

# Evaluation of the Austrian agri-environmental program ÖPUL in terms of biodiversity

<sup>1</sup>Pötsch E.M. and E. Schwaiger<sup>2</sup>

<sup>1</sup>Agricultural- and Education Centre Raumberg-Gumpenstein, Raumberg 38, 8952 Irdning, Austria,

<sup>2</sup>Federal Agency of Environment, Spittelauer Lände 5, 1090, Vienna, Austria

[erich.poetsch@raumberg-gumpenstein.at](mailto:erich.poetsch@raumberg-gumpenstein.at)

## Abstract

In Austria 72 % of all agricultural holdings with 94 % of the total farmland participate in the Agri-Environmental Program ÖPUL aiming at an environmentally friendly, extensive agricultural land use and at the maintenance of the countryside. Within the evaluation framework positive effects could be identified in terms of the examined subjects (soil, water, biodiversity, diversity of habitats, genetic diversity, landscape, socio-economy). However the evaluation report also indicated some deficits – ÖPUL should even be more efficiently according to “environmental goals” and a transparent and continuous monitoring of the programs and the evaluation of their results are seen to be necessary.

Keywords: extensive grassland, mountainous grassland, cultural landscape, agri-environmental schemes

## Introduction

Permanent grassland is the most important land use system in Austria especially in the mountainous regions of the western provinces. Due to harsh climatic conditions and unfavourable site properties most of the Austrian grassland is obligatory grassland. A significant decrease of permanent grasslands of which extensively used grassland has been affected most has to be noticed since 1960. The strongest reduction can be seen for one-cut grassland and extensive pastures but also for alpine meadows and litter meadows which both provide a valuable source of biodiversity and are indispensable elements of cultural landscape. The Austrian Agri-Environmental Program ÖPUL that is highly accepted especially by grassland farmers supports traditional farming systems and contributes to the maintenance of both farms and cultural landscape.

## Material and methods

According to the Common Monitoring & Evaluation Framework (EC, 2006) economic, social and environmental impacts of the 2007-2013 rural development programs have to be evaluated. The agri-environmental program ÖPUL is part of axis 2 (improvement of environment and landscape) and is evaluated in terms of its effects on soil, water, biodiversity, diversity of habitats, genetic diversity, landscape, socio-economy. Concerning biodiversity a number of specific evaluation projects have been commissioned covering floristic diversity and diversity of (farmland) birds which play an important role in a European point of view (FRÜHAUF and TEUFELBAUER, 2008). The evaluation was monitored by a committee (ÖPUL advisory board) consisting of representatives of the environmental NGOs, the Federal Ministry of Life and of the agricultural sector and nature conservation officers from the Federal Provinces.

## Results and discussion

In Austria 72 % of all agricultural holdings with 94 % of the total farmland participate in the actual Agri-Environmental Program ÖPUL 2007 (Figure 1). This programme consists of more than 30 specific measures with interdependent modules, most of which are - as opposed to some other EU countries - offered in all parts of Austria. The evaluation analysis (BMLFUW, 2009) indicated a significant shift to higher-level measures such as organic farming, nature-conservation areas, maintenance of orchard grassland and groundwater protection. The measures ‘organic farming’ and ‘renunciation of yield-increasing inputs’ provided clearly positive effects on biodiversity. Due to its high level of acceptance and the extent of area covered by it, the bundle of ‘keeping cultivated landscapes open’ (meadows on sloping sites) measures as well as ‘alpine pasture and herding’, is of enormous importance.

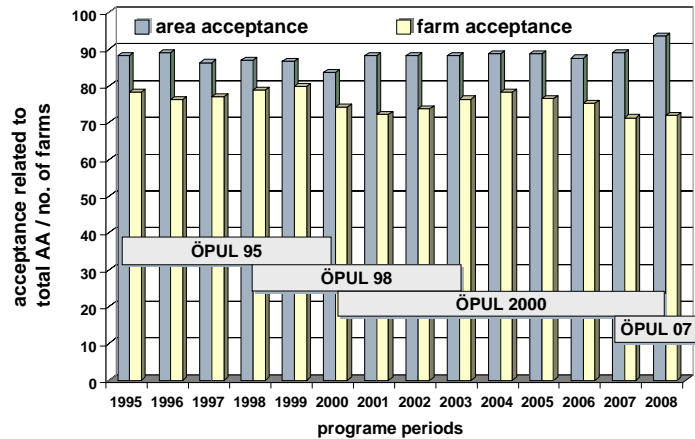


Figure 1: Acceptance level of agri-environmental programs in Austria from 1995-2008

It is evident that extensively used grassland provides a high number of different plant species some of which are red list species (PÖTSCH and BLASCHKA, 2003). In intensively managed grassland areas with high cutting frequency, the floristic diversity is strongly reduced and there is no/little structure of utilization during the vegetation period. Grassland farmers are therefore obliged to reduce the utilization frequency on 5% of the grassland to a maximum number of two cuts per year to provide different species a chance to establish and survive. This obligation is heavily criticised in some intensive grassland regions especially due to its negative impact on forage quality and economy. Areas with nature conservation measures have constantly increased and are seen as highly efficient in terms of biodiversity. 70% of these areas are grasslands which comprise valuable vegetation types with rarely plant species and/or provide habitats for protected birds (e.g. corn crane). Due to the stronger cutback of European budget for rural development programs there is an increasing intention to advance measures with a higher positive impact on biodiversity.

## Conclusions

Aspects of biodiversity have become a special concern of agrarian- and environmental policy and of general public. Agri-environmental schemes as part of rural development programs strongly focus on the maintenance and improvement of biodiversity on a landscape, habitat and species level. The results of the evaluation of the Austrian agri-environmental program ÖPUL indicate both positive impacts on biodiversity but also some deficits concerning the efficiency of several measures which have to be advanced.

## References

- BMLFUW (2009): Evaluierungsbericht 2008. ex-post-Evaluierung des Österreichischen Programms für die Entwicklung des ländlichen Raums. 273s.
- EC (2006): Handbook on common monitoring and evaluation framework - Guidance document. DG Agriculture and Rural Development. 15pp.
- FRÜHAUF J. und N. TEUFELBAUER (2008): Bereitstellung des Farmland Bird Index für Österreich – Vorstudie. Bird Life Österreich, Wien, 141s
- PÖTSCH E.M. und BLASCHKA A. (2003) Abschlussbericht über die Auswertung von MAB-Daten zur Evaluierung des ÖPUL hinsichtlich Kapitel VI.2.A ‚Artenvielfalt‘. Gumpenstein, 37 pp.