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## Family Holdings in Montenegro as Factors of Development of Villages and Agriculture

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### Abstract

Agricultural production in Montenegro has a long tradition and due to available natural resources it could present a backbone of economic development. Almost the entire agricultural production in Montenegro is conducted at family holdings. According to the most recent agricultural census from 2010, the total number of agricultural holdings is 48,847, whereof 48,824 are family agricultural holdings or 99%, whilst only 46 companies perform agricultural activities. Regarding the number of holdings, the lowest number is in Tivat, 169, whilst Podgorica has the primacy with 7,254 holdings. The paper displays the analysis of socio-demographic and agrarian factors at family agricultural holdings. Demographic picture of Montenegrin agricultural population is unfavorable, since intensive aging process has many negative implications, which could be expected in the future period, too.

*Key words:* agricultural production, sociodemographic, agricultural population

### Introduction

Agricultural holdings are the main subjects of agricultural development and have an important role in village area development. The agricultural holding represents an individual technical economic unit with individual management, which performs agricultural activity and could be

a family agricultural holding or a business undertaking, (Republički zavod za statistiku Crne Gore [MONSAT], 2011). Out of total number of agricultural holdings in Montenegro, most of them are family agricultural holdings, around 99% or 48,824, whilst only 46 companies perform agricultural activities. The share of agricultural population in the total population has been reduced for several times in the few recent decades – from 75%, which was immediately after the Second World War to around 6% according to the most recent evaluations in majority of Montenegrin municipalities (MONSTAT, 2011).

According to the definition of the Statistical Office of Montenegro, one of the main characteristics of family holdings is a dispersed land. Namely, family holdings of Montenegro have 2.3 ha of arable utilized land per holding, in comparison to over 15 ha in EU, (Šarović, 2012). Moreover, it is important to point out that holdings are of low productivity, which is indicated by the data that one agricultural producer hardly can produce enough for one citizen of Montenegro, whilst such ratio in most of EU countries is one to sixty five (Šarović, 2012). Such fact shows that this is one of the main causes that limit accelerated economic development. The offer of domestic agricultural products is far behind the demand. Economic goal of agricultural development is to “satisfy aggregate demand for agricultural products together with lower overall costs” (Grahovac, 2006). Regarding the demographic aspect, the situation is not favorable. Deagrarization processes were implemented randomly and too fast, which caused negative consequences. Although the relative share of agricultural population in the total population is not so low (almost 7% in comparison to EU where the share is 5.3%), it is still unproportional to the degree of general development of society and to the degree of agricultural development itself. Population at holdings is aging faster, which has as a consequence a high percentage of elderly households. It was registered that 80% of Montenegrin villages have declining birth rate and 70% of them have been affected by depopulation process. However, village agricultural holdings used to be orientated to production. Such orientation related to satisfaction of basic needs of life, therefore this was a necessity for most of our villagers, not their choice. On the other hand, it is important to point out that technical-technological and economic characteristics of holdings do not correspond to rich natural and other resources. There is a low level of utility infrastructure and hygiene-technical facilities of houses, therefore many villages do not have water and sewage systems in line (Vukadinović, 2004).

Municipality with the lowest number of family agricultural holdings is Tivat with 169 of them, which comprises 0.35% of the total number of family agricultural holdings and municipality with the highest number is Podgorica, which has 7,276 family agricultural holdings, comprising 14.89 % of the total number of family agricultural holdings.

## Material and Methods

The objective of this paper is to indicate to the importance of family holdings and the role they have in development of villages and agriculture.

The paper displays the structure of family agricultural holdings in Montenegro in respect to certain determinants, based on statistical data published in publications of the Republic Statistical Office of Montenegro and the relevant literature. Taking into consideration the potentials available to holdings, it is necessary to create conditions for their faster economic development. Particular attention should be given to quality and quantity of human resources.

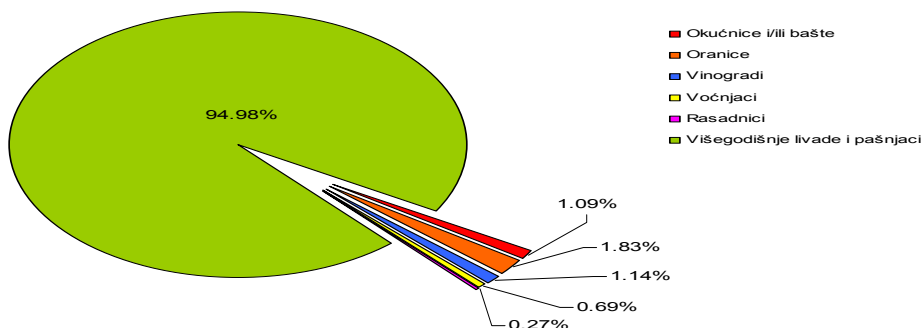
## Results and Discussion

The main indicator of social and economic values of each agricultural holding is its land property. The agrarian structure in Montenegro has changed during the last half century. According to the census from 1991, out of total 163,274 Montenegrin households, 60,043 or 37% of them were agricultural family holdings, but there were only 7% of active agricultural producers. Number of agricultural holdings without active members has increased in Montenegro, from 10,995 in 1981 to 15,826 in 1991, or measured with relative figures from 26% to 44% of total holdings. Regarding the income sources, the social-economic structure of holdings was as follows: out of total 60,043 holdings, 13.6% were agricultural, 73.8% were non-agricultural, 10.9% were mixed and 1.7% were without labor (MONSAT, 2011). The Agricultural Census from 2010 included agricultural holdings that at the time of census used 1,000m<sup>2</sup> of agricultural land or less than 1,000m<sup>2</sup> of agricultural land and possessed: 1 cow and 1 calf or 1 cow and 1 heifer, or 1 cow and two adult heads of small stock, or 5 adult sheep or goats, or 3 adult pigs, or 4 adult heads of sheep or goats or pigs together, or 50 heads of adult poultry or 20 bee-

hives. The statistics enumerated holdings in respect to the land area and available number of heads.

Family agricultural holdings and business entities enumerated by the Agricultural Census 2010 have 221,297.6 ha of total utilized land, which makes 71.6% of the total available land. An average agricultural holding has 4.6 ha of utilized agricultural land.

Structure of utilized agricultural land is the following: perennial meadows and pastures make 94.98% of total utilized agricultural area and other categories of land as kitchen gardens, arable land, vineyards, orchards and nurseries make together somewhat above 5%, (graph 1).

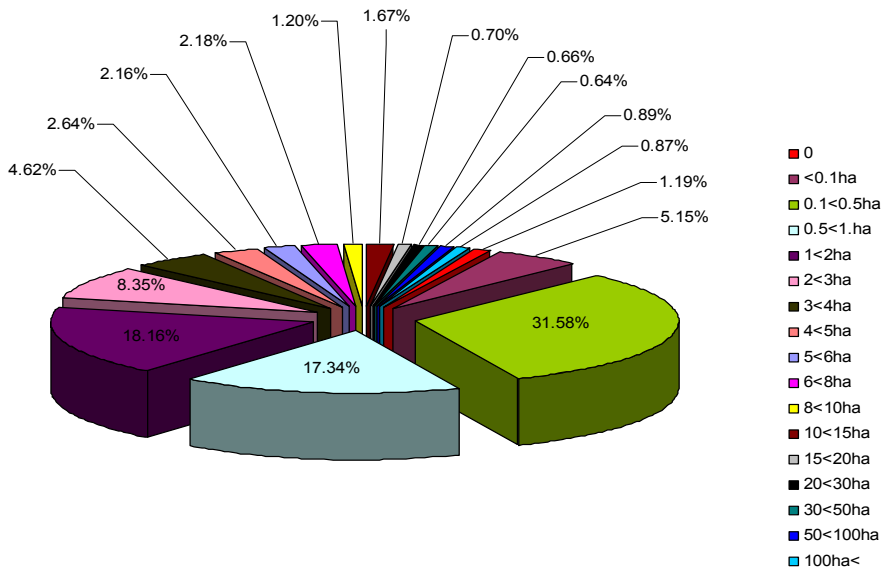


Graph. 1. Agricultural holdings by utilized agricultural land (MONSAT, 2011)  
*Poljoprivredna gazdinstva prema korišćenom poljoprivrednom zemljištu*

The highest number of agricultural holdings that use perennial meadows and pastures is in the following municipalities: Nikšić, Podgorica, Bijelo Polje, Pljevlja and Berane.

The share of utilized agricultural land in the total territorial land area varies in EU countries. For example in Sweden it amounts to 7%, the Great Britain 71%, Netherlands 50%, Hungary 62.2%, whilst in Montenegro such share amounts to 16%, (MONSAT, 2012).

Regarding the size of utilized agricultural land, 15,418 family agricultural holdings belong to the interval between 0.1- 0.5 ha or 31.6%, (graph 2). There is a rather low number of holdings whose size varies between 100 ha or more, only 425 of them or 0.87% in comparison to the total available land. The previous data indicate to the fact that small land property still prevail in Montenegro.



Graph. 2. Family holdings by the size of class type of utilized agricultural land (MONSAT, 2011).

*Porodična gazdinstva prema veličini razreda korišćenog poljoprivrednog zemljišta*

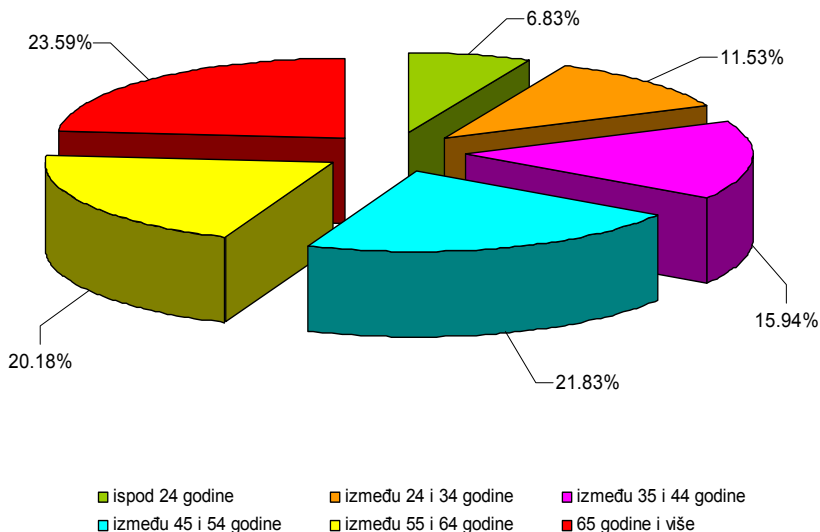
Livestock production was one of the main occupations in the rural area of Montenegro, which had impacts to development of psychological and physical characteristics of people from that area (Cvijić, 1966). According to the Agricultural Census in 2010, the total number of agricultural holdings that raise livestock is 32,675, which is 66.9% of the total number of family agricultural holdings (MONSAT, 2011). Total number of livestock units is 17753.1. The average number of livestock units at family agricultural holdings is 3.6 LSU. Out of total 32,675 holdings that raise livestock, 24,624 of them or 75.3% breed bovines, whereby the average number per holding amounts to 3.3 heads.

Out of 48,824 family agricultural holdings, 6,088 holdings or 12.24% raise sheep. An average number of sheep per family agricultural holding is 37.6 in comparison to the number of holdings that breed sheep, while the average number of sheep is 4.7 heads in comparison to the total number of family agricultural holdings. The number of holdings that take sheep to common lands amounts to 3,512, which makes 57.7 of the total number of family agricultural holdings that breed sheep. Taking into

consideration the previously stated, it can be noticed that livestock potential of Montenegro relies on sheep breeding, which is particularly emphasized by the fact that an average family agricultural holding possesses 37.62 sheep (MONSAT, 2012).

If the data of the Agricultural Census implemented in 2010 are compared to the data of Population Census 2013, it can be concluded that number of bovines at family agricultural holdings suffered a decline of 2.4%, while the number of sheep increased for 42.3%; goats for 157.8%; pigs for 37.7%; poultry for 74% and number of beehives for 103.6%, (MONSAT, 2012).

One of main characteristics of family agricultural holdings is a high share of older persons working at holdings and lower number of younger people. At family agricultural holdings, 23,198 working persons are 65 or older, which comprises 23.5% of the total labor force, while the share of people under 24 years is declining, comprising 6.83%. Moreover, the data indicate the fact that almost 44% of the total number are persons older than 55, (graph 3.).



Graph. 3. Number of persons at family agricultural holdings (MONSAT, 2011)  
*Broj osoba na porodičnim poljoprivrednim gazdinstvima*

The highest number of working persons below 24 years is in Bijelo Polje Municipality, namely 1,264, and the lowest number is in Budva Municipality with 8 working persons. The highest number of working persons that are 65 or older is in Nikšić Municipality or 3,206 persons, and the lowest is in Tivat Municipality with 71 working persons.

From the aspect of education, the labor force on family agricultural holdings comprises of 33,180 persons with 4 years of secondary education, i.e. 33.74%, whereof 22,157 are males, or 66.78% and 11,023 are females or 33.22%. The number of persons with post-secondary or higher agricultural education is 1,446 which makes 1.47 % of the total labor force on family agricultural holdings. The number of males with post-secondary or higher agricultural education is 1,054 or 72.89 % and of females is 392 or 27.11%. The share of persons with other post-secondary or high education in the total labor force is 7.62%, whereof 74.37% are males and 25.63% are females (MONSAT, 2012).

## Conclusion

Family holdings represent an important factor for development of villages and agriculture in Montenegro. Almost entire agricultural production is performed on family holdings. Their main characteristic is a dispersed land property. The highest share in the structure of utilized agricultural areas belongs to perennial meadows and pastures with 94.98%. This contributes to livestock development and most of the holdings engage in bovine raising (75.3%), with the average of 3.3 of heads per holding.

Demographic abandonment and aging of villages represent main trends in population development in Montenegro. The share of persons over 65 years is pronounced, comprising 23.58% of the total labor force, while the share of persons below 24 is 6.83% of the total labor force.

With the aim to revitalize villages and agriculture, it is necessary to encourage the merging of property, establishing of specialized production, as well as horizontal and vertical connecting into a wider agro-industrial units through clusters and other agricultural companies.

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# Porodično gazdinstvo u Crnoj Gori kao faktor razvoja sela i poljoprivrede

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## Sažetak

Poljoprivredna proizvodnja u Crnoj Gori ima dugu tradiciju i zahvaljujući raspoloživim prirodnim resursima može da predstavlja okosnicu privrednog razvoja. Skoro cjelokupna poljoprivredna proizvodnja u Crnoj Gori odvija se na porodičnim gazdinstvima. Prema poslednjem popisu poljoprivrede iz 2010. godine ukupan broj poljoprivrednih gazdinstava je 48870, a od toga su 48824 porodična poljoprivredna gazdinstva ili 99%, dok je svega 46 preduzeća koja obavljaju poljoprivrednu djelatnost. Kada je riječ o rasprostranjenosti gazdinstava najmanje ih je u Tivtu, 169, dok primat ima Podgorica sa 7254 gazdinstva. U radu je prikazana analiza socio-demografskih i agrarnih faktora na porodičnim poljoprivrednim gazdinstvima. Demografska slika poljoprivrednog stanovništva Crne Gore je nepovoljna, jer intenzivan proces starenja ima brojne negativne implikacije, koje se mogu očekivati i u budućem periodu.

*Ključne riječi:* poljoprivredna proizvodnja, sociodemografski, poljoprivredno stanovništvo

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