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POSSIBILITIES FOR IMPROVING THE MANAGEMENT OF THE MEADOWS FROM BANAT MOUNTAIN AREA

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Abstract: *Adapting to climate change from Banat mountain area and mitigating the effects of grazing, suppose controlled actions that simultaneously bring co-benefits, in synergy, and in addition additional benefits through the diversification of farm activities, for sheep breeders who practice transhumance for the use of fodder resources, for sustainable use of the area. In order to carry out recreational, educational and leisure activities in good conditions, the management of the destination must find new solutions for identifying areas with landscapes with farm tourism vocation, depending on the interest of potential farm tourists towards the farm, nature, heritage, landscape and accommodation and gastronomic possibilities along the itinerary.*

• Introduction

The plant species from the flora of permanent mountain meadows fulfill several alternative functions and the arrangements with tourist or agritourism function provide a series of services, which bring benefits to those who manage them:

- ensuring access and consumption of products obtained from sheep farming in this area;
- conservation of environmental factors: water, air and soil;
- contribution to the attractiveness of the landscape;
- increasing the productivity of pastoral activities and rural tourism and agritourism;
- increasing biotic resistance (the living environment that houses a biocenosis, meaning a set of plant species and sheep graze on meadows);
- favoring adaptation to climate change;
- preserving the biodiversity of the vegetal carpet and the living organisms that live on the surface, in the soil and in the water, including by sowing wild plants;
- preserving the structure of the landscape;
- preserving the aesthetic value of landscapes;
- travel and recreation - hiking, driving herds, identifying plant species, consumption of farm products;
- supporting sheep production;
- supporting the stability of fodder under climate change conditions.

Adaptation to climate change from mountainous Banat and mitigating the effects of grazing suppose controlled actions that simultaneously bring co-benefits, in synergy, and in addition bring benefits to:

- sheep farmers who practice transhumance;
- consumers of rural tourism, farm tourism and agritourism through the services offered by the hospitality industry;
- local economy;
- the natural environment including by preserving/restoring biodiversity).

• Material and method

Within this scientific approach, for a good use of the practical mountain heritage and maintaining its sustainability, using the specific methods of evaluation and analysis of the multifunctional potential of Banat mountain area new solutions will be sought for the implementation of farm tourism activities that are gentle with the natural environment, which will diversify the activity of professional sheep farms, by optimizing the rational exploitation of livestock on pastures according to the degree of supportability of the environment and the maintenance of mountain landscapes with pastoral utility and unspoiled tourism and increasing the profitability of farms by using surplus areas and selling the products obtained directly to the consumers of educational farm tourism activities.

• Results and discussions

The multifunctionality of the functional types of plant species from the flora of permanent meadows of Banat mountain area can be supported by reducing the intensity of pasture management and optimizing the grazing herds, but also by diversifying farm services.

We propose for the evaluation of the potential multifunctional use of functional types of plant and animal species from the flora of permanent mountain meadows, taking into account the following functions: of plant and animal production. The relationship between adaptation, mitigation and sustainable agriculture in the context of climate change is shown in the figure below:

This function is provided for Banat mountain area by the following facilities:

- a. tourist buildings, pastoral facilities as model, stables and other tourist facilities for the implementation of new tourist, mountain activities that include forms of niche rural tourism, farm tourism, agritourism, country tourism, village tourism, ecotourism, tourism in protected areas.
- b. pastoral potential:
 - meadow quality classes;
 - gravity;
 - the areas available for pastoral activities, grazing and pastoral activities.
- c. agritourism services and facilities, farm tourism:
 - access to farm agritourism services;
 - public access;
 - water supply, energy, accommodation, meals:

• Conclusions

The meadows from Banat mountain area can be considered true natural ecosystems because they constitute dominant elements of the rural environment, with great diversity, but some of them are particularly fragile, due to the composition and quality of the soils. The management of their sustainable use requires the implementation of the best management practices for optimal grazing of sheep during the summer. The best management practices of grasslands, in addition to well-managed rotational grazing, for their protection as natural ecosystems must also provide for their management to ensure the necessary amount of vegetative mass for the maintenance and production of sheep for as long as possible. The vegetation management on the meadows and maintaining their sustainability, through the measures undertaken by the management, must take into account the loading capacity of the meadow, the optimum number of sheep per surface unit and the grazing capacity to which measures to restore the floristic composition will be added, all as concrete measures of integrative production management.