# Agri-environmental and forest-environmental schemes: first steps of European Union policy in Czech Republic

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#### Introduction

The Czech Republic joined the European Union (EU) on 1.5.2004. The membership in the EU is associated with participation in the Common Agriculture Policy. As a member of the EU the Czech Republic adopted various policies that reflect the EU concern for environmental issues. A potentially important economic tool that seeks to implement the EU policies are agri- and forest environmental programs.

These schemes (or programs) are a set of active or restrictive measures that farmers or foresters accept voluntarily. Farmers or foresters agree to carry-out a specific activity, or to refrain from a specified action for a certain period of years. In return, the government pays a certain sum of money (a subsidy) to the farmers or foresters. These programs are financed mostly from the common budget of the European Union, and partially from domestic funds. Currently, in the Czech republic, all farmers are entitled to receive subsidies from agrienvironmental programs upon meeting certain conditions. The agri-environmental programs are not selective such as traditional nature conservation programs. The forest-environmental programs have much shorter history than the agri-environmental programs, and will offer their funds to foresters beginning the year 2007.

The objectives of agri- and forest-environmental schemes are:

- to establish farming and forestry practices that respect the increasing concern for water and soil protection,
- to protect wildlife habitats and endangered species of fauna and flora on farm and forest land,
- to produce quality and safe food, as well as a renewable resource wood, in an environmentally friendly and sustainable manner.
  - d) to provide additional income in rural areas

## Goal and method of research

The goal of this study was to evaluate the initial experience with agri-environmental programs in the Czech Republic, as well as to consider the future expectations from the forest-environmental programs. Through collection of mostly unpublished information, including document analysis, we attempt to determine the current status, the initial results and to estimate the future development. We deal with policy research which differs on methodology from the standard scientific research (such as in biology, econometrics, physics). The key term in policy research is "policy evaluation." Through policy evaluation we determine how the goals of the policy were met, or, in some cases, evaluate the goals themselves. Therefore, we have to differentiate between "policy formulation" and "policy implementation". In our case, we do not evaluate the policy formulation on the EU level, we seek to evaluate the implementation (realization) of the policy in the Czech Republic.

Since one of the stated goals of agri- and forest- environmental measures is protection, and possibly improvement of wildlife habitats (biodiversity), we have to find out whether objective criteria for meeting these goals are a part of the obligatory policy evaluation document<sup>1</sup>. We can quantify the maintenance or change in biodiversity through biodiversity indicators. As far as the evaluation of different agri- (or forest) environmental measures, we can evaluate:

- the up-take of the measure against expectations (the "popularity" of the particular measure with farmers and foresters
- the effectiveness of the measure (whether the measure is reaching its goals, ie. biodiversity increase or maintenance measured through a biodiversity indicator),
- the efficiency of the measure (compare costs with effects, include various alternatives of reaching the same goal, ie. certain level of biodiversity increase or maintenance)

## Agri-environmental measures in czech republic

The agri-environmental programs are a part of European Union agricultural and rural development policies. Every EU member state is obliged to introduce an agri-environmental program. However, member countries are independent to a large degree to design the particular measures of the program. The current subsidy titles of the Czech agri-environmental measures:

- 1. 1. Organic farming,
- 2. 2. Grassland maintenance
- 3. Conversion of arable land into grassland
- 4. Grass belts on slopes
- 5. Growing of catch crops (intercrops)
- 6. Bio-belts
- 7. Permanently water-logged meadows and peat meadows
- 8. Bird habitats on grassland (waders, corn crake)

<sup>&</sup>lt;sup>1</sup> Policy evaluation (ex-ante, interim, and ex-post) is a compulsory part of EU system of public expense programs.

## 9. Crop procedures in cave protection zones

10. Integrated fruit and vineyard production

#### Evaluation results:

It is evident from the document analysis that only up-take evaluation<sup>2</sup> takes place by the Czech administration. There is no systematic evaluation of effectiveness as far as biodiversity increase and maintenance is concerned. The evaluation of economic efficiency of biodiversity maintenance and improvement measures is totally missing. The possible reasons are: the relatively short history of agri- environmental schemes, the methodological difficulty and high costs of efficiency evaluations, non-interest of some stakeholders in effectiveness and efficiency evaluations.

If we synthetise the results of the up-take evaluations, we find out that: Farmers prefer relatively simple measures that can be carried-out by large scale mechanization (*grassland maintenance* - periodical grass mowing<sup>3</sup>), and measures that do not differ substantially from usual practices (*growing of intercrops*). Almost 90% of agri-envi subsidies were paid out to the two above mentioned measures only, and the *growing of intercrops* title had even to be closed during the evaluation period<sup>4</sup> due to disproportionally high demand. On the other hand, measures demanding manual labor, even though with higher subsidies, or measures differing from usual current farm practices did not meet stated expectations. For instance, the participation in bird habitats title was about 50% of the official expectations.

### Forest-environmental measures in czech republic

The Czech forestry has a relatively good track as far as sustainability of wood production is concerned (in comparison with, for instance, some Mediterranean countries). However, the current political demand, especially in publicly owned forests, stresses the ecological significance of the forest<sup>5</sup>. Forest-environmental measures are at the planning stage only. The planned measures are: 1) leaving of old trees and deadwood6, and 2) improvement of structure7 and species composition of the forest. The total amount of forest subsidies is to be substantially lower than the total amount of agriculture subsidies.

#### References:

Annual Evaluation Report about the Horizontal Plan of Rural Development of the Czech Republic for 2004 (in Czech). Ministry of Agriculture of the Czech Republic, Prague, 2005.

Notes and Proceedings from the Seminar "European Agricultural Fund for Rural Development", organized by the MoA and the Chamber of Agriculture in Most on Sept. 12, 2005.

<sup>&</sup>lt;sup>2</sup> " up-take evaluation" means that the expectation of participation is stated in an official government document (usually in ha of land that is expected to participate in a given measure). After a period of time, we can compare the resulting interest (in ha of land that farmers claimed subsidies for the measure)

<sup>&</sup>lt;sup>3</sup> since there is little use for grass in the Czech countryside under current system of agriculture, the farmers get paid/subsidized for mowing of meadows (which is considered to be important for nature and landscape protection) often without really using the grass on the farm.

<sup>&</sup>lt;sup>4</sup> the evaluation period was the first year of Czech membership in the EU (1.5. 2004-31.12. 2004)

<sup>&</sup>lt;sup>5</sup> Czech forests exhibit a low level of biodiversity due to prevalence of artificial spruce monocultures

<sup>&</sup>lt;sup>6</sup> leaving of old trees and deadwood is very important for biodiversity. Deadwood is important also for soil nutrient replenishment.

<sup>&</sup>lt;sup>7</sup> "structure" means space structure and age structure. Spruce monocultures tend be of the same age which means low biodiversity. "Species composition improvement" means usually planting some native decidious trees among spruce (Lat.: Picea abies) trees.