

FINANCIAL ISSUES OF RURAL SUSTAINABILITY - OPPORTUNITIES FOR COMPENSATION

*Sorinel Ionel BUCUR*⁷⁸

Abstract

Analyze the financial aspects of the sustainability of rural areas in a given area, consisting of entities socio-economic and cultural backgrounds, acquires far greater importance at least from two perspectives: ensuring the preservation and promotion resources specific to each area, but also their combination of the innovative point of view. From this perspective, our analysis on at least two levels: economic and financial heritage of each area and how to preserve resources, in support of economic and financial activities generating added value in rural areas. Based on these considerations, this approach aims to present a series of identity elements specific to each area of a development region, which, coupled with economic-financial information, underlying identify alternative higher recovery potential through efficient use of resources available to stock locally.

Keywords: Rural sustainability, rural economy, interdisciplinary analysis.

JEL classification: R11, R12, Q01, Q57

1. Introduction

The issue of economic processes in the context of sustainable development made over time the subject of much discussion, both about how to combine existing resources locally and hence the degree of performance of results, but also the necessity of devising local development activities very long term. Disparities within the country and between counties, the regions and the macro-development and their effect on the level of performance of Romania abroad were often put in the middle of scientific debate and the factors action of local communities. The present study has as main objective diagnosis of interactive relations and economic and social system combining adaptive modes depending on the coverage of needs for food resources, economic and financial. Based on these considerations, the approach has as main objective to diagnose the extent of the economic and social sustainability in the post-accession of one of the 8 regions, namely South region.

2. Knowledge

The issue did meet food needs over time several studies, both at the level of basic, but policy makers and investment groups with an interest in this field. Knowledge resources, how to combine their territorial disparities allocation is for any decision maker or factor involved in establishing a starting point of investment strategies and more. In an economy with trends visible globalist, where efficiency and competitiveness are very important in winning new market niches, the issue of resources and the allocation of territorial has a special value, large concerns agri competing in developing strategies for combining the drive resource to achieve its strategic objectives.

3. Material and method

To try to realize a radiography degree of economic and social sustainability in the South Muntenia, the present approach was based on data from the National Statistics Institute (INS) by Tempo-Online database. To analyze the available data established statistical methods were used, such comparisons, dynamics and structure the results are presented in tabular form. It should also be noted that if the value indices have resorted to turning them into comparable prices of the last year statistics available to prevent certain improper assessment of incorporating the results of inflation nominal prices.

⁷⁸ researcher assistant, Institute for Agricultural Economics, Romanian Academy

For transformation of values in comparable prices last year was used general index of consumer prices. From the methodological standpoint, the analysis takes into account the timeframe 2007-2013, the upper limit is adjusted according to the availability of statistical data at regional / territorial. Please note that measuring the potential for regional (county) present approach took into account a battery of indicators, grouped as follows:

1. demo-economic indicators:
 - *employment;*
 - *number of employees;*
 - *net nominal average earning.*
2. indicators of endowment resources:
 - *land fund;*
 - *animals per 100 ha.*
3. sector performance indicators:
 - *The value of agricultural production;*
 - *The value of total agricultural production per 100 ha of agricultural land per person employed in agriculture, forestry and fisheries.*

4. Results and discussion

4.1. Demo indicators of economic developments in South Muntenia Region

As part of Macroregion III South Region regrouping structure a seven counties with economic characteristics different social, both from county to county but especially in terms of evolution in time, especially in the post-aderare.

As an indicator of labor, employment recorded a total saving period 2007-2013 dropped by 2.2 percent. The same downward trend was recorded in the South-Muntenia (3.8%), the overall level of involution of almost all the seven counties (table 1).

Table 1

**Evolution of employment in the country, macroregion,
South Muntenia Region and counties components (thou.pers.)**

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	8725,9	8747	8410,7	8371,3	8365,5	8569,6	8530,6	-2,2
Macroregion three	2426,5	2482,7	2380,2	2369,6	2379,0	2421,6	2425,7	0,0
South Muntenia Region	1214,8	1201,0	1159,9	1154,8	1154,5	1182,6	1168,8	-3,8
Argeş	259,7	256	241,6	240,9	241,7	249,4	246,8	-5,0
Călăraşi	101,5	101,3	96,8	100,2	99,2	100,9	98,8	-2,7
Dâmboviţa	202,8	198,5	193,1	193,6	193,3	196,9	193,5	-4,6
Giurgiu	87,6	88,0	86,5	85,2	87,5	89,8	87,9	0,3
Ialomiţa	100,7	100,1	97,4	95,5	96,0	99,0	97,7	-3,0
Prahova	303,6	302,3	291,4	286,7	284,2	288,3	289,8	-4,5
Teleorman	158,9	154,8	153,1	152,7	152,6	158,3	154,3	-2,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

The same downward trend is recorded on the population employed in agriculture, forestry and fisheries. Thus, in the post-accession period, employment declined by 3.7 percent on the total region, of involution in all seven counties, with a range of oscillation ranging from -1.2% (Calarasi) and -5.3% (Prahova) (table 2).

Table 2

Evolution of employment in agriculture, forestry and fisheries in the country, Macroregion three, South Muntenia Region and counties components (thou.pers.)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2465,6	2407,4	2410,7	2439,9	2442,0	2510,0	2380,1	-3,5
Macroregion three	478,0	460,7	460,9	465,1	466,6	480,8	455,6	-4,7
South Muntenia Region	435,3	424,3	424,9	428,3	429,6	442,8	419,1	-3,7
Argeş	70,9	69,0	69,2	70,9	70,0	71,8	68,0	-4,1
Călăraşi	48,8	47,3	47,4	50,1	49,1	50,7	48,2	-1,2
Dâmboviţa	71,0	69,7	69,8	69,3	70,6	72,5	68,5	-3,5
Giurgiu	46,8	45,1	45,3	45,5	46,3	47,8	45,1	-3,6
Ialomiţa	45,1	44,4	44,3	43,6	44,2	45,6	43,5	-3,5
Prahova	65,5	64,0	64,0	62,6	63,6	65,9	62,0	-5,3
Teleorman	87,2	84,8	84,9	86,3	85,8	88,5	83,8	-3,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

In the period under review, the number of employees marked a visible process of reducing both the total economy and especially in the agricultural sector. Thus, if the total economy, employment decreased by 1.4 percent per total country, South Muntenia Region marked a drop of 10.4 percent, mainly due specific weight printed Dambovita (-15.6%) and Prahova (-10.6 % in 2013 compared with 2007)

A trend more pronounced reduction was recorded but in the number of employees in agriculture, forestry and fisheries. If the country level, the number of employees decreased by 15.2 percent, South region decreased by 17.3%, the most significant reduction was found in Arges County (-31.6%) closely followed by Prahova County (-27 %) (table 3).

Table 3

Evolution of the number of employees in agriculture, forestry and fisheries in the country, Macroregion three, South Muntenia Region and counties components (thou.pers.)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2465,6	2407,4	2410,7	2439,9	2442	2510	2380,1	-3,5
Macroregion three	478	460,7	460,9	465,1	466,6	480,8	455,6	-4,7
South Muntenia Region	435,3	424,3	424,9	428,3	429,6	442,8	419,1	-3,7
Argeş	70,9	69	69,2	70,9	70	71,8	68	-4,1
Călăraşi	48,8	47,3	47,4	50,1	49,1	50,7	48,2	-1,2
Dâmboviţa	71	69,7	69,8	69,3	70,6	72,5	68,5	-3,5
Giurgiu	46,8	45,1	45,3	45,5	46,3	47,8	45,1	-3,6
Ialomiţa	45,1	44,4	44,3	43,6	44,2	45,6	43,5	-3,5
Prahova	65,5	64	64	62,6	63,6	65,9	62	-5,3
Teleorman	87,2	84,8	84,9	86,3	85,8	88,5	83,8	-3,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

As an expression of purchasing power, net nominal average earning was registered in 2007-2013 fluctuated total economy compared to agriculture, forestry and fisheries. We mention that in terms of methodology, ensuring comparability of data, it has resorted to using for this purpose their deflationary consumer price index.

Not the same positive trend can be seen but the net nominal average earning in agriculture, forestry and fisheries. From this perspective, the period 2007-2013 is characterized by a visible trend of decrease percentages between -59.8% (overall agriculture) and -65.1% (Giurgiu) (Table 4).

Table 4

The evolution of net nominal average earning expressed in constant prices of agriculture, forestry and fisheries in 2007-2013 (lei)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2138	847	884	848	817	828	859	-59,8
Macroregion three	0	892	910	835	843	890	896	-56,0
South Muntenia Region	2034	836	853	797	793	831	817	-59,8
Argeş	1903	912	893	840	848	890	864	-54,6
Călăraşi	2213	822	841	861	800	876	896	-59,5
Dâmboviţa	2030	940	978	912	896	838	832	-59,0
Giurgiu	2287	745	838	829	799	782	799	-65,1
Ialomiţa	1978	754	815	671	770	870	725	-63,4
Prahova	1993	816	900	815	862	881	907	-54,5
Teleorman	1679	924	806	796	694	707	765	-54,4

Source: Calculations based on data from Tempo-Online, INS, 2014.

**4.2. Indicators of endowment with resources
at regional level - core sector performance within the agri-food sector**

As an expression of the degree of endowment resources, land and its structure were recorded in the post-accession oscillated and divergent, both of the country and regional / territorial.

In 2013, aprox.2.4 million ha of the total country South Muntenia Region has an area of cca.3.4 million ha, accounting for 14.5% of the total and 95% of the area of macroregion III. As a total area of seven counties, Arges ranks first, followed by Teleorman and Calarasi, the three bringing together 51.4% of the region.

From the structural point of view, South Muntenia Region is characterized by the predominance of agricultural land (70.6% in 2013) are but a slight setback of 0.4 percentage points compared to the base year - 2007. The arable area registered an increase of share in total agricultural area of 2.2 percentage points, i.e. from 70.7% (2008) to 80.9% (2013) (table 5).

Table 5

The evolution of land fund structure in the South Muntenia Region in 2007-2013 (%)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
Total	100	100	100	100	100	100	100	0,0
Agricultural area	71,0	70,9	70,9	70,8	70,6	70,6	70,6	-0,4
Arable area	80,7	80,7	80,8	80,7	80,8	80,9	80,9	0,2
Pastures	11,8	11,8	11,8	11,9	11,8	11,7	11,7	-0,1
Meadow	4,4	4,4	4,4	4,4	4,5	4,5	4,5	0,1
Vineyards and nurseries	1,3	1,3	1,3	1,2	1,2	1,2	1,2	-0,1
Orchards and nurseries	1,9	1,9	1,8	1,7	1,7	1,7	1,7	-0,2
Non-agricultural land	29,0	29,1	29,1	29,2	29,4	29,4	29,4	0,4

Source: Calculations based on data from Tempo-Online, INS, 2014.

A worrying trend is encountered but in terms of livestock per 100 ha of agricultural land. From this perspective, the period under review was characterized by a visible trend of decrease, with few exceptions, both counties and categories of animals. Thus, within seven years, the number of cattle / 100 ha was reduced by about 30 percent per total country, while at the level of counties of South Muntenia Region most significant diminishing returns Giurgiu county, approx. 61% (table 6).

Table 6

Evolution of the number of cattle / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	21,4	20,4	19,1	14,6	14,7	14,8	15,0	-29,9
Macroregion three		16,5	14,8	10,3	10,2	10,1	10,1	-38,8
South Muntenia Region	17,7	16,4	14,7	10,5	10,3	10,2	10,1	-42,9
Argeş	36,9	36,9	37,8	21,0	21,2	21,1	22,2	-39,8
Călăraşi	8,6	7,4	6,6	5,0	4,9	4,9	4,9	-43,0
Dâmboviţa	25	20,8	17,6	16,9	16,5	15,9	15,4	-38,4
Giurgiu	15,3	13,3	9,1	6,9	6,9	7,0	6,1	-60,1
Ialomiţa	10,4	9,0	7,6	7,5	7,3	7,3	7,0	-32,7
Prahova	20,0	19,1	18,2	13,8	13,8	14,3	15,0	-25,0
Teleorman	14,5	14,2	12,1	7,8	7,4	6,7	7,1	-51,0

Source: Calculations based on data from Tempo-Online, INS, 2014.

The same trend can also be found and in the number of pigs per 100 hectares, with lower percentages, however, the only exception being represented by Ialomiţa (+ 13.8%) (table 7).

Table 7

Evolution of the number of pigs / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	75,7	70,8	65,9	59,3	59,6	58,2	58,9	-22,2
Macroregion three		62,1	56,6	55,3	53,1	51	49,3	-20,6
South Muntenia Region	60,4	55,2	50,1	50	49,1	48	47,4	-21,5
Argeş	132,5	129	126	108,8	110,7	113,8	120,8	-8,8
Călăraşi	43,2	35,6	33,7	32,3	32,6	34,5	35,6	-17,6
Dâmboviţa	73,4	60,3	59,4	78,1	75	68,4	61,5	-16,2
Giurgiu	49,5	41,4	32,7	41,6	42,5	38,9	33,1	-33,1
Ialomiţa	34,8	38,4	36,9	42,9	40,9	40	39,6	13,8
Prahova	107,4	115,4	114,4	75,9	74,3	69,1	75,6	-29,6
Teleorman	52,7	41,2	29,5	34,4	32,6	32,1	32,7	-38,0

Source: Calculations based on data from Tempo-Online, INS, 2014.

An opposite trend occurs in the sheep / 100 hectares. From this perspective, the number of sheep per 100 hectares is part of a growing trend by percentages ranging between + 6.4% (Calarasi) and + 50.3% (Prahova) (table 8).

Table 8

Evolution of the number of cattle / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	70,9	74,3	76,4	70,5	72,2	74,6	77,4	9,2
Macroregion three		46	46,2	44,1	44,6	45,6	48,2	4,8
South Muntenia Region	43,1	46,2	46,7	44,7	44,9	45,8	47,9	11,1
Argeş	65	72,9	68,5	60,9	59,8	62,3	74,8	15,1
Călăraşi	37,3	42,9	42	34,4	38,2	37,4	39,7	6,4
Dâmboviţa	24,7	24,7	25,8	37	35,6	36,1	36,5	47,8
Giurgiu	30,3	28,3	29,2	27,7	26,8	29,6	27,2	-10,2
Ialomiţa	38	41,9	43,9	43,4	42,3	43,2	44,4	16,8
Prahova	55,3	66,3	79,8	70,6	75,2	76,7	83,1	50,3
Teleorman	48	44,5	41,3	43,5	41,6	41,6	42,1	-12,3

Source: Calculations based on data from Tempo-Online, INS, 2014.

4.3. Indicators of sector and regional economic performance

As a specific indicator of the agricultural sector, the value of agricultural production in the period 2007-2012 registered a growth trend, both per total country and in the South Muntenia Region. If the period under review, total agricultural output, expressed in constant prices went up by only 2% in the South Muntenia Region witnessing a growth of cca.23%, due to developments in the counties components. Basically, except for two counties (Argeş and Dambovita), total agricultural production has risen significantly with percentages ranging from 6.5% + (Prahova) and 110.9% (Ialomiţa) (table 9).

Table 9

Changes in the value of total agricultural production in the period 2007-2012 (thousand lei, constant prices)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	47699916	62117669	52624701	53348579	59861634	48657381	2,0
Macroregion three	8299820	11952845	10018620	10171329	11992849	9993140	20,4
South Muntenia Region	7697601	11278901	9456259	9581355	11427046	9491344	23,3
Argeş	1533460	1770321	1794517	1448189	1666570	1367880	-10,8
Călăraşi	874133	1707217	1296851	1317263	1776574	1528658	74,9
Dâmboviţa	2036431	1963193	1752639	1841194	1891352	1670753	-18,0
Giurgiu	615451	1171719	976274	1046521	1227320	973638	58,2
Ialomiţa	684765	1566812	1063966	1386917	1740473	1444117	110,9
Prahova	1032022	1496503	1249253	1142507	1281102	1098690	6,5
Teleorman	921339	1603135	1322759	1398764	1843654	1407608	52,8

Source: Calculations based on data from Tempo-Online, INS, 2014.

The 19.5 percent made the South Muntenia Region of the total value of agricultural production are achieved in a relatively equal for all seven counties, with an oscillation between 10.3% (Ipswich) and 17.6% (Dambovita).

Increasing the value of total agricultural production was the effect mainly in the field of plant growth. Thus, within six years, the crop production was increased by nearly 6 percent total country because the South region percentage to be around 48%. The 48 percent increase in crop production are the result of significant increases in six of the seven counties, with percentages ranging from + 6.8% (Prahova) to no more than tripling in Calarasi and Ialomiţa

At the animal sector, the value of agricultural production falls on a downward trend not only the country but also in the total analyzed region and its counties. From this perspective, the period

2007-2012 marks a decrease in the value of agricultural production by 9.6% to level animals of South Muntenia Region, because in profile county, the percentage of reduction to reach the -33.6% (Arges)

A more pronounced rate of decline is observed in the value of agricultural services but from 2007-2012. From this point of view, the reference period is characterized by a noticeable tendency to reduce them, with percentages ranging counties, between -3% (Dambovita) and -89.9% (Prahova).

Per 100 hectares of agricultural land, arable or per person employed in agriculture, agricultural production value has recorded an upward trend in 2007-2012, due to different rates of change of indicators reported.

In this regard, the value of agricultural production / 100 ha of agricultural land has increased the total country with 2.7% for the region-wide percentage to exceed 20 percent, due to changes in a positive sense occurred in five of the seven counties (table 10).

Table 10

Changes in the value of agricultural production / 100 ha of agricultural area in 2007-2012 (thousand lei, constant prices/100 ha.)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	324,3	422,5	358,4	364,5	409,4	332,9	2,7
Macroregion three	324,6	468,0	392,4	400,0	472,7	394,0	21,4
South Muntenia Region	314,7	461,5	387,0	393,0	469,8	390,3	24,0
Argeş	444,8	513,8	521,0	424,6	494,9	403,8	-9,2
Călăraşi	205,1	400,5	304,4	309,9	417,8	359,8	75,4
Dâmboviţa	817,8	789,7	705,4	741,3	762,2	674,5	-17,5
Giurgiu	222,0	423,4	353,2	378,6	444,5	353,2	59,1
Ialomiţa	182,9	418,7	284,2	369,8	464,3	385,3	110,7
Prahova	375,3	544,8	455,1	418,8	470,1	404,7	7,8
Teleorman	184,6	321,2	265,0	280,3	369,7	282,3	52,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

Divided by the population employed in agriculture, forestry and fishing, agricultural production value recorded in 2012 at the level of South Muntenia Region amounting to 214.3 lei, the largest contribution being found in Ialomita and Calarasi. But dynamic viewed except Arges and Dambovita counties, where we witness a visible trend of decrease in the other five counties indicator marks a significant increase, reaching doubling the county Ialomita (table 11).

Table 11

Agricultural production value / person employed in agriculture, forestry and fisheries in the period 2007-2012 (lei, constant prices/ persons employed)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	193,5	258,0	218,3	218,7	245,1	193,9	0,2
Macroregion three	173,6	259,4	217,4	218,7	257,0	207,8	19,7
South Muntenia Region	176,8	265,8	222,6	223,7	266,0	214,3	21,2
Argeş	216,3	256,6	259,3	204,3	238,1	190,5	-11,9
Călăraşi	179,1	360,9	273,6	262,9	361,8	301,5	68,3
Dâmboviţa	286,8	281,7	251,1	265,7	267,9	230,4	-19,7
Giurgiu	131,5	259,8	215,5	230,0	265,1	203,7	54,9
Ialomiţa	151,8	352,9	240,2	318,1	393,8	316,7	108,6
Prahova	157,6	233,8	195,2	182,5	201,4	166,7	5,8
Teleorman	105,7	189,0	155,8	162,1	214,9	159,1	50,5

Source: Calculations based on data from Tempo-Online, INS, 2014.

5. Conclusions

Since accession to the European Union, Romanian agri-food sector still faces many structural problems and adapting to the demands and rigors of integration into the European community. The effect of these changes was passed both on the level of productivity and efficiency of production achieved but mainly on the living standards of the population. Achieving analysis at regional level meets the need of knowing the degree of endowment resources, efficiency and productivity of a region, the counties of its components as a starting point in building strategies for local sustainable development, integrated into the extensive process development nationally. The present study focused on the analysis of the South-Muntenia led to the detachment the following conclusions:

1. Counties increased heterogeneity related South Muntenia Region in terms of characteristicilor generated by spatial location; four of the seven counties are located in lowland area, tilting the balance more towards development activities in the sphere of crop production; a wider range of alternatives is reflected in the other three counties, Arges, Dambovita and Prahova, which, due to territorial location, including both plains, hills and mountains, gives them a noticeable advantage in identifying niches alternative local development ;2. A common feature of all seven counties a declining population is stable in 2014 compared to 2007, the percentages range between -1.7% (Dambovita) and -8% (Teleorman); one of the reasons for this can be attributed to population migration to counties with a higher degree of development and diversified employment opportunities for work; this downward trend stable population is more visible in plain counties (Calarasi, Ialomita, Giurgiu and Teleorman), while the other three counties the percentages are lower, giving them a possible trend of relative stability of the population;
3. Changes in the agricultural sector after 2007, due to the need to respect European criteria required for accession to the EU, but also a reorientation towards other business segments generated a sharp decline in the number of employees in agriculture, forestry and fisheries, generally valid for all seven counties of the South-Muntenia, with percentages that ranged in 2013 from 2007 from -7.2% (Teleorman) to -31.6% (Arges);
4. Land structure reveals the possibility of developing activities be inclined to crop production or, in other cases, to animal production, tourism, logging, manufacturing; Four of the seven counties (Teleorman, Calarasi, Giurgiu and Ialomita) hold a share of the total arable agricultural area of over 90%, with percentages range between 91.4% (Teleorman) and 96.7% (Calarasi); a potential arable significantly correlated with the trend of relative stability with time, gives counties the ability to identify those local development of alternatives to the crop production through optimal use of existing resources; in contrast, in Arges, Dambovita and Prahova ratio of arable and other land use categories confers enhanced opportunities to diversify their activities both in the sphere of food production, tourism or manufacturing;
5. Regress in the livestock per 100 ha of agricultural land; basically, except sheep and goats, in which there is a growth trend in five of the seven counties, all other categories of animals recorded significant decrease; otherwise it is worth worrying trend of reducing the number of cattle / 100 ha of agricultural land, with percentages ranging from 25% (Prahova) and -60.1% (Ipswich) in 2013 compared to 2007;
6. Expression of the degree of efficiency of agricultural production value recorded in 2012 in the South Muntenia Region an increase of 23.3% compared to 2007; basically, with two exceptions, Arges and Dambovita, the other five counties are characterized by an increasing trend of the value of agricultural production; the 23.3 percent increase recorded oscillations are the effect of the structure of production value; ie the trend accentuated by increasing crop production has mitigated the falls recorded at the value of animal production and agricultural services.7. Reported to agricultural land, arable land per person employed in agriculture, forestry and fishing, agricultural production value enrolled in most counties on an upward trend, mainly generated pace in May accelerate production growth compared to fluctuations reduced farmland / arable and those of employment.

Acknowledgements

“This work was supported by the project “Interdisciplinary excellence in doctoral scientific research in Romania - EXCELLENTIA” co-funded from the European Social Fund through the Development of Human Resources Operational Programme 2007-2013, contract no. POSDRU/187/1.5/S/155425.”

Bibliography

1. * * *, Tempo-Online database of INS, 2014;
2. * * *, 2014-2020 National Strategy for Regional Development, Ministry of Regional Development and Public Administration, Bucharest, 2013;
3. * * *, National Rural Development Programme for 2014-2020, the Ministry of Agriculture and Rural Development, Bucharest 2014.