



UNIVERSITY OF LIFE SCIENCES "KING MIHAI I"
FROM TIMISOARA
"YOUNG PEOPLE AND MULTIDISCIPLINARY
RESEARCH
IN APPLIED LIFE SCIENCES"



"Young people and multidisciplinary
research in applied life sciences"

16-17 November 2023

MIGRATION AND TRANSHUMANCE IN SHEEP

**Bianca CSIZMADIA¹, Ionuț Bogdan Alexandru ISDRARIU¹, Ioana Cristina ȚÎRLEA¹,
Ioan PETROMAN¹, Cornelia PETROMAN^{1*}**

¹ Banat's University of Life Sciences "King Mihai I", Faculty of Management and Rural Tourism, Timisoara

*Corresponding author's e-mail: cornelia_petroman@yahoo.com

Abstract: *The existence and efficient use of natural food resources is a permanent concern of sheep breeders, who move their flocks through migration and transhumance over shorter or longer distances, a phenomenon that can be used as a resource for the practice of pastoral and transhumance tourism, diversifying animal production systems, moving from old migration systems to systems of collective transhumance and diversification of pastoral activities in order to preserve the biodiversity of transhumance routes among tourist routes through the good practices of practicing sustainable pastoral tourism, because both static herding without herd migration as well as transhumance with its forms are matters of cultural importance given the fact that they have a multi-millenary tradition being ineffective for rural areas. Transhumance and pastoral tourism are territorial identity factors, with the aim of preserving migration paths and routes, improving ecosystem services thanks to environmental risk measures regarding the use of resources and the protection of environmental factors.*

• Introduction

The problem of natural resources of food for sheep has been a concern since time immemorial, when the extensive exploitation of sheep and classic transhumance or semi-transhumance was practiced, researchers drawing attention to the fact that the establishment of farms of sheep operated in extensive, semi-intensive or alternative intensive production systems is only suitable in areas with food resources for longer periods, where:

- better grazing can be ensured:

- a. areas with marginal precipitation;

- b. high rainfall areas;

- the lands taken out of fallow from the rainfed areas can be replaced with forage leguminous crops;

- fodder can be produced through irrigation by introducing fodder crops in rotation with food crops;

- agricultural and agro-industrial by-products for feeding sheep are available in large quantities.

Other research shows that sometimes-historical challenges can change the type of animal production system, finding that nomadic sheep in different areas of the globe, which practiced, at the beginning, a system of horizontal and vertical migration, they were forced with the reduction of pasture areas to stabilize their homes and farms and to switch to new production systems, with the reduction of associative transhumance migration.

• Material and method

The vertical and horizontal migration of sheep flocks and transhumance with its forms, as an action or practice of moving flocks from wintering areas with fixed or non-fixed dwellings to those with abundant local resources, in the hill or mountain area, is a form of agropastoralism, which can be used by breeders and tourism tour operators to improve the economic results of their units. For these reasons, in this scientific approach, for the circled area, Arad County, we looked for solutions to introduce the old sheep transhumance routes, among the tourist routes, for the development of new forms of tourism and the diversification of farm activities, for a better valorization of the products obtained from the breeding and exploitation of sheep in areas with a vocation, which have cheap local fodder resources and infrastructure for the practice of new forms of niche tourism, because both farm production, processing, valorization, consumption and transhumance activities of sheep are matters of socio-cultural importance with a multi-millenary tradition and can become examples that can help tour operators understand the novelty of such beneficial concerns for the rural area as well as for tourists.

• Results and discussions

The migration period includes the following farm actions in which pastoral tourism seekers can also participate:

- accompanying herds to grazing;
- weaning of lambs, pastoral celebrations, measuring sheep;
- participation in sheep shearing;
- the slow migration of flocks on old sheep paths and roads;
- breakfast at the barn, participation in milk processing actions;
- spending the stay in the fold, watching the behavior of the sheep;
- accompanying the herds to the wintering areas;

Collective transhumance includes the following recreational and educational activities for tourists:

Transhumance	Large collective herds → Spend spring in valleys and foothills → Accompany travel by trailer or on foot to high areas → Spend summer in mountains → Return by trailer or foot to lowlands → Return by trailer to wintering areas
--------------	--

The involvement of farmers, product organizations and tour operators in the migration and transhumance activities of sheep to the resource areas depending on the season provides multiple possibilities regarding:

- sustainable development of isolated areas that have food resources for sheep;
- population access to new extension services, by promoting products obtained from sheep;
- the development of new forms of pastoralism with economic influence on isolated areas;
- conservation of the agro-silvo-pastoral landscape and its introduction on the classic tourist routes;
- modification of the floristic composition and nutritional value of meadows, as well as the propagation of agricultural and social forestry by avoiding the reforestation of alpine gaps.

• Conclusions

By practicing transhumance with its forms of horizontal or vertical migration of sheep flocks, cyclical depending on resources, the economic activity of farms can be improved, if they are willing to diversify their farm activities and practice pastoral tourism as alternative activities farm, with its niche forms. The diversification of activities in order to preserve the biodiversity of transhumance routes among tourist routes through good practices contributes, the improvement of ecosystem services due to environmental risk measures regarding the use of resources and the protection of environmental factors.