

SUSTAINABLE DEVELOPMENT OF AGRICULTURE IN GORJ, REQUIREMENTS IN THE EUROPEAN

Pecingină Irina-Ramona, “Constantin Brâncuși” University of Târgu
Jiu, ROMANIA

ABSTRACT: In this paper are made agriculture a diagnosis of Gorj county, using a number of statistical indicators on the state of agriculture both in the county and in the region southwest Oltenia.

KEY WORDS: agriculture, Gorj, sustainable development

1. INTRODUCTION

The essence of sustainable development of human society is given by the management, current and future, its natural resources, energy, materials and information. Reconciling these two aspirations is the core concept of sustainable development and eco-dualism is synthesized through eco-efficiency. Man, environment and economy form a unitary system in which the balance must watch the entire human society. As a result, new concepts take into account the complex relationships economy-human-environment and seek to prevent adverse effects resulting from the use of resources for economic purposes, enabling a balanced development of social and economic systems and ecological way to ensure the existence not only of current generations but also future ones.

Gorj County is located in southwestern Romania, in Oltenia historic northwestern province. County, with an area of 5602 km² is stretched by a side of the middle course of the river Jiu. Through its location, it has been learned over time in a border area politico-administrative, geographic and economic.

Administrative, Hunedoara counties bordering the north, Valcea east, south Dolj, Mehedinți southwest and west Caras-Severin. (fig.1)



Fig. 1 Position in Gorj County
South-west Oltenia

The relief consists of three major physical and geographical units which descend in steps from north to south.

Mainly climate is temperate continental with a wide variety of shades, due to its geographical position, atmospheric circulation and relief components present. Gorj County is located in the northern region, where agriculture plays a less significant

than in the southern counties. Livestock and forestry and fruit growing, viticulture and beekeeping are specific activities for north county, grain culture is present mainly in the center and south.

2. MATERIALS AND METHODS

Gorj county agriculture analysis is performed to start by knowing the land, its structure and the comparison with the situation in the region Oltenia and national situation. It must also be taken into account that people may be involved in this sector (tab. 1).

Table 1. Situation land fund in Gorj

Years	Surface total	Surface agricultural	Of which, by use:				
			arable	pastures	hayfields	Vineyards	Orchards
Gorj							
2005	560174	250776	102803	85750	40577	8433	13213
2006	560174	250204	103234	84787	40518	8399	13266
2007	560174	250271	103410	85124	40559	8236	12942
2008	560174	250268	103409	85123	40558	8236	12942
2009	560174	246350	100500	86038	40997	7485	11330
2010	560174	245732	100653	86302	41529	6009	11239
2011	560174	243768	99215	88469	42487	4439	9158
2012	560174	243740	99149	88654	42542	4434	8961
2013	560174	242875	99045	88167	42335	4478	8850
2014	560174	242879	99045	89169	42383	4244	8038

Analyzing the structure of land fund development regions and counties can say that in Gorj county agricultural area occupies 43% of the total compared with 79% Dolj and Olt counties, Mehedinti and Valcea 60% 42%.

The data for the land fund, compared to the number of inhabitants shows that:

- The ratio of arable Gorj county and number of inhabitants is about 0.26 hectares of arable land / capita;

- The lower value national average, which is 0.42 ha, located near the European average but that is about 0.236 ha / capita.

- o achieve a diagnosis of Agriculture Gorj county, we have used a number of statistical indicators on the state of agriculture both in the county and in the region southwest Oltenia: agricultural production, fertilizers

and natural use in agriculture, area under major crops, surface structure analysis on the different types of crops, total fruit production, living on fruit and animal agricultural production.

3. RESULTS AND DISCUSSIONS

Statistical indicator of agricultural production agricultural goods and services renders the structure of agricultural production, providing important data on the development of various components of agriculture.

Table 2 presents the structure of agricultural production in Gorj County in 2010-2014.

Table 2 The structure of agricultural production and animal and plant

County	output total	vegetable	%	animal	%	Services	%
Dolj	1452400	981289	67,5	434557	29,9	36554	2,6
Gorj	514482	514482	57,7	414957	42,3	1291	0,1
Mehedinti	785342	509283	64,7	267315	34,0	8744	1,3

Olt	1321319	852064	64,4	465708	35,2	3547	0,4
Vâlcea	929134	577432	62,1	350198	37,6	1504	0,3
Argeş	1491402	827346	55,4	662072	44,3	1984	0,3
Prahova	1062600	559712	52,6	491411	46,2	11477	1,2

The data presented there is a higher share of animal production in Gorj, compared to the national average, which is explainable by the geographical location of the county. Analysis of potential for increased agricultural production Gorj county must take into account the structure of its possibilities for future development of these sectors.

The indicator chemical and natural fertilizers used in agriculture provides data regarding the amount of fertilizer applied in Gorj.

Table 3 shows the situation fertilizers applied in Gorj County in 2011-2014.

Table 3 Fertilizer applied in Gorj (tons)

	2011	2012	2013	2014
Fertilizer applied	5003	5093	5805	5254
Total	4294	4639	5269	4806
(active)	539	426	531	430
Nitrous	170	28	5	18
phosphatic				
potash				
Natural fertilizers applied (total)	595259	456690	373036	392729

One can notice a decrease of 45% the amount of manure applied in Gorj county agriculture.

Analysis of surface cultivated with various crops indicator provides data both in the farm land cultivated and crop types used in Gorj.

Figure 2 presents the dynamics of the cultivated area in Gorj County in 2010-2014.

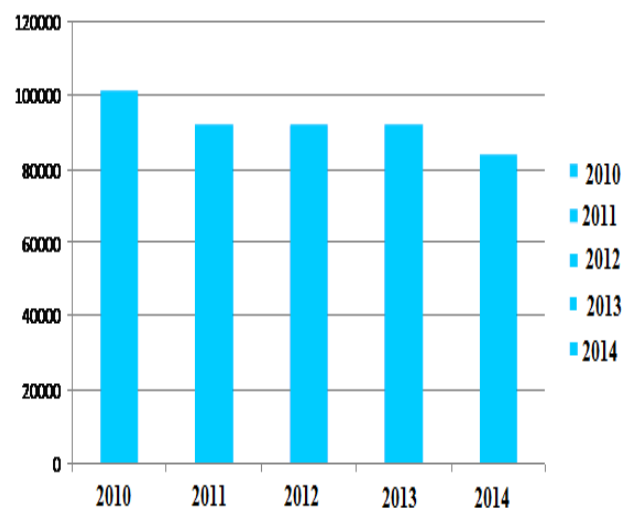


Fig. 2 Total cultivated area

There is a significant decrease in cultivated area since 2014 followed by stabilization of this surface, a decrease of 10% recorded in 2011.

Surface structure analysis on the different types of crops was carried out on the South-West Oltenia and two counties located in approximately the same physical and geographical conditions.

Figure 3 presents the total area cultivated and the area planted with cereals for grains and wheat, in figure 4 the area under barley, oats and maize, and in fig. 5. area cultivated with vegetables, tomatoes, cabbage and onions.

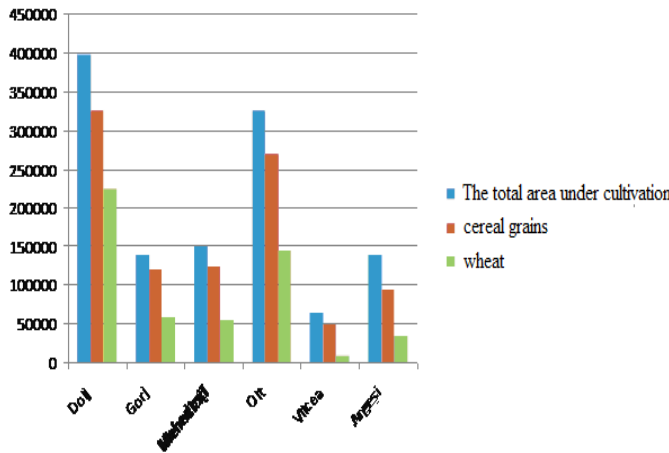


Fig. 3. Total cultivated area under cereals and grains and wheat

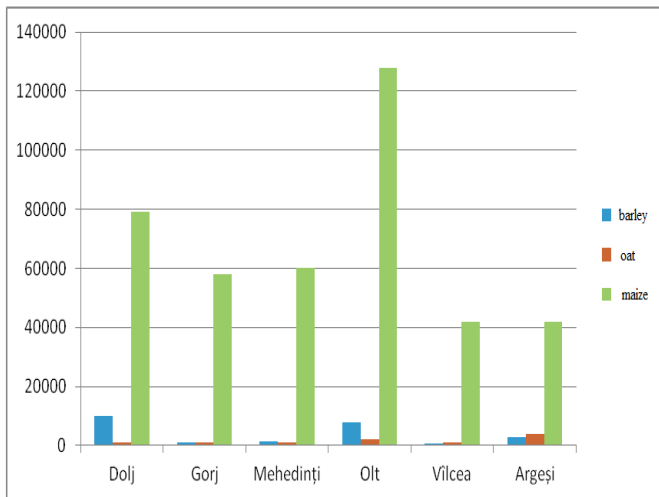


Fig. 4. Area planted with barley, oats and maize

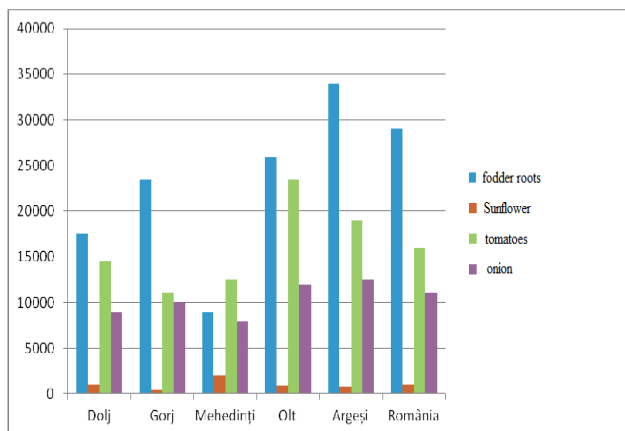


Fig. 5. Average yield per hectare of fodder root, sunflower, tomato, onion

Analyzing the data presented, it is clear that development directions for the Gorj County, productivities above the national average crop of rye, barley, maize etc.

Horticulture and viticulture indicator is the number and structure of the existing fruit trees and vineyards bearing.

Figure 6 presents the dynamics of total fruit production in Gorj, and in fig.7 total bearing vineyards.

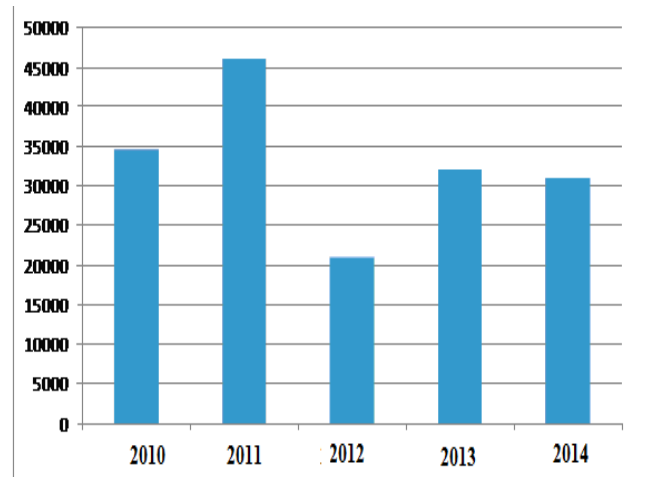


Fig. 6 Dynamics of total fruit production

This indicator confirms the decline in fruit production in recent years, which should be corroborated, first, by reducing the number of fruit trees bearing fruit. This indicator indicates a decrease in the number of fruit trees, which can define a direction of development of agriculture Gorj.

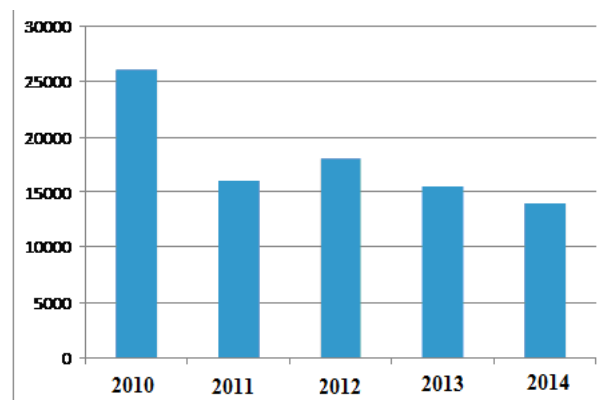


Fig.7 Vineyards bearing fruit

The indicator shows the structure of agricultural production animal animal sector in Gorj.

Figure 8 shows the situation in livestock counties and regions.

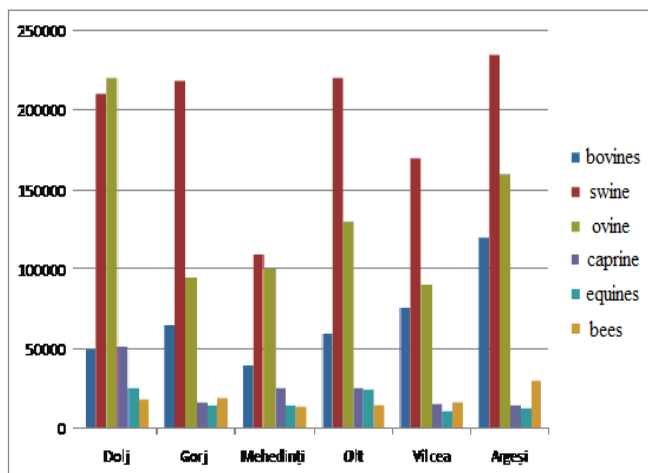


Fig.8. The situation on livestock development regions and counties

3. CONCLUSION

Statistical indicator of agricultural production agricultural goods and services renders the structure of agricultural production, providing important data on the development of various components of agriculture.

The indicator chemical and natural

fertilizers used in agriculture provides data regarding the amount of fertilizer applied in Gorj.

Analysis of surface cultivated with various crops indicator provides data both in the farm land cultivated and crop types used in Gorj.

Horticulture and viticulture indicator is the number and structure of the existing fruit trees and vineyards bearing.

REFERENCES

- [1] Albu, I. Dobrescu, E. Sustainable Development in Romania, Expert Publishing House, Bucharest, 2005
- [2] Buga, PhD, Suciu, M., Hemlock, C., (Eds.), Geographical dictionary of Gorj, Targu Jiu, 2002
- [3] Băltărețu, A., Ecotourism and sustainable development, Prouniversitaria Publishing, Bucharest, 2007
- [4] Gorun, A., (Eds.), Diagnosis on the state of development of Gorj County, Ed. Academica Brancusi, Tg-Jiu, 2009