

SUSTAINABLE RURAL DEVELOPMENT IN ROMANIA. OPPORTUNITIES AND PERSPECTIVES. CASE STUDY: THE SIBIU COUNTY

POPESCU Doris-Louise¹

Lucian Blaga University of Sibiu, Romania

Abstract

The paper below aims at bringing its contribution to outline the Sibiu County's complex agricultural profile. We are interested not only in observing the current economic realities, but also the structural changes experienced in the agricultural sector, our goal being that of highlighting the determining factors underlying the changes experienced. Last but not least, the research paper below seeks to identify the likely opportunities that Sibiu County has in what concerns sustainable rural development and, at the same time, to make a series of recommendations related to a more efficient exploitation of the agricultural potential existing at the level of this county.

Keywords: rural development, sustainable agriculture

JEL classification: Q15, R14

1. Rural Sustainable Development. General Considerations

Despite the remarkable progress made by humankind, the problem of resources (namely ensuring these, using them rationally, efficiently and in a balanced manner), is far from being solved. Paradoxically, societies and economies capable of satisfying the most complex and sophisticated needs, encounter more and more difficulties in providing solutions to basic needs, such

¹Assist. Prof., PhD, "Lucian Blaga" University of Sibiu, Faculty of Economic Sciences Department of Management, Marketing and Business Administration, doris.popescu@ulbsibiu.ro
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as food, water, air. The population growth, although expected to decrease over the following decades, continues to represent a pressure factor on food production, supplying humankind with food becoming more and more challenging, given the fact that it is predicted that in 2050 humankind will have to produce 50 % more food for the 9 billion inhabitants expected to be recorded at that time.

Nevertheless, avoiding an ever-present food crisis is not the only challenge. Equally pressing is the need to redefine and revitalize the rural space, thus offering the inhabitants of these areas the chance of employment and obtaining decent incomes. The need to identify quick and viable solutions is felt more strongly since, globally, the rural population constitutes 47 % of the total population, for well over 70 % of the inhabitants of the poorest states in the world, agriculture being the sole source of income/employment.

2. The Sibiu County. Representation at the level of the Center development region/at national level.

One of the broadest perspectives on the current situation of the Romanian agriculture is reflected in the data of the General Agricultural Census 2010. According to this source, in 2010, Romania owned a utilized agricultural area of 13,306 thousand ha, representing 91.19 % of the total agricultural area recorded in our country (14,590 thousand ha). The allocation per development regions placed the South-Muntenia region on the first place: (2,334 thousand ha: 17.54 %), followed, shortly, by the South-East region: (2,195 thousand ha: 16.49 %), then the North-East region: (1,940 thousand ha: 14.57 %), the North-West region: (1,808 thousand ha: 13.58 %), the West region: (1,732 thousand ha: 13.01 %), the region Center: (1,627 thousand ha: 12.22 %), respectively the South-West Oltenia region: (1,608 thousand ha: 12.08 %) and Ilfov-Bucharest region: (62 thousand ha: 0.46 %).

As concerns the agricultural exploitations with utilized agricultural area, the 3,724,332 exploitations that fall into this category represent an overwhelming proportion (96.50 %) of the total 3,859,043 agricultural exploitations in Romania. Related to this indicator, the regions with the best representation are: the North-East region (775 thousand exploitations/ 20.81 %) and the South Muntenia region (761 thousand exploitations/20.43 %). They are followed, with relatively close percentages, by: the South-West Oltenia region (555 thousand exploitations/14.90 %) and the North-West region (521 thousand exploitations: 13.99 %), then the South-East (444 thousand exploitations/11.92

%), Center (375 thousand exploitations/10.06 %) and West regions (264 thousand exploitations/7.08%), the lowest number of agricultural exploitations with utilized agricultural area being recorded in the case of the Bucharest-Ilfov region (29 thousand exploitations/0.77 %).

The study of these figures reveals a balanced distribution, per regions, of both the utilized agricultural area and the number of agricultural exploitations with utilized agricultural area. Thus, in the first case, percentages vary between 17.54 % and 12.08 %, in the second case, the proportions amount to between 20.81 % and 7.08 % (except for the Bucharest-Ilfov region). According to the abovementioned criteria, the Center region subscribes to this statistical evidence, the 12.22 % of the total utilized agricultural area in Romania and the 10.06 % of the total number of agricultural exploitations with utilized agricultural area, placing the Center region on the sixth position at the level of the development regions.

Table 1. The utilized agricultural area and the number of agricultural exploitations with utilized agricultural area, per macro-regions and development regions (2010)

Indicators	Macro-region 1		Macro-region 2		Macro-region 3		Macro-region 4	
	North-West	Center	North-East	South-East	Bucharest-Ilfov	South Muntenia	South-West Oltenia	West
Utilized agricultural area	1808	1627	1940	2195	62	2334	1608	1732
Agricultural exploitations	521	375	775	444	29	761	555	264

Source: The General Agricultural Census (2010)

As regards Sibiu County, this has a utilized agricultural area of 243,923 ha, more precisely of 14.99 % of the total utilized area at the level of the Center region and only 1.83 % of the total utilized agricultural area in our country. Concerning the number of exploitations, Sibiu County has 49,211 exploitations which utilize the agricultural area, namely a percentage of only 1.32 % of the total exploitations falling into this category at national level. Within the Center development region, our county has a representation of 13.12 % of the total number of exploitations of this kind, being surpassed by the following counties: Mureș (102,467 exploitations/27.32 %); Alba (75,999 exploitations/20.26 %) and Harghita (68,607 exploitations/18.29 %).

According to the criterion of the size of the agricultural exploitation, statistical data indicate the fact that, in Sibiu County, small farms are predominant, with sizes of under 5 ha. Exploitations belonging to this category, amounting to 43,766, represent 88.93 % of the total number of exploitations which utilize the agricultural area in Sibiu County. These are followed by farms with agricultural areas between 5-50 ha (4,849 agricultural exploitations, respectively 9.85 %), large size farms (over 50 ha) having a modest representation: only 596 such exploitations, namely a percentage of 1.21 % of the total agricultural exploitations in the county.

If, in terms of numbers, small farms are overwhelming in Sibiu County, from the point of view of the utilized agricultural area, there is a shift in proportion. Thus, one can remark that the biggest utilized agricultural area is owned by big farms, with sizes over 50 ha. These encompass approx. 142,030.89 ha of the total utilized agricultural area at the level of our county (58.22 %), being followed by farms with sizes between 5-50 ha (52,354.19 ha, respectively 21.46 %) and small farms, with utilized agricultural area of under 5 ha. (totaling 49,538.03 ha, namely 20.30 % of the total utilized agricultural area in Sibiu County).

Table 2. Number of agricultural exploitations, according to the size of the utilized agricultural area, at the level of Sibiu County (own calculations)

No.	Classes according to the size of the utilized agricultural area (ha)											
	under 5 ha						between 5-50 ha				over 50 ha	
1.	Under 0.1	0.1-0.3	0.3-0.5	0.5-1	1-2	2-5	5-10	10-20	20-30	30-50	50-100	over 100
	7501	7353	3814	7584	8124	9390	3308	1000	263	278	274	322
2.	43766						4849				596	
3.	Total: 49211											

Source: The General Agricultural Census (2010)

Table 3. The utilized agricultural area (ha), per classes according to the size of the utilized agricultural area, at the level of Sibiu County (own calculations)

No	Classes according to the size of the utilized agricultural area (ha)											
1.	under 5 ha						between 5-50 ha				over 50 ha	
	under 0.1	0.1- 0.3	0.3- 0.5	0.5- 1	1- 2	2- 5	5- 10	10- 20	20- 30	30- 50	50-100	over 100
	332	1316	1462	5235	11476	29714	21952	13305	633	10762	19063	122967
2.	49538						52354				142030	
3.	Total: 243923											

Source: The General Agricultural Census (2010)

In fact, Sibiu County does not differ from the rest of the Center development region. In this respect, at the level of the region one can notice the predominance of small farms, the 328,283 agricultural exploitations with a surface of up to 5 ha representing 87.54 % of the total exploitations with utilized agricultural areas within the region. At the other end of the cline, we find big farms, of over 50 ha, these amounting to 2,954 exploitations, namely a modest percentage of 0.78 % of the total (farms with sizes between 5-50 ha, totaling 43742, represent 11.66 % at the level of the Center region).

If in terms of number, prevalence, at the level of the region, belongs to small farms, in relation to the utilized agricultural area, one can notice, just as in the case of the situation in the county, that big farms encompass the greatest utilized agricultural area in the Center region (769,667.01 ha/47.29 %), being followed by medium farms (436,768.68 ha/26.84 %) and small farms (420,854.13 ha/ 25.86 %).

Another important aspect concerns the average size of an agricultural exploitation. Actually, it is well-known that the limited size of Romanian farms is a current reality and a factor with a strong negative influence on the development of rural economy. On average, in Romania, the utilized area per agricultural exploitation is of 3.57 ha. The Center region surpasses this limit, with an average of 4.33 ha/exploitation, Sibiu County, as well, benefiting from an average size/exploitation above the national average, more exactly 4.95 ha.

3. The situation of the produce sector/livestock sector at the level of Sibiu County

According to how it is used, the biggest part of the utilized agricultural areas in Romania (amounting to 13,306 thousand ha) is represented by arable land (8,306 thousand ha/ 62.42 %), followed by pastures and hayfields (4,506 thousand ha/33.86 %), permanent crops (312 thousand ha/2.34 %) and family-owned gardens (182 thousand ha/1.36 %). Of the total arable land, the biggest areas are cultivated with cereals (wheat, rye, barley, oat, corn, sorghum, rice): 59.71 %, the rest of the arable area being occupied by industrial crops (flax, hemp, tobacco, sun-flower, rape, soy): 17.62 %, root plants (potatoes, beet): 1.75 %, vegetables: 0.71 %, respectively legumes: 0.36 %.

Both at the level of the Center development region, as well as at the level of Sibiu County, one has to observe some subtle changes among the main plants that are cultivated. Thus, if the biggest part of the arable land is allotted to cereals, just as at the national level, the second place is occupied, in this case, by root plants (to the detriment of industrial crops).

Table 4. The main crops on arable land, at national/region Center/Sibiu County (ha) (own calculations)

Category	Total	Region Center	Sibiu County
Cereals for grains	4,959,601.79	270,659.01	32,849.02
Legumes	30,721.04	571.31	85.5
Industrial crops	1,464,333.52	10,333.74	1,081.21
Root plants	145,873.92	49,139.18	3,602.16
Vegetables, water melons, strawberries	59,050.62	2,797.65	308.91

Source: The General Agricultural Census (2010)

Over time, growing livestock has imposed itself as one of the traditional activities conducted by the rural population in Romania, despite the constant decrease of actual livestock recorded, our country still presents, from this viewpoint, a considerable potential. In relation to the main animal species grown at national level, one can remark that, in Romania the predominant categories are: cattle, sheep, goats, swine, etc.

According to the statistics consulted, Sibiu County had in 2010 approx. 11.46 % of the total cattle livestock in the Center region (1.83 % of the total livestock at national level), a more favorable situation being recorded in the case of goats: (16.74 % of the total in the Center development region, respectively 1.47 % at national level) and swine: (19.25 % of the total in the region, respectively 1.87 % of the national total).

By far, the best representation in Sibiu County is that of sheep, our county having a percentage of 28.46 % the total sheep in the Center region (6.17 % at national level). The explanation for this fact lies in the considerable importance given to shepherding/grazing in Sibiu County over time, especially in the villages of Mărginimea Sibiului, an emblematic area of our county, known as powerful centers of the pastoral economy.

Table 5. Animal livestock, per species, at national level/region Center/Sibiu County (heads)

Specie	Total	Region Center	Sibiu County
Cattle	2,001,000	319,872	36,658
Sheep	8,417,000	1,824,824	519,459
Goats	1,241,000	109,483	18,331
Swine	5,428,000	528,284	10,1742
Fowl	80,845,000	8,158,908	905,190
Horses	611,000	69,168	9,961
Beehives	1,275,000	192,793	29,48

Source: The General Agricultural Census (2010)/The Statistical Yearbook of Romania (2012)

4. Perspectives of organic agriculture/ sustainable rural development in Sibiu County

In the context of a constant increase of the demand for certified organic products and an expansion of the market for such goods, Romania has experienced, lately, a more sustained pace of development in the area of organic agriculture. However, the local potential is far from being effectively harnessed, which is valid both at national level, as well as at the level of the development regions. Referring strictly to the case of the Center region, one can notice that, out of the total 374,979 registered farms with utilized agricultural areas, only 71 of these (0,01 %) have certified organic agricultural areas, other 37 (0.009 %) having agricultural areas undergoing conversion. From this viewpoint, Sibiu

County ranks first at the level of the Center region, with the 30 exploitations with certified organic utilized agricultural areas (42.25 % of the total number of exploitations of this kind in the region Center), respectively 14 exploitations with utilized agricultural areas undergoing conversion (37.83 % of the total exploitations in this category, in the Center region).

The situation becomes even more problematic once we refer to the figures provided by Eurostat. According to this source, in 2010, Romania had a number of 2,986 certified organic agricultural exploitations or exploitations undergoing conversion, the discrepancy compared to EU-27 being enormous (our country: only 1.54 % of the total 193,709 such exploitations existing at the level of EU-27).

As concerns the agricultural area allotted to organic agriculture or undergoing conversion, Eurostat data reveal a total of 182,706 ha having this destination for entire Romania. Once again, the gap compared to EU-27 is significant, our country having only 1.98 % of the 9,181,507 ha assigned for this purpose in EU-27. The Center region, through its certified organic or undergoing conversion 6,363.44 ha has a very small representation at national level (3.48 %), Sibiu County, with its 3,933.28 ha, having a percentage of 61.81 % at the level of the Center development region, respectively 2.15 % at national level. (own calculations, based on the General Agricultural Census 2010 and the report Agriculture in the European Union. Statistical and economic information, 2012).

Related to the farms with organically grown animals, in the Center region there are 240 such exploitations, out of which 54 (namely 22.5 %) in Sibiu County. The vast majority of these farms: 26, namely 48.14 % of the total category/county is specialized in growing sheep and goats, a perfectly explicable fact if we consider the considerable contribution of Mărginimea Sibiului in the rural economy of Sibiu County.

5. Conclusions

The statistical data prove that the agricultural resources of the Sibiu County are considerable. Though possessing this great potential, Sibiu County continues to lack in what regards its efficient exploitation. Therefore, we consider that a series of measures is needed in order to stimulate this sector and make it a profitable one:

- Establishing a development model adequate for Mărginimea Sibiului;

- Introducing measures for increasing the competitiveness/profitability of the agricultural exploitations from Mărginimea Sibiului;
- Increasing the level of financing;
- Encouraging entrepreneurship;
- Attracting a bigger proportion of traditional products on the market.

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