

## Land Administration Infrastructures for Sustainable Development

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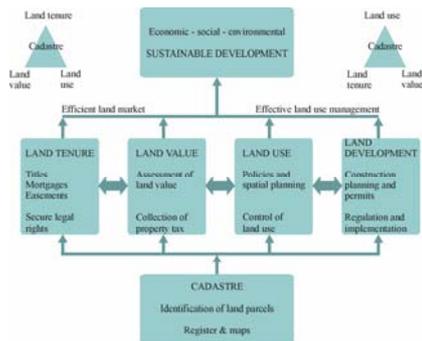
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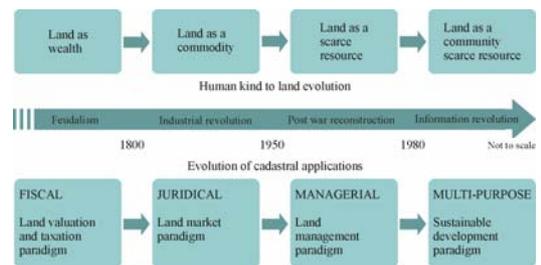
## The Global Challenges

- **Technology development**
  - GPS, GIS, Internet
- **Micro-economic reform**
  - privatisation, decentralisation, downsizing, quality assurance
- **Globalisation**
  - from local to global
  - events in one part of the world impact on people in other parts of the world
- **Sustainable development**
  - developments that effectively incorporate economic, social and environmental concerns in decision-making
  - meet the needs of the present without compromising the ability of future generations to meet their own needs

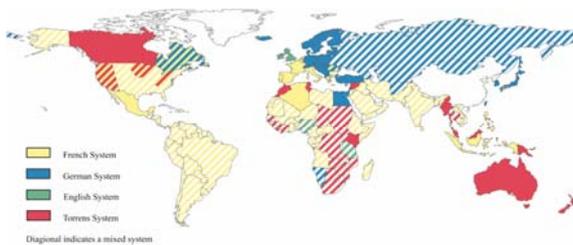
## A Global Land Administration Perspective



## Evolution of Western Land Administration Systems



## Land Registration Systems around the World



## Deeds/Title Registration . . .

System	Deeds System	Title system
Content	Who owns what	What is owned by whom
Register	A register of owners	A register of properties
Legal effect	Registration of the transaction The title is not guaranteed	Registration of the title Guaranteed by the state
Actors	Notaries/Registrars	Lawyers/Surveyors
Role of the Cadastre	Taxation purposes	Identification purposes
Boundaries	Sketch for the deed	German and Torrens: Fixed English: General

## Comparing Land Registration Systems

Parameters for comparison:

- **Property Definition**
  - Where and how is it defined
  - Legal/economic/physical concept
- **Property Determination**
  - General/fixed boundaries
  - determination process
- **Property Formation**
  - Process, institutions and actors - who does what
  - Role of the surveyors
- **Property Transfer**
  - Process, institutions and actors - who does what
  - legal consequences

## Development and Sustainability

**”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*

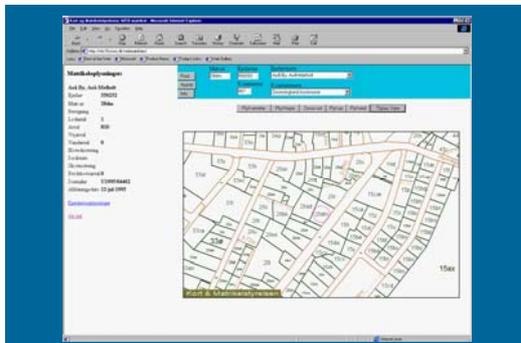
## The Nordic Way...

Country	Denmark	Norway	Sweden	Finland
<b>Area</b>	43,000 sq. Km	324,000 sq. Km	450,000 sq. km	337,000 sq. Km
<b>Area Population</b>	5.2 mill	4.2 mill	8.6 mill	5.0 mill
<b>Properties</b>	About 1,5 mill	About 2 mill	About 3 mill	about 2 mill
<b>National cadastral authority</b>	National Survey and Cadastre under the Ministry of Housing	National Mapping Authority under the Ministry of Environment	National Land Survey under the Ministry of Environment	National Land Survey under the Ministry of Agriculture
<b>Cadastral surveys</b>	Licensed surveyors in private practice	Municipal Survey Authorities; Licensed surveyors in private practice will be introduced	State Survey Authorities at county level; and some Municipal Survey Authorities	State Survey Authorities in rural districts; and some City Survey Authorities

## ...The Nordic Way

Country	Denmark	Norway	Sweden	Finland
<b>Property Register Authority (land parcels)</b>	National Survey and Cadastre maintaining the cadastral register and the digital cadastral maps	Municipal Survey Authorities; and the National Survey Authority maintaining the GAB-register	County and Municipal Survey Authorities; and the National Land Survey maintaining the Land Data Bank System	District and City Survey Authorities and the National Land Survey maintaining the Real Estate Register
<b>Land Register Authority (title and mortgage)</b>	Local district courts (Ministry of Justice)	Local district courts (Ministry of Justice)	Local district courts (Ministry of Justice)	Local district courts (Ministry of Justice)
<b>Land Information System</b>	Interactive subsystems linked together through a Cross Reference Register	GAB – register linked with the Land Book	Land Data Bank System	Central Information System on Real Estate Data

## The Web-Cadastre



## Spatial Data Infrastructures

- provides mechanisms for sharing geo-referenced information

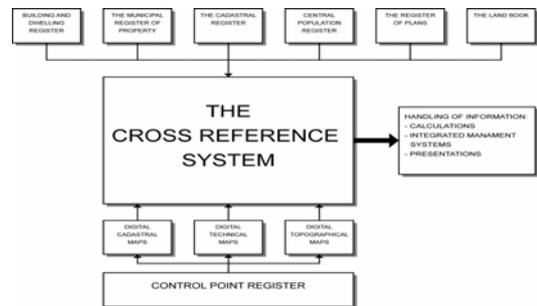
- **Conceptual mechanisms**
  - design of organisational concepts for data sharing and custodianship
- **Political mechanisms**
  - provision of an effective institutional framework and the distribution of power between the governmental levels.
  - policies for access to data
- **Economic mechanisms**
  - cost recovery policies
  - strategies for distribution and maintenance

- considerable benefits flow from a well developed Spatial Data Infrastructure

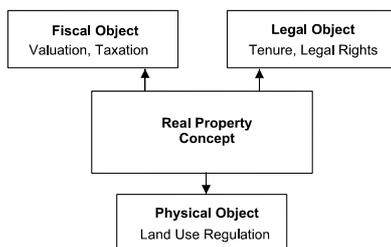
## Spatial Data Infrastructure



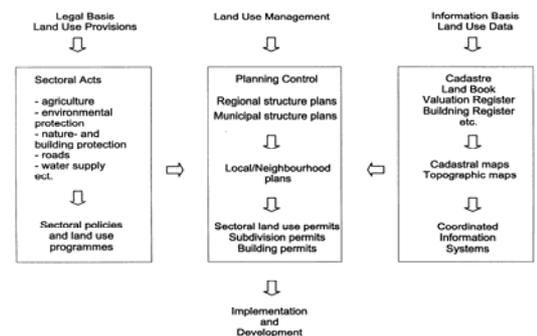
## The GIS Concept



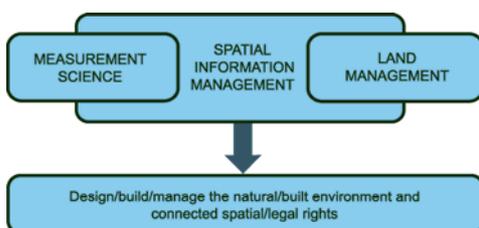
## The Property Concept



## The Planning Concept



## The Educational Challenge



THE EDUCATIONAL PROFILE OF THE FUTURE

## The Institutional Challenge

- Institutions are "the rules of the game"
- Property right is such an institution in society - the cadastre is a facilitator to make it work
- Another institutional challenge is to establish a suitable balance between national policy making and local decision making

## Decentralisation

- not de-concentration
- relates to autonomous land-use decision-making at local level
- based on democratic ideals of local self-government

## Subsidiarity

- competencies should rest with the lowest possible level of jurisdiction
  - more efficient service
  - better use of local knowledge
  - greater participation and democracy
  - increased popular consent to government
  - improved political sustainability
- particularly valid for land-use decision-making
- depends on a finely tuned relationship between national, regional and local level

## Sustainability

- requires action at all jurisdictional levels
- sectoral policies must be co-ordinated
- mature governmental structures is a must

## Conclusions ...

- The Bathurst Declaration established a powerful link between appropriate land administration and sustainable development
- Sustainable development is not attainable without sound land administration

## ... Conclusions

- This again requires support from a well developed spatial information infrastructure
- A global approach to land management depends on appropriate structures of governance
- Decentralisation may be seen as a significant key to sustainable development

