

# Socio-Economic Analysis of Land-Using Households in the Apuseni Mountains, Romania

- Aims:**
- To get the structure of the economic activities.
    - Input and output per activity and per period/year.
    - Income calculation, including family consumption of its own products.
  - To identify and evaluate potentials for further development.
    - Finding out development paths through a interdisciplinary and participative process.
    - Implementation of pilot projects to initiate development processes.



### Step 1 Contact & Interviews

**Aims**

- To gain the local people confidence
- To obtain information about their live and activities

**Methods**

- Semi-structured interviews in the villages.
- The interviews were conducted informally in open conversations while taking notes. To avoid suspicion problems, no printed questionnaires were used.
- There was no pressure if the answers were avoided or false with the intention to keep the confidence on the project participants.

**Results – qualitative**



- Results – quantitative (village Ghetari, 28 HH)**
- 1/2 of the households (HH) consists of 3 – 4 adults / HH
  - Horses are the most important animals
  - 93% of HH use the communal high pasture in summer
  - Private land is scarce, 1/2 of the HH posses <1,7 ha, few > 3 ha
  - 1/3 of the HH own 1 ha forestland
  - 2/3 of the HH have a circular saw
- Problems**
- Incomplete data sets
  - Dependence from translators

### Step 2 Household Classification

**Aims**

- To define households classes in relation to their economic position using key indicators.

**Methods**

- Multivariate cluster analysis.
- Manual selection of some strong indicators.
- Each class is built up with the lower class and an additional attitude.

**Results**

Class	Definition	HH in village	%-Part	Case-Studies
I	Only elderly persons (=2HH)	5 (incl. 1 with saw)	18	1
II	+ young persons (>2 pers./HH)	7	25	2
III	+ circularband saw	12	43	3
IV	+ car or truck	4	12	1
total		28	100	7

**Problems**

- No complete and real data for all households.
- No information about amount of used farmland.
- Chosen data set for the multivariate cluster analysis determine the results (classes). There was no objective way for statistical methods.



**Contact**  
 Eckhard Auch  
 Institute of Forestry Economics, University of Freiburg  
 Tennenbacherstr. 4  
 D-79106 Freiburg  
 e.auch@ife.uni-freiburg.de

### Step 3 Household Case-Studies

**Aims**

- To obtain data for analysing and modelling year-round activities, inputs and outputs, economic returns.
- To obtain data about "hidden" forest use

**Methods**

- Enterprise inventories at the beginning and at the end of the study (12 months).
- Dividing the year according to typical activities in a seasonal-calendar
- At the end of each season, interviews were carried out with the farmers.
- Ethnographical methods of observation for „hidden“ activities
- Additional information from other disciplines (cattle raising, grassland management, ethnography).

**Results**

- Seasonal-calendar

**Problems**

- The farmers often have problems to quantify amounts of quantities, yields, and time.
- Given illegal use of forests, farmers fear to be controlled, so they hardly tell about details of their activities in the forest and with forest products.
- Translated dialogs between the farmers and the interviewer lose information.
- Logging and sawing is a taboo-theme, observation without "spying" is difficult.



- Scenarios for the further development and their evaluation with a local landscape-model:**
- In a participatory process some scenarios of the further development of the region are formulated.
  - For comparing and evaluating these scenarios a set of indicators were defined. For each scenario, the values for the indicator were calculated with this landscape model. The household-module applied to the farmer resource management converted the natural productivity in monetary income for each specific scenario.

### Step 4 Modelling Household's Economy

**Aims**

- To account and define the structure of the family-income and other socio-economic indicators.
- To build up a tool for the landscape modelling, (household-module).
- To calculate the indices of indicators for the simulation of scenarios

**Methods**

- Spreadsheet calculation
- Working with three dimensions
  - Activities
  - Time (8 periods in the yearly calendar)
  - Goods and Services (inputs and outputs)
- Monetary evaluation of the goods and services consumed by the family.
- Analyses of activity, time and goods and services (labour, products) in order to calculate the family net income.
- Analyses of the seasonal liquidity and inter-dependence of the different activities, etc.

**Results**

- In 2003

