

# Land Governance: Supporting the Global Agenda and Serving Society

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OLUMIDE MEMORIAL LECTURE  
NIGERIAN INSTITUTION OF SURVEYORS  
ABUJA, NIGERIA, 29 OCTOBER 2009

## 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

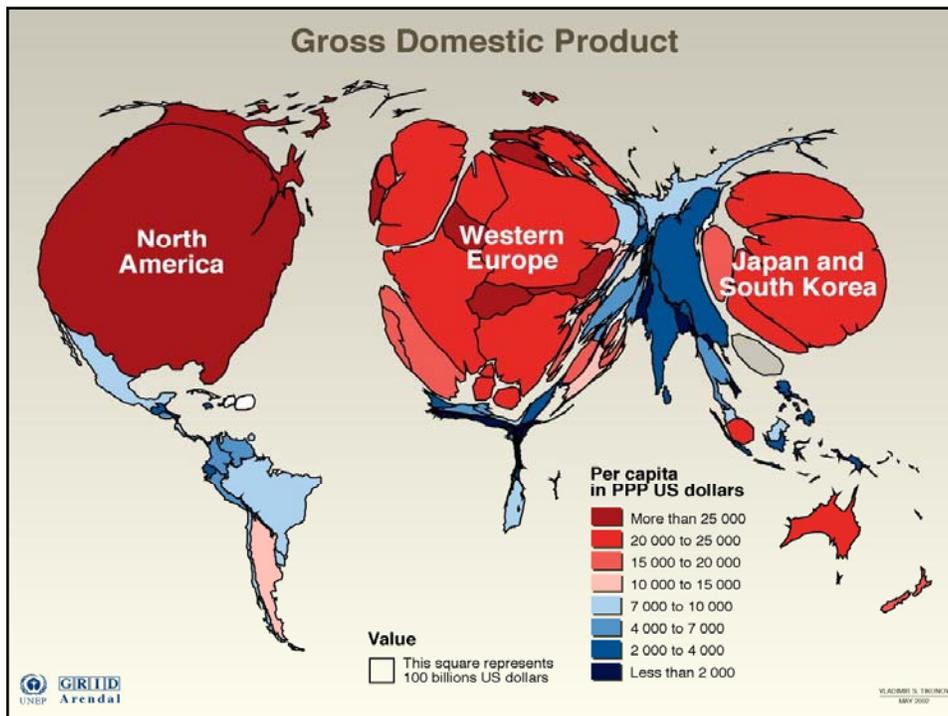
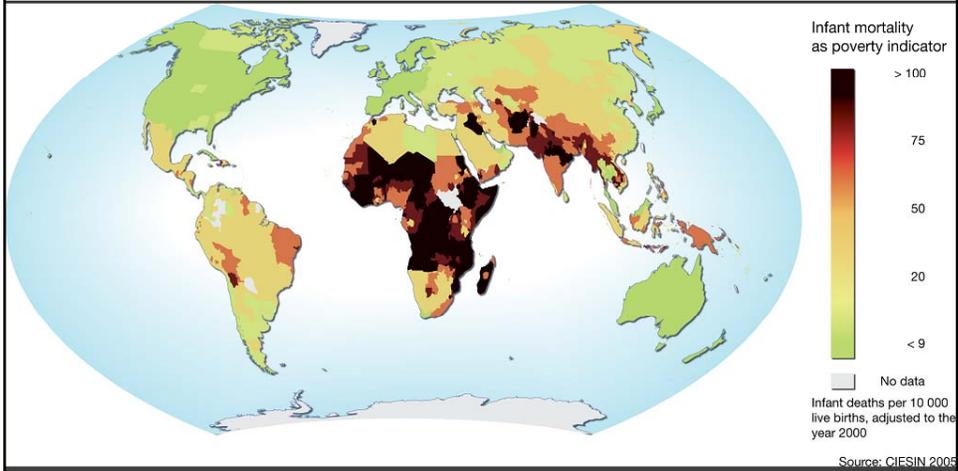
## The Millennium Development Goals

- 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

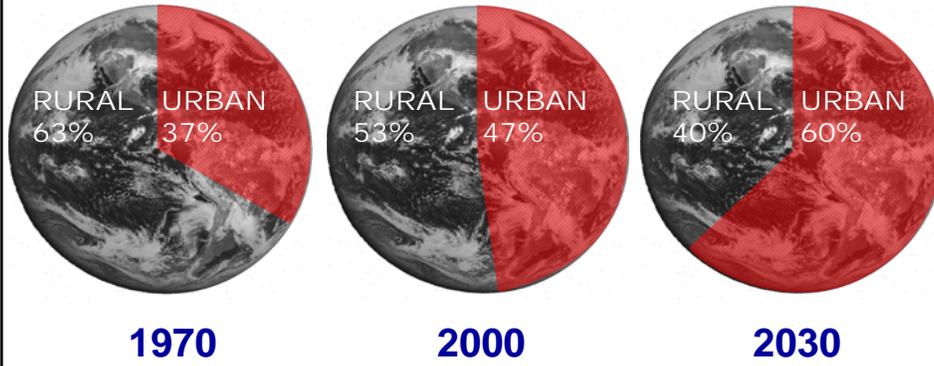
**Goal 8: Develop a Global Partnership for Development**

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

## World status of poverty



## Urban population growth



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





Kibera, Nairobi, 250 ha, 1 mill+ people

**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



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## 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

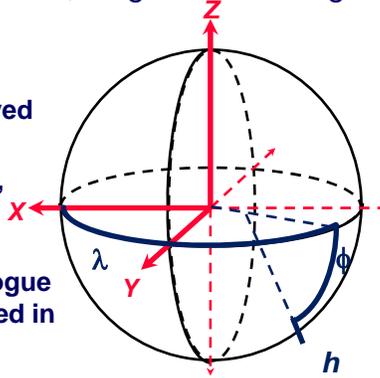
### ▪ **To management**

Surveyors will increasingly contribute to building sustainable societies as experts in managing land and properties

***The land professionals***

## Positioning infrastructures Versus traditional Geodetic Datum

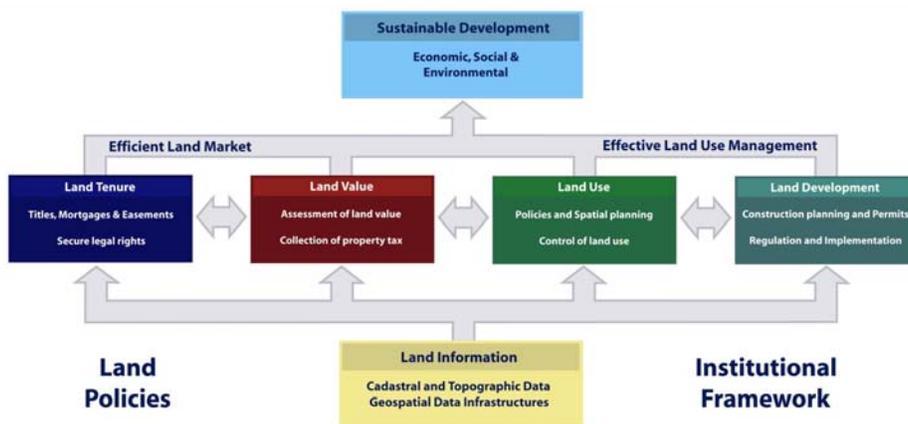
- Enables description of position as latitude, longitude and height and underpins all geo-spatial data;
- Characteristics:
  - Coverage - initially local but has evolved to national and continental;
  - Measurement – initially ground based, labor intensive, now more efficient using GNSS;
  - Data management - 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.

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## 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**

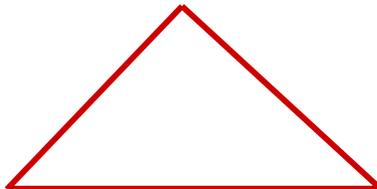


## Interests in land

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

### Rights:

Registration and security of tenure positions



### Responsibilities:

Social, ethical commitment to environmental sustainability and good husbandry

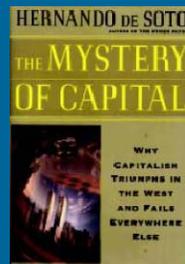
### Restrictions:

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”

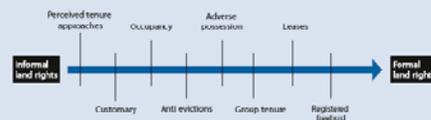
*Hernando de Soto – 1993*



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

### A Worldwide Comparison of Cadastral Systems

Cadastral country reports based on a jointly developed PCGIAP/FIG template.  
Established under UN mandate by Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan in July 2003.  
UN endorsement for cooperation with UN-ECE WPLA, UN-ECA CODI, and PCIDEA.

<b>Data per Country</b> (last update: 31 Dec 2007, 42 countries) as .htm <input type="button" value="Select a Country"/> as .pdf <input type="button" value="Select a Country"/>	<b>II. Principles and Statistics</b> (last update: 4 Jan 2008, 42 countries) 1.1 Cadastral Principles 2.1 Population 2.3 Parcels 2.7 Professionals	<b>Latest Updates</b> • Country report of Cyprus (31 Dec 2007) • Country report of Norway (6 Aug 2007) • Country report of Israel (16 Oct 2008) • Updates of Latvia and Netherlands (5 Aug 2008) • Country report of Austria as 39th country (16 Jan 2008) • Country report of Latvia (26 Oct 2005) • Country report of Tanzania (12 Jul 2005) • Country report of Finland (29 Apr 2005) • Country report of Namibia (7 Jun 2004) • Country report of Venezuela (in Spanish) (28 May 2004)
<b>Field Definitions</b>  <b>I. Data per Data Fields</b> (last update: 4 Jan 2008, 42 countries) <input type="button" value="Select a Field"/>	<b>Documents</b> • Questionnaires for Download (English, Español, Portuguese) • Publications • Administrative Documents	<b>Visitor locations</b> 

The "Cadastral Template" has been developed by a research group at the Department of Geomatics of the University of Melbourne. It consisted of Prof. Ian Williamson, Dr. Abbas Rajabifard, and Daniel Steudler, supported by Prof. Stig Enemark from Aalborg University, Denmark.

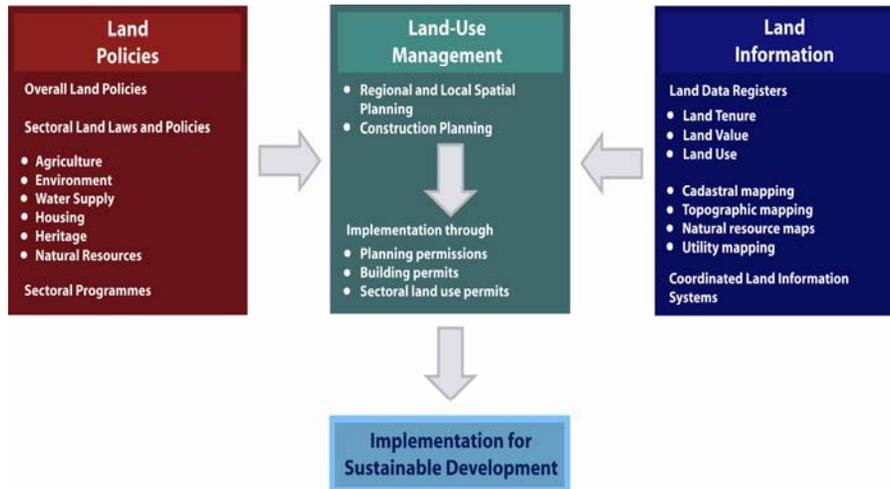
[www.cadastraltemplate.org](http://www.cadastraltemplate.org)

## 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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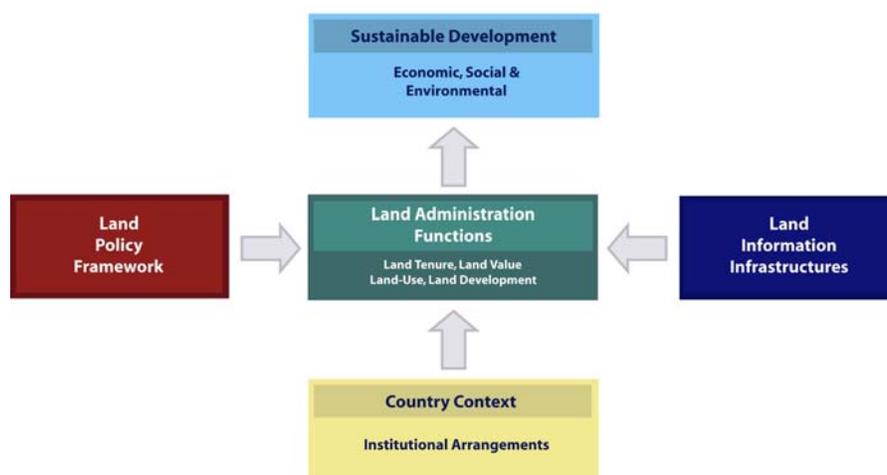
The new Challenges

- Climate change, natural disasters

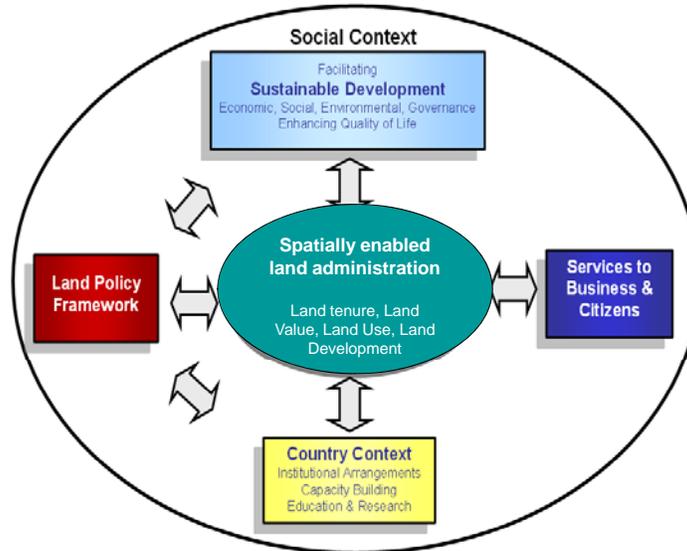
The role of FIG

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## Understanding the land management paradigm



## A land management vision



## Place matters

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

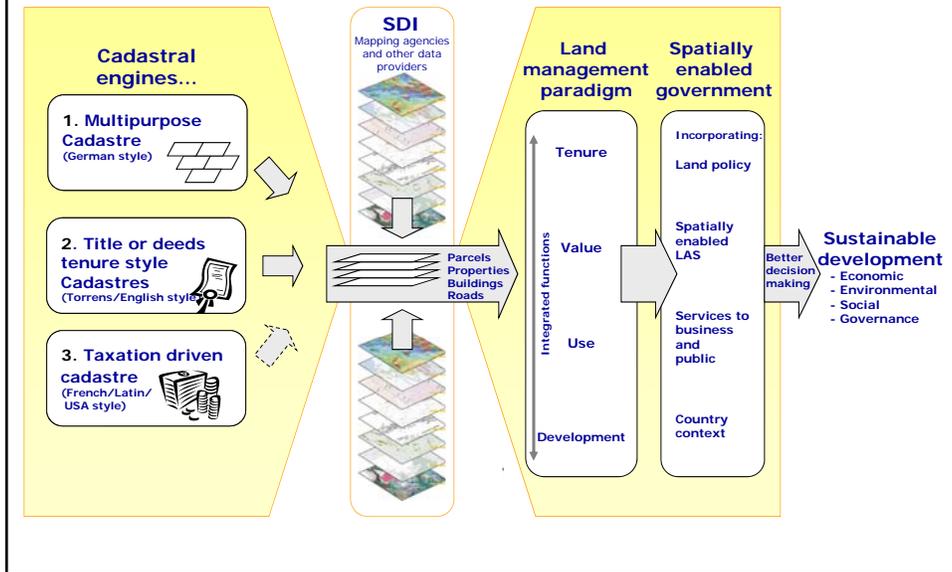
- There are a range of stakeholder interests  
This includes Ministries/Departments such as:  
Justice; Taxation; Planning; Environment; Transport;  
Agriculture; Housing; Interior (regional and local authorities); Utilities;  
and civil society interests such as businesses and citizens.
- Creating awareness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

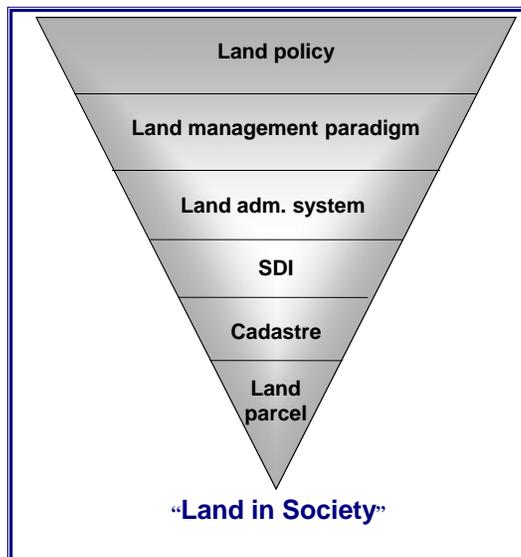
A spatially enabled government organises its business and processes around “**place**” based technologies, as distinct from using maps, visuals, and web-enablement.

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

## Significance of the Cadastre



## Land Governance – a hierarchy of land issues



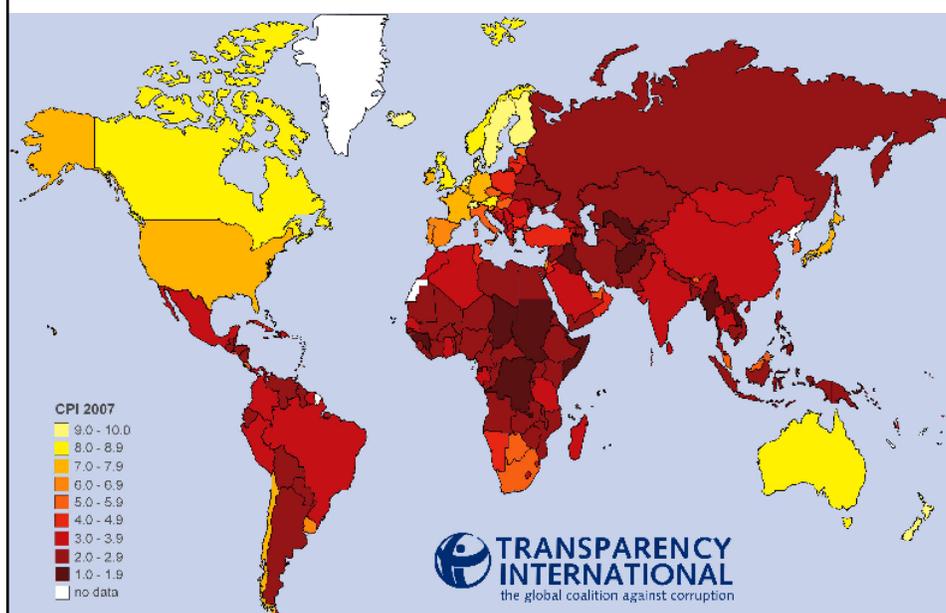
## Good governance is:



- **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

## Good governance and corruption



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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.

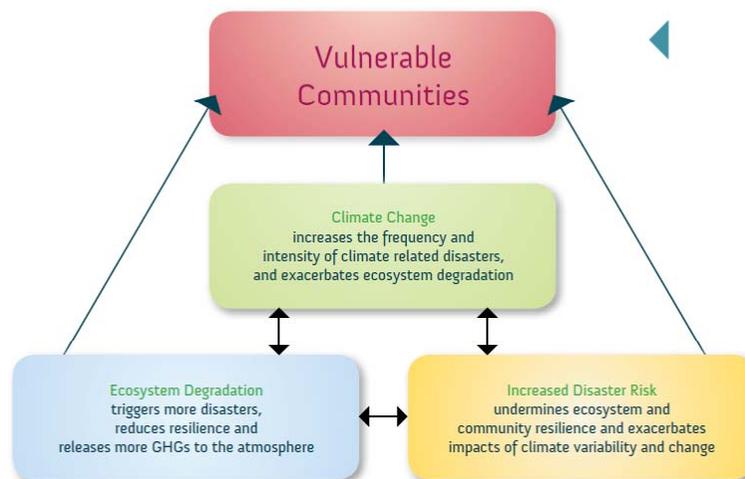
**Ban Ki-moon, UN secretary general**

### “Climate change also provides a range of opportunities”

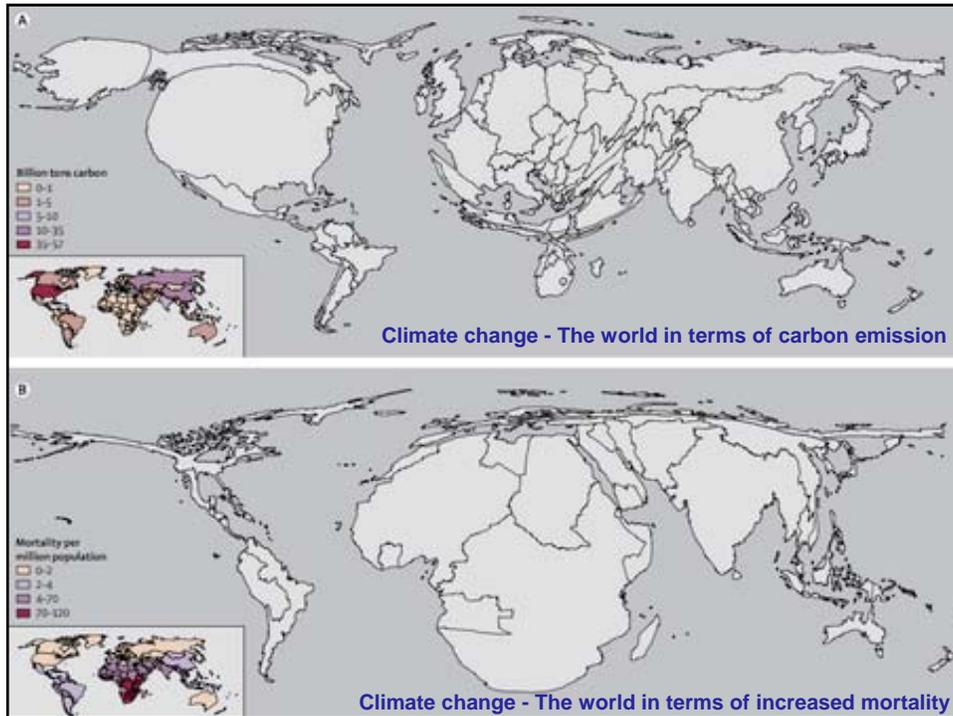
Prevention of climate change can be greatly enhanced through better land-use planning and building codes so that cities keep their ecological footprints to a minimum and make sure that their residents, especially the poorest, are protected as best as possible against disaster.

**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

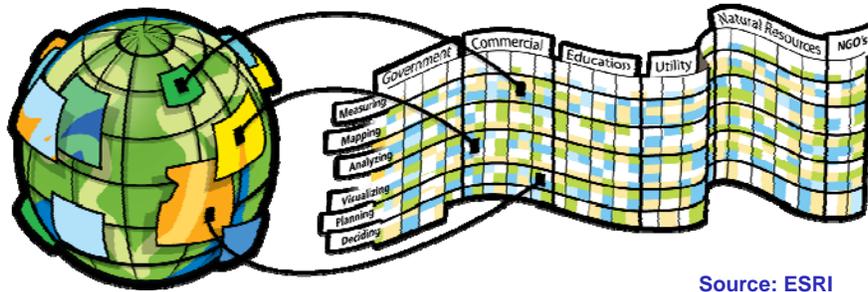
No matter the inequity between the developed and developing world in terms of emissions and climate consequences, there is a need to develop relevant means of adaptation to climate change both in the rich and the poorer countries.

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

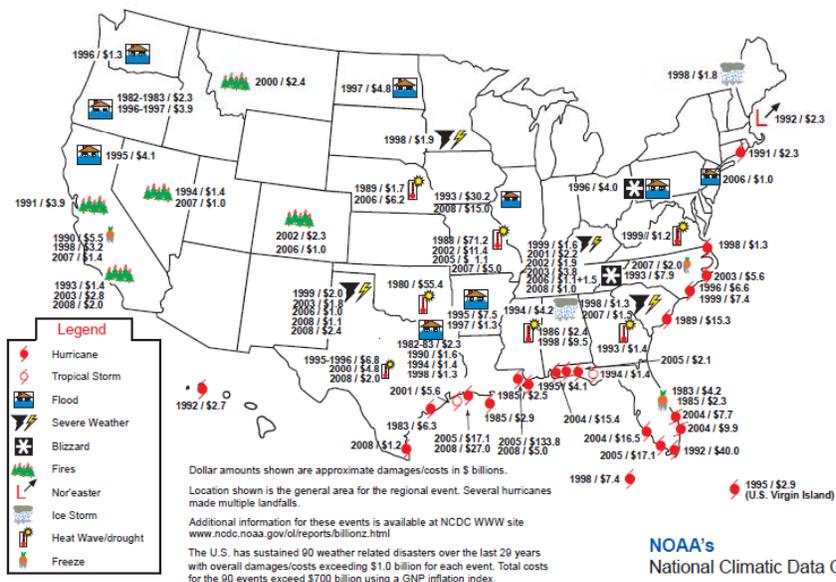
...creates a strong foundation



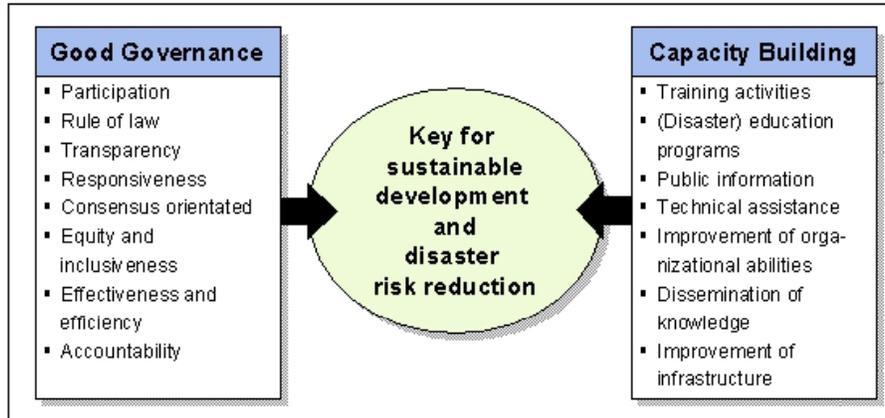
Source: ESRI

**...for sustainable action**

## USA Billion Dollar Weather Disasters 1980 - 2008



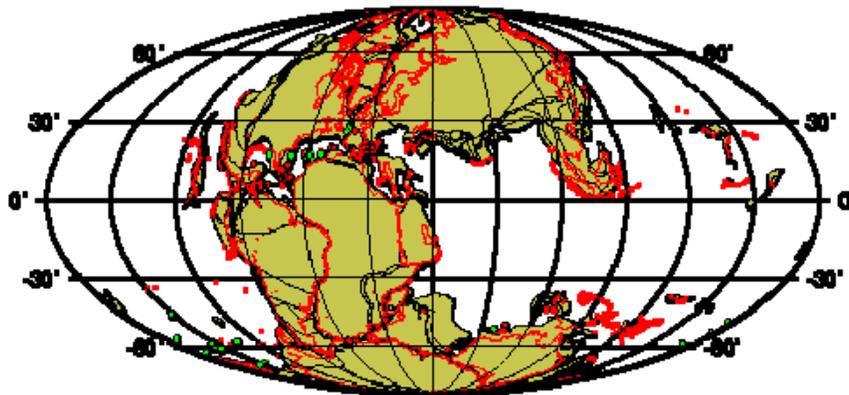
## Building the capacity



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

Kofi Annan, 2004

## Climate Change ...



**150** Mill Years reconstruction

***We cannot change the Hazard - but we can manage the Risk***

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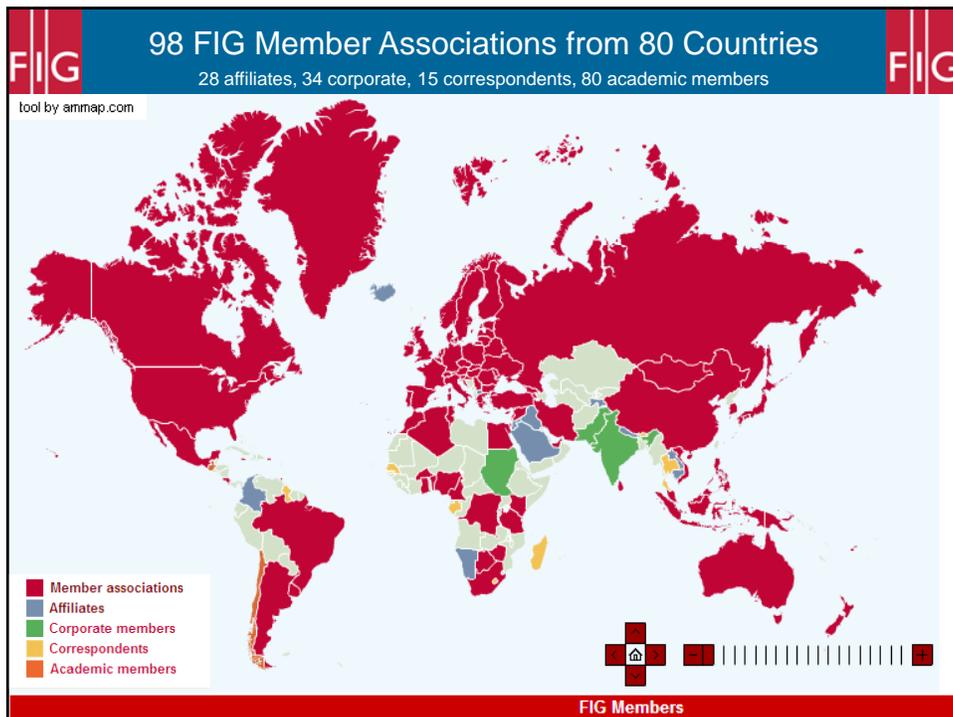
- Professional, institutional and global development

## 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.**



## The Role of **FIG**

- **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

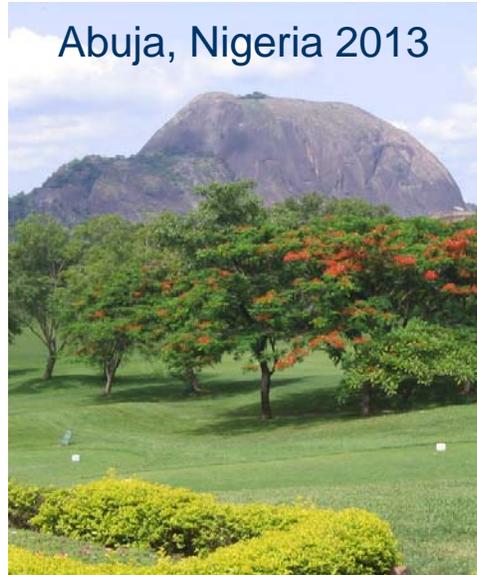
### Commission work plans

10 technical commissions  
 Interaction with national delegates

### Commission working groups

Interaction with national delegates

### Commission workshops and seminars



Abuja, Nigeria 2013

## 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.

**FIG** 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



## The role of

 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 XXIV FIG International Congress 2010

Sydney, Australia - 11 to 16 April 2010



**Facing the Challenges  
– Building the Capacity**

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