

Facing the Global Challenges:

the importance of Land Governance
and the significance of the Cadastre

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INTERNATIONAL OPEN SEMINAR
FIG COMMISSION 7 ANNUAL MEETING
KUALA LUMPUR, MALAYSIA, 12-16 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 role of FIG

- Capacity development to face the challenges

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

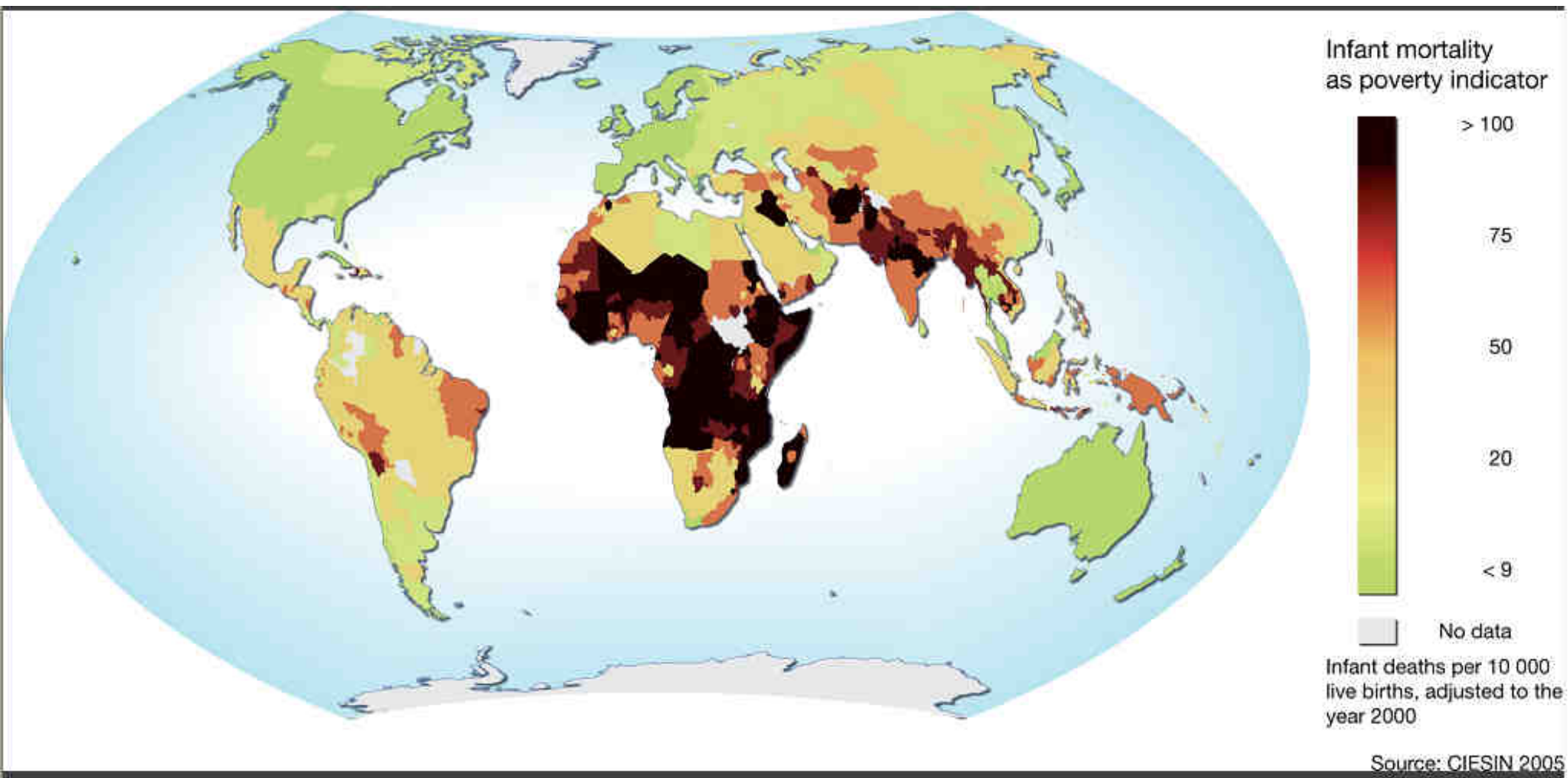
Goal 6: Combat HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability

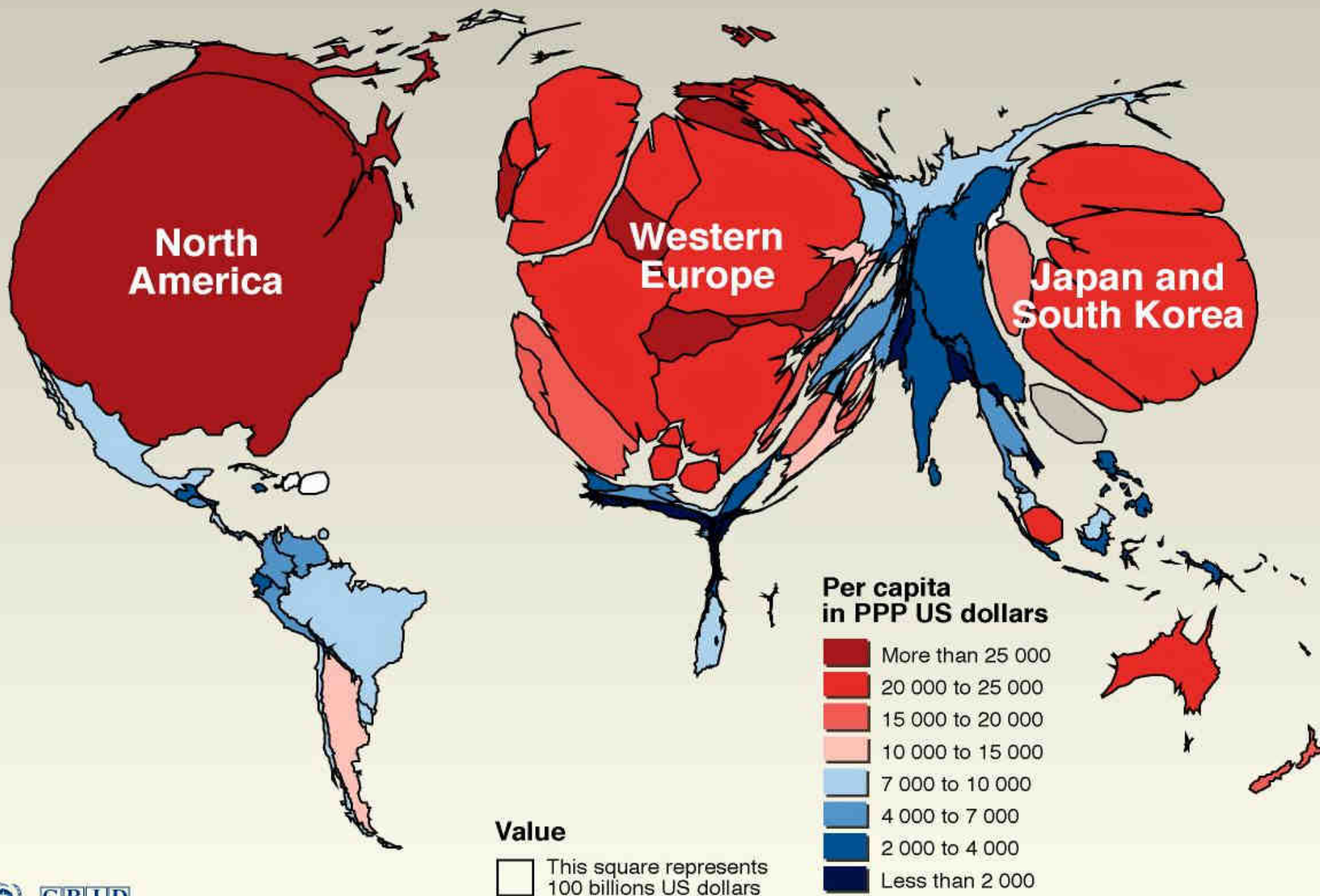
Goal 8: Develop a Global Partnership for Development

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

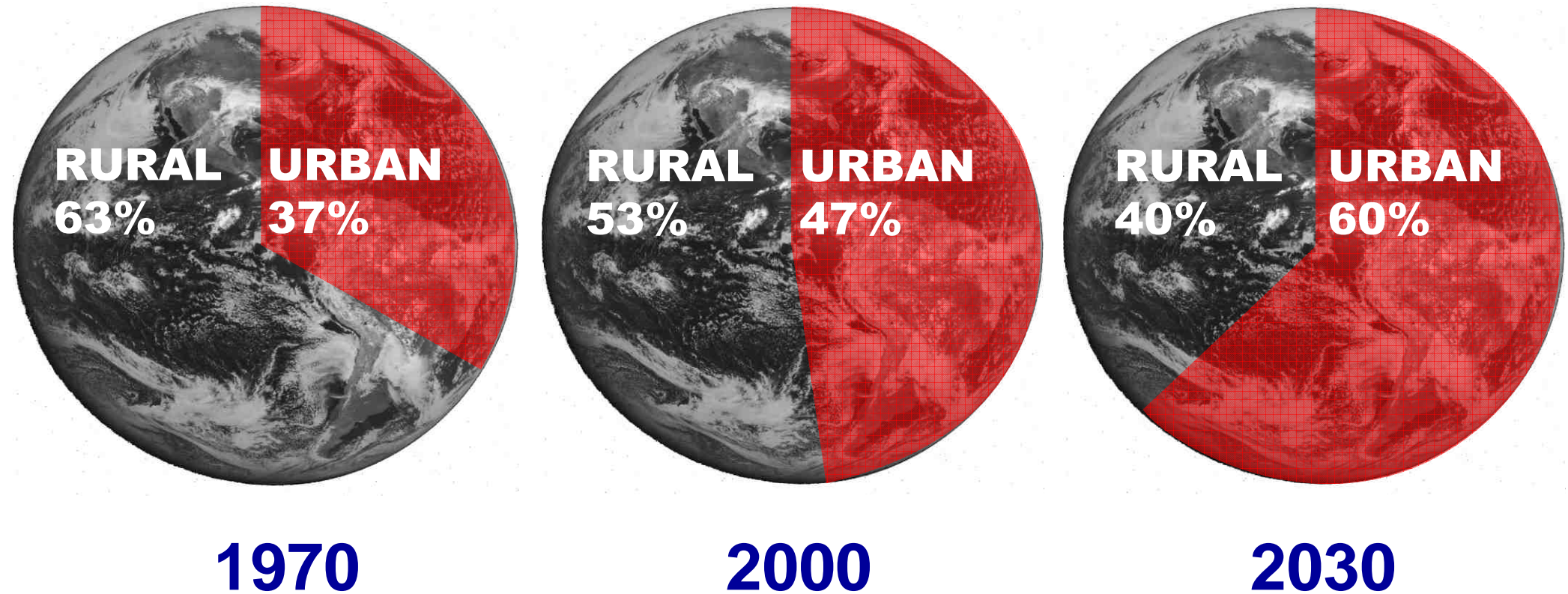
World status of poverty



Gross Domestic Product



Urban population growth



2007:

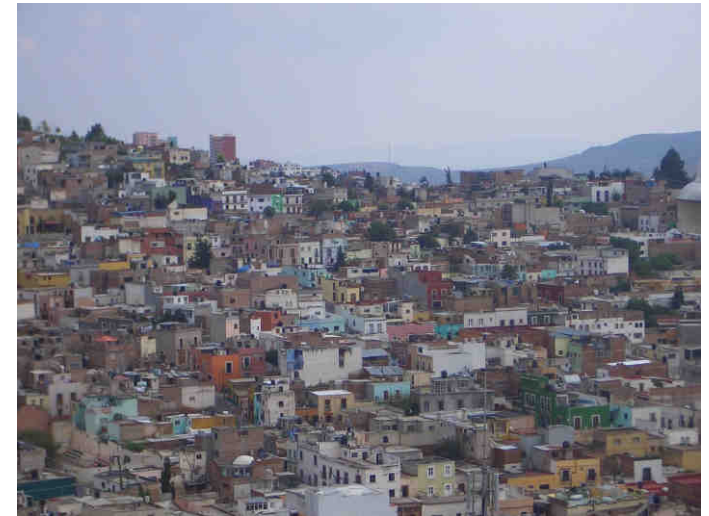
Total world population : 6.5 billion
Total urban population: 3.3 billion
Total slum dwellers: 1.1 billion



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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Is the role of the surveyors changing ?

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**

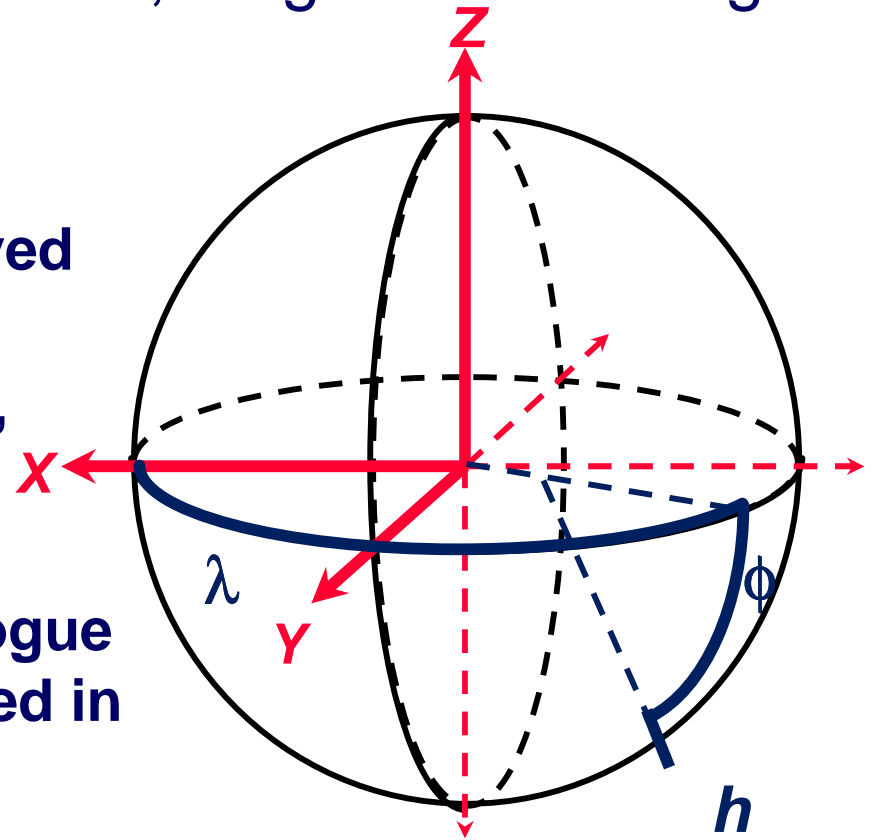
Surveyors will increasingly contribute to building sustainable societies as experts in managing land and properties

The land professionals

Positioning infrastructures

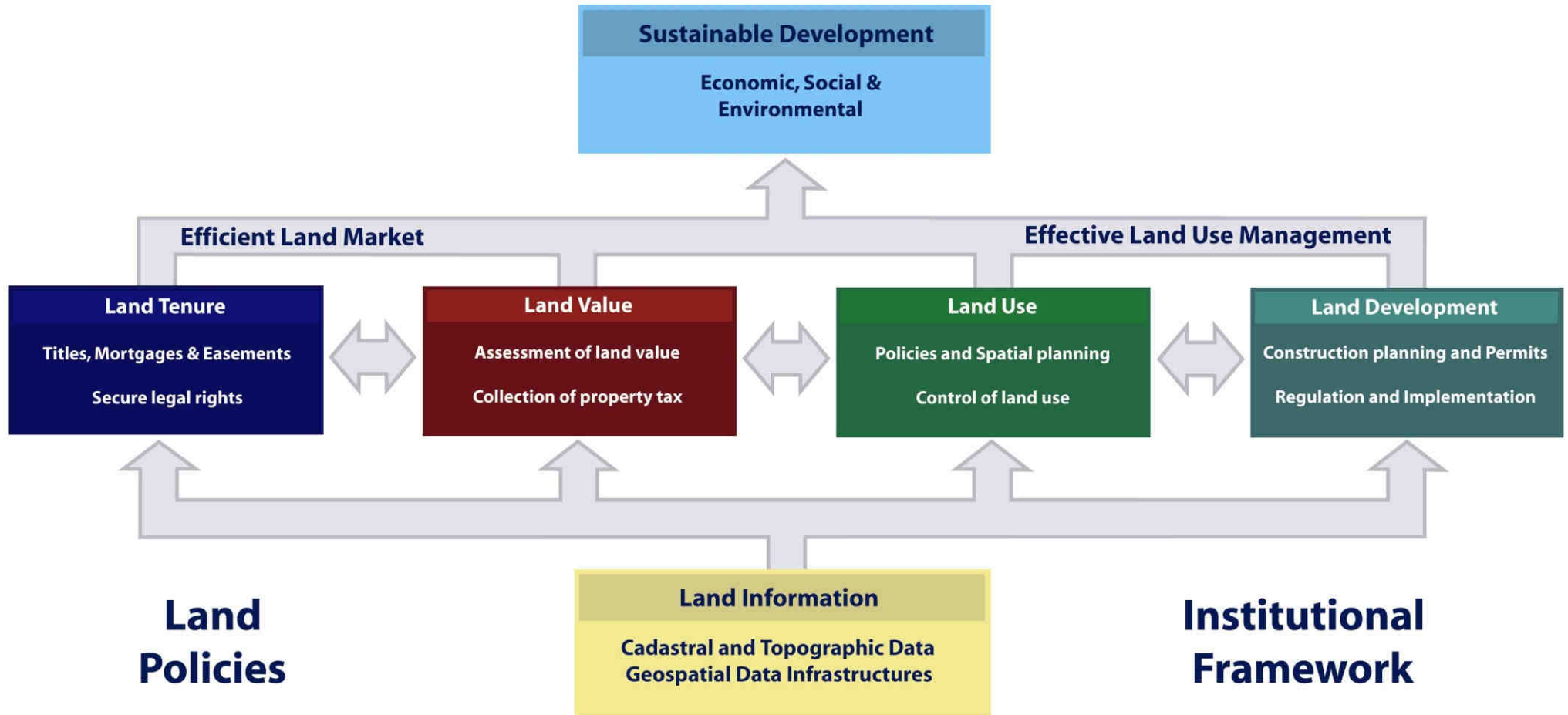
Versus traditional Geodetic Datum

- 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

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.

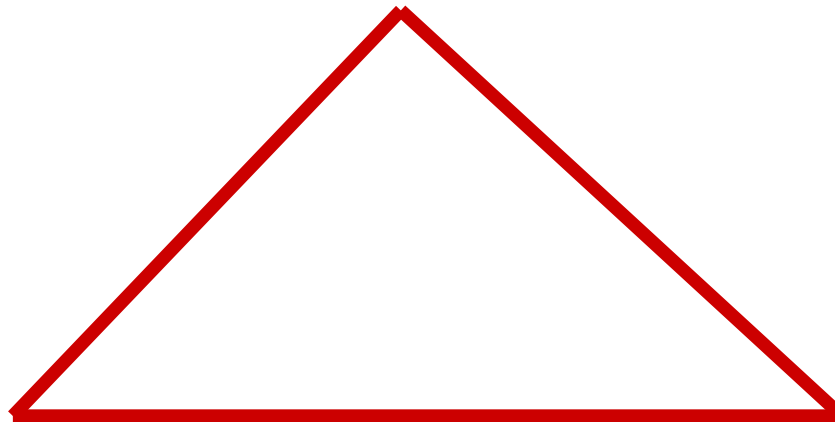
Land governance is about determining and implementing sustainable land policies.

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

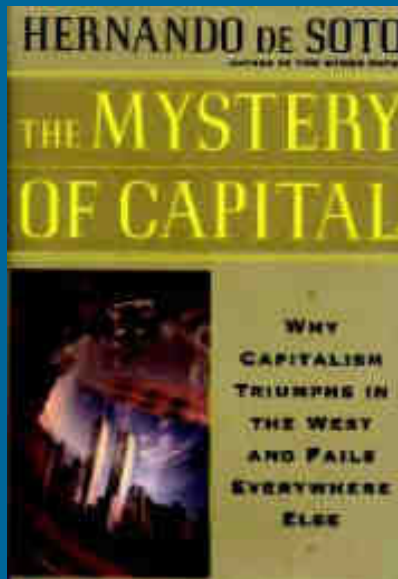
Restrictions:

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”

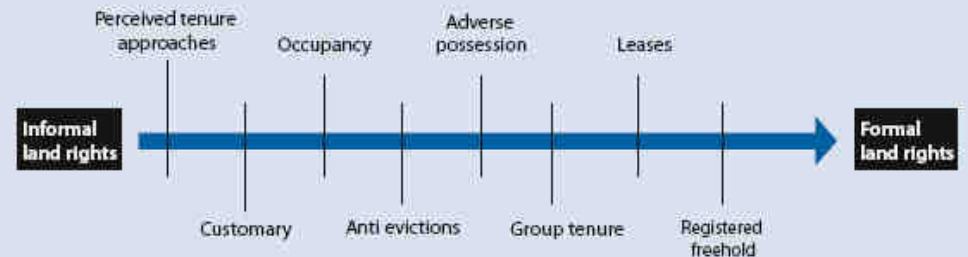
Hernando de Soto – 1993



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

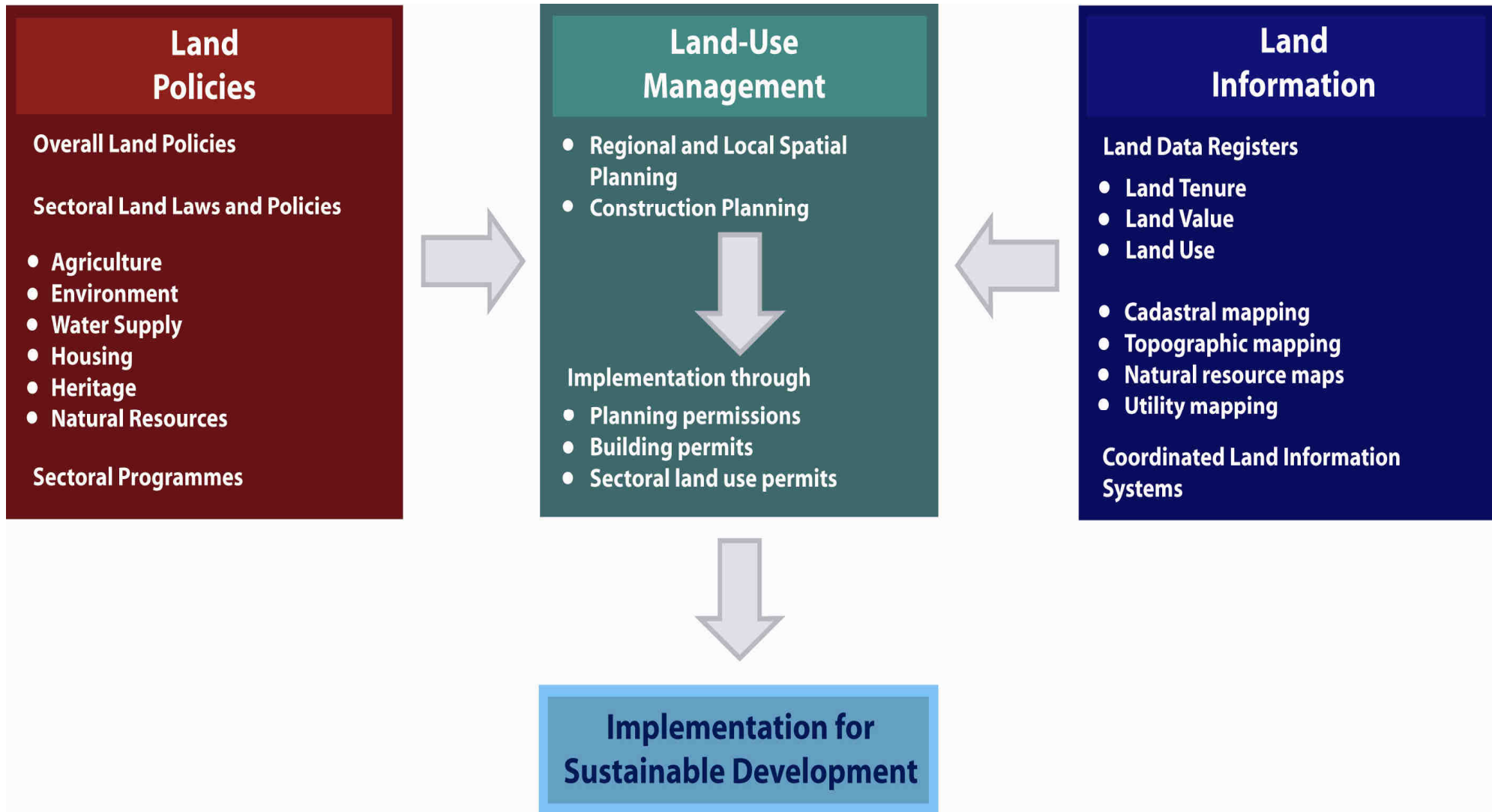
**Only 25-30 countries in the world
apply to these criteria.**

Property Restrictions

- two conflicting approaches

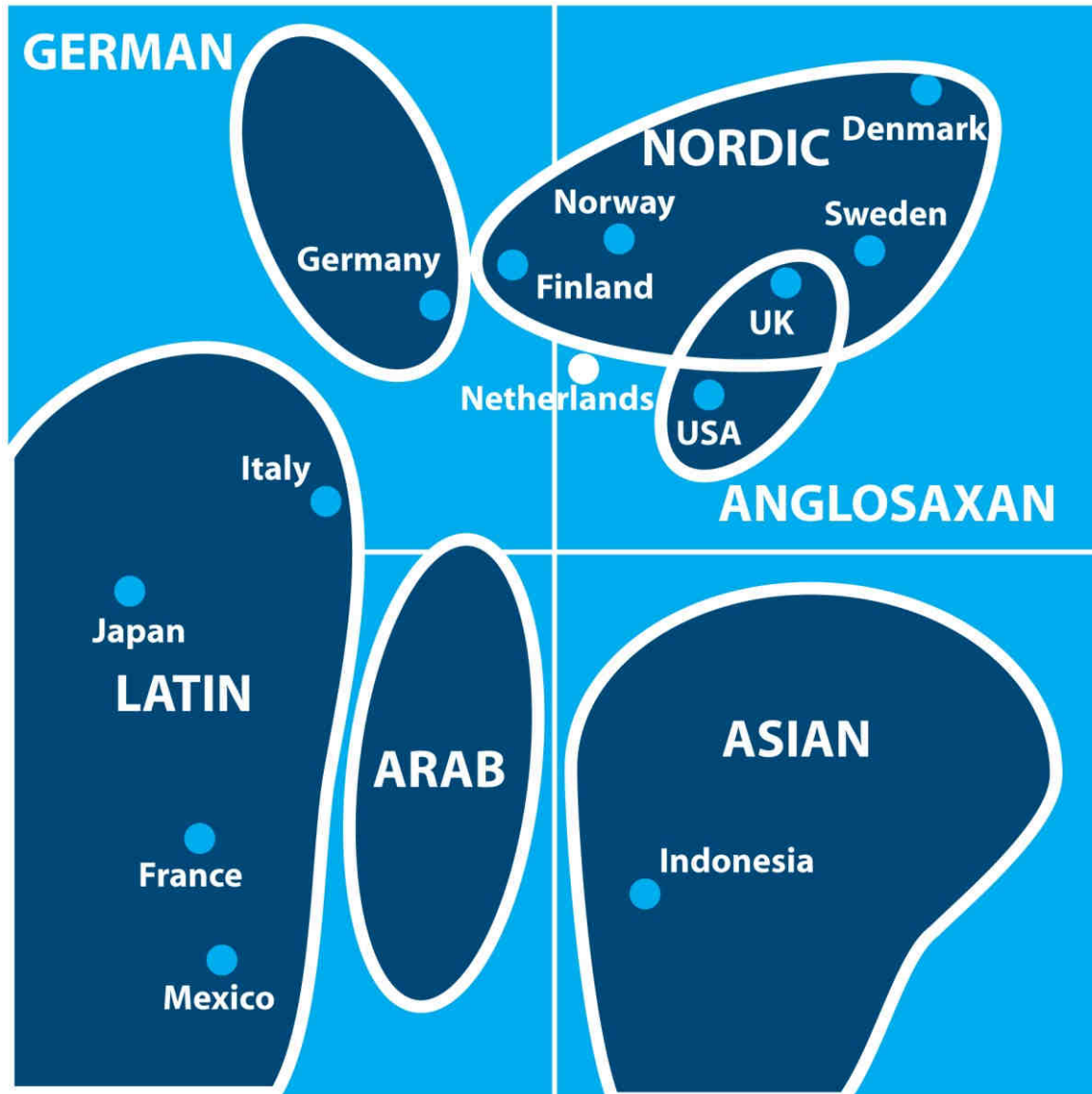
- **The free market approach** (current debate in the US)
 - Land owners should be obligated to no one and should have complete domain over their land.
 - The role of government to take over, restrict, or even regulate its use should be non-existent or highly limited.
 - Planning restrictions should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



Responsibilities:

A cultural map of the world



Uncertainty avoidance:

The preference of structured situations over unstructured or flexible ones

Power distance:

The degree of inequality among people accepted by the population

Geert Hofstede (2001).

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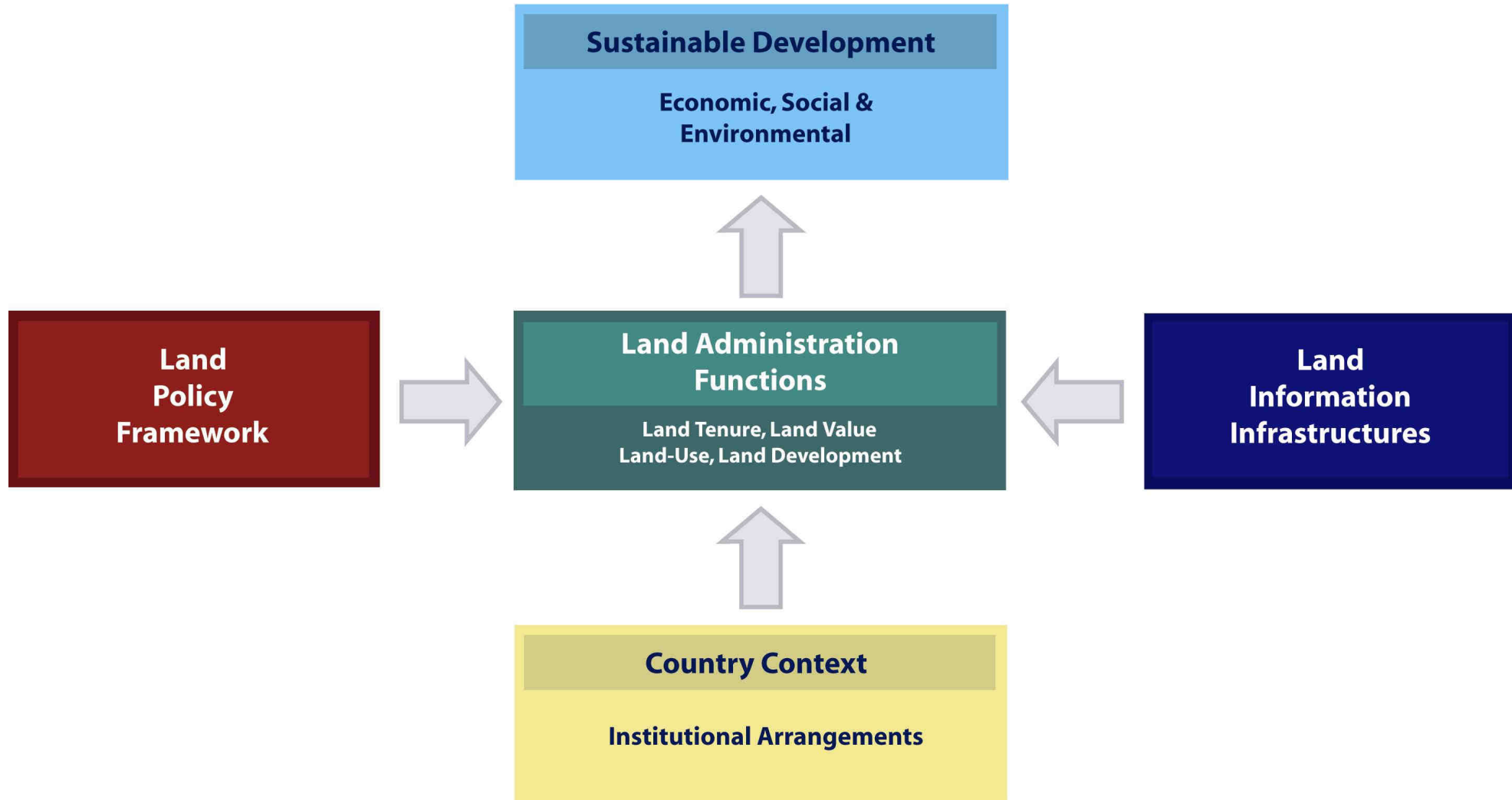
Spatially enabled government

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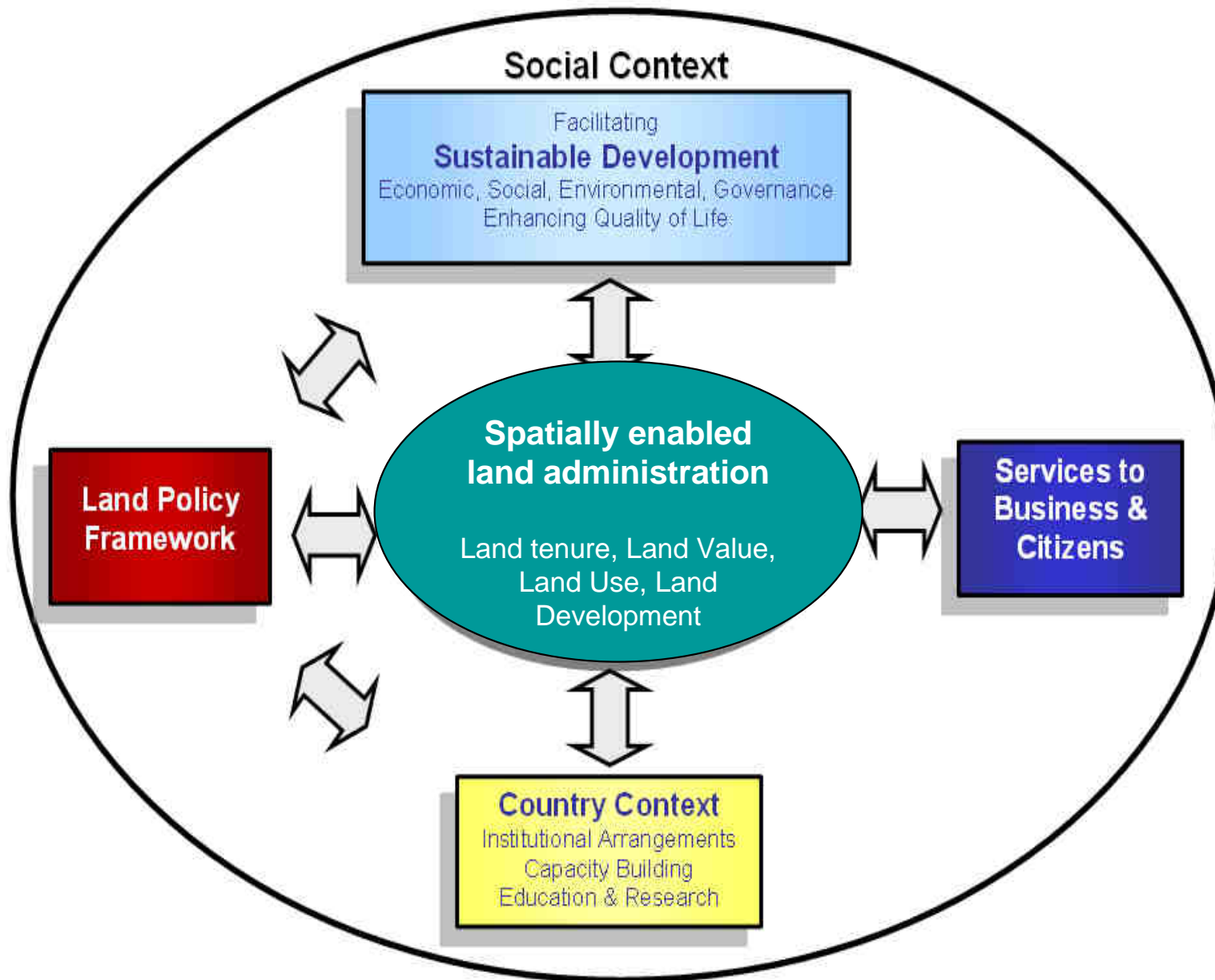
The role of FIG

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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

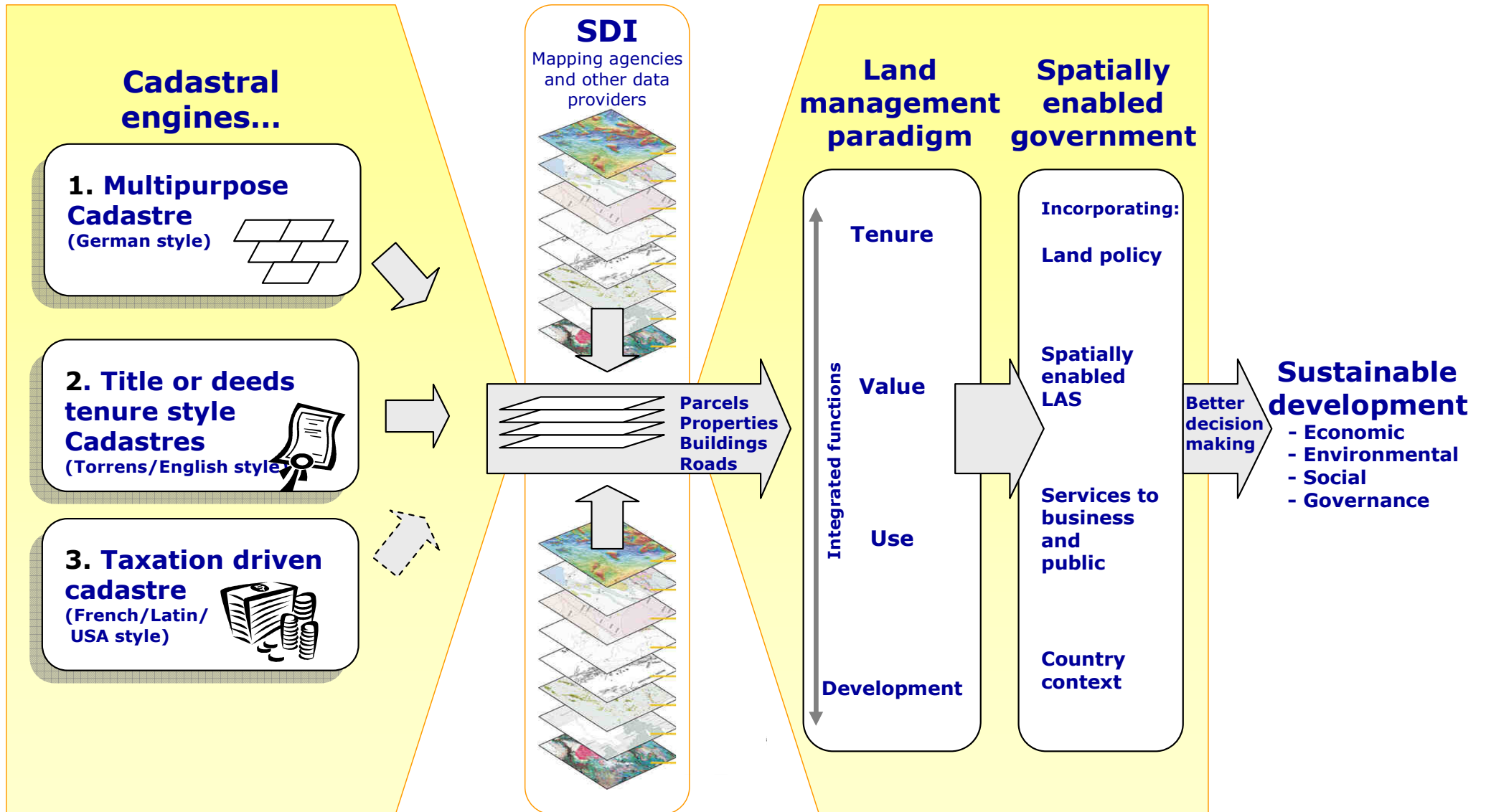
- There are a range of stakeholder interests
This includes Ministries/Departments such as:
Justice; Taxation; Planning; Environment; Transport;
Agriculture; Housing; Interior (regional and local authorities); Utilities;
and civil society interests such as businesses and citizens.
- Creating awareness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

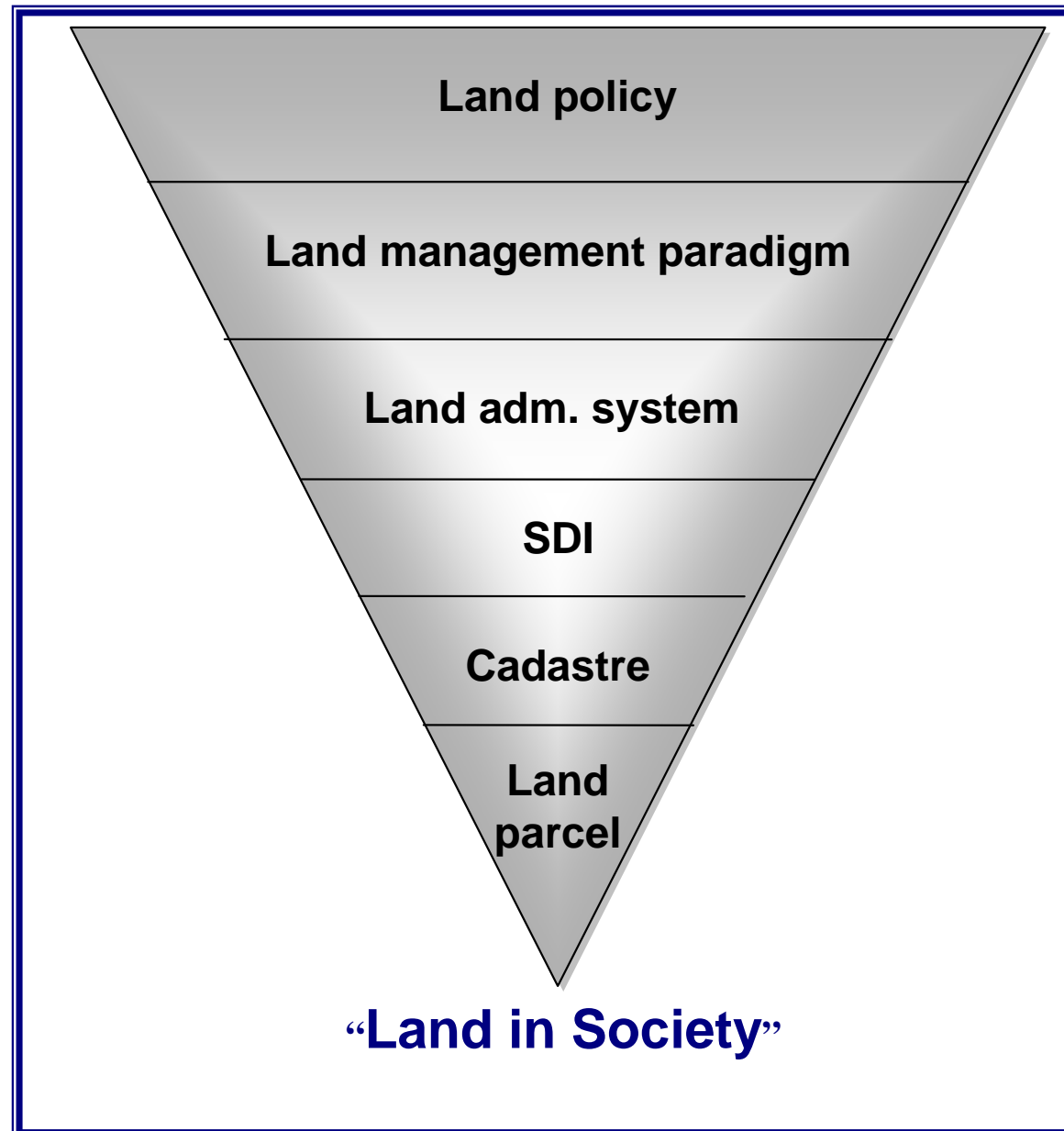
A spatially enabled government organises its business and processes around “**place**” based technologies, as distinct from using maps, visuals, and web-enablement.

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

Significance of the Cadastre



Land Governance – a hierarchy of land issues

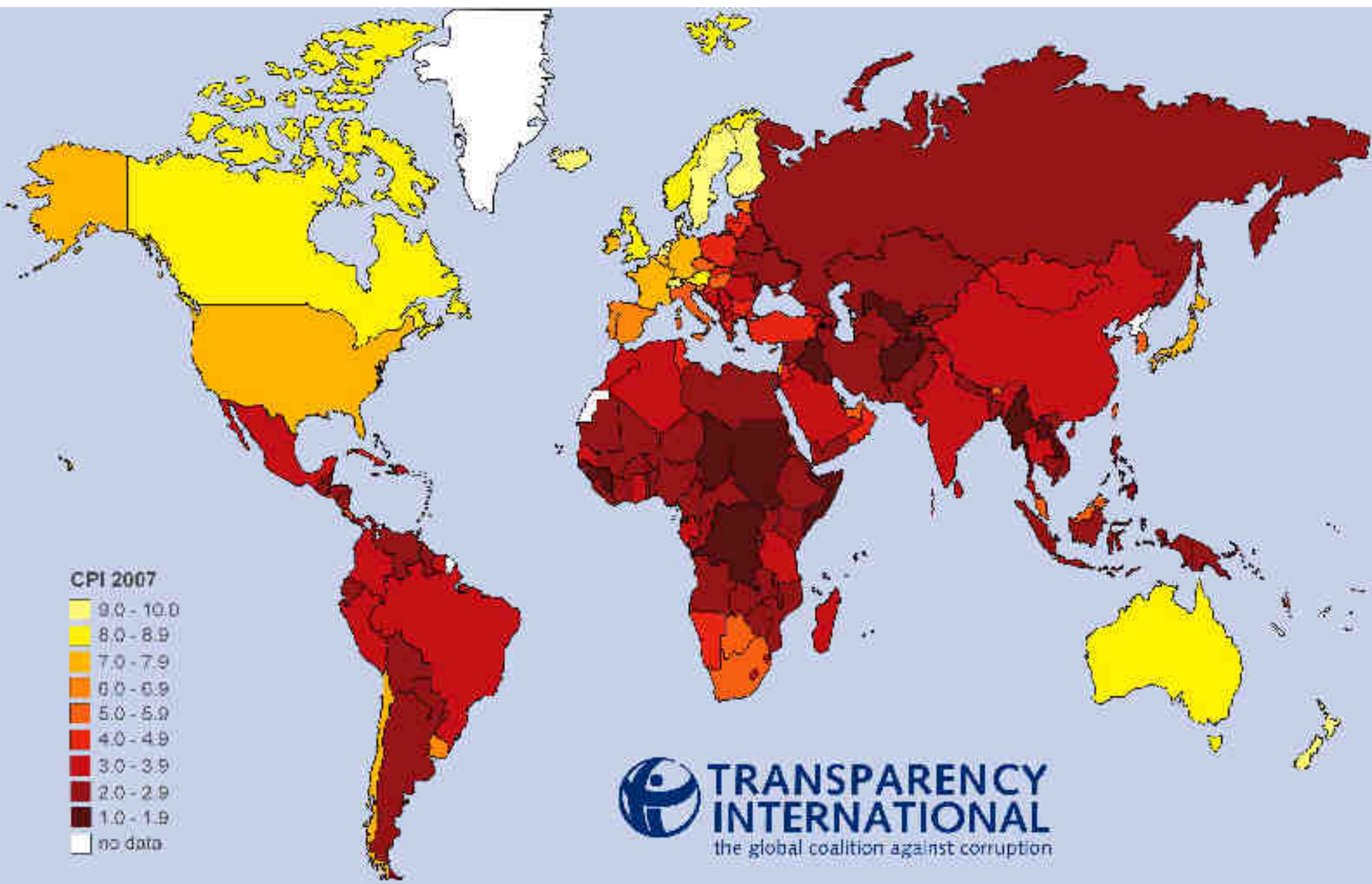


Good governance is:



- **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.

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.

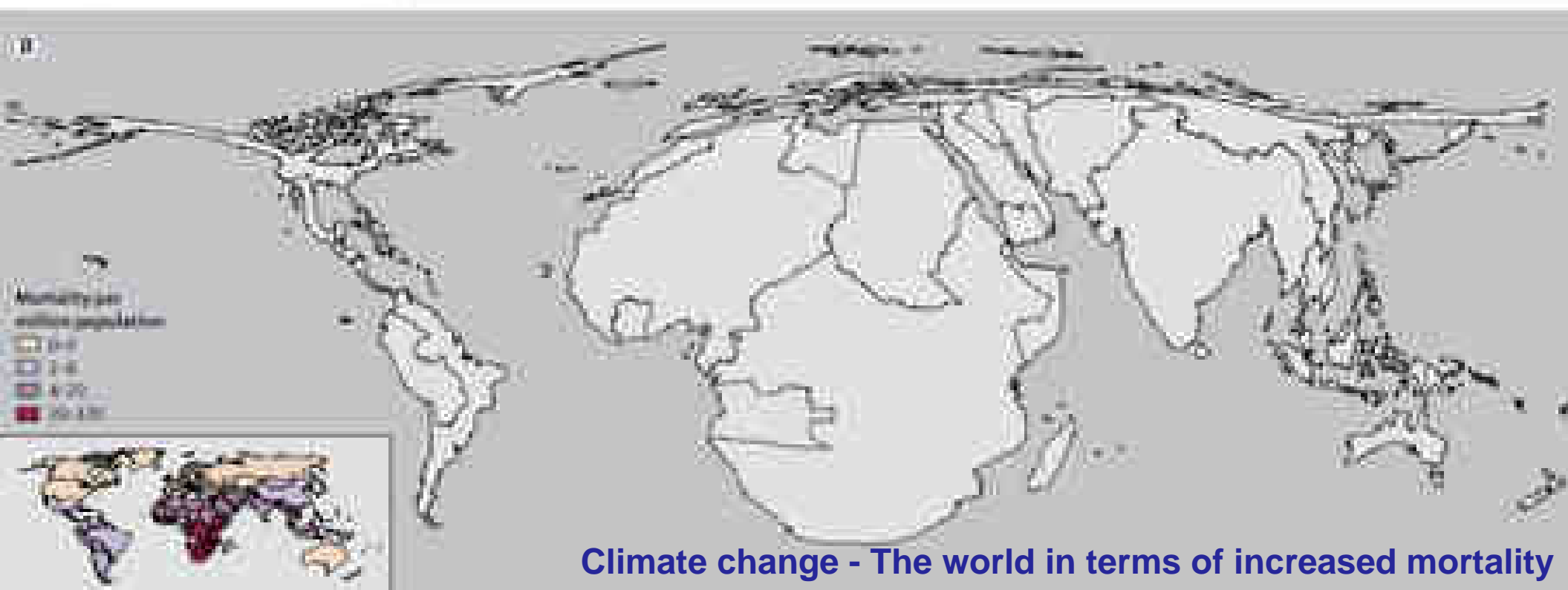
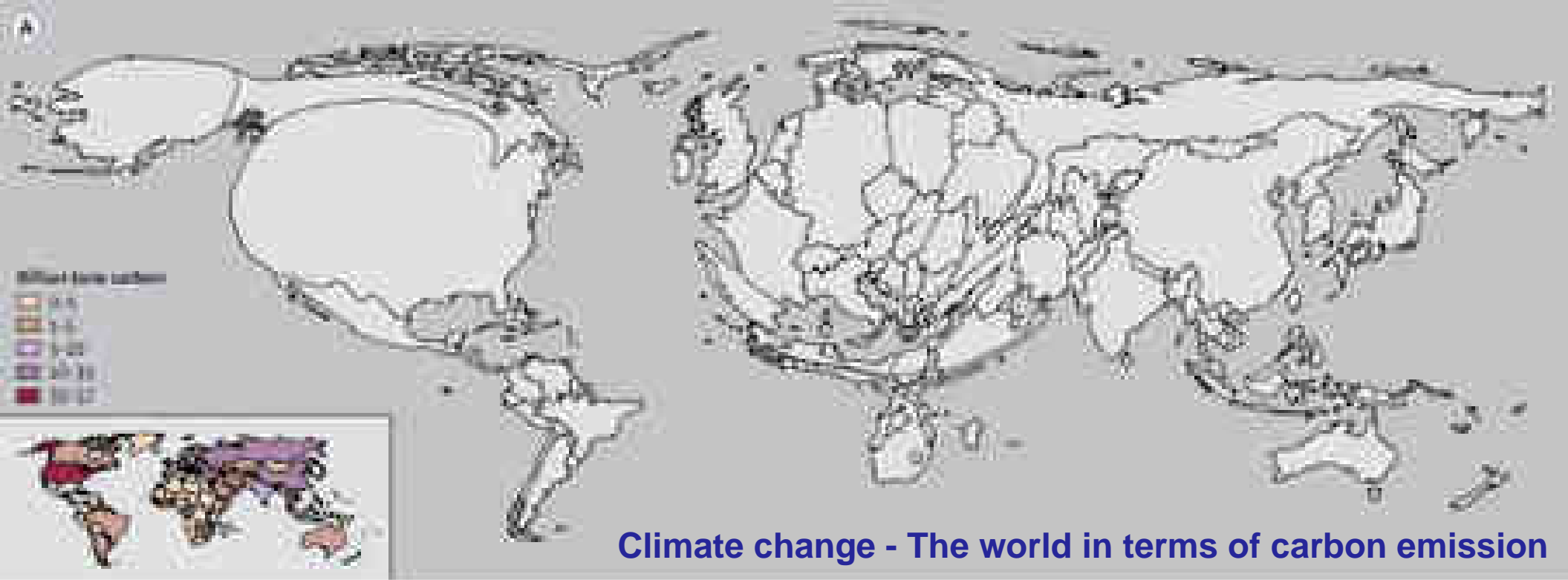
Those that contributed the least to this planetary problem continue to be disproportionately at risk.

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



Climate Change

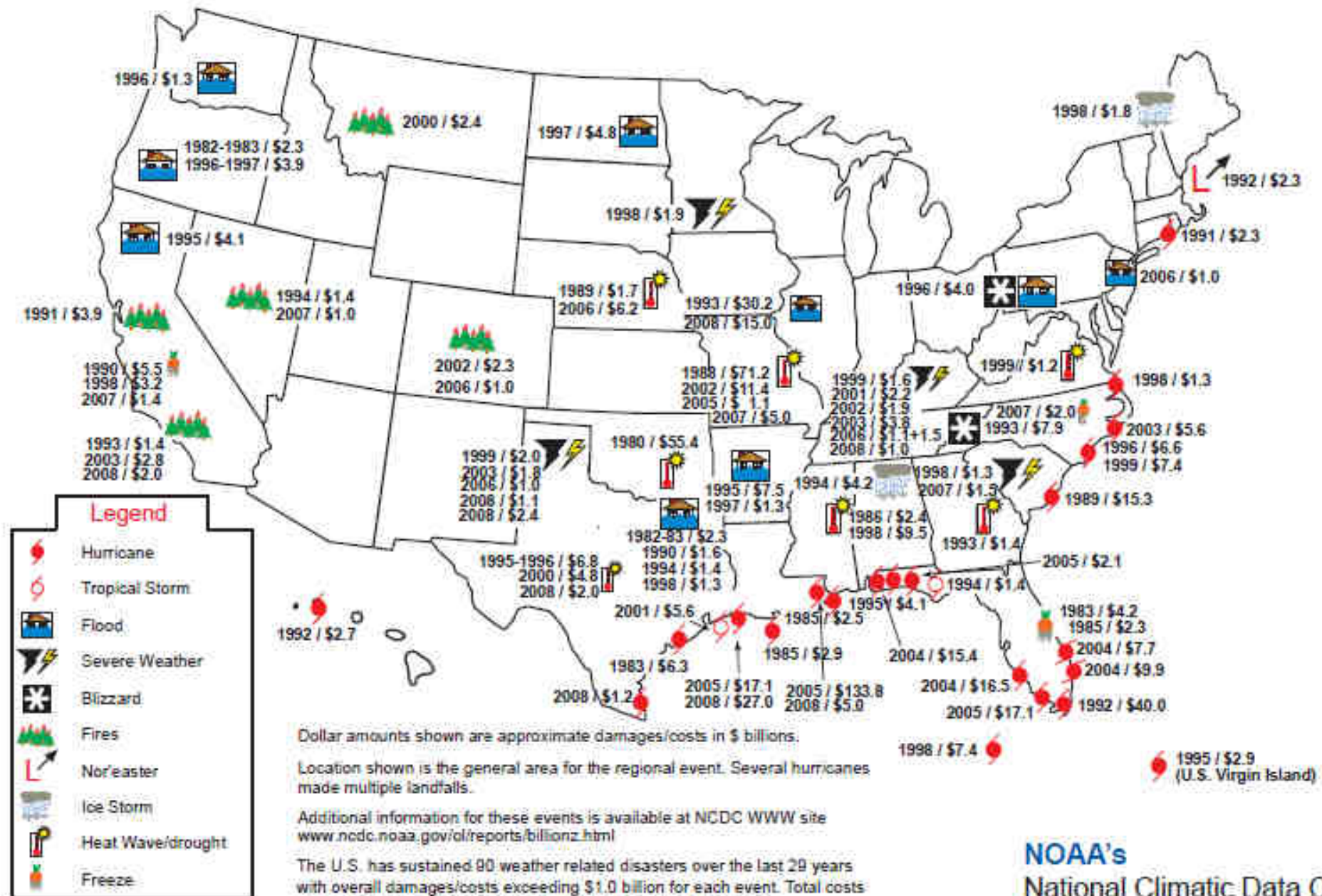
No matter the inequity between the developed and developing world in terms of emissions and climate consequences, there is a need to develop relevant means of adaptation to climate change both in the rich and the poorer countries.

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

USA

Billion Dollar Weather Disasters 1980 - 2008



1996 / \$1.3
 1982-1983 / \$2.3
 1996-1997 / \$3.9
 1995 / \$4.1
 1991 / \$3.9
 1990 / \$5.5
 1998 / \$3.2
 2007 / \$1.4
 1993 / \$1.4
 2003 / \$2.8
 2008 / \$2.0
 2000 / \$2.4
 1997 / \$4.8
 1998 / \$1.9
 1989 / \$1.7
 2006 / \$6.2
 1993 / \$30.2
 2008 / \$15.0
 1998 / \$71.2
 2002 / \$11.4
 2005 / \$1.1
 2007 / \$5.0
 1999 / \$1.6
 2001 / \$2.2
 2002 / \$1.9
 2003 / \$3.8
 2006 / \$1.1+1.5
 2008 / \$1.0
 1999 / \$1.2
 1998 / \$1.3
 2007 / \$1.3
 1999 / \$1.3
 2007 / \$2.0
 1993 / \$7.9
 1998 / \$1.3
 2003 / \$5.6
 1996 / \$6.6
 1999 / \$7.4
 1989 / \$15.3
 1995-1996 / \$6.8
 2000 / \$4.8
 2008 / \$2.0
 1990 / \$1.6
 1994 / \$1.4
 1998 / \$1.3
 1980 / \$55.4
 1995 / \$7.5
 1997 / \$1.3
 1982-83 / \$2.3
 1990 / \$1.6
 1994 / \$1.4
 1998 / \$1.3
 1995-1996 / \$6.8
 2000 / \$4.8
 2008 / \$2.0
 2001 / \$5.6
 1983 / \$6.3
 2008 / \$1.2
 2005 / \$17.1
 2008 / \$27.0
 1985 / \$2.5
 1985 / \$2.9
 1995 / \$4.1
 2004 / \$15.4
 2005 / \$17.1
 2008 / \$5.0
 1983 / \$4.2
 1985 / \$2.3
 2004 / \$7.7
 2004 / \$9.9
 2004 / \$16.5
 2005 / \$17.1
 1992 / \$40.0
 1998 / \$7.4
 1995 / \$2.9 (U.S. Virgin Island)

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

- **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,

FIG publications



WWW.FIG.NET

The role of FIG

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”

XXIV FIG International Congress 2010



www.fig2010.com

11 – 16 April 2010



Facing the Challenges

- Building the Capacity



Thank you
For your attention