

ANALYSIS OF THE AGRICULTURAL POTENTIAL OF THE VILLAGE ARIEȘENI

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Abstract

This paper aims to determine the agricultural potential of the village Arieșeni. For this, we made an analysis of the land, and livestock existing at the commune level.

Following the analysis was revealed that the agricultural potential in this commune is low, ensuring the population's needs in a very small proportion (5-10% cereals, 40 - 50% potato), due to relatively harsh climate and geographical position of the village, soils having low fertility. In the same vein is the livestock sector, where except porcine, at which the number increased by over 11%, to the other livestock species the effectives were drastically reduced (in 2008 compared to 1975).

Keywords: agricultural potential, land fund, livestock, soils.

INTRODUCTION

Agriculture in the village Arieșeni (located in the Apuseni Mountains area) is practiced to an altitude of 1200 m, in a rudimentary way and until recently it could be seen the wooden plows. Cold climate allows only growing potatoes, barley and wheat planting risks to not be ripened until the hoarfrost falls.

On the high peaks grow large pastures that allow sheep and cattle breeding. In the same purpose are used all cultivable land which are mown for hay. Therefore, we shouldn't be surprised by the fact that in the most isolated glade in the middle of the forests leads a road wagon, on which the highlandmen carries its hay down.

Village's agriculture before 1989 was not cooperativized, agricultural area was much smaller and soil poor in nutrients, it was not worked in the best conditions, resulting in very poor harvests, which covered population needs only in proportion of 5-10% on grain and 40-50% in the potato.

The difference of grain, to cover the needs of the population, was brought from Câmpia Transilvaniei, Câmpia Crișurilor, Someș and Banat, under very heavy conditions with rudimentary means of transport, most often with a horse cart or on horseback.

Because of harsh climate, geographic position of the municipality, scattered on many pinnacle hills, which exceed altitude of 1000 m, surrounded by mountain peaks that reaches 1848 m altitude, a few hot days,

with mornings and cold winds, poor rocky soil with low fertility, agricultural production was and is very low.

Cultivated land is plowed and sowed once at two - three years, and in the remaining time is used as grassland.

Another cause of low production is also the skew position of land, located on the hills, which if is plowed every year, arable land can crumble, after heavy rains.

MATERIAL AND METHODS

The material used to accomplish this work includes: the most recent bibliographic sources in the field, the statistical data in Alba County and monograph of Arieșeni village.

RESULTS AND DISCUSSION

Agricultural area of the Arieșeni village at the 2002 census was 2041 ha, of which:

- arable land - 200 ha;
- pasture- 902 ha;
- meadow - 939 ha.

Currently, the agricultural area of the village Arieșeni is 2519 ha, of which:

- arable land - 333 ha;
- pasture - 1157 ha;
- meadows - 1029 ha.

It is noted, so an increase of agricultural area from 2002 to present with 478 ha (Table 1).

As results from the table, in the structure of agricultural area in 1975, prevailed natural grassland with 43,3%, followed by natural pasture with 40,4% and arable land with 16,2%. The situation of how the land was used in 2009 is changed from year 1975, the highest ponderosity in the structure of agricultural area is owned by natural pasture with 45,9% (fig.1.).

In 1999 the arable land recorded a decrease of almost 40% compared to 1975, occupying only 9.3% of total agricultural area, which is maintained until 2009, when the arable area is expanding significantly from previous years, with a difference of 133 ha compared to 2002.

Table 1

Structure and evolution of land by categories of land use during the period 1975 - 2009, in the studied area (hectares)

Category of use	1975	1995	1999	2000	2002	2009	%/1975
Agricultural area, of which:	2028	2268	2143	2041	2041	2519	124,2
- arable land	328	325	200	200	200	333	101,5
- natural pasture	820	1123	1123	902	902	1157	141,1
- natural meadow	878	820	820	939	939	1029	117,2

Source: Data processing Alba County Statistics

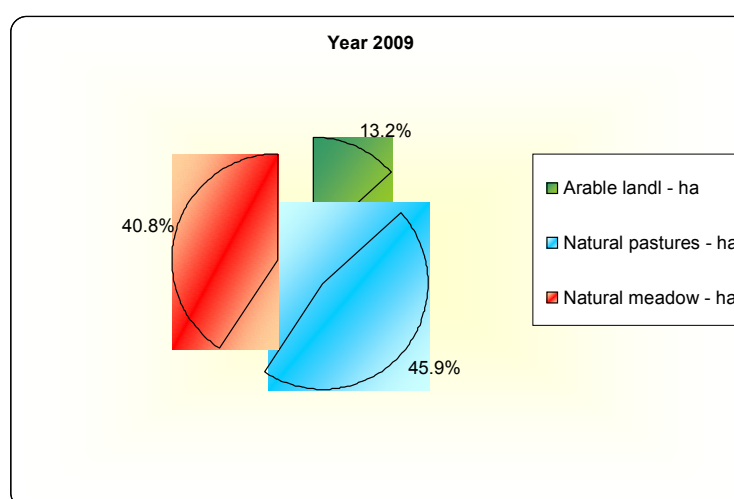


Fig. 1. Structure of land by categories of land use, in the studied area, in the year 2009 (%)

In the following years 2000-2002 is noticed a stabilization of the agricultural area, representing 61.44% of the total area of the village.

In 2009 the agricultural area expands dramatically from previous years with a difference of 478 ha compared to 2002.

In addition to other sources of living, since long time, animal breeding occupies a prominent place for the inhabitants of Arieșeni , animals providing them with products such as milk, cheese, cream, meat, etc.

Unlike other areas, animal breeds, which were lended at the mountain area and still lends itself today, are those of Pinzgau breed, not existing a pure breed but an infusion with Romanian Piebald (red) and less with other races.

Although forage quality has improved, as in present is growing alfalfa and clover and is applying well fermented manure on meadows and pastures, breed cattle for milk has remained almost at the same level of performance in terms of production.

Livestock register a change from one year to another, with differences in species (Table 2.)

Table 2

Evolution of animals on species during the period 1975 - 2008, in the commune Arieșeni (number)

Species	1975	1990	2000	2001	2008	%/1975
Bovines – total	1863	1454	1190	1050	1020	54,8
Porcine – total	538	594	588	600	598	111,2
Sheep - total	361	50	32	24	12	6,6
Poultry - total	3069	2050	3584	2000	2025	66,0
Equine	494	470	462	450	445	90,1

Source: Data processing Alba County Statistics

In 2008, the largest ponderosity is held by the poultry - a total, with 49.2% (Fig. 2).

From the presented data it is noted that, except swine, the effectives have declined considerably, so that at the sheep remained only 12 heads, at poultry the effective was reduced by 1/3, and in bovine, with about 45%.

The causes were different. Thus, in sheep, the significant decrease in 2008 compared to 1975 is explained primarily by the lack of profitability in breeding this species in the mountains. Wool is paid at a reduced price, there is no outlet, and milk and its processed products don't have demand in the analyzed area.

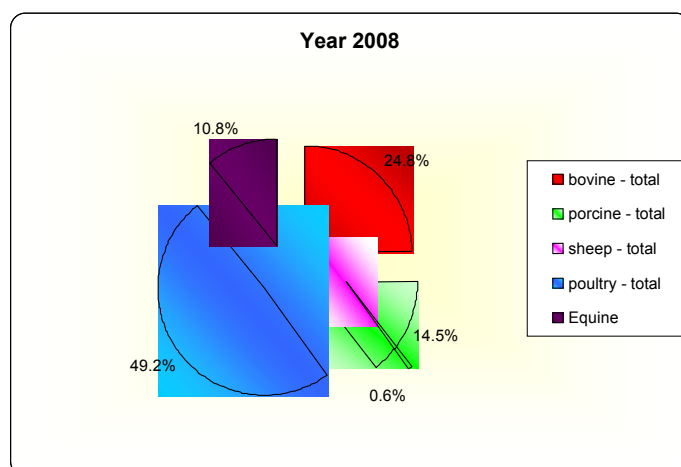


Fig. 2. Structure of animals on species, in the commune Arieșeni, in the year 2008 (%)

Number of poultry recorded a steady increase until 2000, and in 2001 the number is reduced significantly with a number of 1584 heads, ulterior registering in 2008 a growth of 25 heads.

Regarding the number of horses, from the records of agricultural registry from 2001, the effective of equine was of 450 heads unto 494 heads in 1975, which means a decrease in time of the effective with a number of 44 heads, in 2008 being recorded an effective of 445 heads.

CONCLUSIONS

In May of each year, usually after the 10th of the month, according to the way spring leaves, the inhabitants go on the mountain with the animals. Unlike other parts of the country, shepherding in the mountains is different. There are not collected separately the large cattle, sheep, etc, but each householder sends one person from the family to take care for cattle and sheep. In general, each householder has his stable and his hut and he often brings his entire family to live all summer in the mountains.

Regarding the sheep summer or getting out the sheep to the fold, for now we can not talk about something like this, the village livestock is very low, the total number on village being 12 heads.

For getting the cows out to pasture some householders have made a small barn (mutătură) on the grazing place, where they left the cattle over the night, bringing home only the milk.

The most common form of grazing has been and is, besides breeding cattle near man's house, a form of sedentary occupation. This form is and was practiced in general by those who had and have fewer cattle and a larger grazing land nearby the house.

Another form of grazing, which is practiced often enough, is the farm shepherding (local), which consists in carrying the cattle to pasture during the day at the pasture they have around the village or in the forest.

The third form of grazing fully manifested in the village Arieșeni is simply pendulous grazing, practiced by householders that have more cattle and less pasture near the house, who every summer shift away to the mountains for grazing.

The soils of the village Arieșeni are part of the acidic mountain soil, even highly acidic.

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