Estonian case study: Land Management & Public Goods

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Europe’s rural areas in action - Facing the challenges of tomorrow

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Land Management & Public Goods

Estonian case study

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Where do we come from?
Estonia

Population: 1,34 mln. Rural pop. dens. ~10,5
Total area: 45 266 km²

Forest area: ~50% of total area, 2,2 mln ha
Agricultural land: ~20% of total area, 850 000 ha is UAA
Average cereal (rye, wheat, barley) yield: 2,7t/ha
Concept of land value and land OWNERSHIP has changed over the time ...

<table>
<thead>
<tr>
<th>Type of habitat</th>
<th>1950s</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooded meadows, ha</td>
<td>800 000</td>
<td>1500</td>
</tr>
<tr>
<td>Alvars, ha</td>
<td>44 000</td>
<td>9000</td>
</tr>
<tr>
<td>Flooded meadows, ha</td>
<td>100 000</td>
<td>15 000</td>
</tr>
<tr>
<td>Wooded pastures, ha</td>
<td>200 000</td>
<td>3000</td>
</tr>
</tbody>
</table>
And also environmental awareness and ATTITUDE towards land and land management...
What public benefit do we expect from supported land management?

- Protect the values against the threats

- Reduce pollution from agriculture (healthy environment)
- Support agricultural and landscape diversity
  - Genetic resources
  - HNV Farmland (including semi-natural habitats)
Why semi-natural habitats are important?

- **Biodiversity** - plants, insects, birds
- **Cultural heritage** - they reflect our history
- **Sustainable agriculture** - pastoralism and hay-harvesting on semi-natural habitats are among ecologically most viable ways to use nature.
Why are they threatened?

- Intensification of agriculture
- Agricultural abandonment
- Infrastructure development
- Pollution
- Climate change
Semi-natural grasslands in EU habitats directive

- 1630 Coastal meadows
- 6210 Seminatural dry grasslands on calcareous substrates
- 6270 *Fennoscandian lowland species-rich dry to mesic grasslands
- 6280*Nordic alvars and precambrian calcareous flatrocks
- 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils
- 6430 Hydrophilous tall herb fringe communities
- 6450 Northern boreal alluvial meadows
- 6510 Lowland hay meadows
- 6530 *Fennoscandian wooded meadows
- 9070 Fennoscandian wooded pastures
The most important Estonian semi-natural habitat types
(respective Annex I habitat type codes are shown in brackets)

Around 40% of Estonian vascular plants can be found here (603 species), out of 56 protected species (1/3 of all protected plant species in Estonia)

Wooded meadows (6530)
Around 260 vascular plant species, out of 30 protected species

Alvars (6280)
Coastal meadows (1630)

Around 290 vascular plant species
Wooded pastures (9070)
Land management through RDP AE

- **1997-2004** PHARE/MATRA projects
- Since 2000 nationwide organic farming support
- 2001-2003 National AE pilot scheme
- Since 2004 EU funded AE measure under RDP
- Period 2004-2006 - “piloting the procedures”
- 2007-2013 AE measures under Axis II
Implemented AE scheme for 2004-2006 period was rather broad and shallow scheme not targeted at specific habitat and species of HNV farmland!
Western Estonia

F(2;19)=0.15; p=0.86

Number of bumblebees

Species diversity

Central Estonia

F(2;19)=1.53; p=0.24

Number of bumblebees

Species diversity

Southern Estonia

F(2;19)=1.83; p=0.45

Number of bumblebees

Species diversity
RDP Axis II measures for 2007-2013

2.1 Support for LFA (2009)
2.2 Natura 2000 support for agricultural land (2009)
2.3 Agri-environment support
2.4 Support for grazing animals (2009)
2.5 Non-productive investment support:
   Restoration and establishment of stonewalls;
   Mixed species hedgerows.
2.6 Establishment of protection forest on agricultural land (2008)
2.7. Natura 2000 support for private forestry land (2008)
Agri-environment support for 2007-2013

- Environmentally friendly farming (2009)
- Organic farming (2008?)
- Local endangered breeds (2007)
- Local varieties (rye “Sangaste”) (2009)
AE and protection of highest nature values...

- According to ESCCA’s semi-natural grassland inventory we have ~100,000 ha of semi-natural habitats (SNH), only half of that area is UAA and eligible for CAP payments!

- Only N2000 grasslands supported from RDP! N2000 sites form less than 50% of total semi-natural habitat areas! So more than 50,000 ha of SNH are out of any policy instrument for management!
Public goods of land management - landscape amenities and high nature value (BD)?

Are those aspects always visible and accessible?
Willingness to pay for public goods?

Estonians like forest and wetlands... Private land versus public access?
Low environmental awareness...
Nature conservation starts in people’s minds - developing the skills and capacity of the farmer and his family, and investing in the future of these rural communities are the key elements in this!
Additional information on the AE evaluation in Estonia –

http://pmk.agri.ee/pkt

And about AE evaluation conference:

http://pmk.agri.ee/conference

THANK YOU!