

Spatially Enabled Land Administration:

Responding to the Global Agenda
and
Addressing Societal Needs

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GSDI 12 WOLD CONFERENCE
REALISING SPATIALLY ENABLED SOCIETY
SINGAPORE, 19-22 OCTOBER 2009

Outline of presentation

The global agenda

- Facing the Millennium Development Goals

Land governance

- The land management paradigm

Spatially enabled government

- The significant role of the cadastre

Addressing societal needs

- Land administration in support of social tenure security

Facing the new challenges

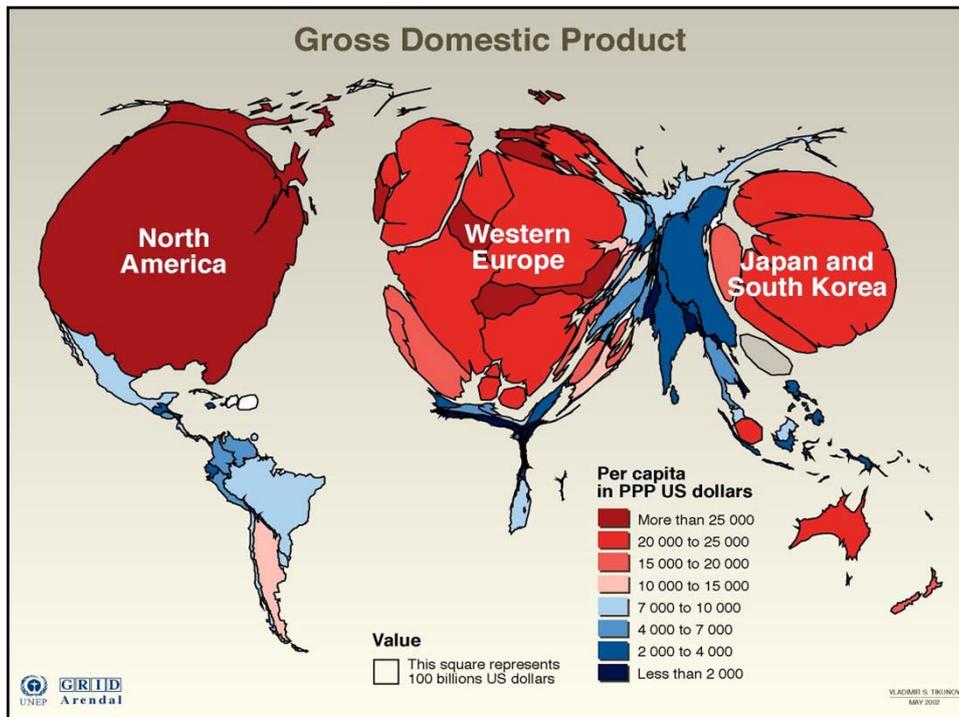
- Land administration in support of climate change adaptation and natural disaster risk management

The Millennium Development Goals

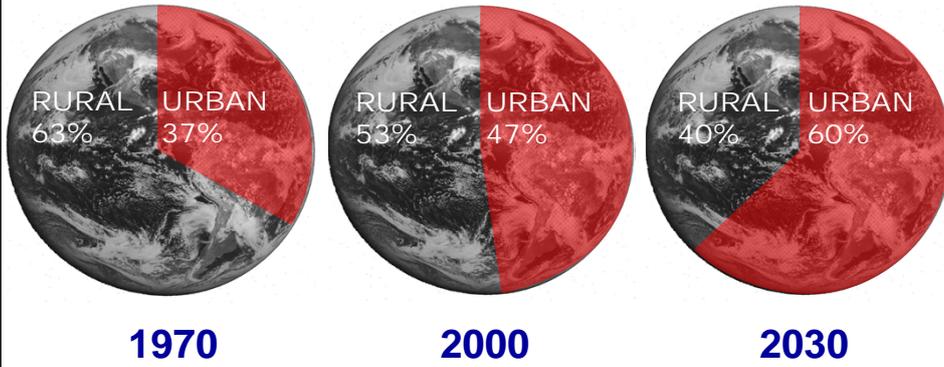
- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability

Goal 8: Develop a Global Partnership for Development

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



Urban population growth



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



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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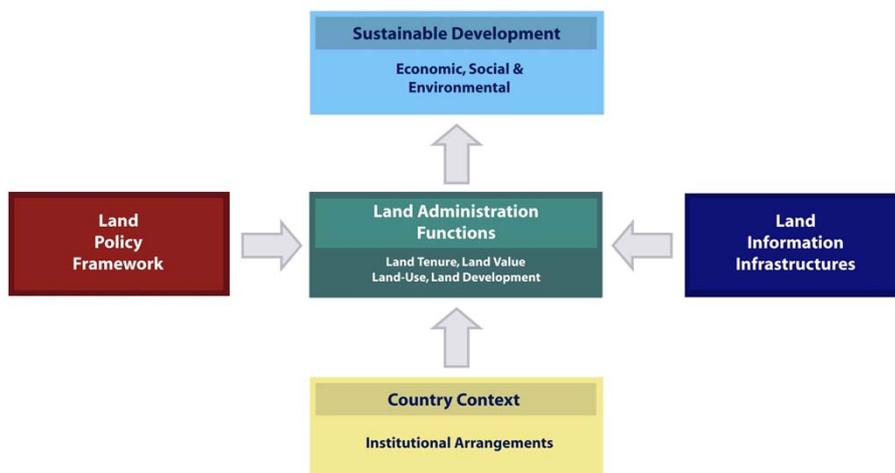
Land governance

Land governance is about the policies, processes and institutions by which land, property and natural resources are managed.

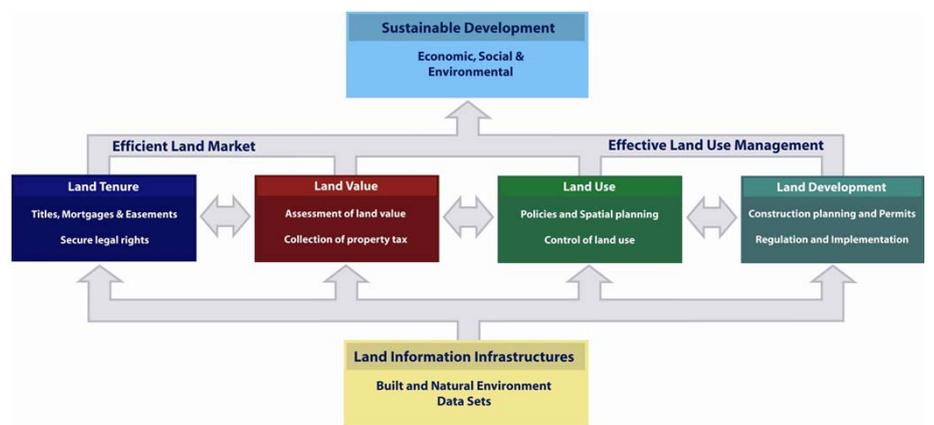
This includes decisions on access to land; land rights; land use; and land development.

Land governance is about determining and implementing sustainable land policies.

Understanding the land management paradigm



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



Land Tenure: the allocation and security of rights in lands; the legal surveys of boundaries; the transfer of property through sale or lease; and the management; adjudication of disputes regarding rights and boundaries.

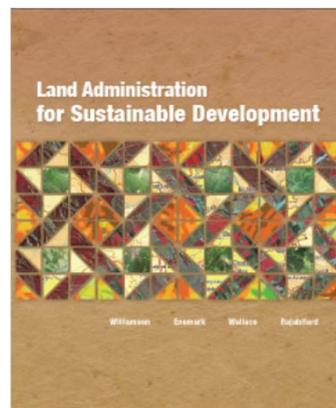
Land Value: the assessment of the value of land and properties; the gathering of revenues through taxation; and the management and adjudication of land valuation and taxation disputes.

Land-Use: the control of land-use through adoption of planning policies and land-use regulations at various levels; the enforcement of land-use regulations; and the management and adjudication of land-use conflicts.

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

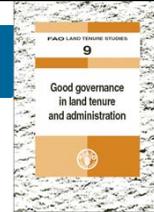
TABLE 1.1 – TRADITIONAL BENEFITS OF LAS

| | |
|---|---|
| Support for governance and rule of law | The formalization of processes used for land management engages the public and business, and, in turn, this engagement leads to their support for the institutions of government. |
| Alleviation of poverty | A primary means of alleviating poverty lies in recognizing the homes and workplaces of the poor and their agricultural land as assets worthy of protection. |
| Security of tenure | This is the method of protecting people's associations with land. It is the fundamental benefit of formal land administration. Ensuring security throughout the range of tenures used in a country helps provide social stability and incentives for reasonable land use. Conversion of some of the rights into property is the core process of commoditization of land needed for effective markets. |
| Support for formal land markets | Security and regularity in land arrangements are essential for successful, organized land markets. LAS manage the transparent processes that assist land exchange and build capital out of land. |
| Security for credit | International financing norms and banking practices require secure ownership of land and robust credit tenures (that is, tenures which support security interests in land) that can only exist in formal LAS. |
| Support for land and property taxation | Land taxation takes many forms, including tax on passive land holding, on land-based activities, and on transactions. However, all taxation systems, including personal and company taxation, benefit from national LAS. |
| Protection of state lands | The coherence of national LAS is dependent on its coverage of all land. Thus, management of public land is assisted by LAS. |
| Management of land disputes | Stability in access to land requires defined boundaries, titles, and interests. If LAS provide simple, effective processes for achieving these outcomes, land disputes are reduced. The systems also need additional dispute management processes to cover breakdown caused by administrative failure, corruption, fraud, forgery, or transaction flaws. |
| Improvement of land planning | Land planning is the key to land management, whether the planning is institutionalized within government or achieved by some other means. Impacts of modern rural and urban land uses affect adjoining land and beyond. These impacts need to be understood and managed by effective land planning assisted by LAS. |



Williamson, Enemark, Wallace, Rajabifard, 2010

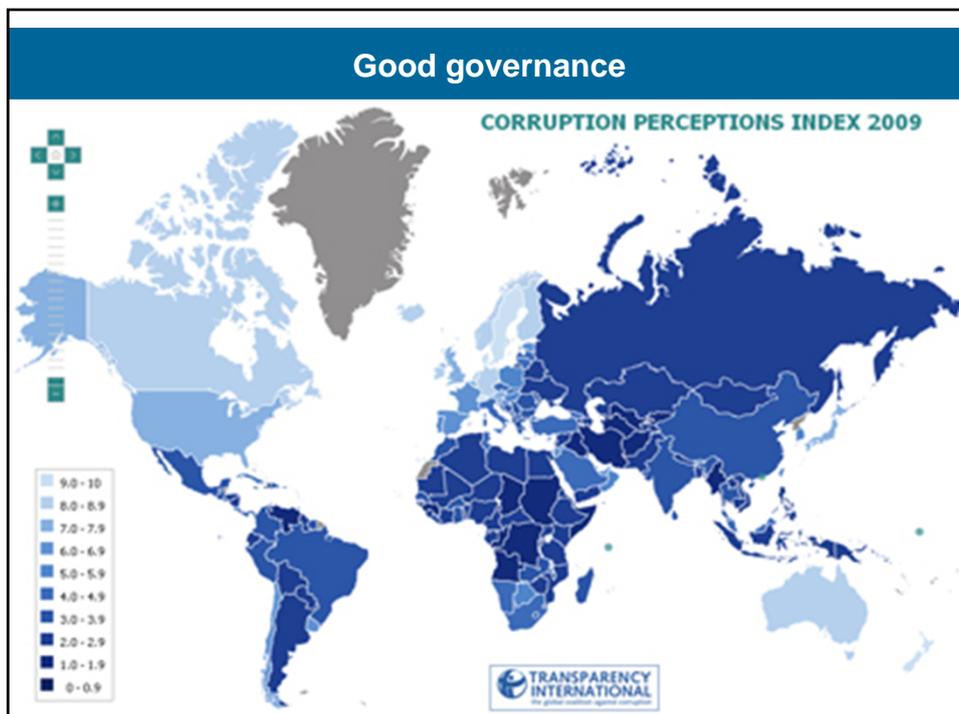
Good governance is:



- **Sustainable and locally responsive:** It balances the economic, social, and environmental needs of present and future generations, and locates
- **Legitimate and equitable:** It has been endorsed by society through democratic processes and deals fairly and impartially with individuals
- **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
- **Participatory and providing security and stability:** It enables citizens to participate in government and provides security of livelihoods, freedom from crime
- **Dedicated to integrity:** Officials perform their duties without bribe and give independent advice and judgements, and respects confidentiality

Adapted from FAO, 2007

Good governance



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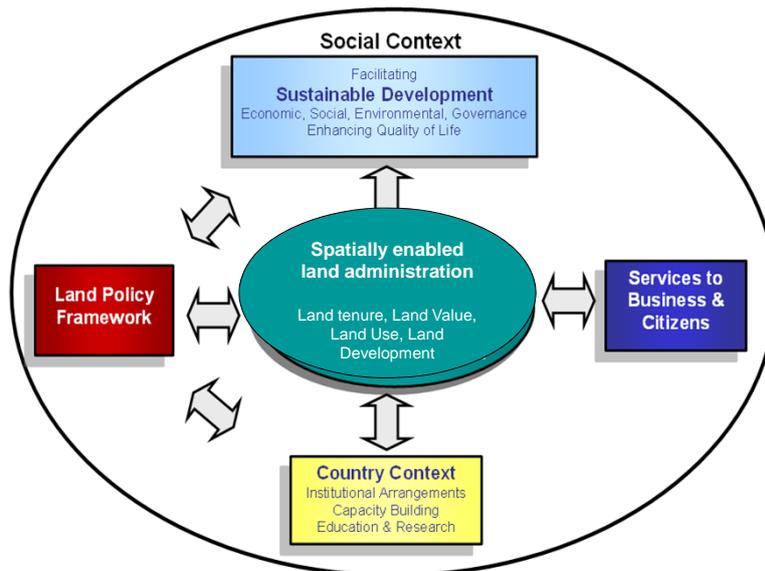
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A land management vision



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.”

Location Strategy for United Kingdom, 2008

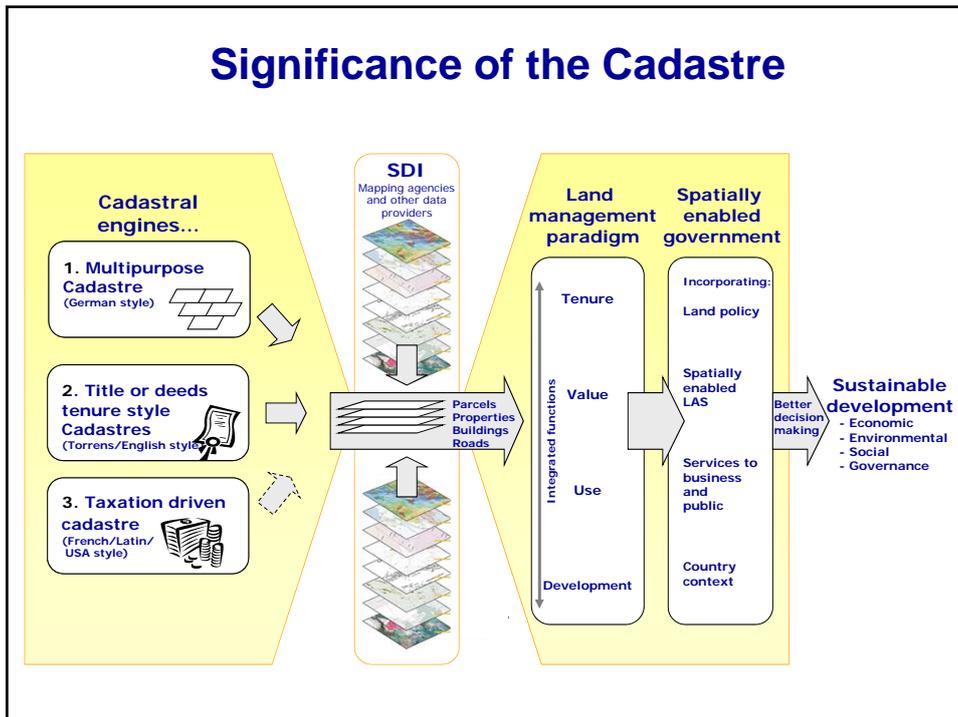
“Heading toward spatial enabled society”

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



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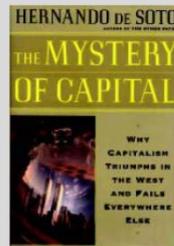
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The role of property rights

”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

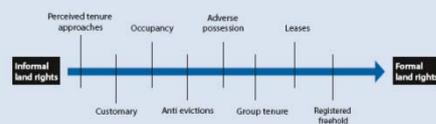


Formal land rights **can** be recorded in traditional cadastral systems

Continuum of rights (GLTN-agenda)

From: illegal or informal rights

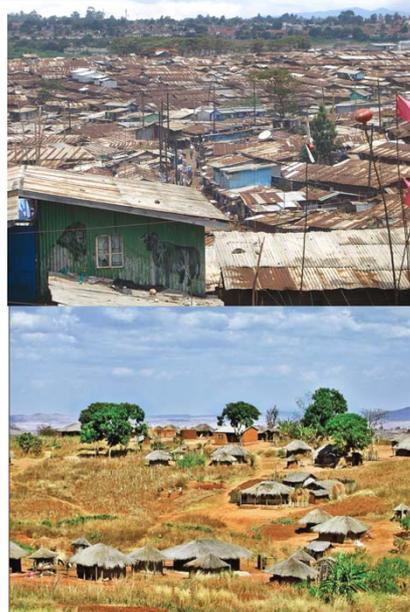
To: legal or formal rights



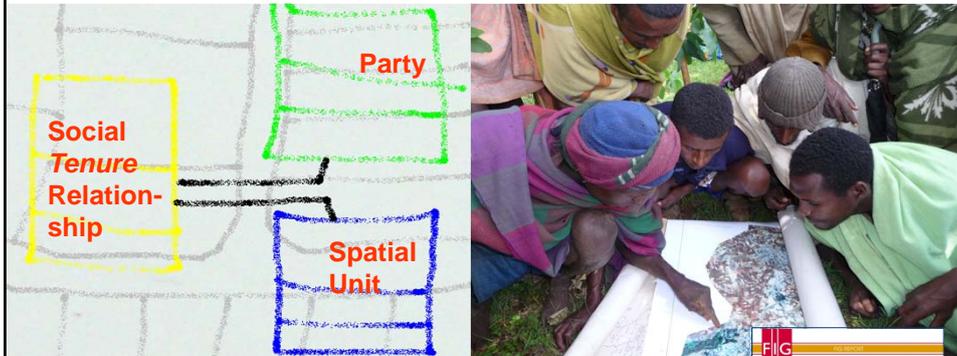
Informal rights **cannot** be recorded in traditional cadastral systems

Limitations of Formal Cadastral Systems

- More than 70 per cent of the land in many developing countries are outside the formal systems of land registration and administration
- This relates especially to informal settlements and areas governed by customary tenure
- Traditional cadastral systems do not provide for security of tenure in these areas.

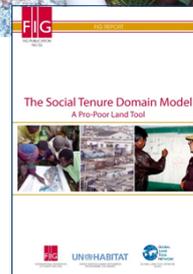


The Social Tenure Domain Model: Closing the Gap



Modeling the relation between Parties – Spatial unit – Social Tenure

Parties (“who”): Not only a (legal) person – but a range of subjects such as person, couple, groups of people, unidentified groups, authority, etc,
Spatial Unit (“where”): Not only an identified (measured) parcel – but a range of objects such land parcels, buildings, etc and identified in various ways – such as one point, street axes, photos, etc.
Social tenure (“what”): Not only ownership and formal legal rights – but also range of informal, indigenous and customary rights as well as financial issues such group loans and micro credit.



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Facing the new challenges

- 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

Good Land Governance is fundamental for addressing the new challenges and for achieving the MDGs

Climate change – disaster management



7 Manila

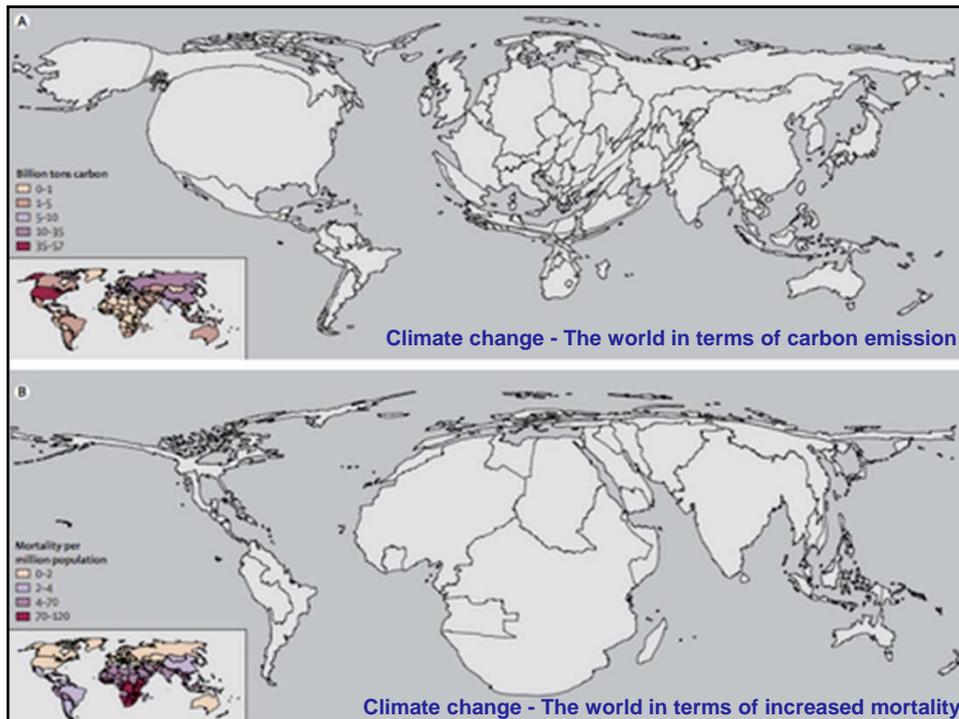
Time, 2009



A Majeed, AFP, Getty Images (2010)

The most important environmental concern now is climate change. The authoritative Stern Report on the economics of climate change concludes that it will 'affect the basic elements of life for people around the world – access to water, food production, health and the environment'.

Planning Sustainable Cities: UN-Habitat Global Report on Human Settlement 2009



Climate Change

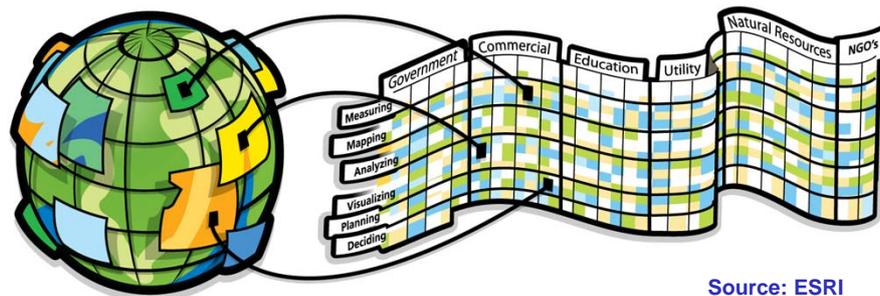
No matter the inequity between the developed and developing world in terms of emissions and climate consequences, there is a need to develop relevant means of adaptation to climate change both in the rich and the poorer countries.

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 and 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

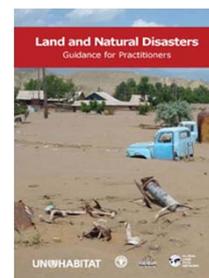


...for sustainable action

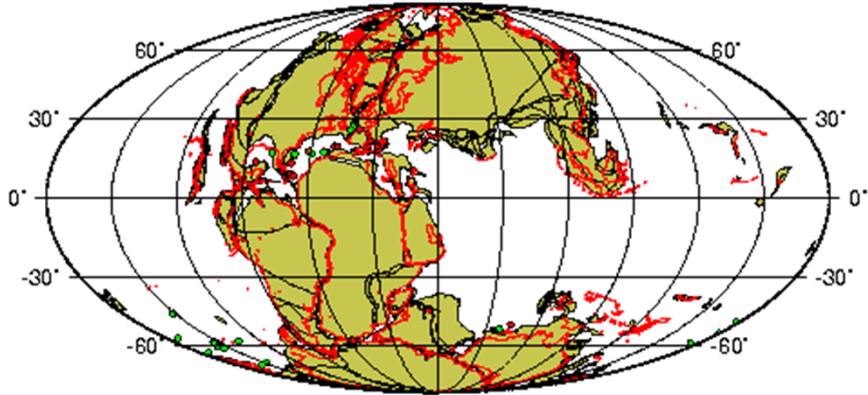
Disaster risk prevention and management

- Humanitarian actors are often confronted with land issues when undertaking emergency shelter and protection activity.
- The information on the people to land relationship is crucial in the immediate post disaster situation.
- Disaster risks must be identified as area zones in the land-use plans and the land information system with the relevant risk assessment and information attached.
- Measures for disaster risk prevention and management should be integrated in the land administration systems

**Land and Natural Disasters
Guidance for Practitioners.
UN-HABITAT/FAO, 2010**



Climate Change – disaster management



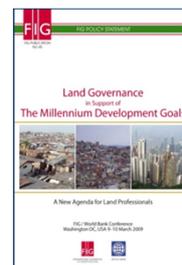
150 My Reconstruction

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

The role of FIG

FIG intend to play a strong role in building the capacity to design, build and manage Land Governance systems in response to the new challenges and addressing societal needs.

“Building the capacity for taking the land policy agenda forward”



**Thank you
for your attention**

