# International Dimension of LADM and its Pro Poor Version STDM

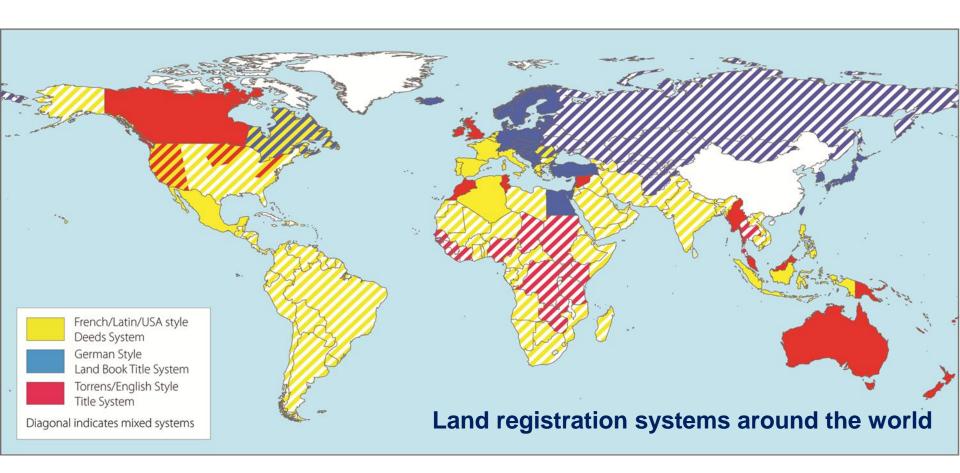
**Prof. Stig Enemark** 



#### **LADM form Research to Implementation**

- Land Administration Domain Modelling at a Threshold International Workshop, Rotterdam, the Netherlands, 6 July 2012

# The people to land relationship is dynamic, and reflects the cultural and institutional setting of the country



Deeds System (French/Latin/USA style): A register of owners; the transaction is recorded – not the title. Title System (German, Torrens/English style): A register of properties; the title is recorded and guarantied.

#### **Introductory Statements**

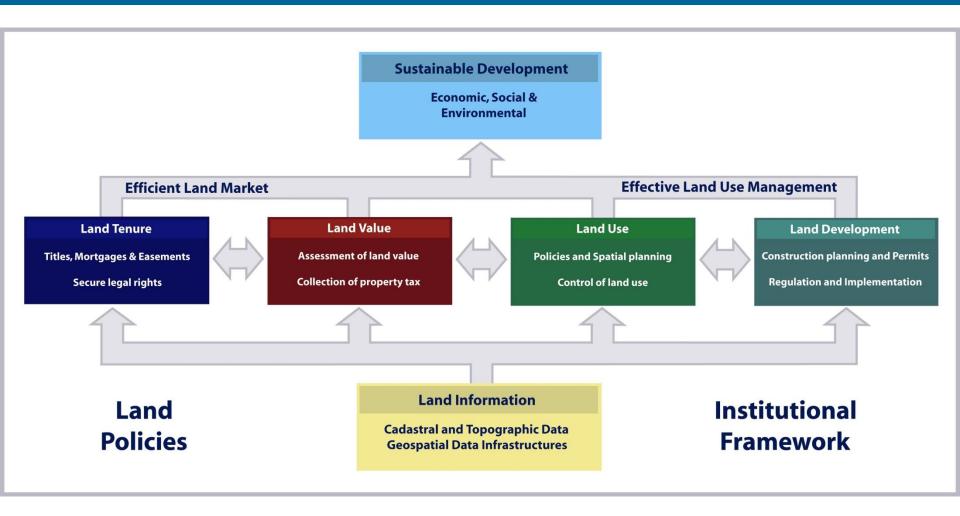
#### A Global perspective:

- Land Administration Systems (LASs) provide the infrastructure for implementing land policies and land management strategies in support of sustainable development.
  - Land Administration Domain Model (LADM) provides a reference framework for building and reengineering LASs in support of society demands, and for underpinning Spatially Enabled Society (SES).
  - Social Tenure Domain Model (STDM) provides a key tool for including unregistered land in developing countries, and supports the global agenda such at the MDGs.

#### **Outline of presentation**

- Land administration and land governance Some core principles
- 2. Spatially enabled government
  A land management vision LADM as the technical core
- 3. Supporting the Global Agenda
  Land administration in support of the climate change challenge,
  poverty reduction, and sustainable development

#### 1. Land Administration



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

# Ten land administration principles

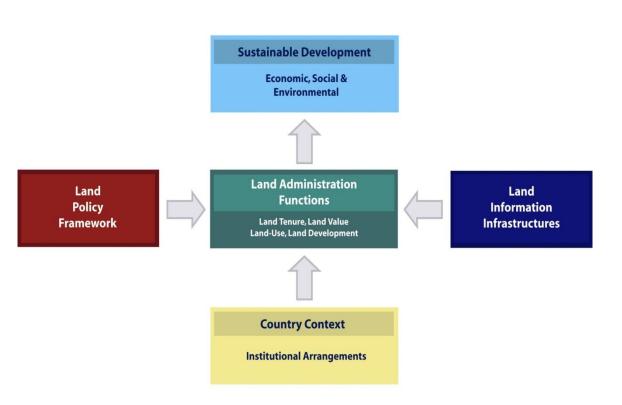
1.	LAS provide the infrastructure for implementation of land polices and land management strategies in support of sustainable development.	6.	LAS are dynamic and reflect the continual evolution of people-to-land relationship.
2	The land management paradigm provides a conceptual framework for understanding and innovation in land administration systems	7.	LAS include a set of processes that manage change
3.	LAS is all about engagement of people within the unique social and institutional fabric of each country.	8.	Technology offers opportunities for improved efficiency of LAS and spatial enablement of land issues.
4.	LAS are the basis for conceptualizing rights, restrictions and responsibilities related to people, policies and places	9.	Efficient and effective land administration systems that support sustainable development require a spatial data infrastructure to operate.
5.	The cadastre is at the core of any LAS providing spatial integrity and unique identification of every land parcel	10.	Successful LAS are measured by their ability to manage and administer land efficiently, effectively and at low cost

# Benefits to society

Support for governance and the rule of law		Protection of state lands
Alleviation of poverty		<ul> <li>Management of land disputes</li> </ul>
Security of tenure		<ul> <li>Improvement of land planning</li> </ul>
Support for formal land markets		<ul> <li>Development of infrastructure</li> </ul>
Security of credit	Land Administration for Sustainable Development	<ul> <li>Management of resources and environment</li> </ul>
Support for land and property taxation		<ul> <li>Management of land information and statistics</li> </ul>

Williamson, Enemark, Wallace, Rajabifard, ESRI Press, 2010, 500 pages.

#### 2. Land governance



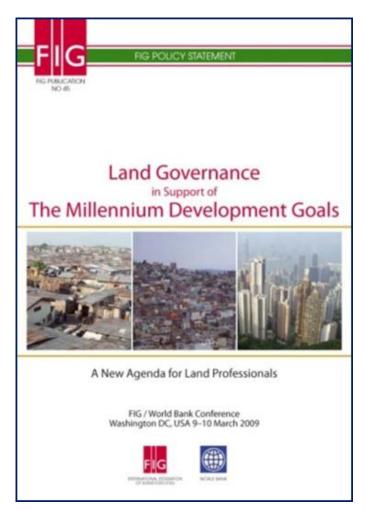
The land management paradigm

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; land development.

Land governance is about determining & implementing sustainable land policies.

#### **Good land governance**





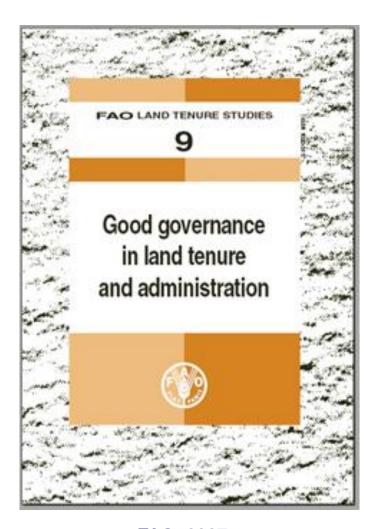


FIG and WORLD BANK, 2010 www.fig.net/pub/figpub/pub45/figpub45.htm

FAO, 2007 www.fao.org/nr/lten/abst/lten\_071101\_en.htm

# **Good governance**

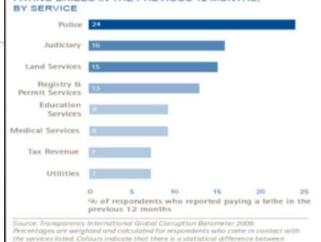
#### Good governance is

- 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 service.
- 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.

#### **Corruption perception index**



LADM provides standardised land information that enables better access and supports transparency



#### An overall international perspective

Some western countries have already developed sophisticated LASs with advanced business models for data management and interaction.

LADM will act as a reference framework for further improvement and standardisation of interoperability.

- Other countries are in the stage of reengineering existing systems or building new systems. LADM will act as the reference framework for design and implementation.
- In most developing countries such as SSA the STDM will act as the key tool for building local systems that eventually can be included in the formal LASs following the LADM standards.

# 2. 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 Enabled Government is a Land Administration Domain Model: LADM

#### **Place matters**

## Everything happens somewhere

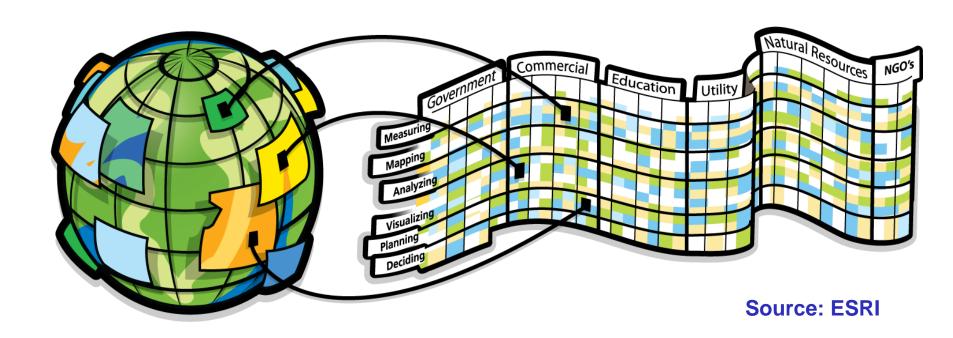
"If we can understand more about the nature of "place" where things happen, and the impact on the people and assets on that location, we can plan better, manage risk better, and use our resources better."

Location Strategy for United Kingdom, 2008

"Heading toward spatial enabled society"

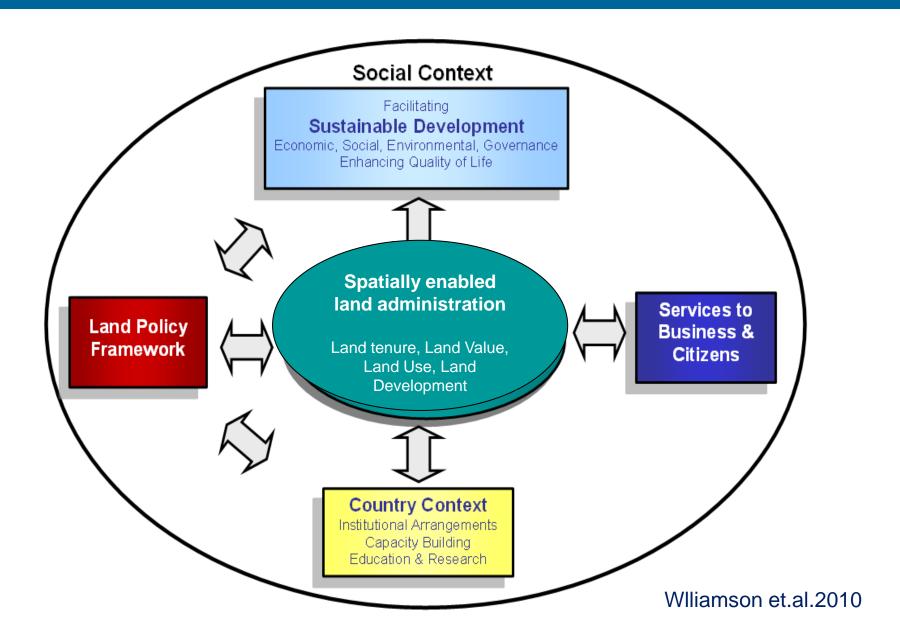
## **Geo-information management**

# Accessible and transparent Geo Information creates a strong foundation



...for sustainable decision making and action

# A land management vision



## **Spatially enabled society**

- The term 'spatially enabled society' attempts to describe an emerging cultural and governance revolution: pervasive spatial information technologies and spatially equipped citizens are changing the way economies, people, and environments are managed and organized.
- ■The concept is not about managing spatial information it is about managing information, or governing society, spatially.
- "Spatial enablement of society is only possible with forward planning and a shared vision of what is possible. This vision is at the heart of the next generation of Land Administration Systems".
- This vision is also in the heart of LADM

# 3. Supporting the global agenda

#### Facing the challenges:

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



All these challenges relate to governance and management of land

# **Supporting the Global Agenda**



Good Land Information and Good Land Governance is fundamental for:

- Coping with Climate Change
- Meeting the Millennium Development Goals, and
- Achieving Sustainable Development

# The Millennium Development Goals Report 2011



8 Goals18 Targets48 Indicators



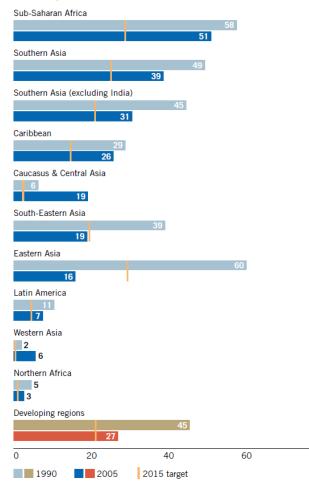
#### Goal 1, target 1:

#### **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

Proportion of people living on less than \$1.25 a day, 1990 and 2005 (Percentage)

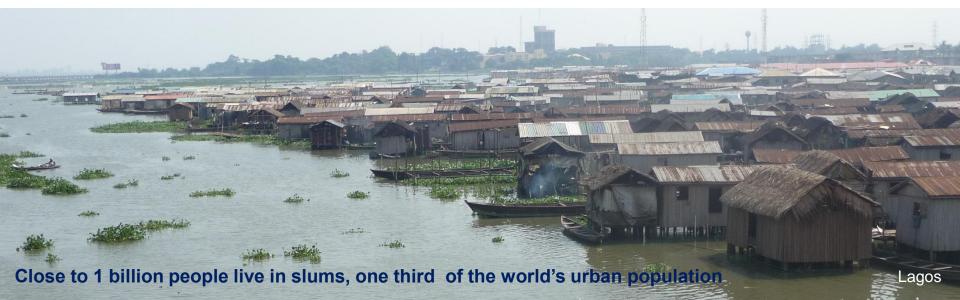


80

# Rapid urban Growth – sustainable cities

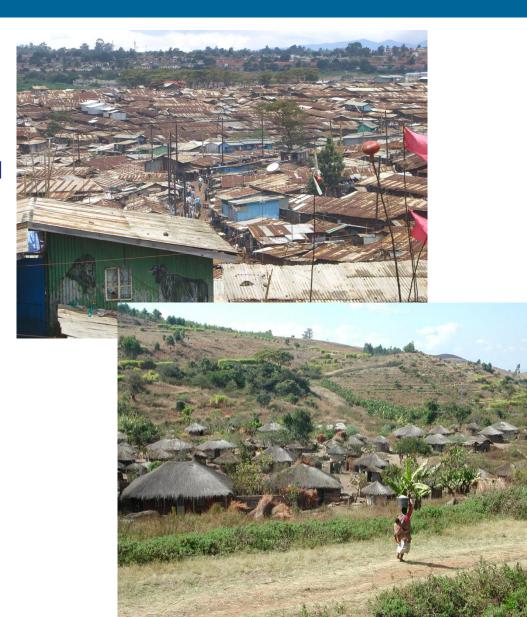
	1950	1975	2007	2025	2050
World Urban Population (million)	737	1,518	3,294	4,584	6,398
Percentage	29.1%	37.3%	49.4%	57.2%	69.6%
More Developed Region (million)	427	702	916	995	1,071
Less Developed Region (million)	310	817	2,382	3,590	5,327

Source: World Urbanization prospects, UN, 2008

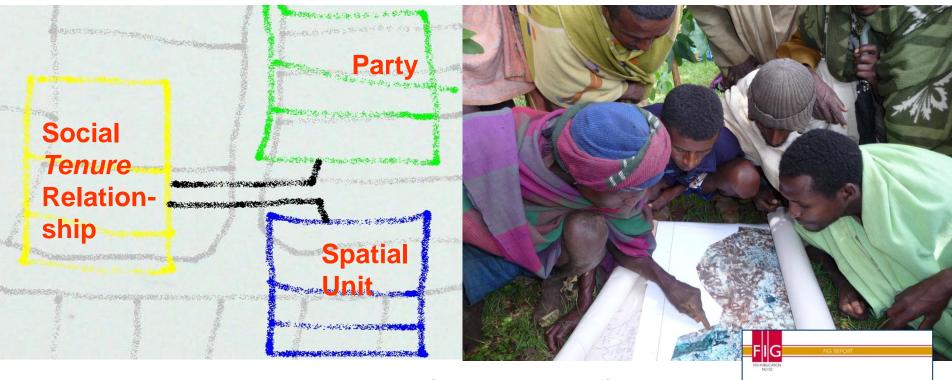


#### **Limitations of Formal Cadastral Systems**

- 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.
- STDM is a key tool for closing this technical gap



#### The Social Tenure Domain Model: Closing the Gap

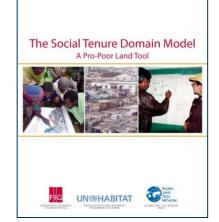


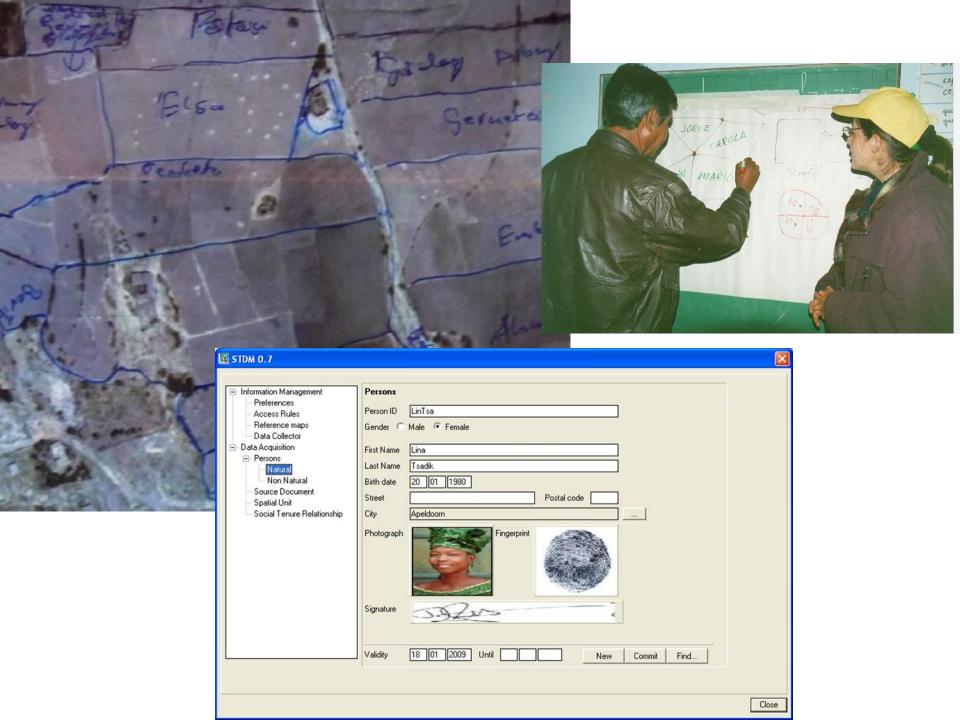
#### Modeling the relation between Parties ← Social Tenure ← Spatial Unit

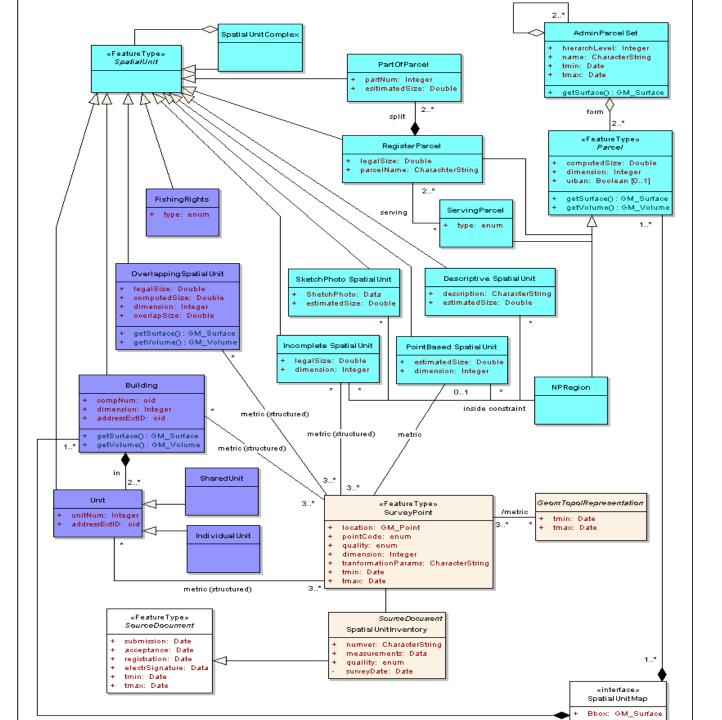
Parties (who): Not only a (legal) person – but a range of subjects such as person, couple, groups of people, unidentified groups, authority...

Spatial Unit (where): Not only an identified (measured) parcel – but a range of objects such as land parcels, land objects, buildings, etc., and identified in various ways – such as a point, street -axes, photos...

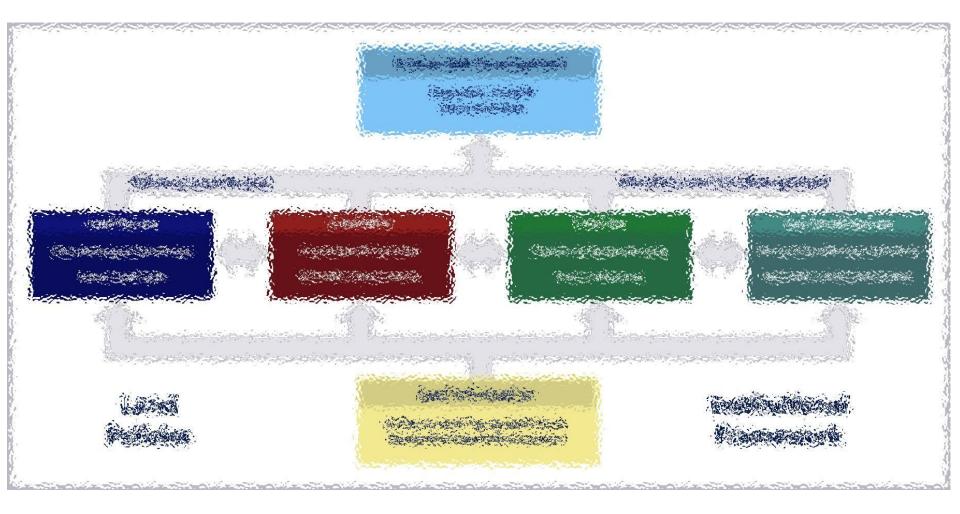
Social tenure (what): Not only ownership and formal legal rights – but also a range of informal, indigenous and customary rights as well as financial issues such group loans and micro credit.







## Closing the technical gap



Clearly: There is an urgent need for including all land to be managed through sustainable LAS

#### STDM: An international pro-poor perspective

#### Inclusion of informal land rights and land use

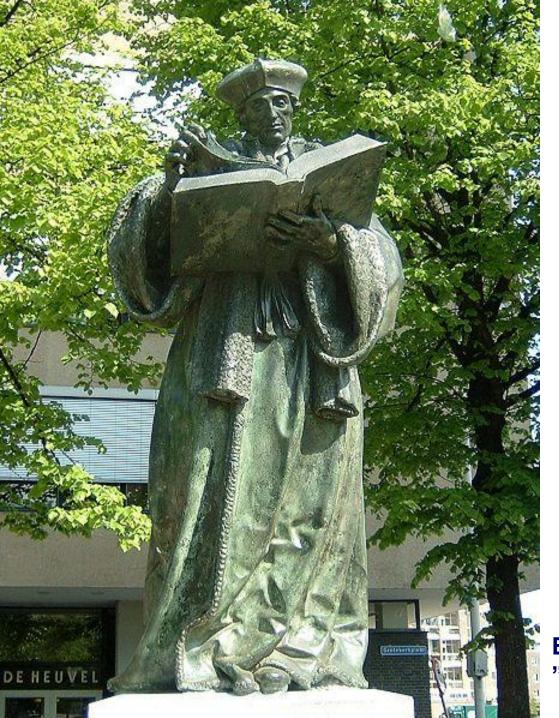
Land agencies and land professionals should be willing to adapt their ways of working to deal with a flexible and unconventional approach to land rights and use.

#### Data collection using a "fit-for purpose" approach

This can be done in through unconventional means such low resolution satellite images, hand held GPS, photos, etc.

Accuracy can be incrementally improved over time in response to local and societal needs.

From informal towards more formalised tenure relationships Integration of informal tenure relationships into the more formalised systems will enable improvement, implement the GLTN concept of a continuum of land rights, and create new markets for the land professionals.



# Thank you for your attention

Erasmus of Rotterdam 1467-1536: "The Educator's Educator".