

SOCIO-ECONOMIC INFLUENCES ON THE AGROSILVOPASTORAL SYSTEMS IN MOUNTAIN AREAS

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Abstract: Agrosilvopastoral production systems, as the entire agricultural sector for that matter, have been influenced by the various stages of development of local and national economy, by the social life of local communities. The aim of the present paper is to analyze the situation in the mountain areas, more precisely in two communes: Bănia, in Caraș-Severin County, located in Banat Mountains, and Nădrag, Timiș County, situated in Poiana Ruscă Mountains. Both communes are part of disadvantaged mountain areas. The documentation is mainly focused on providing information on the natural resources and opportunities offered by the mountain area under study. It was observed that the positive tendency of economic and social development has major influences, at first negative, on agriculture and agrosilvopastoral systems, due to the fact that people left their homes in the villages and migrated to towns. This phenomenon is going to be replaced by a positive influence, the savings and knowledge accumulated in other areas being "invested" by villagers in the rational and sustainable exploitation of the natural resources specific for the area, thus contributing to the revival of traditions and the and types of agrosilvopastoral mountain economy.

Keywords: agrosilvopastoral systems, mountain area, socio-economic influences and types of agrosilvopastoral mountain economy.

INTRODUCTION

More often than not, especially in the mountain area, the maintenance of good agricultural conditions and practices, as well as good environmental conditions, is influenced by economic development, by the level of education and information of villagers and last but not least, by the possibilities for sustainable exploitation of the natural resources specific for the area.

Human capital is of utmost importance for the development of the mountain rural area. Romania faces abandonment of mountain areas, where mostly older people remain to live. "The level of education and the access to information of the population in rural areas are rather low, constituting a limiting factor for the development of economic activities" (CAMELIA BURJA, BURJA V., 2014).

Animal husbandry is the main productive activity in the mountains of Romania (MARUȘCA T., 2012, LUMINIȚA COJOCARIU ET AL., 2014 a, b, c), where animals are raised in agrosilvopastoral systems. The pastoral resource of Romania is one of the biggest natural assets of our country; this fact is confirmed by the multitude of studies in the field (HORABLAGA M. AND MOISUC A., 2004; HORABLAGA ADINA, ET.AL. 2007; HORABLAGA M.N. ET AL., 2012; MAZĂRE V. ET AL., 2010; BOSTAN C. ET AL., 2010; BOBOICIOV S. AND LUMINIȚA COJOCARIU, 2010; ALINA LAVINIA CALUȘERU AND LUMINIȚA COJOCARIU, 2011; BOSTAN C. ET AL., 2012; ALINA LAVINIA CĂLUȘERU et al.,2013). To this we would add practicing agritourism as a source of revenue growth and of sustainable development, especially in the mountain area.

Government Emergency Ordinance 34/2013 states a particularly important aspect that must be the basis for designing the pastoral arrangement, as well as for using any type of agrosilvopastoral mountain economy: “The use and exploitation of grasslands are performed employing good agricultural and environmental conditions, in accordance with the legal provisions in force”.

There is a well-known tendency to choose the plains to the detriment of the mountain areas, not only for practicing agriculture, but also for other economic branches. This is mainly caused by the infrastructure and the extensive possibility for economic development. Nevertheless, the mountain areas of Romania are attractive from an economic point of view, because they are picturesque and there is a real possibility to implement and develop agritourism there (OPRUȚ P., 2008). Agritourism, as an economic system for obtaining an income, must be developed in parallel with efficient but traditional agrosilvopastoral types of mountain economy.

MATERIAL AND METHODS

The activity of information and research is based on statistic data gathered from official sources, specialized literature. Observations in the field were also made, in several stages, the method used being the field trip for interviewing the villagers in Bănia, which is located in Banat Mountains, and in Nădrag, which is situated in Poiana Ruscă Mountains. The data underwent statistical processing.

RESULTS AND DISCUSSIONS

Order 355/2007 stipulates disadvantaged mountain areas as being “those areas, marked as administrative-territorial units, characterized by considerable limitation of the possibilities of land use and by considerable increase in working the land there, because of:

- a)** average altitudes of over 600 m, which determine very harsh climate, the effect of which being substantial shortening of the vegetation season; or
- b)** the presence, at an average altitude of between 400 and 600 m, which determines difficult climate conditions, of average slopes above 15%, which render mechanization impossible, or require the use of costly specific equipment”.

The same enactment contains the list of administrative-territorial units that belong in this category; the communes Bănia and Nădrag are on this list.

“In Banat Mountains, pastoralism is based mainly on small exploitations. Mountain farms are mainly mixed, pluriactive, where the main activity is animal husbandry and fruit production; depending on the area and traditions, the dominant animals to be raised are cattle, sheep, goats. “The directions for making efficient the submountain and mountain economy in Banat Mountains, based on the selected and modernized traditions in the mountain family farm, focus on maintaining the ecological agriculture, based on the vegetation of mountain semi-natural pastures and on balanced load of ruminants – cattle, sheep, goats – in perennial harmony with the mountain forests” (Cojocariu Luminița et al., 2014)

Nădrag commune covers an area of 13250 ha, of which only 220 ha are pastures, 247 ha arable land, the most significant area being represented by forests (11380 ha) (Development strategy of Nădrag commune, www.primarianadrag.ro).

Bănia commune covers 20768 ha, of which 7.585 ha agricultural land (arable land: 1,720 - ha; orchards: 378 - ha; pastures: 4,624 - ha; hay meadows: 863 – ha), and 12,437 ha are covered by forests (HCL Bănia 4/31.01.2008).

Both communes have in their components, besides the commune center, another village each, the population registered in July 2012 being of 1966 inhabitants in Bănia and of 2672 inhabitants in Nădrag.

Having a closer look at the population, one can see that in Caraș-Severin County, the number of people living in rural areas decreased after 1990, but that starting with 2007, this decrease has slowed down: if in 2007 the maximum population number was 142868, the minimum number registered in 2013 was 140079 (Statistical Yearbook of Caraș-Severin County, ed. 2013).

In Timiș County, the situation is different, in that, although percentage-wise the population in the rural area is not as numerous as in Caraș Severin (related to the number of inhabitants), when comparing numbers, the rural area in Timiș County has started to record a larger number of inhabitants. This upward trend started in 2009: at that time, there were 253802 inhabitants, and at the beginning of 2013 there were 262805 inhabitants (Statistical Yearbook of Timiș County, ed. 2014).

Percentage-wise, the rural population in Caraș Severin County is 44%, while in Timiș County it is 38.9%.

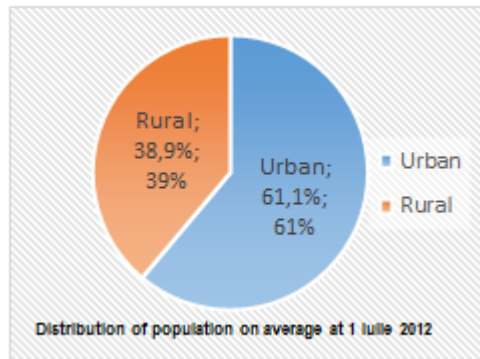


Fig.1 Distribution of population on average, Timiș, Source: County Statistics Department Timiș, Statistical Yearbook Timiș County, ed. 2014.

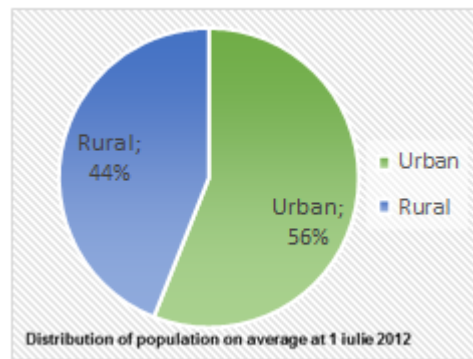


Fig.2 Distribution of population on average, CS Source: Statistical Yearbook Caraș-Severin County Statistics Department CS, County, ed. 2013.

In the communes under study there is stability in regards to the population number, starting with the year 2000 in Bănia commune and starting year 2010 in Nădrag commune. A graphical representation of the evolution in the population numbers is presented below.

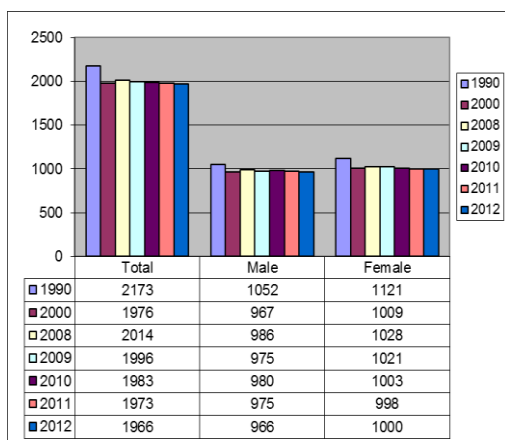


Fig.3 Existing population and sex ratio, Bănia commune, from 1990 to 2012.

*Data taken and processed from the Statistical Yearbook of Caraș Severin County, ed. 2013

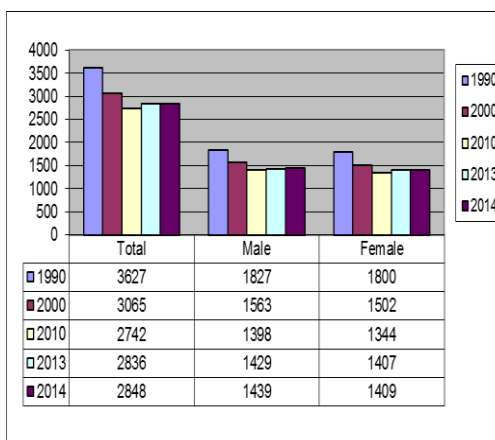


Fig.4 Existing population and sex ratio, Nădrag commune, from 1990 to 2012. *Data taken and processed from the Statistical Yearbook of Timiș County, ed.2014

The evolution of population is a factor that has a direct influence on the economic, social and cultural development of a community, and implicitly the population stability in the rural areas leads to the use of natural and material resources, which use can prove to be really beneficial for the local community and more.

Thus, we discovered that in Nădrag commune there are clear signs of the development of private economic activities: at present there are 3 economic units for wood processing, 3 agricultural units, 8 units related to beekeeping and 2 tourism units, although in 1990 there was only one firm, in the metallurgic business. Animals are only raised in private households: in Nădrag there are no farms for intensive livestock farming.

The same development in the private sector can be noticed in Bănia, too, starting with the year 2005. At present, the firms there are concerned with wood processing, agriculture, fruit production, commerce, as well as animal husbandry and panification. There are lots of touristic sights in the area, which make it possible to practice agritourism (ANDREI N., 2007).

In regard to grassland management, article 6 in Government Emergency Ordinance 34/2013 states that “grassland use is established by pastoral arrangements”, and the local councils have “the obligation to design the pastoral arrangement valid for all grasslands found on that particular administrative-territorial unit”. However, no pastoral arrangements have so far been designed for either of the two communes under analysis. In what Bănia commune is concerned, it is commendable that Local Council Decision 16/28.02.2014 passed the “pasture regulation” for the pastures owned by Bănia, for the year 2014. This regulation establishes the “rights and obligations of pasture managers and users, for 2014, who have signed a renting contract for plots of land owned by Bănia commune, for ensuring their protection and sustainability, until pastoral arrangements are set”. (art.1). The Local Council of Nădrag commune, by Decision 20/26.03.2014, approved “the value of 0.3 UVM/ha. as being the grazing capacity or the optimal load of animals for the pastures included in the public domain and in private domain of Nădrag commune, in view of making contracts for renting or leasing them ” (art.1).

CONCLUSION

Although included in mountain areas classified by law as disadvantaged, communes Bănia and Nădrag have a rich and picturesque natural patrimony. Our analysis revealed that their economic and social development is on the rise, being closely related to the index of population stability in rural areas. The development strategies of both communes, set for the timeframe 2014-2020, target the development of infrastructure (roads, running water, sewage system, public lighting, etc.), promoting tourism and agritourism, assessment of agricultural areas, designing the plan for using the areas, pastoral arrangements, and, last but not least, sustainable management of the natural resources of the area. For achieving these strategic objectives, it is very important that every administrative-territorial unit identify, access and use the tools for non-refundable financing made available from the European Agricultural Fund for Rural Development, in conformity with the law.

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