

Vegetation patterns and land-use system in a traditional cultural landscape- a case study from the village of Ghe \bar{a} ri, Apuseni-Mountains, Romania

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In traditionally used landscapes, the people had to adapt their practises to the natural environment and its site conditions. The various combinations of different site conditions and human treatments formed landscapes rich in structures, plant communities, and species.

Within the framework of the BMBF-funded 'Proiect Apuseni', a montane landscape, its land use and future perspectives were analysed [1, 2]. The village of Ghe \bar{a} ri was selected as the core study area, embedded in a transect from the valley to the high pasture. In the parish of Ghe \bar{a} ri, eight semi-natural forest communities were found, differentiated by soil and mesoclimate. Only 31,7 % of the forests today have closed canopies. Logging and wood pasture have opened the canopies, and recent immigration of 'ruderals', grassland and forest edge species are characteristic for many stands, particularly near settlements.

In the openland, different floristic elements meet. Generalist herbs and grasses, species of semi-natural, unfertilised grassland, nutrient-demanding species, lowland and subalpine species take advantage of the improved light conditions created by man and his grazing animals. Floristic elements adapted to increased disturbance from different management practises and site properties formed ten ruderal plant communities, five grassland communities, and seven transitional shrub and fringe communities along the forest edges. The average numbers of vascular species of the ruderal vegetation ranged between 13 and 26, and was 29 in successional stages between fallow fields and meadows. The grassland and forest edge communities with 28 to 48 vascular species in average, were particularly species-rich.

Since 1990, European and global changes of economies, societies and politics also have started to modify Romania, including its landscapes. The land uses and landscapes of the eastern European mountain regions have started to face completely new economic and ecological problems. The increased incorporation of the household economies of Romanian farmers into the world market inevitably will lead to future socio-economic changes. This will induce processes of increasing farm size, of specialisation, mechanisation, and intensification on the more fertile soils. The agricultural use of marginal soils will decrease, or such sites will become completely abandoned and afforested.

References

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