A Study on the Experiences of Arable Land Owners on Land Rearrangement - Project at Pajuneva in Finland
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Foto: Don
Land Consolidation strategy

- The Ministry of Agriculture and Forestry and the National Land Survey (NLS) have approved the LC strategy for 2007 – 2013
  - The priority of tasks is the following:
    - LC surveys on arable land
    - LC project surveys (traffic safety and nature reserve)
    - LC surveys on forest land
  - It is essential to follow the plans as well as the changes in society
  - It is also very important to actively cooperate with interested parties and to keep them informed

Land consolidation provide vitality to rural areas

- Land consolidation is used to improve the location of land
  - The farmers’ small and fragmented blocks of arable land are assembled to form coherent units closer to homesteads, at the same time crisscross traffic is reduced.
  - The road network and the drainage facilities in the area to be rearranged are renewed to correspond with the needs of the farmers.
- Land consolidation is carried out in areas where the property structure is fragmented.
Demand for land consolidation
- land consolidation/
  private road survey
- fragmentation of field
  parcels
- closing of plantation
  connections

Number of land consolidations
- In Finland rearrangements of arable land are carried out every year for approximately 10,000 – 15,000 hectares of land
  - The need for such rearrangements is as high as 700,000 hectares
- Ongoing rearrangements of arable land cover an area of 80,000 hectares
  - The need for land rearrangements is being assessed for an arable land area covering 40,000 hectares
- The number of forest land rearrangements is increasing considerably in the near future
- Positive experiences have been obtained from project-related land consolidations carried out in connection with traffic projects
  - The current study is an example of this
Structural change of rural areas

- A considerable structural change is taking place in rural areas of Finland
  - The most drastic changes concern agriculture
  - Forestry and the settlement of rural areas are also subjected to change
- The size of farms is increasing and the number is decreasing
  - The old property structure dates back to the horse-carriage age
- Long-distance transportation on roads and rail is separated from local traffic
- Similarly fast traffic is separated from slow local traffic
  - It is important to follow the plans as well as the changes in society
  - Active information and cooperation with interesting parties is also very important
Different research interests in land rearrangements (land consolidations)
- from the perspective of a real property owner

Economical
Technical
Judicial

Sociological

Successfull land consolidations

Property structure before LC
Initial and technical data

- The length of a new road was about 5 km
- Arable land about 400 hectares and forest about 100 hectares
- Approximately 80 units of use
- In the beginning the number of arable parcels was 126, the average size being 3.4 hectares/parcel
- The number of parcels could have been increased with 25 (totalling 151) but their average size would have fallen below 3 hectares
- After LC survey; 56 parcels, average size 5.84 hectares/parcel

Different processes overlap one another

Schedule of the final engineering plan process

- 15.4.2005 Public notice in the newspaper, start of technical work in the terrain
- 31.8.2005 The road district sends the plan for approval
- 18.7.2006 The Finnish Road administration (Finnra) approves the plan

Schedule of the land rearrangement process

- 23.6.2005 The road district applies for a survey
- 9.11.2005 The initial meeting/needs assessment (KIVA)
- 3-26.2 and 2-9.6.2006 one-to-one discussions with property owners
- 10.10 and 3.11.2006 allotment plan meetings
- 16.9.2008 Accounts/final meeting
- 17.10.2008 The survey is legalized (no appeals)
Finnish Road Administration purchased land

- Finnra purchased arable land, which was intended to be allocated in a land rearrangement procedure on the road line.

  The whole road could be built on state-owned land because of LC.

  Some of the land was also sold as additional land to arable land owners.

Example of property structure changes
Costs and benefits, euros €

<table>
<thead>
<tr>
<th>Implementation alternative</th>
<th>Expropriation (Public road survey)</th>
<th>Project-related land consolidation and public road survey</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey and adaptation costs</td>
<td>30 000 €</td>
<td>280 000 €</td>
<td>- 250 000 €</td>
</tr>
<tr>
<td>Other costs</td>
<td>67 000 €</td>
<td>- 67 000 €</td>
<td></td>
</tr>
<tr>
<td>Building costs for parallel road network</td>
<td>580 000 €</td>
<td>260 000 €</td>
<td>320 000 €</td>
</tr>
<tr>
<td>Maintenance costs of private roads</td>
<td>50 000 €</td>
<td>50 000 €</td>
<td></td>
</tr>
<tr>
<td>Indemnifications</td>
<td>71 000 €</td>
<td>71 000 €</td>
<td></td>
</tr>
<tr>
<td>Agricultural benefits</td>
<td>194 000 €</td>
<td>194 000 €</td>
<td></td>
</tr>
<tr>
<td>Impact on traffic safety</td>
<td>16 000 €</td>
<td>16 000 €</td>
<td></td>
</tr>
<tr>
<td>Impact on traffic flow</td>
<td>61 000 €</td>
<td>61 000 €</td>
<td></td>
</tr>
<tr>
<td>Savings in need for building an underpass</td>
<td>408 000 €</td>
<td>408 000 €</td>
<td></td>
</tr>
<tr>
<td>TOTAL savings</td>
<td>803 000 €</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Experiences, theoretical background

- Satisfaction of the people is largely based on fairness evaluations of processes, not on outcome (research concerning cases of judicial authorities)
- Tyler’s (1988; 1997) components of fairness were tested:
  - Possibility to participate
  - Trustworthiness of the authorities
  - Ethicality of the authorities
  - Neutrality of the authorities
  - Outcome quality/accuracy and
  - (Possibility to appeal)
Theoretical background: Neutrality-based/Trust-based concept of authorities

- In district courts of Finland the neutrality-based concept of authorities is changing towards a trust-based one,
- meaning:
  - More informal dialogues
  - Confidential discussions
  - More customer initiatives
  - The use of mediation

People pay attention to the morality of authorities, not on signs of professionalism.

Research and Results

- Questionnaire to arable land owners; 40 responses, response rate 87%
- Quantitative (regressio analysis) and qualitative (material-oriented text analysis) research methods in use

The study provided new scientific information.

Part of the components of subjective experience of fairness introduced by the American Tyler explained the arable land owner’s satisfaction.
Results

- One component of satisfaction was the possibility to participate
  - Which meant sufficient acquisition of information.
  - It had a positive effect on how arable land owners experienced both the outcome of land rearrangement and the land rearrangement process.

- The fast schedule of the reparation works had a positive effect on satisfaction with the outcome.
  - The reparation timetables should have been suitable also for arable land owners.

- Trust-based course of action increased satisfaction.
  - It meant that the relations were confidential and fair discussions were held during the rearrangement process. The mode of action focused on facts.

Conclusions

- The arable land owners were satisfied with the land rearrangement process used.
- Common in Finland: expropriation proceedings with road projects should be completed with need assessment phases (KIVA) and land rearrangements. At present this new mode of action is only partly used.
- In Finland, legislation provides satisfactory grounds to utilise land rearrangements already at present.
- The study indicates that the results could apply to arable land owners in Southern and Western Finland. The concepts of practicing experts strengthen this interpretation.
Thank you for your interest!

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