

# Project Apuseni

## Sustainable Development in Eastern Europe, Romania



### Fields of Research:

#### Analyses and evaluation of landscape, land-use and land-use- techniques

- > Natural conditions: climate, geology, soil, hydrology
- > Agriculture: grassland and farming, fields and gardening
- > Forestry: techniques and exploitation
- > Official plants as a valuable resource

#### Social-economical analysis and evaluation of the rural economy

- > Social conditions, infrastructure
- > Agriculture and forestry
- > Trade and commerce, tourism

Results from the different fields of research are implemented in exemplary **model projects**:

- Development of **rural tourism**
- Sustainable use of **medicinal plants**
- New plants and techniques in **gardening**
- Improved **livestock husbandry** and **grassland management**
- Basic research and proposal of a **water supply** project for the region
- Increase in sustainability in **forest use**: wood processing by craftwork

### „Gardening“

Because of the mountain climate, gardening is a marginal land-use. Supply with vegetables is problematic, risky and confined to a short summer season. Participatory experiments with propagating frames and new varieties were started in 2001.

The young plants were distributed to all interested families, their success and opinions will be evaluated.



### “Improved livestock husbandry” and “Grassland management”

The local animal breeds, the techniques of husbandry are described. Improvements of milk production may be achieved after founding an association, dealing with artificial insemination and a common stud bull (cooperation with GTZ). A guideline for building new stables should meet animal-adapted demands and integrate architectural traditions.

Fertilization experiments (left) compare the effect of manure and artificial fertilizer upon yield and species composition. A comparison of three major soil types is made, including a “productive parabrown soil” and a “marginal rendsinic lithosol”. Valid answers will be obtained only after some years. Aspects of economy (increase of yield) and nature conservation (rarity and diversity of plants) will be evaluated.



### “Rural tourism”

The landscape and the caves of the Apuseni mountains have a high touristic potential (left). Rural tourism provides the opportunity of diversification and increase of monetary incomes.



Aims of the project are the development and the marketing of an extended touristic offer, including more beds and improved food supplies. First steps were transforming a traditional blockhouse barn into a tourist information centre in May 2002 (right), and initiating and founding in August 2002 a “village development association”.

### “Medicinal plants”

Aims are the identification and analysis of the social and commercial potential of medicinal plants. *Arnica montana* as a key species is investigated in terms of yield, of local processing, of its contribution to local income, and sustainability of use (population biology studies).

The data will provide a management concept for an improved use of medicinal plants.

