
AGRARIAN STRUCTURE CHANGES IN THE VILLAGE FARMSTEADS ON DURMITOR

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ABSTRACT

The paper presents findings about agrarian structure changes that have occurred in the village farmsteads on Durmitor highlands considering thesis that this area has experienced complex and strong changes. The most important characteristics of these changes relate with , aging, de-agrarian striving; and reduction of the livestock fund, land surfaces and number of homesteads.

The agrarian structure of the Durmitor area, which includes the municipalities of Žabljak, Šavnik and Plužine, is characterized by the dominant participation of individual farms focused on sheep and cattle production. The structure of agricultural land use in the examined region was defined by natural conditions and natural way of production. In the total agricultural area, natural meadows and pastures occupy over 90% of the area, and arable land and orchards occupy a small percentage of the area. The existing land structure determined livestock production as the basic production.

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Introduction

Wider area of Durmitor is distinguished by many characteristics as one specific geographical and agricultural region with all the features of extensive production and it is naturally predestined and mostly oriented to cattle breeding. This area includes completely or partially the following municipalities of the northern Montenegro: Žabljak, Plužine and Šavnik with approximately one third of the total surface of Montenegro. Today, about 3% of the total population of Montenegro lives in the given area, of which over 50% is agricultural, in contrast to the republic where only 15% is the agricultural population. However, the agriculture is the basic branch of economy for other branches are still poorly developed here. The under development of the economy in this region is visible upon participation of agriculture and forestry in the national income. According to the statistical data 2010 the agriculture and forestry participate in the national income in Montenegro with 28.1% and private agriculture sector with

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25.2%, while in the region of Durmitor this participation is about 43% or 35%. Of course, there are significant variations in the region regarding development of the economy in its certain parts and intensity of the agriculture. Generally, it can be stated that economy is more developed and agriculture more intensive in the lowland villages of Durmitor contrary to the highlands.

Materials and methods

The goal of the research is monitoring the state of agrostructural changes in the Durmitor area in the period from 1991 to 2016. Data from the Statistical Office of Montenegro and the Federal Statistical Office of the Republic of Yugoslavia were used to achieve the set research goal. The sources of statistical material were data from the Census of households and dwellings in 1991 and 2003, which referred to the agricultural sector, specifically households, agricultural holdings by size of property and sources of income, and agricultural funds. Data for 2010 are from the Census of Agriculture, and refer to the structure of agricultural holdings: livestock, used land and households. Data for 2016 are preliminary data from the Statistical Office obtained on the basis of a survey on the structure of agricultural holdings, where a two-stage stratified sample without repetition was applied with census districts as primary and households as secondary units. Data related to individual municipalities are unofficial and were obtained by the Statistical Office. For that purpose, a comparative analysis of annual statistical data was performed in order to show agrarian structural changes on farmhouseholds.

The following hypothesis is set in the paper „The size of agricultural holdings significantly determines and conditions the representation of land areas, where it is assumed that the highest concentration will be within the group of farms with medium land holdings from 10 to 15 ha. Significantly, the size of holdings will cause changes in the number of heads, on average per farm and per hectare of agricultural land, in a way that with the increase in holdings per farm, the number of head of livestock will also increase”.

In accordance with the established hypothesis and the scientific goal studied in this paper, the relevant quantitative and qualitative methods were applied, as well as the procedures of analysis and synthesis of processes and tendencies that take place under the influence of the ownership structure of agricultural holdings. Quantitative analysis of production resources and agricultural potentials in the observed period included an absolute analysis in hectares, and a relevant one that referred to the percentage of the total represented areas. This analysis was necessary for a quantitative assessment of the current trends and the state of the agricultural structure.

In connection with the study of relevant internal factors of farms, especially the size of holdings and land used in production, the procedures of grouping of rural farms according to several criteria were applied, such as: size of land holdings, share and structure of labor force, and share of livestock. Accordingly, appropriate statistical procedures are applied, such as mathematical and statistical methods, in order to see the mutual reciprocity. They were applied in order to make a comparison between the

intensity of phenomena by groups of farms that were analyzed. Based on quantitative and qualitative analyzes, with the application of statistical procedures, a performed synthesis confirmed the hypothesis and considered the answers to the questions posed in the research. The results were interpreted in accordance with the criteria, and in order to achieve better visibility, they are presented in tabular form.

Results of the research – Some indicators with individual farmsteads as subjects of production

Individual farmsteads in this region represent important subject of the agricultural production. Having in mind this fact we can ask what is the supply in these homesteads with the work force, means of work, land capacities, livestock and what is the economic power of these households. Analyzing all these indicators, together with other already mentioned factors, we will get better insight in this production subject and its potentials for higher goods production. In the former paragraph were raised some general conditions and factors in the agrarian landscape of this region and their effects to the livestock breeding in the individual sector, while here we wish to discuss about basic structures of the individual homesteads making their production within such settings. Sources of data for this work are census of the agricultural households 1991, 2003, 2010, and 2016. These collections can fully serve for exploration of the main structural framework features in the individual households when it is in question supply with land, livestock or means of work.

The importance for studying changes in the ownership structure was the selection of methods on which the analysis on the impact of the size of the land ownership on agricultural production processes was carried out. The subject of the research was agro-structural balances, which related to: household fund, population structures, land and livestock. All holdings are grouped according to the size of the landed property into the following groups: for the total holding, without land, then 1ha, from 1 to 3ha, 3 to 5ha, 5 to 8ha, 8 to 10ha, 10 to 15ha, 15 to 20ha and over 20ha. The statistical method interpreted the numerical data obtained during the survey using certain statistical indicators, depending on the availability of data from both primary and secondary data sources. Agriculture is subordinated to the natural conditions rather than to the market. The natural conditions determine the production structure and the yield are mostly depended on the climatic factors since technology survived in the same form as supply of the household with the means of work.

One of the facets of the individual household regarding organization of the goods production and increase of the income and existence of the family is supply of the household with land surfaces. This aspect is particularly interesting in conditions of extensive agricultural production as in this case study.

However, supply with land surfaces still keeps higher significance in the areas with intensive production since technique and technology are not widely implemented in the practice of these homesteads and natural and economic conditions survived as demanding and unfavourable and they will be the same in the future.

Table 1.Total household and holdings

TYPES OF HOUSEHOLDS	1991		2003		2010		2016	
	Number of households	Per land size(ha)	Number of households	Per land size(ha)	Number of households	Per land size(ha)	Number of households	Perland size(ha)
TOTAL DOMESTIC	4053	<1->20	3619	<1->20	3108	<1->20	3027	<1->20
Represented	709	1-3	694	1-3	658	1-3	702	1-3
Represented	223	15-20	194	15-20	9	15-20	156	15-20
AGRICULTURAL HOUSEHOLDS	2659	<1->20	2210	<1->20	2282	<1->20	2242	<1->20
Represented	636	1-3	694	1-3	600	1-3	650	1-3
Represented	42	-	90	15-20	35	-	33	-
M I X E D HOUSEHOLDS	558	<1->20	564	<1->20	314	<1->20	297	<1->20
Represented	150	-	157	-	81	-	80	-
Represented	8	>20	23	>1	6	>20	6	>20
N O N AGRICULTURAL HOUSEHOLDS	836	<1->20	845	<1->20	512	<1->20	488	<1->20
Represented	280	-	263	-	148	-	139	-
Represented	32	3-5	50	>20	1	>20	1	>20

Source: Population, households, dwellings and agricultural holdings Census in 1991 and 2003, Agriculture Census 2010- structure of agricultural holdings, Press release No. 234: "Structure of agricultural holdings in 2016 (p) 1", Statistical Office - MONSTAT

Table 1. Illustrates that total number of the households was the highest in 1991 (4053) and the highest concentration was in the category of the land ownership of 1-3 ha with 709 in total or 17.49%. Total number of the households in 2016 was 3027 representing 25% less when compared with 1991. In this year the highest concentration of the households was also in the category of the land ownership of 1-3ha with 702 in total or 28%, while the lowest concentration was in the category of the land ownership of 15/20 ha (156). Total number of the village households in 1991 was 2659 and this is the highest number of all examined years. In the light of this data, the highest concentration of the households in the category of 1-3 ha of the land ownership is with 636 units or 23%. The number of the agricultural households in 2016 was 2242 and this represents 74% of total number of households and 15.68% less in comparison with 1991.

The highest concentration of the households is in the category of 1-3 ha with 650 units or 28.88%. **Mixed households** of total number of the households in 1991 were represented with 13% and in 2016 with 9%. The **non-agricultural households** in 1991 were in 836 units or 20% of total number of the households and 488 units in 2016 or 16% and this is less for 41.62%.

Table 2. Land funds

LAND FUNDS Size of the holdings according to the size of property	Years			
	1991	2003	2010	2016
Available land (000) ha				
Total available land in ha	67176	42553	46836	49805
Up to 5 ha	3383	2797	3144	3395
From 5-10 ha	5302	2981	3314	3265
From 10-15 ha	3564	1788	1684	2140
Over 15 ha	54927	34987	33494	41005
Per holding	25,26	19,52	20,52	22,21
Per farmer	15,78	17,18	16,03	17,31
Agricultural land (000) ha				
Total agricultural land in ha	63674	32987	37172	35166
Up to 5 ha	3388,25	1816,6	2428,3	2358,22
From 5-10 ha	51854	2164	2431,4	2079,81
From 10-15 ha	5053,15	1319	1392	1381,32
Over 15 ha	23,94	27412	30920	29347,32
Per holding	3378,54	14,92	16,28	15,68
Per farmer	14,96	17,18	16,03	17,31
Arable land (000) ha				
Total arable land in ha	18713	8133	9333	9456
Up to 5 ha	3250,16	1760	2319,7	2256,13
From 5-10 ha	4169,43	1843	2073,6	2131,34
From 10-15 ha	2372,90	1039	1067,7	1088,38
Over 15 ha	8919,87	3493	3872,1	3980,18
Per holdings	7,03	3,68	4,08	4,21
Per farmer	4,39	3,28	3,19	3,28
Meadows (000) ha				
Total meadow in ha	16739	8015	9146,5	8977
Up to 5 ha	3071,76	1830	1941,9	2230,08
LAND FUNDS				
Size of the holdings according to the size of property	Years			
	1991	2003	1991	2016
Meadows (000) ha				
From 5-10 ha	7974,87	1957	2043,8	1532,47
From 10-15 ha	3558,89	1096	1042	1090,80
Over 15 ha	6,29	3132	3818,3	3543,87
Per holding	2125,96	3,62	4,00	4,00
Per farmer	3,93	3,23	3,13	3,12
Pastures (000) ha				
Total pastures in ha	44953	24854	27839	25710
Up to 5 ha	134,84	57,39	56,6	104,37
From 5-10 ha	876,59	321	357,4	418,81
From 10-15 ha	1002,47	280	323,85	365,08
Pastures (000) ha				
Over 15 ha	42926,4	23919	27049,1	24822
Per holding	10,56	11,24	12,19	11,46

Source: Population, households, dwellings and agricultural holdings Census in 1991 and 2003, Agriculture Census 2010- structure of agricultural holdings, Press release No. 234: "Structure of agricultural holdings in 2016 (p) 1", Statistical Office - MONSTAT

Table 2. illustrates that the total available land in 2016 amounted to 49805 ha, which is 25.85% less compared to 1991. The largest share of land in both 2016 and 1991 was in the category of over 15 ha. The total available land per farm in 2016 was 22.21 ha and in 1991 it was 25.21 ha, which is 11.90% less compared to 1991. The average farm size in the EU is 17 ha, in Montenegro 6 ha and in the Durmitor area is 15 ha, which indicates approximately the same farm size as the EU, and 2.5 times larger than the national average in Montenegro. Agricultural land in 2016 amounted to 35,166 ha or 70.60% of the total available. Compared to 1991, when that number was 63674, it is 44.77% less. The largest share of agricultural land in both cases is in the category of land over 15 ha. Agricultural land per farm in 2016 amounted to 15.68 ha while in 1991 it was 23.94 ha, which is 34.50% less. Agricultural land per farmer in 2016 amounted to 17.31 ha, while in 1991 it was 14.96 ha, which is 13.57% less. The agricultural area per agricultural inhabitant in the EU is 7.47 ha, in the Alpine countries (Austria and Switzerland 8.50 ha) in Montenegro is 4.25 and in the Durmitor area 17.31 ha, which is 2.42 times more than in the EU and the Alpine countries and 4.25 times more than in Montenegro. This is a great comparative advantage of the Durmitor area. Arable land in 2016 amounted to 9456 ha or 26.88% of the total agricultural. Compared to 1991 when the number was 18713 ha, it is less for 49.46%. The highest share of arable land for all observed years is in the category of over 15 ha.

Arable land per farm in 2016 amounted to 4.21 ha, while the same in 1991 amounted to 7.03 ha, which is 40.11% less. Arable land per farmer in 2016 amounted to 3.28, while the same in 1991 was 4.39 ha which is 25.28% less. The largest share is in the category over 20 ha. Arable land per farm is 9.49 ha, in the Alpine countries 6.80 ha, in Montenegro 2.37 ha, and in Durmitor area 4.21 ha. This shows that the arable area is 2.25 times smaller on the Durmitor compared to the EU and 1.61 times less compared to the Alpine countries. While it is 1.77 times bigger compared to Montenegro. Meadows in 2016 amounted to 8977 ha or 25.52% of the total agricultural land. Compared to 1991, when that number was 16739 ha, it is 46.37% less. The highest share in both years is in the category of over 20 ha. Meadows per farm in 2016 amounted to 4.00 ha, while in 1991 the amount was 6.29, which is 36.40% less. Meadows per farmer in 2016 were 3.12 and in 1991 were 3.93 ha or 20.61% less. The area of meadows per farm in the EU is 5.31 ha in the Alpine countries from 7.32 to 10.48 ha. In Montenegro it is 1.88 ha, while in the Durmitor area it is 4 ha. Compared to the EU, they are approximately the same and compared to the Alpine countries 2 times smaller and 2 times larger compared to Montenegro. The total share of pastures is 25710 ha, which represents 73.11% of the total agricultural land in 2016. Compared to 1991, when the number was 44953 ha, it is less by 42.80%. The highest share of pastures in both years is in the category of over 20 ha. Pastures per farm in 2016 amounted to 11.46 ha, which is compared to 1991, decrease of 32.18%, when that number was 16.90 ha. Pastures per farmer amounted to 8.93 ha in 2016, which is 15.43% less compared to 1991, when that number was 10.56 ha. The area of pastures per farm in the EU is 5.67 ha, in the Alpine countries is about 10 ha, in Montenegro 3.21 ha, while in the Durmitor area it is 11.46 ha. Compared to the EU it is 2.02 times even larger than the Alpine countries, and 3.57 times more than Montenegro.

Table 3. Livestock fund-cattle breeding

CATTLE	1991	2003	2010	2016
NUMBER OF HOUSEHOLDS WITH CATTLES	1832	1535	1460	1385
Number of cattle in (000)	21138	8552	7629	7138
Number of cattle per household	11,53	5,57	5,22	5,18
Number of cattle on 100 ha of	11,28	25,99	20,56	21,77
Number of cattle per ha of arable surface	1,12	0,34	0,27	0,27
Number of cattle per ha of meadow	0,47	0,34	0,27	0,27
HOUSEHOLDS PER NUMBER OF CATTLE				
1-2	437	362	429	337
3-4	596	563	513	505
5-6	359	279	216	238
7-8	252	175	132	149
>8	182	154	167	153
HOUSEHOLDS WITH COWS				
1-2	516	750	601,52	549
3-4	926	710	673,6	745
5-6	261	59	172,28	101,90
>7	128	13	94,9	26,31
CATTLE	1991	2003	2010	2016
NUMBER OF CATTLE PER CATEGORY				
Total	21138	8552	7629	7183
Calf and young cows	6271,64	2373	3067	1424
Cows and pregnant cows	13471	5209	4113	5490
Oxen and bull	1392	970	449	269
AGRICULTURAL HOUSEHOLDS PER NUMBER OF CONDITIONAL HEADS				
Total	15735	6772	5328	6115
Number of households	1832	1535	1460	1385
Cows	13471	5209	4113	5490
CONDITIONED HEADS PER HOUSEHOLD				
Total	8,58	4,71	3,64	4,41
Cows	7,35	3,39	2,81	3,96

Source: Population, households, dwellings and agricultural holdings Census in 1991 and 2003, Agriculture Census 2010- structure of agricultural holdings, Press release No. 234: "Structure of agricultural holdings in 2016 (p) 1", Statistical Office - MONSTAT

It is visible from the *Table 3.* that number of households with cattle in 2016 was 1385 and in 1991 was 1832 which is for 24.39% less. The largest representation of the households in both years is in land category of 1-3ha. The number of cattle in 2016 was 7183 and in 1991 this was 21138, or for 66.01% less. The largest representation of cattle in 2016 was in category of land over 20 ha and in 1991 it was in category of 3-5ha.

Number of cattle per household in 2016 was 5.18 heads, while in 1991 this was 11.53 heads which is for 55.07% less. Number of cattle on 100ha of surface in 2016 was 21.77 heads and in 1991 this was 11.28 heads. Number of cattle per ha of arable land in 2016 was 0.75 heads and in 1991 this was 1.12 heads, or 33% more when compared with 2016. Number of cattle per ha of meadow in 2016 was 0.27 heads and in 1991 this was 0.47 heads, or 42.53% less than in 2016. Households per number of cattle are the most represented in category of 3-4 heads of cattle and this was 505 heads in 2016 and 596 heads in 1991, or 15.26% less. As well, the number of households with cows is the most

represented in category of households of 3-4 heads of cattle. This was 745 heads in 2016 and 926 heads in 1991, or 19.54% less. Number of cattle according to categories illustrates the largest representation of cows and pregnant cows in total number in 2016 that was 5490 or 76.43% and in 1991 this number was 13471 heads, or 63.72% of total number.

Agricultural households per number of conditioned heads in 2016 were 1385 and in 1991 were 1832, or 24.39% less. Total number of conditioned heads of cattle in 2016 was 6115 heads and in 1991 it was 15735 heads or 61.13% less. Total number of conditioned heads per household in 2016 was 4.41heads and in 1991 this was 8.58 heads or 48.60% less. Number of cattle heads per EU household is 5.86 and in Alps countries 20 heads, in Montenegro 1.94, and on Durmitor territory this is 5.18 heads of cattle. In comparison with EU this is at the same level, and with Alps countries this parameter value is 4 times lower or 2.67 times higher than in Montenegro.

Table 4. Livestock fund- sheep breeding

SHEEP	1991	2003	2010	2016
NUMBER OF HOUSEHOLDS WITH SHEEP	688	368	496	350
Number of sheep in (000)	84037	25684	36986	21065
Number of sheep per household	122	69	74	60
Number of sheep on 100 ha of agricultural surface	132	78	99	63
Number of sheep per ha of arable surface	4,49	3,15	3,96	2,22
Number of sheep per ha of meadow	1,86	1,03	1,32	0,81
HOUSEHOLDS PER NUMBER OF SHEEP				
10	20,56	7,84	14,1	10
HOUSEHOLDS PER NUMBER OF SHEEP				
20-50	294	93,85	139,85	136
60-100	183	99,24	134,87	116
110-150	129	91,98	119,38	62
>150	60	74,8	87,59	26
HOUSEHOLDS WITH SHEEP FOR MILKING				
10	28,20	13,8	14,08	10,67
20-50	317,44	112,6	151,08	144
60-100	201,58	105,8	156,43	128
110-150	92,87	97,40	132,77	66,5
>150	48,16	38,89	40,82	0,105
NUMBER OF SHEEP PER CATEGORIES				
Total	84018	25684	36986	21065
Lambs	21353	4676	16834	7485
Breeding sheep	59657	18285	18965	12692
Other sheep	3008	2723	1187	888
AGRICULTURAL HOUSEHOLDS PER NUMBER OF CONDITIONED HEADS				
Number of households	688	368	496	350
Sheep for milking	5965	1828	1896	1269
Total	8403	2568	3698	2106
CONDITIONED HEADS PER HOUSEHOLD				
Total	12,21	6,97	7,45	6,01
Sheep for milking	8,67	4,96	3,82	3,62

Source: Population, households, dwellings and agricultural holdings Census in 1991 and 2003, Agriculture Census 2010- structure of agricultural holdings, Press release No. 234: "Structure of agricultural holdings in 2016 (p) 1", Statistical Office - MONSTAT

Number of households with sheep in 2016 was 350 households and the most were in category of over 20 heads. In 1991 the number of households with sheep was 688 or 49.12% more in comparison with 2016. Number of sheep in 2016 was 21065 heads and mostly were in the land category of 5-8ha while this number in 1991 was 84037 or 74.93% less. Number of sheep per household in 2016 was 60 heads and in 1991 this was 122 heads or 50.81% more when compared with 2016. Number of sheep on 100ha of agricultural surface in 2016 was 63 heads of sheep and in 1991 this was 132 heads or 52.27% less. Number of sheep per ha of arable land in 2016 was 2.22 heads and in 1991 this was 4.49 heads or 50.55% more in comparison with 2016. Number of sheep per ha of meadow in 2016 was 0.81 heads and in 1991 this was 1.86 heads or 56.45% less. Households in accordance with number of sheep show higher representation in group of 20-50 heads of sheep and there were 136 households in 2016, while in 1991 there were 294 households or 53.74% less, more. Households with milking sheep were the most represented in the group of 20-50 heads of sheep and there were 144 households in 2016, while in 1991 there were 317 households or 54.57% less. Regarding the number of sheep per categories it was observed that the most numerous had been category of breeding sheep, and in 2016 this number was 12692, while in 1991 this was 59657 heads of sheep or 78.72% more when compared with 2016.

Agricultural households per number of conditioned heads in 2016 were 350 and in 1991 were 688 heads or 49.12% less. Number of conditioned heads per household in 2016 was 6.01 and in 1991 this was 12.21 or 50% less. Number of head of sheep per household in EU is 0.87, in Alps countries 0.50 heads, in Montenegro 4.19 heads, and on Durmitor territory 60 heads of sheep. When compared with EU and Alps countries this is 60 times more and when compared with Montenegro it is 15 times more.

Comparative data relating to the Alpine countries, the EU and Montenegro are presented in detail in the following table.

Table 5. Statistical indicators of the agrarian structure of Alpine countries, EU and Montenegro

Statistical indicators	Switzerland	France	Austria	Italy	Alpine - together	EU	Montenegro
Size of agricultural holdings (ha)	17,72	42,00	17,00	6,1	20,70	17,00	6,00
Agricultural areas per agricultural population (ha)	8,59	29,56	8,65	3,88	12,67	7,47	4,25
Arable land per holdings (ha)	6,85	27,86	6,89	3,25	11,21	9,49	2,37
Meadow area per holdings (ha)	10,48	12,07	7,23	1,59	7,99	5,31	1,88
Pasture area per holdings (ha)	10,86	15,70	9,76	2,02	9,58	5,67	3,21
Number of head of cattle per holdings	19,69	20,87	0,2	0,31	10,26	5,86	1,94
Number of head of sheep per holdings	0,73	1,12	0,2	0,31	0,59	0,87	4,19

Source: Eurostat (2017). Questionnaire about farm structure

Conclusion

During the research, relevant issues related to the perception of tendencies and factors that affect the constitution of the ownership structure and its impact on agricultural production were analyzed. Under the influence of the general trends, significant changes were made in the agrarian and ownership structure of land areas on rural farms. There were periodic changes in all land areas, especially in 2003, when there was a large decrease compared to 1991, so that this trend went upwards from 2003 to 2010. When there was an increase, and from that year to 2016, the trend of decreasing land areas continued. The exception to this was arable land, where after the fall in the period from 1991 to 2003, there was a constant increase of areas. In the total agricultural area, meadows and pastures occupy over 90%, with a more dominant share of pastures, which led to livestock-dominated extensive production. In accordance with the established hypothesis, it is concluded that the highest concentration of households according to the ownership structure of land areas is in the category over 15 ha, which confirms the same that these are properties with larger land areas. In the researched area, there was a decreasing trend in the number of cattle on rural holdings, especially in 2003 compared to the baseline, when this trend was most emphasised. Also, the size of the holdings significantly determined the changes in the share of the number of cattle in average per farm and per hectare of land used. Throughout all analyzed annual periods, it was noticed that the highest concentration of farms was according to the number of farms with cattle and according to the number of cattle in the category of 3-4 heads. Major changes also took place in the share of sheep breeding. The total number of sheep significantly decreased, as well as the number of sheep farms compared to 1991, and especially in 2003. The largest share of farms according to the number of sheep and sheep for the milking was in the category of 20 to 50 heads. In the Durmitor area, according to this research, there was a significant connection between the general tendencies of socio-economic development and changes in the ownership structure of agricultural holdings. This correlation was indicated by changes in the socio-economic holdings structure under the influence of economic development and deagrarianization.

Conflict of interests

The authors declare no conflict of interest.

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