen without the footprint of the surveyor

The Millennium Development Goals

Goal 1: Eradicate extreme poverty and hunger
Goal 2: Achieve universal primary education
Goal 3: Promote gender equality and empower women
Goal 4: Reduce child mortality
Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability

Goal 8: Develop a Global Partnership for Development

The framework includes 18 targets and 48 indicators enabling the ongoing monitoring of annual progress
World status of poverty

Infant mortality as poverty indicator

Gross Domestic Product

North America

Western Europe

Japan and South Korea

Value

This square represents 100 billion US dollars

Per capita in PPP US dollars

- More than 28,000
- 20,000 to 25,000
- 15,000 to 20,000
- 10,000 to 15,000
- 7,000 to 10,000
- 4,000 to 7,000
- 2,000 to 4,000
- Less than 2,000
Urban population growth

- **1970**: Rural 63%, Urban 37%
- **2000**: Rural 53%, Urban 47%
- **2030**: Rural 40%, Urban 60%

**2007:**
- Total world population: 6.5 billion
- Total urban population: 3.3 billion
- Total slum dwellers: 1.1 billion

Mega cities of the world 2015

- New York
- Paris
- Moscow
- Istanbul
- Karachi
- Dhaka
- Calcutta
- Shanghali
- Tokyo
- Mexico City
- Rio de Janeiro
- São Paulo
- Buenos Aires
- Bombay
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 role of surveyors is changing

- **From measurement**
  Surveyors will still be high level experts within measurement science, but due to technology development the role is changing more into managing the measurements

- **To management**
  Surveyors will increasingly contribute to building sustainable societies as experts in managing land and properties

*The land professionals*
Positioning infrastructures

Versus traditional Geodetic Datum

- Enables description of position as latitude, longitude and height and underpins all geo-spatial data;

- Characteristics:
  - Coverage - initially local but has evolved to national and continental;
  - Measurement — initially ground based, labor intensive, now more efficient using GNSS;
  - Data management - initially very analogue but now a key part and often integrated in Spatial data Infrastructures (SDI)

Positioning infrastructures are the only truly global infrastructure underscoring capture and management of spatial data world wide

Source: Matt Higgins, Washington, 2009

A global land management perspective

LAS provide the infrastructure for implementation of land polices and land management strategies in support of sustainable development.
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.
Land reform

Land reform is concerned with changing the institutional structure governing man’s relationship with the land, involving intervention in the prevailing pattern of land ownership, control and usage in order to change the structure of holdings, improve land productivity and broaden distribution of benefits (World Bank, 1996).

This may mean:

• Land restitution (Eastern Europe)
• Land redistribution (Sub Saharan Africa)
• Land consolidation

The starting point is about identifying existing land rights (adjudication)

The real challenge is to focus relentlessly upon how legal reforms impact the poor, the disadvantaged, and the environment.

The Nigeria Development Goals

Agenda 1: Power and Energy
Agenda 2: Land reform:
Agenda 3: Food Security
Agenda 4: Security
Agenda 5: Wealth Creation
Agenda 6: Education
Agenda 7: Transport Sector

Agenda 2: Land Reform:
Review existing land laws to ensure equitable use of the Nation’s land assets for socio-economic development

Building sustainable land administration systems is a key tool.
Land reform is about
Building a sustainable future

Surveyors play a key role

Land administration systems are the basis for conceptualising rights, restrictions and responsibilities related to people, policies and places.

**Interests in land**

**Rights:**
Registration and security of tenure positions

**Responsibilities:**
Social, ethical commitment to environmental sustainability and good husbandry

**Restrictions:**
Planning and control of land-use and land development
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

Continuum of rights (GLTN-agenda)

From: illegal or informal rights
To: legal or formal rights

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.
A worldwide Comparison of Cadastral Systems

Cadastral Template

Property Restrictions
- two conflicting approaches

- The free market approach (current debate in the US)
  - Land owners should be obligated to no one and should have complete domain over their land.
  - The role of government to take over, restrict, or even regulate its use should be non-existent or highly limited.
  - Planning restrictions should only be imposed after compensation for lost land development opportunities

- The central planning approach (European perspective)
  - The role of democratic government include planning and regulating land systematically for public good purposes.
  - A move from every kind of land use being allowed unless it was forbidden to every change of land use is forbidden unless it is permitted and consistent with adopted planning regulations and restrictions.
Integrated land-use management

Property Responsibilities

- Responsibilities relate to the social, ethical commitment or attitude to environmental sustainability and good husbandry.

- Individuals are supposed to treat land and property in a way that conform to cultural traditions and ways of good ethical behaviour.

- Therefore, systems for managing access and use of land vary throughout the world according to historical development and cultural traditions.
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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
A land management vision

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.

“Heading toward spatial enabled society”
Institutional Challenges

- There are a range of stakeholder interests
  This includes Ministries/Departments such as:
  Justice; Taxation; Planning; Environment; Transport;
  Agriculture; Housing; Interior (regional and local authorities); Utilities;
  and civil society interests such as businesses and citizens.

- Creating awareness of the benefits of developing a shared platform for Integrated Land Information Management takes time and patience.

- Mapping/Cadastral Agencies have a key role to play

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

Cadastral engines...

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

Land management paradigm

Tenure
Value
Development
Use

Spatially enabled government

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

Sustainable development - Economic - Environmental - Social - Governance

Land Governance – a hierarchy of land issues

- Land policy
- Land management paradigm
- Land adm. system
- SDI
- Cadastre
- Land parcel

"Land in Society"
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 of officials and politicians and the affairs of government.

Adapted from FAO, 2007
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Facing the new challenges

Focusing on land Governance and achieving the MDGs, also includes facing the big challenges of the new millennium:

• Climate change
• Food shortage
• Energy scarcity
• Urban growth
• Environmental degradation
• Natural disasters
• Global financial crisis

All these challenges relate to governance and management of land

The surveyors – the land professionals - play a key role
Climate change

“Climate change is the defining challenge of our time”
Combining the impacts of climate change with the current global financial crisis we risk that all the efforts to meet the MDGs will be rolled back. Those that contributed the least to this planetary problem continue to be disproportionately at risk.

Ban Ki-moon, UN secretary general

“Climate change also provides a range of opportunities”
Prevention of climate change can be greatly enhanced through better land-use planning and building codes so that cities keep their ecological footprints to a minimum and make sure that their residents, especially the poorest, are protected as best as possible against disaster.

Anna Tibaijuka, Executive Director, UN-Habitat

The impact of climate change

The interaction between climate change, ecosystem degradation and disaster risk (UNEP, 2009)
Climate Change

No matter the inequity between the developed and developing world in terms of emissions and climate consequences, there is a need to develop relevant means of adaptation to climate change both in the rich and the poorer countries.

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

- 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 access to land and the use of land in relation to climate change and disaster risks
- Controlling building standards and emissions in relation to climate change
- Improving resilience of existing ecosystems vulnerable to climate change
Geo-information management

...creates a strong foundation

Source: ESRI

...for sustainable action

USA
Billion Dollar Weather Disasters 1980 - 2008

Legend
- Hurricane
- Tropical Storm
- Flood
- Severe Weather
- Blizzard
- Free
- Nor’Easter
- Ice Storm
- Heat Wave/Drought
- Freeze

Dollar amounts shown are approximate damages costs in $ billions.
Location shown is the general area for the regional event. Several hurricanes
made multiple landfalls.
Additional information for these events is available at NCDC website
www.ncdc.noaa.gov/oh/ohreports/billionst.png

The U.S. has sustained 94 weather-related disasters over the last 30 years
with losses damages costs exceeding $1.0 billion for each event. Total costs
for all events exceed $71 billion using a 2008 inflation rate.
Building the capacity

**Good Governance**
- Participation
- Rule of law
- Transparency
- Responsiveness
- Consensus oriented
- Equity and inclusiveness
- Effectiveness and efficiency
- Accountability

**Capacity Building**
- Training activities
- (Disaster) education programs
- Public information
- Technical assistance
- Improvement of organizational abilities
- Dissemination of information
- Improvement of infrastructure

“While many people are aware of the terrible impact of disasters throughout the world, few realize this is a problem that we can do something about.”

Kofi Annan, 2004

**Climate Change …**

We cannot change the Hazard - but we can manage the Risk
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The role of the surveying profession

Land governance and management is a core area for surveyors/geo-spatial profession. It will require:

- High level geodesy models to predict future change
- Modern surveying and mapping functions to support management and implementation
- Spatial data infrastructures to support decision making on the natural and built environment
- Secure tenure systems
- Sustainable systems for land valuation, land use management and land development
- Systems for transparency and good governance

Land governance is a cross cutting issue confronting all traditional silo-organised land administration systems.
98 FIG Member Associations from 80 Countries
28 affiliates, 34 corporate, 15 correspondents, 80 academic members

- Professional Development
  - Global forum for professional discussions and interactions through conferences, symposia, commission working groups, ….

- Institutional Development
  - Capacity building through Institutional support for educational and professional and institutional development at national level

- Global Development
  - Cooperation with the UN agencies, FAO, UN.Habitat and World Bank, and sister organisations through Joint Board of Geospatial Information Societies.

- Information and Communication
  - website, annual review, publications

- FIG Office
  - administration, finances,
Professional Development

**Annual working weeks**
- Hong Kong 2007
- Stockholm 2008
- Eilat 2009
- Marrakech 2011
- Rome 2012
- **Abuja, Nigeria 2013**

**Biennial regional Conferences**
- Costa Rica 2007
- Hanoi 2009

**FIG Congress every four years**
- Sydney 2010

**Commission work plans**
- 10 technical commissions
- Interaction with national delegates

**Commission working groups**
- Interaction with national delegates

**Commission workshops and seminars**

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Global Development

**FAO**, projects on capacity building, good governance, land economics,

**UN-HABITAT**, partner in the GLTN network, projects on informal settlement, informal development, gendered land tools, etc….

**World Bank**, joint activities; publications, and joint conference March 2009 on Land Governance in support of the MDGs

Global partnership is the link that drives development for achieving the global agenda such as the MDGs

Global recognition ➔ national recognition ➔ local recognition
Global development partnership with UN-Habitat

Informal settlements

Traditional cadastral systems do not provide for security of tenure in informal settlements.

A more flexible system is needed for identifying the various kind of social tenure existing in informal settlements.

Such systems must be based on a global standard and must be manageable by the local community itself.

cooperates with UN-Habitat, ITC and the World Bank to develop the STDM model that is design as a basic tool for poverty alleviation.

FIG publications

WWW.FIG.NET
FIG intend to play a strong role in building the capacity to design, build and manage national surveying and land administration systems that facilitates sustainable Land Governance in support of the MDGs.

“Building the capacity for taking the land policy agenda forward”
The future belongs to our children