The XXIV FIG International Congress 2010 Sydney, Australia

Facing the Challenges – Building the Capasity
TS 10H – Land Consolidation II
15 April 2010 16:00-17:30

Juhana Hiironen

-- Researcher, Aalto-University School of Science and Technology --





Renewing the evaluation of LC effects in Finland

Content of the presentation

- $\hfill \square$ Why do we need to evaluate the effects of land consolidation?
- ☐ Why did we need to renew the evaluation methods in Finland?
- ☐ How did renew the evaluation of land consolidation effects in Finland?

Importance Problems Solution

Why do we need to evaluate the effects of land consolidation?

- □ The aim of the rural policy in Finland is to ensure a viable and functioning countryside.
 - > One of the main priorities is to raise the level of competitiveness.
 - If competitiveness of a farm is improved, either it incomes must be increased or costs decreased. The farming subsidies concentrate mainly to the first option when land management strategies, which are not supposed to be subsidies, focus to the latter.
- □ Because the amount of money to be used for land consolidations finally depends on how good investments land consolidation are,it must be proven that the society will gain from such a project.
 - > In other words, the taxpayers have the right to know whether land consolidations are just new farming subsidies or genuine investments to the rural areas.

3

Renewing the evaluation of LC effects in Finland

Importance Problems Solution

Why do we need to evaluate the effects of land consolidation?

□ The first procedual precondition for land consolidation is the wide acceptance from the land owners:

- \succ In Finland LCP will not be done without the support of the land owners.
- Proving without a doupt that the benefits will be higher than the cost, is the crucial point concerning the acceptance of such a sovereign intervention.

□ The first juridicial precondition for land consolidation is that the profits and benefits must exceed the costs and disadvantages:

- In order to start such a project, it is necessary to prove that the benefits of the project will be higher than the costs, which means that the effects of LCP needs to be evaluated.
- Nowadays, when the farmers apply LCP's more than NLS can carry out, LCP's must be prioritised, that the puplic funds allocates to the best projects. Choosing the project with the most beneficial outcome requires, that the evaluation methods are reliable and used in the same way from project to project.

Importance Problems Solution

Why do we need to evaluate the effects of land consolidation?

□ During LCP the information about the effects is espesially important in the planning and billing phase:

- > The surveyor needs to know the effects of different possibilities to optimize the property structure.
- To treat the land owners equally, the surveyor needs to know the effects of different out comes, because the final expenses that are not covered by the public funding are divided among the land owners based on the benefits they have gained from the project.

□ After LCP the information about the effects is espesially important when promoting land consilidations to the land owners or other involved parties.

5

Renewing the evaluation of LC effects in Finland

Importance Problems Solution

<General problems> <Problems in details>

Why did we need to renew the evaluation methods in Finland?

□ In Finland's land consolidation practice, the effects of agricultural reallotment were evaluated using three methods, the results of which differed significantly from each other.

□ Evaluation of effects other than those that are agricultural had mainly been ignored.

□ In other words, because the evaluation practises of land consolidation effects wasn't used in the same way from project to project and the methods didn't include all (or even most of) the factors, the best possible allocation of public funds was at risk.

□This also meant that land owners weren't treated equally especially between separate projects, because the amount of public funding depends on the cost-benefit ratio.

Importance Problems Solution

<General problems>

<Problems in details>

Why did we need to renew the evaluation methods in Finland?

- □ The biggest problem when assessing agricultural effects using the present valuation methods had been the fact that the effects had been evaluated on the basis of average data.
 - >The assessment had focused on how much the parcel size, distance to the homestead, etc. had changed on average.
 - >Depending on the method of calculation, this has led to inaccuracies of 100-300%, because the average data does not describe actual change. The benefit isn't the same if 1 hectare parcel is increased to 2 hectares or when 2 hectare parcel is increased to 3 hectares.
 - >The numbers must always be calculated on a parcel-specific basis!
- ☐ There was not any evaluation instructions, recommendations or applications

7

Renewing the evaluation of LC effects in Finland

Importance Problems Solution

<Recommendations>

<Calculations>

How did renew the evaluation of land consolidation effects in Finland?

- $\ \square$ As it was discovered that none of the evaluation methods that had been used previously was fit for use as such, a new evaluation methods were developed.
 - >A proper valuation instruction were written, a spreadsheet application was developed and courses to use the new methods were kept for the land surveyors.
- □ The Cental Administration of NLS gave a remommendation to use the devloped method and the Ministry of Agriculture and Forestry informed that the calculation in the financing applications of land consolidations must be done with the new method.
- □ These actions ensured that nowadays, two years after the need to renew the evaluation methods was discovered, the new methods are utilisized and used in the same way from project to project.

Importance Problems Solution

<Recommendations> < Calculations>

How did renew the evaluation of land consolidation effects in Finland?

□ In cost-benefit analyses for land consolidation the effects have been divided into the following main categories (which each has several sub categories):

>agricultural effects; transportation effects; the effects of drainage and similar measures; ecological effects; and social and regional economic effects.

□ A spreadsheet application automatically calculates the various impacts and their values in Euros for almost every effect.

>The application utilises geographic information obtained from the JAKO data system concerning the prevailing property structure before and after land consolidation.

□ Because the effects are valued in Euros, it is possible to determine the costbenefit ratio of LCP and to determine whether land consolidations are genuine investments to the rural areas as they should be.

9

Renewing the evaluation of LC effects in Finland

Thank you for your Attention!

for more information, please contact juhana.hiironen@nls.fi