

Economics of agriculture
SI – 2
UDK: 631.11 (1-773)(497.16)

MARKET AS A FACTOR IN THE DEVELOPMENT OF MOUNTAIN REGION IN MONTENEGRO

Momir Jovanovic, Aleksandra Despotović¹

Abstract

Available surfaces, relief, climate, soil and hydro highlight specific diversity of Montenegrin agriculture. Montenegro has a limited agricultural land (37.5% of the territory), arable land (36.6% or 0.3 ha per capita), and especially the area under arable land, orchards and vineyards (which are counted in the EU arable land), of only 58,262 ha or 0.09 ha per capita.

The hilly and mountainous region includes seven municipalities in northern Montenegro. Although this area is characterized by a significant share of nearly two fifths of total agricultural land and nearly so in total arable land in Montenegro (38.3%), one of the less developed region of Montenegro. The paper analyzes the current situation and perceived potential opportunities to improve this region from the market point of view.

Key words: *market, multi-functionality, the mountain area, natural resources.*

1. Introduction

Some of the features of the Montenegrin primary agriculture are: extensiveness, fragmented holdings, a relatively low level of marketability of production and low levels of self-sufficiency for huge number of agricultural products. In addition to growing some vegetables, part of the vineyards, farm production in fisheries and in cattle (milk production in the areas of organized purchase) and agricultural production has no market character of production yet. Montenegro is a net importer of food, with the outstanding balance deficit in the last ten years².

1 Dr Miomir Jovanović, viši naučni saradnik, dr Aleksandra Despotović, naučni saradnik, Biotehnički fakultet, Univerzitet Crne Gore, 81000 Podgorica. miomirj@t-com.me; alexd@t-com.me

2 Fundamental characteristics of development of the Mountainous area of territory belonging to the municipality of Žabljak, Kolašin, Mojkovac, Plužine, Pljevlja, Rožaje and Šavnik. These seven northern municipalities in Montenegro, along with municipalities Andrijevica, Berane, Bijelo Polje and Plav, consists of mountain agricultural zone, characterized by a developed animal husbandry, forestry, production of honey, herbs and river fish production.

Available natural resources and comparative advantages of mountainous regions contained primarily in the extraordinary natural resources and agricultural production (organic farming), are not used sufficiently. As one of the limiting factors for improving production in this area there are under-developed market relations and market infrastructure, resulting in coming to the fore and weak evaluation of the potential placement of food through the so-called tourist spending so called "*invisible export*". The current level of utilization of resources and the multifunctional character of agriculture in the analyzed area significantly beyond of its present contribution to development of Montenegrin agriculture.

This paper analyzes data relating to the movement of share of population and households in the total number at the National Level in the period 1948-2003 and the latest available information relating to all other observed data, (2003 the latest available census data and the 2008 and 2009 statistical year books).

2. Fundamental characteristics of development of the analyzed area

Analyzed area belongs to the municipality of Žabljak, Kolasin, Mojkovac, Plužine, Pljevlja, Rožaje and Šavnik. These seven northern municipalities in Montenegro along with municipalities Andrijevića, Berane, Bijelo Polje and Plav consists of mountain agricultural zone, characterized by a developed animal husbandry, forestry, production of honey, herbs and river fish production.

Seven municipalities mountainous district covers more than 1/3 of the territory of Montenegro. The movement of population and the number of households of the study area during the period from 1948 to 2003 year record of intense change. The most pronounced and almost identical decline in the share of the total population and number of households recorded in Šavnik from 2.0 (1948) to 0.5% (2003). Unlike Mojkovac that kept uniform level of participation and in the population and the number of households (1.6%), only the municipality of Rožaje recorded a larger share of the total population from 2.9% to 3.7% and total number of households from 2.1% to 2.8% (Table 1).

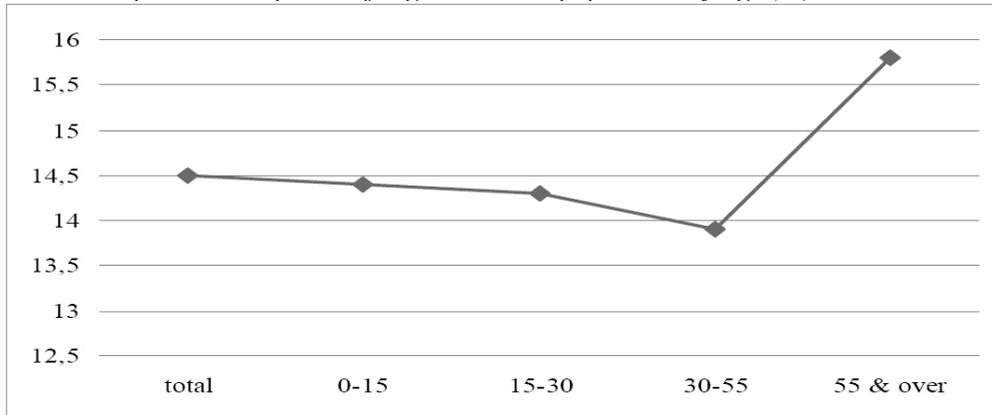
Table 1. The share of population and number of households of mountainous region in Montenegro

	1948		1971		2003	
	Population (%)	Households (%)	Population (%)	Households (%)	Population (%)	Households (%)
Žabljak	1,6	1,4	1,2	1,2	0,7	0,7
Kolašin	3,7	4,0	2,6	2,9	1,6	1,8
Mojkovac	1,6	1,4	1,9	1,6	1,6	1,6
Pljevlja	9,5	8,2	8,8	8,2	5,8	6,2
Plužine	2,1	1,9	1,7	1,7	0,7	0,7
Rožaje	2,9	2,1	3,0	2,2	3,7	2,8
Šavnik	2,0	2,0	1,3	1,3	0,5	0,5
In MNE (%)	23,4	21,0	20,5	19,1	14,6	14,4

Source: Author's calculations based on MONSTAT data.

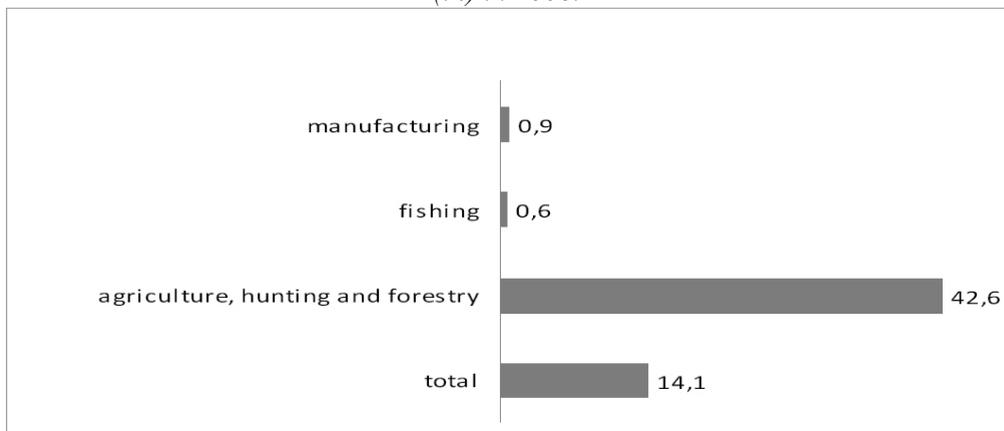
The largest share of mountainous regions in the total population by age was found in populations of more than 55 years (15.8%) and lowest in the category of 30-55, only 13.9% (2003). This indicator shows the pronounced migrations from this area, depopulation of villages and aspirations of the working age population to seek employment in other parts of Montenegro or outside of Montenegro (graph 1).

Graph 1. Participation of regions in total population by age (%) in 2008.



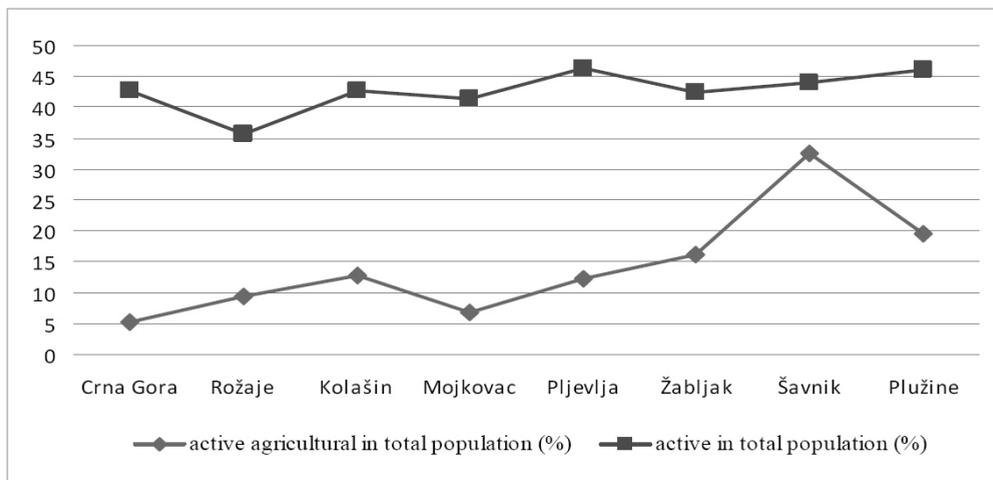
While the participation of the analyzed regions, the total active population, performing an occupation at the national level, is 14.1%, the share employed in agriculture, hunting and forestry is about 42.6%. On the state of manufacturing industry in this region, seen in terms of employees, it is best illustrated by the fact of its shares of only 0.9% of the total number of employees at the national level (graph 2).

Graph 2. Participation of region in total number of active population by occupation (%) in 2008.



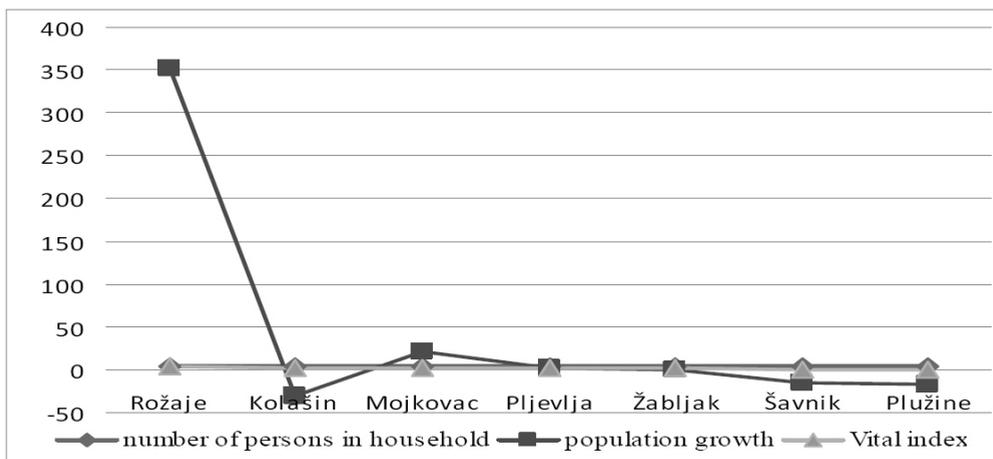
The economic structure of mountainous regions to a large extent conditioned by the participation of agricultural population in total, which was moving at the level of 8.0% in Mojkovac to over 30% in Šavnik (2003), well above the Montenegrin average of about 7% (graph 3).

Graph 3. Active agricultural and active population in total number of population (%) in 2003.



Except Rožaje and Mojkovac, where there was a positive population growth, in other municipalities are recorded negative trends that are manifested by a low vitality index (graph 4).

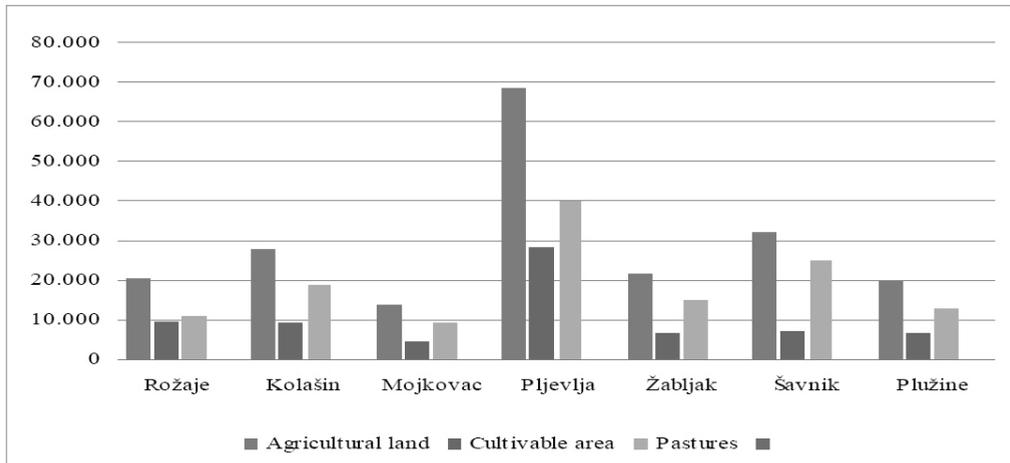
Graph 4. Basic indicators of development of the municipality in 2003.



3. Analysis of the situation of some branches of production

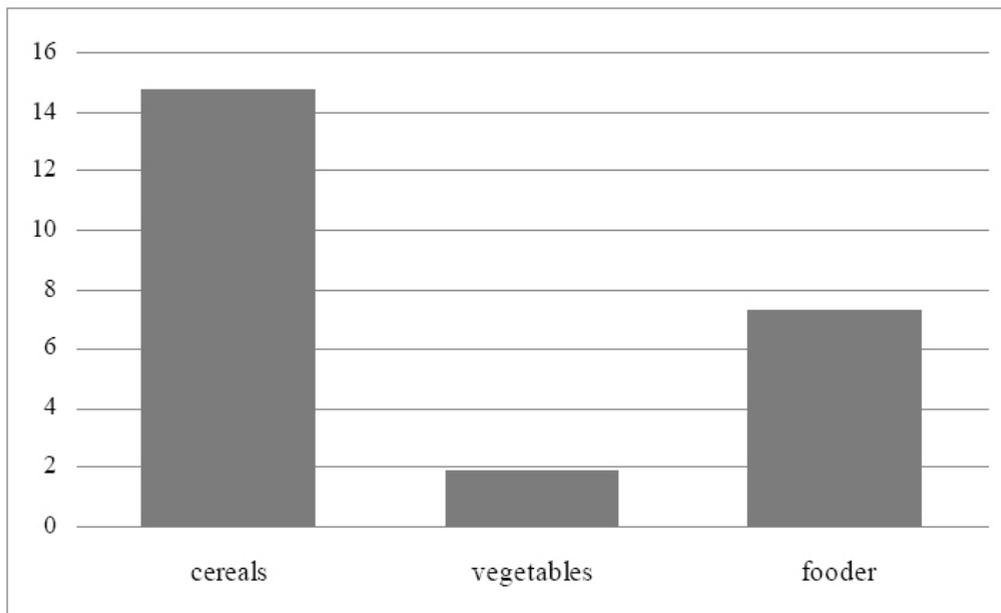
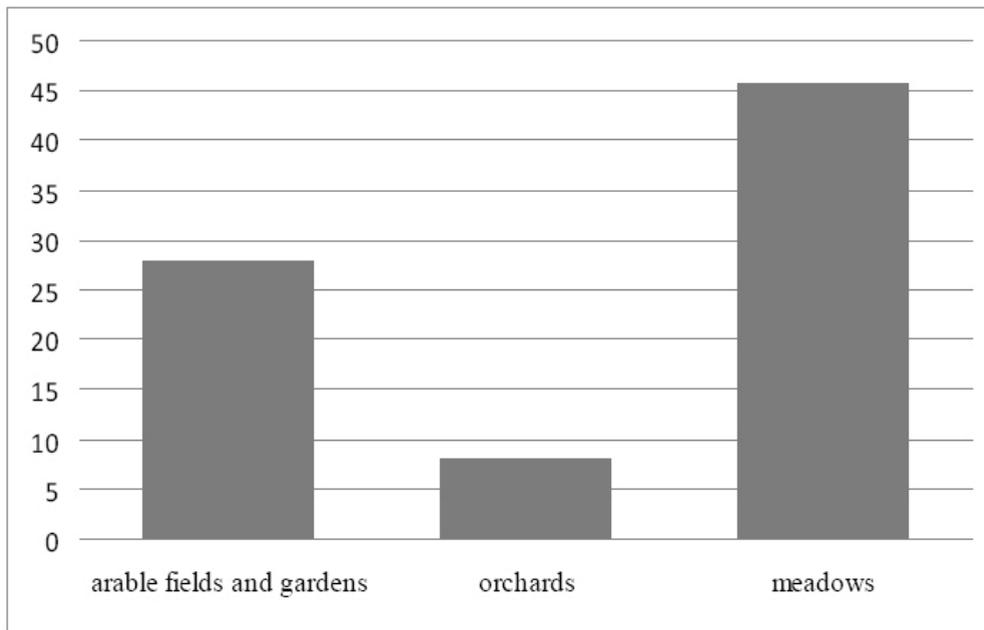
Viewed in terms of participation of agricultural land (39.4%) arable land (38%) and pasture (40.5%) of mountainous regions the total acreage at the national level to conclude that it is a region with significant potential land (2003). The most important agricultural and arable land are located on the territory of the municipality Pljevlja, while the smallest area in the municipality Mojkovac (graph 5).

Graph 5. Agricultural land by categories of exploitation in 2003.



3.1. Crop Production

In contrast to the meadows, where the participation of regions in the total acreage is 45.7%, the share of arable land and the garden is relatively low and moving at about 28% (2008). The share of the total orchard area is Montenegrin, only 8.0%. The data on sown area under grain (14.7%), vegetables (1.9%) and cattle forage crops (7.3%) point to a low level of utilization of available land and lack of development of these manufacturing in this area (graph 6).

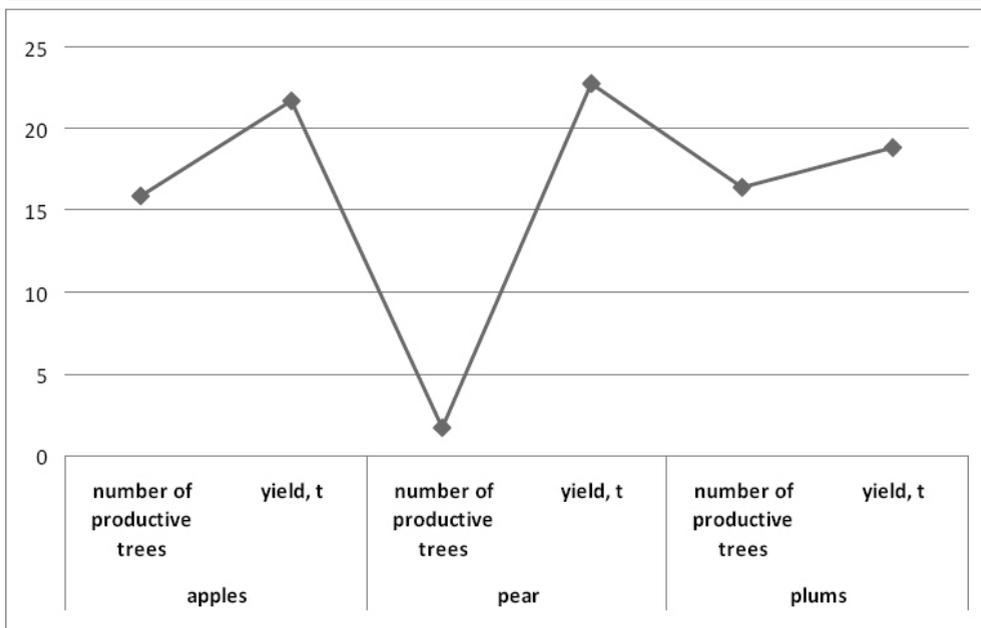
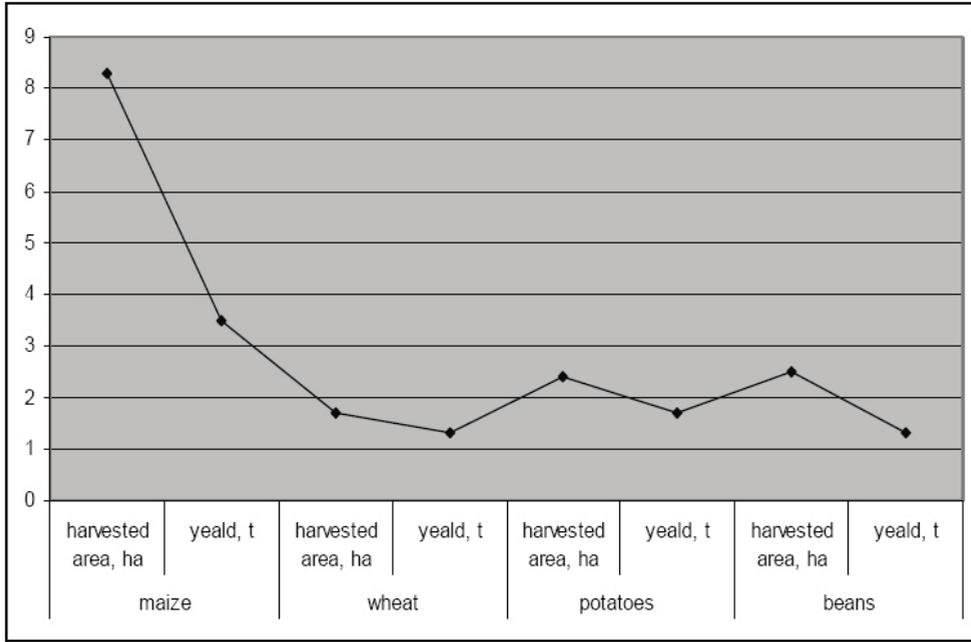
Graph 6. Participation of region in cultivable area (in %) in 2008.

In this area, with relatively low share in total production of maize and wheat, while the share of potatoes and beans at the level of about $\frac{1}{4}$ of the total Montenegrin production, thanks to production realizable in Kolasin and Pljevlja (2008). This resort participates in the yield of apple, pear and plum trees at the level of about $\frac{1}{5}$ of total return on the level of Montenegro, with the gap between the participation in the number

of trees and yield (graph 7 and 8).

Graph 7. Participation of region in maize, wheat..(%) 2008.

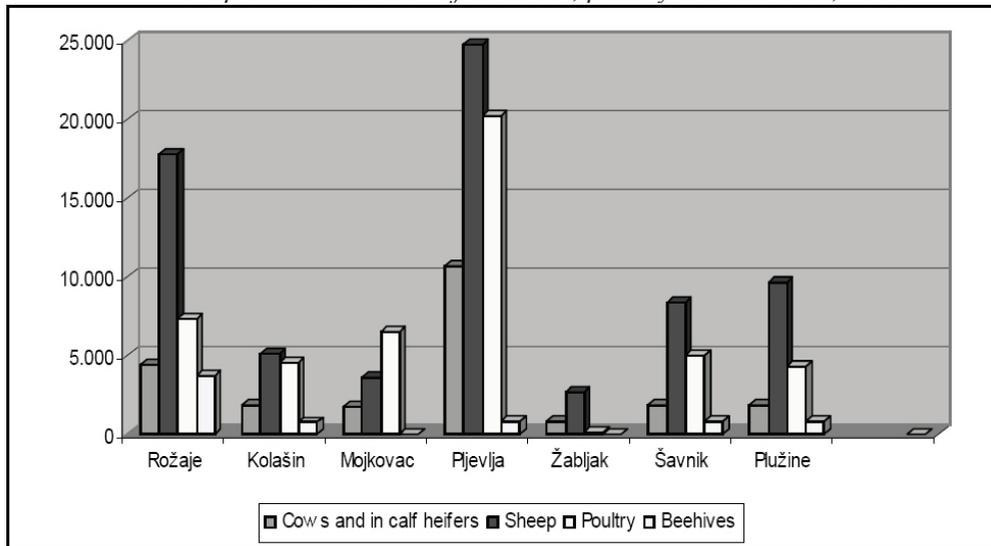
Graph 8. Participation of region in total number of trees and yield (%) 2008.



3.2. Livestock production

The population of the area of the zone has always been tied their existence, especially for agriculture, primarily ranching. Organized form of livestock production started to develop only after the Second World War. Although, significant production potential, land fragmentation and low level of intensity of production, competitiveness, productivity, unfavorable structure of farms in terms of number of heads, low education persons on the farm are just some of the characteristics of livestock production in this area. If we add to this and the relative unavailability of credit facilities, high production costs, variations in the quality and others to the promotion and development of the zone can not be expected in the short term. According to data from 2008 year in this area was around 37.4% of the total number of domestic cows and heifers, about 32.8% of pigs, sheep, 38.1% and 20.2% of poultry. Participation hives is 32.2% (graph 9).

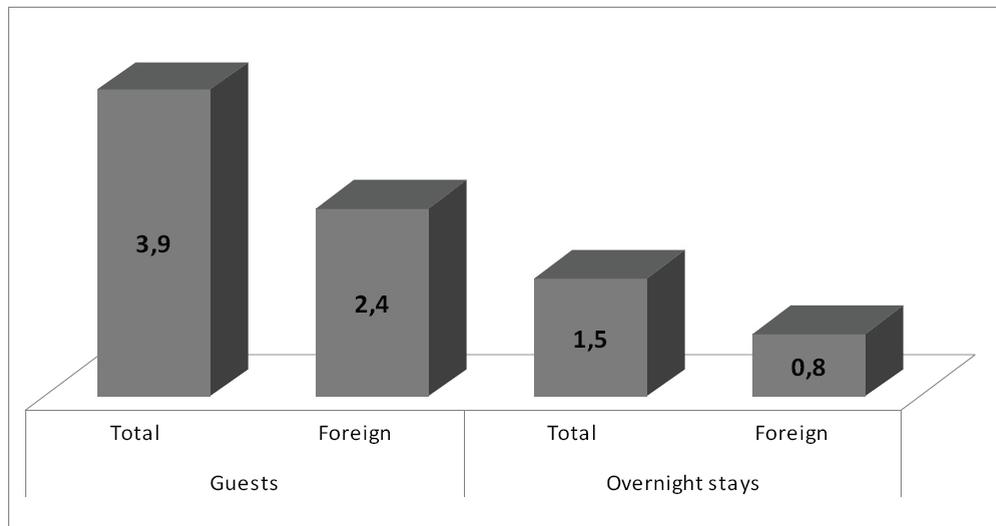
Graph 9. The number of livestock, poultry and beehives, 2008.



3. Tourists consumption

Achieved level of tourist spending, taken from the realized number of registered international guests and nights, and the available capacities, is an outstanding development opportunity for the entire area. Paradoxical situation that is exactly in this area one of the more serious problems for farmers, the problem of realization of the quantities produced, while on the other side of their implementation through tourist spending and output appears as the simplest way to export to the so-called doorstep "invisible export". Currently, the leaders in this area as the municipality of Žabljak and Kolašin, while other municipalities have a significant potential that are not sufficiently used in 2009. (Graph 10).

Graph 10. Participation of region in total number of guests and overnight stays (%) in 2009.



Instead of conclusion

The structure of agricultural production in mountainous region indicates the underutilized potential of the study area and the dominance of the primary, compared to the manufacturing industry, which continues to affect the low level of productivity, low competitiveness, and the relatively low share of marketability of certain agricultural products. Purchase of agricultural products is one of the major limiting factors for the development of the study area, in the past.

Actually, with the development of markets and market infrastructure will create the necessary preconditions for creating a higher level of accumulation of agricultural production which, together with higher quality credit support to banks and approving loans under favorable conditions, contributed, above all, a better realization of products from this region and to strengthen productivity and price competitiveness.

Literature

1. Grujica Đuretić: „Rejonizacija poljoprivredne proizvodnje u Crnoj Gori“, Poljoprivredni institut, Podgorica.
2. Katić Branko, Cvijanović Drago, Potrebić Velibor „Stanje i mogućnosti razvoja stočarstva u tri okruga Republike Srbije Južno-Banatski, Mačvanski i Zlatiborski, Agroekonomika, 2007, br. 36, str. 84-99.
3. MONSTAT, Statistički godišnjaci za odgovarajuće godine.
4. Ministarstvo poljoprivrede, šumarstva i vodoprivrede, “Strategija razvoja proizvodnje hrane i ruralnih područja“ 2006, Podgorica.
5. Ministarstvo poljoprivrede, šumarstva i vodoprivrede, „Zelena strategija Crne Gore do 2000“, Podgorica.
6. „Prostorni plan Crne Gore do 2020“, RZUP, Podgorica.