Evolution and Trends of Land Markets in Switzerland and Europe

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## A Land Market needs …

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• a cadastre and land registration system</td>
<td>→ trustworthy and stable&lt;br&gt;→ based on an information system</td>
</tr>
<tr>
<td>• information</td>
<td>→ that is transparent&lt;br&gt;→ as complete as possible (content and coverage)&lt;br&gt;→ with transparent access</td>
</tr>
<tr>
<td>• land information</td>
<td>→ land market is about land, therefore it requires land information&lt;br&gt;→ georeference is mainly through coordinates and geocoded street addresses</td>
</tr>
<tr>
<td>• procedures to transfer land</td>
<td>→ transactions as efficient as possible&lt;br&gt;→ at reasonable costs for land owners</td>
</tr>
</tbody>
</table>
Table of Content

- Evolution of cadastres
- Economic dimension of cadastre and land market
- Trends
  - European Land Information Service (EULIS)
  - Monitoring of systems
  - Financial crisis
- Elements of Swiss cadastre
Evolving objectives of cadastres

- **18th-19th century**: establishment of cadastres in West-European countries as a mean of tax collection (**fiscal purpose**)
- **19th century**: evolution of the purpose into security of land property ownership (**legal purpose**)
- **late 20th century**: re-establishment of cadastres in "new" East-European countries as one of first infrastructure measure as basis for a viable economy (secure ownership of land property is guarantee for bank loans and economic prosperity) (**economic purpose**)
- **late 20th century**: evolution of cadastres worldwide in a changing land/humankind relationship (**multipurpose aspect**) and providing basic geoinformation (**SDI aspect**)
Evolution of cadastres

Main Phases in Western Humankind/Land Relationship

Up to late 1700’s
Agricultural Revolution & Feudalism
Land = Wealth

Late 1700’s - WWII
Industrial Revolution & Land Markets
Land = Commodity & Wealth

Post-WWII
Post-War Reconstruction
Land = Scarce Resource & Commodity & Wealth

1980s onwards
Information Revolution, Sustainable Development, Social Equity
Land = Community Scarce Resource & Commodity & Wealth

Cumulative Evolution of Applications for Cadastre

Fiscal

Juridical

Planning

Multi-Purpose

(Ting and Williamson, 1998)
Economic dimension of cadastre

"The Mystery of Capital" by De Soto (2000):

- The absence of a reliable and efficient land registration system can have serious implications for the social and economic welfare of a country.
- Systems in western developed countries are well developed and provide sufficient security for the mortgage market.
- Today's systems in developing countries can be compared with systems that existed in the same Western countries some 150 years ago.
- Success factors are: "rule of law", documentation, efficiency, transparency.
Examples cited by De Soto (2000)

- Peru: value of Peruvian telephone company jumped from $53 million to $2 billion just by introducing registered titles.
- Egypt: registration of property takes 17 years / in Cairo there are 4 million unconstitutional buildings, valued each at $10,000 / extralegal properties with a "dead" capital of $241 billion.
- Switzerland: there were 179 different local or cantonal registration systems; the introduction of Civil Code in 1908 created 1 unique land registry.
- China: has 10,900 local "rubakus", they work well; in order to have larger benefits on national level, they only have to be brought into a standardized national system.
Facts and Figures about Swedish Land

The Market
- Total market value 550,000 million USD (Jan 2001)
- Total value of mortgages 204,200 million USD (Feb 2001)
- Total value of shares at the Stockholm Stock Exchange 350,000 million USD (2000)
- Ericsson 76,000 million USD (2000)

Taxation
- Assessed value 252,900 million USD (2000)
- Total real property tax 2,500 million USD (2000)
- Transaction tax, titles mortgage 470 million USD (2000)

GNP
- 205,000 million USD (1999)

State Budget
- 79,000 million USD (2000)
Kreditgeschäft stützt sich ab auf Immobilien

- Immobilienwert Schweiz > 2,000
  (gesamte Börsenkaptialisierung 500)
- Schätzung/Aufteilung der Immobilienwerte
  Mietwohnungen 450
  Einfamilienhäuser/Eigentumswohnungen 550
- Öffentlicher Bau/Infrastrukturen 600
  Bürobauten 150
  Industrie-/Gewerbe-/Lagerbauten 200
  Verkauf 100
- Gesamte Immobilienfinanzierung 600

(Größenordnungen/Annahmen in Mia CHF)

von: Walther (2004), Immobilienfinanzierungen, UBS
European Land Information Service (EULIS) (www.eulis.org)

**Aim:** to provide easy world-wide access to European electronic land and property information in order to promote and underpin a single European property market.
The World Bank: Doing Business - Removing Obstacles To Growth


Table: Registering Property

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of procedures</th>
<th>Number of days</th>
<th>Costs in % of value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>9 / 9 / 9</td>
<td>36 / 36 / 36</td>
<td>10.6 / 10.6 / 10.6</td>
</tr>
<tr>
<td>Australia</td>
<td>5 / 5 / 5</td>
<td>7 / 5 / 5</td>
<td>4.5 / 4.8 / 4.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>6 / 6 / 6</td>
<td>42 / 42 / 42</td>
<td>0.6 / 0.6 / 0.6</td>
</tr>
<tr>
<td>Germany</td>
<td>4 / 4 / 4</td>
<td>41 / 40 / 40</td>
<td>4.2 / 4.5 / 5.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4 / 2 / 2</td>
<td>5 / 5 / 5</td>
<td>6.4 / 6.2 / 6.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4 / 4 / 4</td>
<td>16 / 16 / 16</td>
<td>1.4 / 0.4 / 0.4</td>
</tr>
<tr>
<td>OECD</td>
<td>. / . / 4.7</td>
<td>. / . / 30.3</td>
<td>. / . / 4.5</td>
</tr>
</tbody>
</table>
The cadastral and property rights registration system in the USA

• National Land Parcel Data, a vision for the future, the status of land parcel databases in the United States can be described as follows:
  – No consistent set of parcel data
  – 1/3 of the counties in the United States have embraced digital parcel information systems;
  – 70 percent of the tax parcels in the USA now exist in digital form, the remaining 30 percent are located in the roughly 2,000 most rural counties.

National Research Council, 2007
The cadastral and property rights registration system in the USA

- Commercial firms in the United States are capitalizing on the public’s interest in parcel data.
- Many other private companies in the utility, insurance, or location-based services industries also maintain their own parcel databases.
- Federal agencies are acknowledging their need for parcel data to fulfill their missions.
- Appropriate funding mechanisms are needed.
- The financial/technical issues are minor compared to the organizational/political ones.
- There is no single inventory of federal lands.

National Research Council, 2007

Daniel Roberge & Bengt Kjellson

EILAT 2009
Worldwide losses

- Worldwide losses on debt originated in America (primarily related to mortgages): $1 400 billion.
- American and European banks will shed some $10 000 billion of assets in 2009.
  
  International Monetary Fund

- Based on these data it is fair to say that if a property rights infrastructure had been in place in the USA, the mortgage crisis would have been of less intensity.

Daniel Roberge & Bengt Kjellson
Other proposed solutions

- Objective: establish a nationwide land parcel database
- A huge improvement compared to current situation in USA where often analogue index maps are mainly held at the deeds office at county level.
- Such a database would include data for the total of about 150 million parcels across the country.
Improvement of the registration of property rights

- But this project does not include the need for improving the legal basis.

- However, the improvement of the registration of property rights would be important to rebuild the land market on more sustainable basis.
Swiss Cadastre

**New cadastre for public-law R&R**

**Swiss Cadastre**

**Extended purpose of cadastral data**

- Increasing use and benefit of cadastral system
- Private law (land registration)
- Geoinformation purpose
- Public-law R&R

**Timeline**

- 1912: Introduction cadastral surveying
- 1993: Digital Standard AV93
- 2002: Art. 75a in constitution
- 2008: Complete coverage
- 20xx: 

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Land Market Management Seminar, Tehran, 23 May 2009

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Swiss Cadastre

**Definition of cadastre for public-law R&R**

The cadastre for public-law rights and restrictions:

- is an official and public inventory of concrete land and real estate restrictions;
- is established in a systematic way;
- includes objects that are clearly demarcated and that are officially approved;
- informs about public-law R&R with legal effect and with effect against third parties;
- informs comprehensively and covering all the territory about those geo-basis-data that have been defined by the Government as being part of public-law R&R;
- is considered to be known.
## Prioritized objects for Cadastre of public-law R&R

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Forest demarcations</td>
</tr>
<tr>
<td>2</td>
<td>Basic land use (for land-use planning)</td>
</tr>
<tr>
<td>3</td>
<td>Protection zones</td>
</tr>
<tr>
<td>4</td>
<td>Noise areas</td>
</tr>
<tr>
<td>5</td>
<td>Hazardous waste locations</td>
</tr>
<tr>
<td>6</td>
<td>Ground water areas</td>
</tr>
<tr>
<td>7</td>
<td>(ev.) natural danger areas, flooding areas</td>
</tr>
<tr>
<td>8</td>
<td>(ev.) construction lines / planning zones for national highways</td>
</tr>
<tr>
<td>9</td>
<td>(ev.) construction lines / planning zones for railway projects</td>
</tr>
<tr>
<td>10</td>
<td>(ev.) agricultural production areas</td>
</tr>
</tbody>
</table>
**Cadastre of public-law restrictions of private property rights**

- **Definition:** systematic and public inventory of geographic objects that carry public restrictions.
- **swisstopo** commissioned a study to look into the costs and benefits of such an inventory (Jan. 2006).
- **Estimated costs:** 0.6-2.7 million Euro to establish the data model and the legal basis on cantonal level / 54-215 million Euro for acquiring data for 10 most important restrictions.
- **Estimated benefits:** 63 million Euro per year.
An example from canton of Zurich
Einträge im Zonenplan vom Juni 2002
- Wohnen W3, seit Juni 2002
- Überbauungsordnung ZPP I Zenger-Gut, seit 27.10.2005

Reglement zum Zonenplan
BR: Thun, vom 06.2002

Sondernutzungsplanungen
Die Überbauungsordnung beinhaltet:
- Überbauungsplan 1:500 vom 27.10.2005
- Überbauungsvorschriften vom 27.10.2005

Übergeordnetes Recht

Baugesetz
Bauverordnung
Baugesetz
Bauverordnung

BewD 725.1
D NBauR 723.13
KWaG BE 921.11
KWaV BE 921.111
BPG 215.124.1

Baugesetz
Bauverordnung
Baugesetz
Bauverordnung

RPG SR 700
RPV SR 700.1
BGBB SR 211.412.11
VBB SR 211.412.110

Raumplanungsgesetz
Raumplanungsverordnung
Bäuerliches Bodenrecht
Bäuerliches Bodenrecht Verordnung

An example from city of Thun