

ABSTRACT OF THE HABILITATION THESIS

"Contributions to Establishing the Current Trends in Sheep Exploitation and Knowledge of Applied Technological Techniques, in order to Optimize the Methods of Valuation of the Obtained Products", elaborated by conf.dr.ing. Mirela-Aurora CĂRĂTUȘ (STANCIU)

Key words: sheep, grazing, farming system, traditional product, capitalization, rural tourism, agrotourism

The ability thesis reflects, in a condensed and grounded manner, the way in which the evolution of the academic career was intertwined with the scientific research, the professional results, the recognition and the impact of the activity in the field of Engineering and management in agriculture and rural development after obtaining the Ph.D. title 18 years ago. The results are analyzed in the current and prospective context of the development of sheep exploitation, with reference to the most relevant sources of information regarding the current state of knowledge in the field, and with the pertinent analysis of current trends.

The habilitation thesis is structured in four chapters: Scientific, Professional and Academic Achievements, Scientific Research Activity, Recognition and Impact of Didactic and Scientific Activity, Evolution and Development of Professional, Scientific and Academic Career, Completed by the Summary in the Language Romanian, Abstract in English, relevant keywords (in Romanian and English) and bibliography.

In the course of the 25 didactic and scientific activities and after obtaining the Ph.D. title in Agronomy in 1999, the author deepened the research field in the domain of sheep breeding and of valorization of the obtained products from them in the context of rural tourism and agrotourism by including them in the sphere of scientific concerns. The development of professional training has been carried out at national level through postgraduate and postdoctoral studies, and internationally through internships in rural development conducted in prestigious universities in France and Hungary, or visits to farms in Austria, France and Switzerland.

The teaching activity began after the graduation in 1991, first passing a teaching period in the pre-university education system and then the academic steps from the university assistant to

the associate professor at the Faculty of Agricultural Sciences, Food Industry and Environmental Protection from "Lucian Blaga" University of Sibiu.

The publishing activity of the author is reflected in 6 specialty books (2 single author/coordinator), 9 chapters in books from agricultural field (7 single author/prim author), 2 courses (1 single author) and 4 laboratory guides (2 first author / single author).

The didactic activity intertwined with the scientific research activity, concretized through 14 scientific research projects, of which: project manager/project responsible -8 projects (an international project); member of the team of national projects (member, technical expert, trainer) -6 projects.

The results of my own research have been published in specialized journals and volumes of scientific manifestations with wide international circulation. I have published over 140 papers, of which 11 ISI Thompson indexed articles, 64 articles published in journals and volumes of scientific events indexed in the BDI, 25 articles in national circulation journals, and 40 articles in volumes of national scientific events.

Naturally, the most important part, both in terms of volume and scientific content, relates to the scientific research activity in the field concerned. This chapter was structured in five subchapters, all presenting the contributions to the knowledge: trends of sheep evolution at local, national, European and world level; the shepherd to the Romanians and the link between the valorization of pastoral heritage and rural tourism; the exploitation technology currently applied in sheep farms in Sibiu County; the stage regarding the valorization of traditional/local/bio products obtained from sheep and the ways of promoting them through rural tourism; the typology of organic sheep farms in Sibiu County.

Evolution of sheep flocks, the spread, the level of growth and the direction of exploitation are determined by the agro-climatic, socioeconomic factors and the biological characteristics of the species. In 2013 the world sheep population was 1.172.833.190 heads, with an increase of 10.7% compared to the number existing in 2000 (1.059.082.358 heads). The share of sheep in the continents was in the following year: Asia (44.9%), Africa (27.7%), Oceania (9.07), Europe (11.1%), EU28 (8.32) and America (7.24%). In Asia the largest sheep flocks were owned by China, India, Iran, Pakistan and Turkey. With 185 million head, China holds 15.8% of the world population and 35.1% of the Asian population. In Africa, the largest flocks are found in Sudan,

Nigeria, Ethiopia and Algeria, while in America the first sheep raising countries are Brazil, Argentina, Peru, Bolivia and Mexico.

In 2015 the number of sheep exploited at U.E.28 was 86.599 thousand heads, which represents only 87% of the exploited sheep in 2001 (99.320 thousand heads). Reporting the country's herds in 2015 to 2001, there is a decrease of 31% in Ireland, 2% in Greece, 29% in Spain, 24% in France, 14% in Italy, 42% in Portugal, 2 % In the UK and a 46% increase in Romania.

The lowest sheep population explored at national level after 1990 was in 2001 (7.551 thousand heads). At the end of 2016 Romania exploits 12.330 thousand heads of sheep, which represented only 81% of the existing population in 1990 (15.236 thousand heads). The millenary tradition of exploiting this species, the love of the Romanian breeder towards the sheep and the growing demand for meat on the European and world market have led to the revival of this sector.

In an attempt to talk about the pastoralism past to Romanians, it can be said that the longest shepherds's epoch, began from the mist of the times and is extended until the first half of the nineteenth century.

Traditional products play a major role in preserving the cultural heritage of the countryside, preserving local identity, preserving local traditions and customs, often valued by organizing local fairs and festivals. Within them are promoted both local port, folklore and gastronomy.

Another chapter developed in this habilitation thesis is the one dedicated to recognition and the impact of didactic and scientific work. Thus, 12 papers published as first author/single author/co-author are quoted in an ISI-indexed paper and in another 39 indexed BDI papers. I held two presentations in the plenary of scientific events and participated as moderator at two other scientific events, one with national and one with international participation.

I am part of the editorial secretary of a national journal recognize by C.N.C.S.I.S. and reviewer in a journal indexed B.D.I. I was the main organizer or member of the organizing committee of 13 national conferences with international participation. I organized 4 summer schools and I was guest lecturer at 7 other summer schools in Sibiu and Brasov Counties. I was the main organizer two local fairs of local traditions and products (2008 and 2009) and co-organizer of two editions of a traditional product fair (2016).

Chapter 4 presents the development plan and career progress for candidate with a focus on the scientific future, academic trajectory and professional visibility.