Land Consolidation in Sweden and Land Reform in Romania—similarities and discrepancies – a comparison

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June 16th 2008

Personal presentation

- Land Consolidation work in Sweden 44 years
- Consultant EU Pilot project in Romania 0,5 year
Fragmentation - facts

Romania
- Fragmented area 9 Mill. hectares
- Average property 2 hectares
- Average parcel 0,5 hectares
- Approx. 4,5 Mill. farmers/forest owners

Sweden
- Fragmented area 1,2 Mill. hectares
- Average property 10 – 20 hectares
- Average parcel 2 – 5 hectares
- Approx. 60 000 farmers/forest owners

Simple or comprehensive Land Consolidation?

Simple Land Consolidation
- Optimising the premises in the agricultural sector
  - parcel concentration
  - land exchange

Comprehensive Land Consolidation
- Will also include
  - rural development
  - land use planning
  - land management

Common features:
- Strengthened ownership and rights
Public opinion - approach

- *Top down approach* or *bottom up approach*?
- Stake holders at different levels
  - Central
  - Regional
  - Local
- Awareness campaign
  - Information meetings
  - Media (Newspapers, Radio, TV)
  - Posters
  - Pamphlets

Participation and influence during the procedure

- Directly via contacts with the cadastral staff
  - Days of wishes
  - Dialogue regarding Re-allotment design
  - Dialogue regarding valuation
- Indirectly via committees
  - Principles for re-allotment design
  - Principles for valuation
  - Proposals of infrastructural measures
  - Principles for distribution of costs
Land Consolidation - Methodology

- Adjudication
- Information campaign - initiation
- Interviews with the owners
- Inventory of cadastral maps and land register
- Valuation
- Elaboration of new plan
- Surveys of the “new” boundaries
- Decision making

Powerful data support

- Why?
- Objectives
  - calculation of the values
  - the access to cadastral registers and to keep the cadastral information up-to-date
- The elaboration of the re-allotment design by GIS techniques and the analysis of different alternative designs
- The calculations of the economical settlements for the participants
GISOM – GIS system in Land Consolidation in Sweden

Indata
- Cad Index Map
- Cadastre
- Stereo & Field inventory

Information
- Shape files
- Access data base
- SQL -server
- Coverage
- Raster pictures

Software
- ArcInfo
- ArcView
- Access
- Crystal Reports
- Visual Basic
- BMS Win Husky
- APC

Overlay-techniques in Land Consolidation

Layers
- Properties
- Forest stands
- Re-allotment design

Economic settlements are calculated by intersection between
- "old" properties
- forest stands
- "new" properties

Each little figure has information about:
previous owner, new owner and value
### Organisation and institutional framework

#### Romania

**Institutional solution**
- National Agency for Cadastre and Land Registration
  - Central level
  - Regional level
- Inter-Ministerial Co-ordination Committee
  - Central level
  - Regional level

#### Sweden

**Institutional solution**
- National Land Survey
  - Central level
  - Regional/local level
- Promotion of L.C.
  - Partnership
  - Regional level

### Access to Land Fund

#### Objectives of Land Fund

- **Catalyst facilitating**
  - Mediation and negotiation with farmers
  - Increase of farms
  - Establishment of common valuable nature and culture areas
- **Lubricating medium**
Resources needed

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<th>“Target”</th>
<th>Accomplished area</th>
<th>Staff</th>
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<td>30 years</td>
<td>250 000 ha/year</td>
<td>500 employees</td>
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<tr>
<td></td>
<td>50 years</td>
<td>150 000 ha/year</td>
<td>300 employees</td>
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<td>Sweden</td>
<td>50 years</td>
<td>20 000 ha/year</td>
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<td>100 years</td>
<td>10 000 ha/year</td>
<td>15 employees</td>
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Capacity building – Land Consolidation

- **Important categories**
  - Public relation promoter (information)
  - Cadastral surveyor
  - Map engineer
  - Survey engineer
  - Valuation specialist
  - IT & GIS specialist
Support schemes

<table>
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<th>“Target”</th>
<th>Subsidies</th>
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<td>Romania</td>
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<td>Sweden</td>
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<tr>
<td>50 years</td>
<td>1,2 Mill. EUR/year</td>
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<tr>
<td>100 years</td>
<td>0,6 Mill. EUR/year</td>
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Selection of areas for Land Consolidation

Main criteria
- Degree of fragmentation
- Attitude among the farmers
- Presence of interested stake holders
- Available Land Fund
- Presence of associations in the area
- Need of infrastructural measures
Benefits of Land Consolidation

**Benefits from society's point of view**
- Decreased costs for authorities
- Decreased costs for municipalities, National Road Administration, telecommunication, electric power suppliers
- Higher quality in cadastre and cadastral index map
- Increased activities and employment in rural areas
- Increased tax revenues

**Benefits from a land owner's point of view**
- Lower costs in agriculture and silviculture
- 80 – 90 % reduction of boundary length
- Clear and secure boundaries
- Simple ownership conditions

Consolidated forest area