# REMARKS ON THE EVOLUTION OF AGRICULTURAL LAND DISTRIBUTION IN REGION SOUTH-WEST – OLTENIA (2000-2013)

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## ABSTRACT

The paper presents the evolution of the surfaces by category of use in the southwest region of Romania. It presented a comparative categories of agricultural land, presenting the existing situation in 2000, 2005, 2010, 2013. Processing of data taken from the National Statistical Institute, there is a trend of decreasing area of agricultural land and within its arable land, vineyards and orchards. This requires future action to counteract the contraction of agricultural areas, especially for vineyards and orchards, where the decrease of cultivated areas is more pronounced.

## INTRODUCTION

As categories of use in Romania, according to land use that compose the land fund are distinguished a total of 10 general categories of uses agricultural and non-agricultural of land, which are divided in turn into a total of 65 subcategories agricultural and non-agricultural of use (**C lina A., 2010**).

The surface of use categories can increase or decrease, these developments are closely related to needs of society and market demands (**Miluț M., 2015**).

## MATERIAL AND METHOD

The data used to perform the paper were taken from the National Institute of Statistics - Statistical Territorial 2013. It is an analysis of the evolution of agricultural land in the region South-West Oltenia, comparing existing surfaces every five years and in the year 2013.

At regional level, the data indicate a decrease in the agricultural area, from 1820083 ha (in 2000) to 1797633 ha in 2013 (Table 1).

### Table 1

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	2921169	1820083	1247535	379674	86156	51061	55657
2005	2921169	1806606	1255049	377572	88002	39625	46358
2010	2921169	1799230	1251229	379026	87511	39424	42040
2013	2921169	1797633	1244971	377167	96824	38261	40410

## Agricultural land fund by use in South-West Oltenia region (ha)

If we refer to arable land, it has an oscillating evolution, with a maximum of 1255049 ha in 2005 and a minimum of 1244971 ha in 2013 (Figure 1).

In regard to areas with pasture, they generally remained at the same level, around 37700-379000 ha, throughout the period under review. Hayfields instead had an oscillating evolution, with an increasing trend, the area being between 86156 in 2000 and 96824 to the year 2013 (Figure 2).

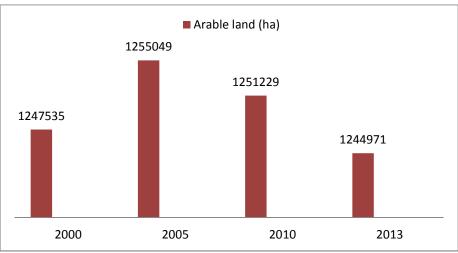


Figure 1. Variation of arable land surfaces in South West region Oltenia

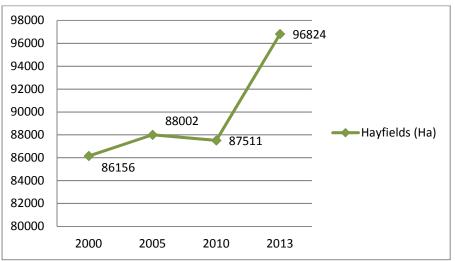


Figure 2. Variation of hayfields surfaces in South West region Oltenia

If we refer to the areas under vineyard and orchard, there is a decrease of their surfaces at the level of South-West Oltenia (Figure 3 and 4).

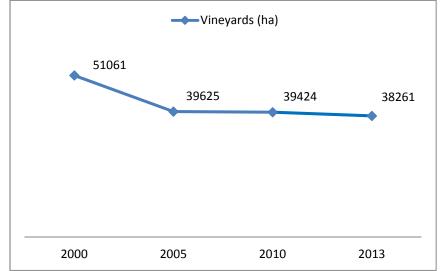


Figure 3. Variation of vineyards surfaces in South West region Oltenia

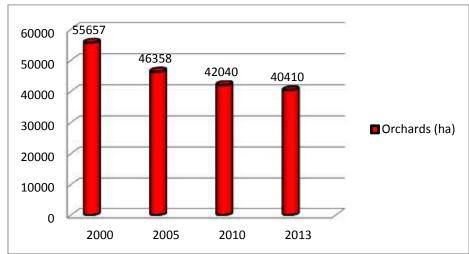


Figure 4. Variation of orchards surfaces in South West region Oltenia

Analyzing the existent situation in each county component of the region reveals: **1. Dolj County:** 

From the dates related in table 2, agricultural area decreased from about 589000 ha in 2000 to 585000 ha for other years taken into account.

Table 2

# Agricultural land fund by use in Dolj County (ha)

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	741401	588944	489004	69390	2993	18810	8747
2005	741401	585699	488677	68435	2952	17538	8097
2010	741401	585469	488820	68506	2952	17334	7857
2013	741401	585451	488805	68503	2952	17334	7857

This decrease is reflected in each category, with the exception hayfields, where the area has remained almost equal to the initial one. The drastic decrease was recorded to vineyards - from 18810 ha in 2000 to 17334 in 2013 and orchards, from 8747 to 7857. Although in absolute numbers decrease is not so high, but as a percentage is significant.

Figures 5 and 6 shows the proportion of each category of agricultural land use in the Dolj County in 2000 respectively 2013.

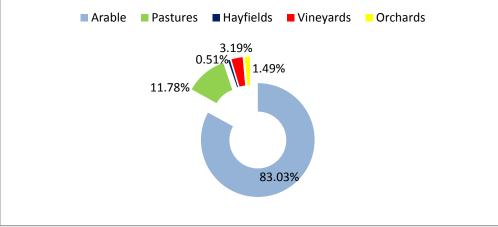
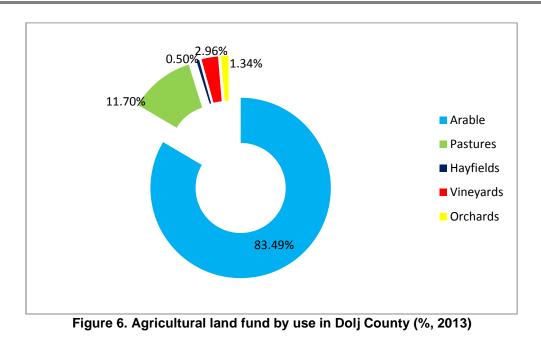


Figure 5. Agricultural land fund by use in Dolj County (%, 2000)

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## 2. Gorj County

In the Gorj County, there is a sharp decline in the agricultural area, with approximately 10,000 ha (Table 3).

#### Table 3

## Agricultural land fund by use in Gorj County (ha)

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	560174	250271	103410	85124	40559	8236	12942
2005	560174	243740	99149	88654	42542	4434	8961
2010	560174	240258	98353	88494	41504	4193	7714
2013	560174	239696	97827	88382	41669	4164	7654

By category of use there is still an increase in areas under pastures and hayfields 3000, respectively 1000 hectares, while the area of arable land decreased from 103 thousand hectares to 98 thousand hectares. The drastically decrease is observed in the category of vineyards where practically the surface is halved (figure 7) and orchards from 12942 ha in 2000 to only 7654 ha in 2013 (figure 8).

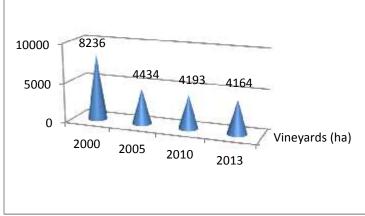


Figure 7. Variation of vineyards surfaces in Gorj County

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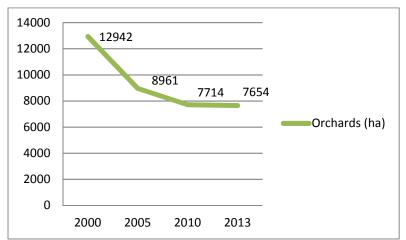


Figure 8. Variation of orchards surfaces in Gorj County

## 3. Mehedinti County

The numbers showing a maintaining of agricultural area in Mehedinti County. However, there was a slight increase in arable land, pasture and hayfields, which is reflected in decrease of vineyards and orchards areas (Table 4).

#### Table 4

## Agricultural land fund by use in Mehedinti County (ha)

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	493289	294534	186444	78910	10775	10124	8281
2005	493289	294082	188692	80740	10687	5997	7966
2010	493289	293381	188141	80661	10988	6502	7089
2013	493289	293381	188141	81297	11388	5563	6992

## 4. Olt County

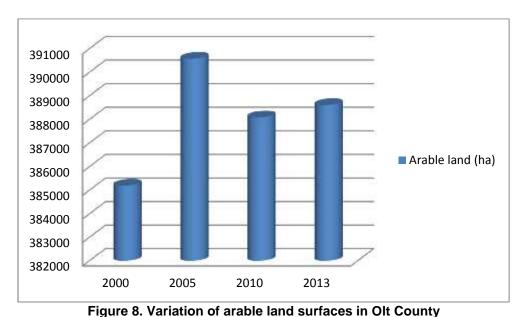
Table 5 shows the distribution situation by category of use of agricultural areas in Olt County. It may notice a decrease in the agricultural area of approximately 6000 ha compared to 2000.

## Table 5

## Agricultural land fund by use in OltCounty (ha)

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	549828	440016	385190	34819	776	9643	9588
2005	549828	437165	390569	31022	637	7630	7307
2010	549828	434442	388079	31784	529	7634	6416
2013	549828	433903	388603	32339	528	7484	4949

Compared to 2000, arable land increased by about 3,000 ha in 2013 (figure 8). A fairly accentuated decrease was recorded in the areas occupied by pastures, vineyards and orchards especially (from 9588 ha to 4949 ha) - figure 9.



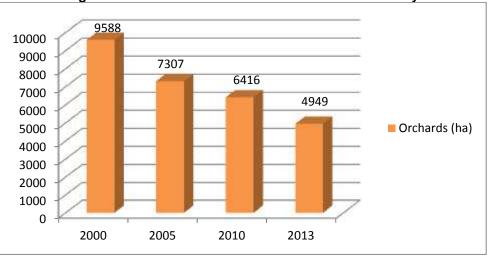


Figure 9. Variation of orchards surfaces in Olt County

## 5. Vâlcea County

Table 6 shows the situation by category of use of agricultural areas for Valcea County.

## Table 6

# Agricultural land fund by use in ValceaCounty (ha)

Year	Total	Agricultural	Arable	Pastures	Hayfields	Vineyards	Orchards
	surface	area					
2000	576477	246318	83487	111431	31053	4248	16099
2005	576477	245920	87962	108721	31184	4026	14027
2010	576477	245680	87836	109581	31538	3761	12964
2013	576477	245202	81595	106646	40287	3716	12958

The agricultural area has decreased by only 1000 hectares compared to 2000. A spectacular decrease of approximately 5000 ha was registered in the pastures (figure 10).

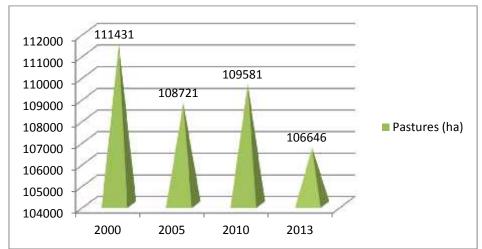


Figure 10. Variation of pasturers surfaces in Valcea County

And arable land decreased by approximately 2000 ha, but the largest as a percentage decrease they had orchards (about 25% - from 16099-12958). In contrast, the hayfield surface category was increased from 31053 ha in 2000 to 40 287 ha in 2013.

## CONCLUSIONS

There is a decrease of agricultural area both for the whole South-West Oltenia region, and for each of its component county.

The arable surface remained about the same in the region, but was found a decrease in Gorj county and an increase in Olt County.

Decrease of agricultural surface is largely due disappearance of areas under vineyards and orchards, especially in the counties of Gorj, Mehedinti and Valcea.

This requires future action to counteract the contraction of agricultural areas, especially for vineyards and orchards, where the decrease of cultivated areas is more pronounced.

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