# Land Administration Systems in the Region god and bad

Helge Onsrud

Norwegian Mapping and Cadastre

Authority

## Content of the lecture

- What is land administration
- Why land administration matters
- Land transactions
- Cadastre and Land Registers
- Restitution and privatisation of ownership
- · Cadastral mapping and surveying
- IT systems
- Cadastre and Spatial Data Infrastructure
- Education in transition

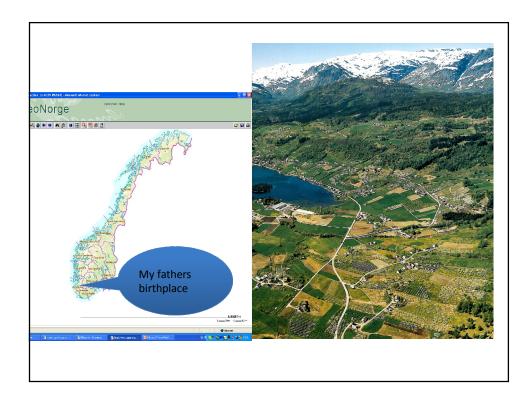
# **Land Administration**

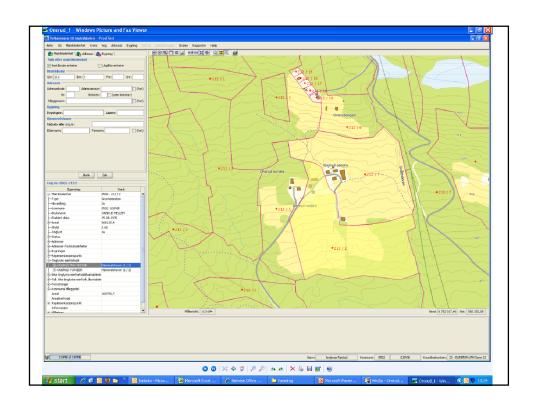
- Cadastre
  - Technical information, maps
- Land Registry
  - Legal information
- Planning
- Valuation, taxation
- Land consolidation
- Region; South and South East Europe ++

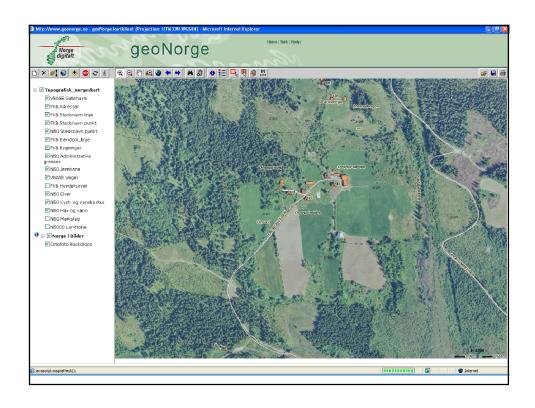


# My Father

- · Born in 1909 at a small farm
  - $-\;$  At that time 70 % working in the agricultural sector now 2 %
  - Between 1860 -1910 , 1/3 of the population emigrated to America
- Left home at the age of 14 "without any money in his pocket"
- 10 years later he could by his own farm financed by a mortgage loan
- All because Norway had a functioning property registration system







# Total amount of loans secured in real estate in Norway

### 500 Billion Euro

#### Norway:

Secured and widespread rights to property more important to the economy than the revenues from oil and gas

#### World:

Only in about 30 countries people at large can enjoy the benefits of a secured right .

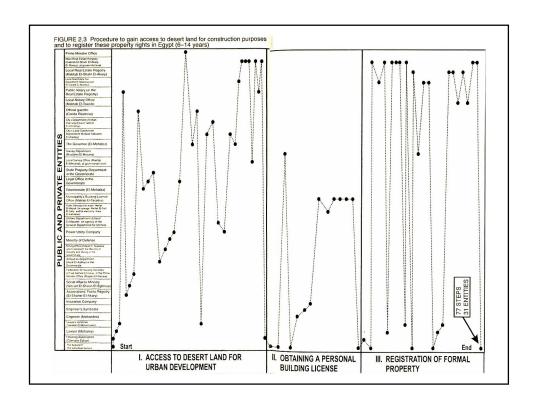
4,5 billion people living without any documentation of the right to the place they live  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left$ 

#### TIME 100/Scientists & Thinkers

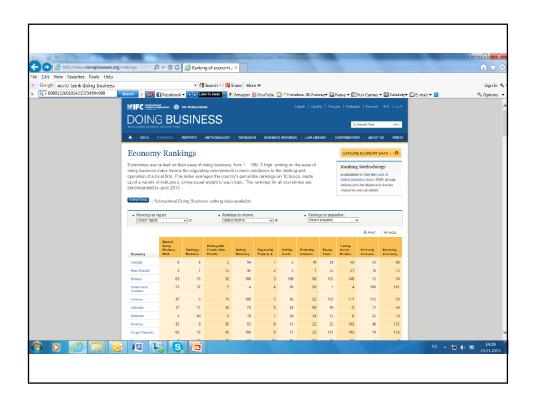
### Hernando de Soto Unlocking the Riches of the Poor

Development schemes for Third World countries rarely benefit the poor, largely because aid is too often squandered by corrupt bureaucracies. That makes fresher, commonsense visions like those of Peruvian economist Hernando de Soto all the more welcome. De Soto has spent years looking deep inside the underground economies where poor people--who make up two-thirds of the world's population-eke out a living. He figures the value of their extralegal property, from cinderblock squatter homes to black-market streetvendor sales, at almost \$10 trillion. De Soto insists that bringing the poor and their assets into the formal economy, which is usually closed to them by oligarchies and epic red tape, would eclipse all previous development efforts.









Doing Business 2013 shows 11 of the top 30 countries for registering property transaction are former socialist states in Europe

- 1 Georgia
- 3. Belarus
- 4. Armenia
- 5. Lithuania
- 8. Slovakia
- 9. Azerbaijan

- 11. Kyrgyzstan
- 14. Estonia
- 16. Moldova
- 27. Czech R.
- 28. Kazakhstan

# ... and in this region

- 44. Serbia
- 58. Kosovo
- 83. Slovenia
- 84. Macedonia
- 96. Bosnia Herzegovina
- 106. Croatia
- 119. Albania
- 180. Belgium

#### LAND GOVERNANCE AND CORRUPTION

http://www.fao.org/docrep/014/am943e/am943e00.pdf





# Corruption in the Land Sector

Unprecedented pressures on land have been create as new areas are cultivated, taken over by expanding urban centres or are abandoned due to degradation climate change and conflict. These developments have strained the rules, processes and institutions that determine which land resources are used, by whom, for how long and under what confilions.

As evident around the globe, where land governance is deficient, high levels of corruption often flourish Waak land governance tends to be characterised by love levels of transparency, accountability and thrule of law. Under such a system, land distribution is unequal, feurure is insecure, and natural resources are poorly managed. As a consequence, social and sustainable feewlooment are undermined.

Land Sector is one of the most plagued by service-level bribery!

Only police and judiciary have higher level of bribery.

69 countries surveyed – 1 out of 10 responded that paid bribe to land authorities

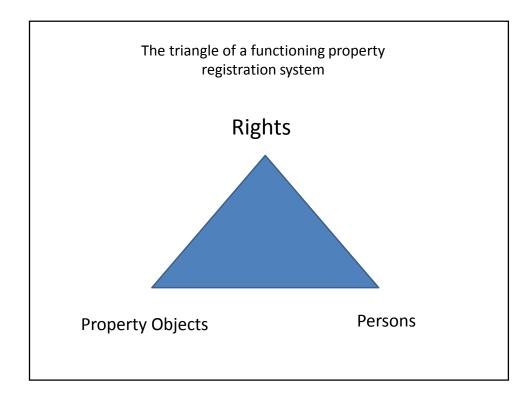
The rate of briberies paid exceed tax, school, health, public utility

Corruption in land sector is a serious issue:

1 out of 2 in high income countries 4 out of 5 in low income countries

GLOBALY 34% of people consider corruption in the land sector serious.

16



### Property registration does not work alone

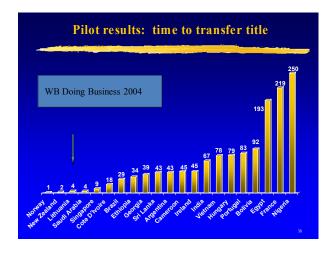
- Secure identification of physical and legal persons needed

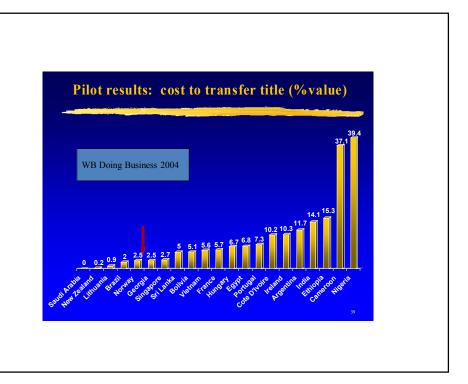
  - Developing countries largely lack population register and company register
     Physical persons could notentially be identified in the identified in th Physical persons could potentially be identified in the property registration system itself, but then only serving property registration
- Systems to deal with conflicts and enforcement also needed.
- "Big" lending does not function with high inflation or before people start saving money. A functioning land market also needed for wider use of mortgages
- A Good registration system has an effect to the interest rates
  - Kosovo still have an interest rate on mortgages of 13 % versus 3 -4 % in the rest of the Euro zone, partly due to lack of a good register

# Two principally different types of Registration systems

- Deed system
  - Legally valid information in documents
  - Supported by notaries
  - All countries in the region re-established system of private notaries
- Title system
  - Legally valid information in database
  - "Anybody" can prepare legal documents
  - Scandinavia

### Notaries tend to increase costs and time





# Cadastre and LR - Combined or separate

- Cadastre and Land Register combined in 50 % of countries in Europe
  - In Serbia, Macedonia, Kosovo, Montenegro , Serbian Republic of BiH , Albania
  - Not in Slovenia, Croatia, BiH
- Private licensed surveyors introduced in majority of countries
  - Changing role of cadastral surveyors; from geodetic engineers to real estate advisors more later

# Methods and technology

- Surveying and mapping used to be expensive and a limiting factor to property registration
- However, surveying, mapping and making registers have become very much cheaper.
  - Ortofoto
  - GPS
  - Satellite images
  - IT (example from making a new property registration system for Armenia)

## Privatization – restitution

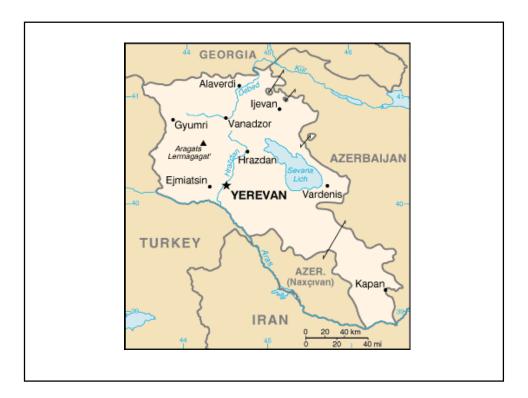
- · Big projects in all former socialist countries
  - Privatization of state property (for <u>all</u> land in former Tzar- Russia )
  - Restitution to former owners (as of about 1945) for non Soviet states, including republics of former Yugoslavia
  - Largely completed for buildings and apartments
  - Growing markets in private property
  - Improvements needed to cadastral maps and to harmonisation with land registry
  - Huge problem with "illegal" buildings

### Geodetic accuracy of cadastre maps

- · General boundaries versus fix boundaries
- CORS and "GPS" introduced for cadastral surveys in all countries
  - · Ensuring high geodetic accuracy at low cost
- Accuracy is an issue if cadastral maps can be established by digitizing old maps or from orthophotos – without field work
  - · Land markets are well serviced by less accurate "index maps"
  - Step by step improvements
- Geodetic accuracy needed for combination of data from various map sources, especially for NSDI

# IT systems for cadastre and land register have been a big problem

- · Often funded by loan from the World Bank
- WB insisting on integrated complex systems
  - Many failures in the region
- New IT technologies are very promising
  - · Centralized web based
  - Service Oriented Architecture (SOA), making systems in modules linked by web services
  - Open Source free SW
  - Applied in a recent project for the cadastre in Armenia

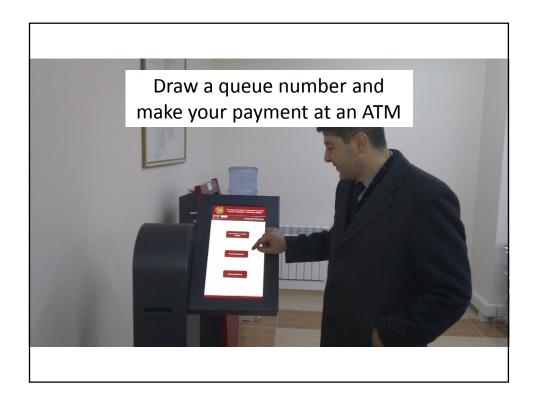


# In less than 8 months –supported by e new IT system

- Separating public contact in front offices and centralizing registration – reducing corruption
- Facilitating electronic submission of documents and remote payment of fees
- Setting a maximum time of 4 days for registration
- Allowing public to monitor progress of their case via Internet
- Removing mandatory use of notaries
- Introducing simple standard forms for deeds
- Removing mandatory surveys for transactions
- Introducing private surveyors
- Allowing registration regardless illegal buildings on the land





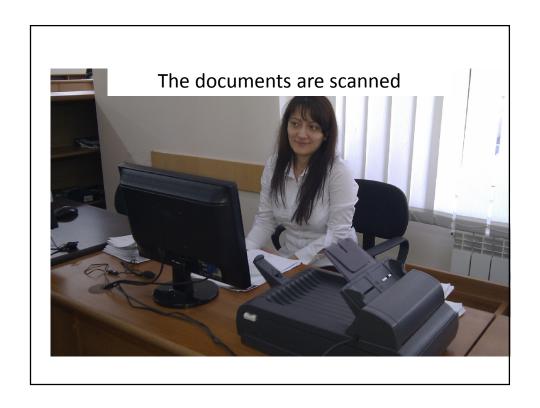


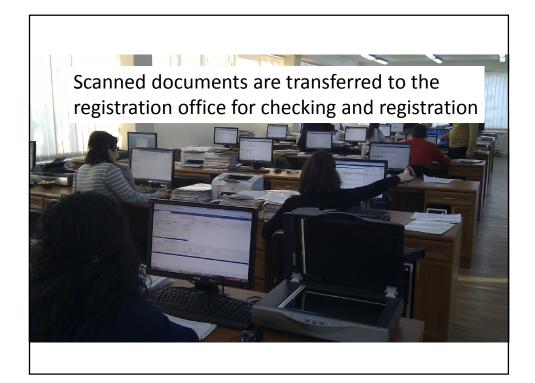






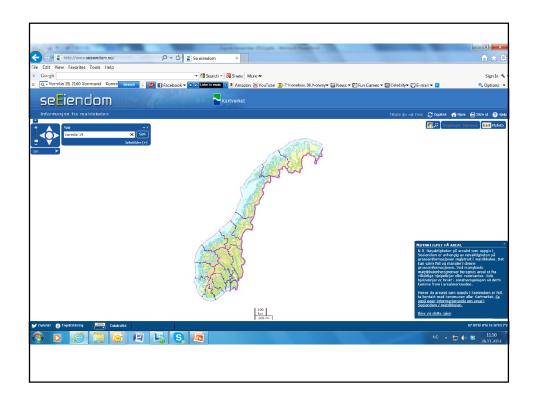


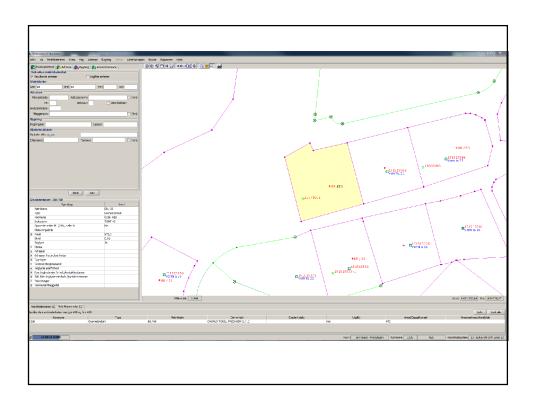


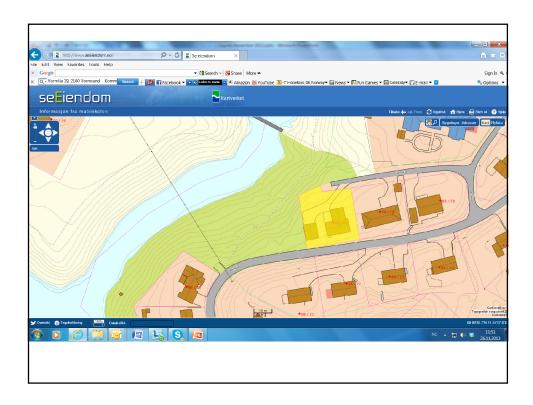


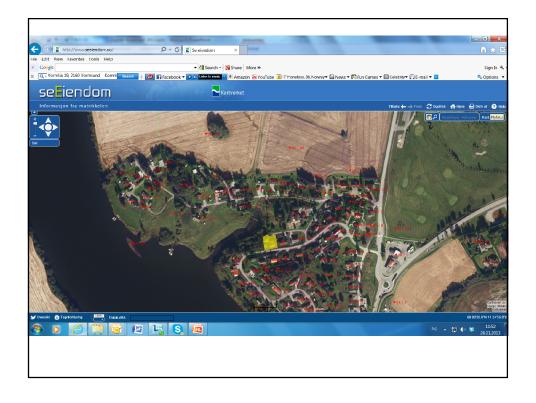
## Cadastre and NSDI

- Cadastre is an important part of NSDI
  - Many users need property information in combination with other data, for flood management, etc.
  - Users in the land market need also additional data
  - Allows the Cadastre map to be limited to basic property data;
  - Norway; the cadastre maps contains only the parcel boundaries, data about buildings, roads etc. "brought in" from topographic maps
  - See My Property









### Geodetic education in transition

- Still big need for geodetic experts
  - for engineering surveying, positioning, GIS, navigation photogrammetry and data collection with other sensors, etc.
  - however, experts with different education are increasingly recruited to the "geodetic profession"
  - growing demand for experts in tools for land and city management, 3 D modelling, e-government, NSDI, etc
- The cadastral surveyor needs less expertise in geodetic measurments
  - Positioning and mapping used to be the most challenging issues of cadastral works
  - GPS becoming "every man's tool"

# A new cadastral surveyor

- From measurer to real estate advisor
  - Still need knowledge about surveying and GIS, but increasingly about land law, land use planning, land management, construction processes, facility management, financing
- New markets for land surveyors
  - Investors and developers in the land market increasingly recruit land surveyors, especially for complex city developments
  - Facility management (of land and buildings) a new activity for land surveyors

# Norway

- To colleges offering bachelor degrees in engineering and cadastral surveying, GIS
- To universities have master programs, with focus on technical subjects and land administration respectively
  - Much too few students with technical skills, 10 masters per year
  - A traditional master program in land consolidation developing specialities in land development and facility management
- Companies and public sector Increasingly recruiting foreigners
  - People from 28 countries working in the Mapping Authority

# Thank you