

## INTEGRATION OF VÂLCEA COUNTY AT REGIONAL LEVEL IN TERMS OF AGRICULTURAL PRODUCTION (2015-2019)

**Dragoș Mihai MEDELETE<sup>1</sup>, Radu Lucian PÂNZARU<sup>1</sup>**

*(1) Faculty of Agronomy, University of Craiova, 19 Libertății street, Craiova, Romania  
dragosmedelete@gmail.com, rlp1967craiova1967@gmail.com*

Corresponding author email: [rlp1967craiova@gmail.com](mailto:rlp1967craiova@gmail.com)

### **Abstract**

*The study follows and highlights the evolution of agricultural production at the level of Valcea County, in the context of the realities existing at national and regional level. In addition to the value of total agricultural production, according to existing data, its distribution by source of origin is also presented: crop production, livestock production and the agricultural services sector.*

*For Vâlcea County, the vegetal production is predominant – 60.41% (834,420.20 thousand lei compared to 1,381,239.60 thousand lei), followed by the animal production – 39.31% (543,015.20 thousand lei) and respectively the agricultural services – 0.28% (3,804.20 thousand lei) followed..*

*At the county level, the variation amplitude of total agricultural production was 393,078 thousand lei, a value that represented 32.70% of the minimum level of the indicator (2016) and 24.64% compared to the maximum level (2019). For vegetable production, the registered amplitude reached 339,264 thousand lei, a level that represented 50.39% of the minimum term (2015) and was lower than the maximum term (2019) by 66.49%. In the case of livestock production, the amplitude of production variation was 72,190 thousand lei, a level that represented 14.25% of the value of the minimum term (2017) and 12.48% compared to the maximum term (2019). If we refer to agricultural services, there is a variation amplitude of the indicator of 3,506 thousand lei, a value that exceeded by 49.13% the minimum level of the indicator (2016) and represented 59.86% compared to the maximum level (2015).*

**Key words:** *agricultural production, plant sector, animal husbandry, agricultural services*

### **INTRODUCTION**

The role of agriculture in the process of economic growth and development, in terms of the degree of development of society, is highlighted by the following: at the level of pre-industrial societies (agriculture is the priority field of formation of national wealth), it highlights the application of the agrocentric theory, which emphasizes the decisive role of agriculture in the process of economic development; for developed societies (non-agricultural branches are characterized by a high level of productivity compared to agriculture), the centrist industrial theory is applied, which emphasizes the secondary role of agriculture in the economic development process.

The place of agriculture in the economy of a country can be appreciated by two categories of parameters: endogenous and exogenous.

The endogenous parameters include the following elements: the share in the way of use of the general land fund; the share held in the general fixed capital structure; the population employed in agricultural activities and its share in the general total in the national economy.

Exogenous parameters include: the share within the social product; specific weight at the level of gross domestic product.

The production branch is made up of activities with a high degree of homogeneity, aimed at obtaining products or services, which have a common specificity for the goods obtained, the specialization of the labour force, the

union of the means of production and the technological elements.

The characteristics of a branch of production are: the good supplied and its way of use; the technology used, based on the means of production used; the direction of specialization of the labour force.

## METHOD AND MATERIAL

The preparation of the paper resorted to the method of comparison in time and space. In addition to the time sequences included in the analysis, it was also operated with their average.

The method reports the results of the activity and reports them to the comparison terms used.

The work presents the level of agricultural production, under the value ratio

(thousand lei), for the time interval 2015 – 2019. The indicator is specified both overall and for the main sectors of agriculture: crop production, livestock production and agricultural services.

They are presented at national, then regional (South-West Oltenia Region) and county (Vâlcea) level. The importance of Vâlcea County, from the point of view of agricultural activity, was achieved by comparing it with the regional level, while the South-West Oltenia Region was compared with the national situation.

## RESULTS AND DISCUSSIONS

Table 1 shows the level and evolution of total agricultural production for the analysis period.

Table 1. Total agricultural production (thousand lei)

Year	National level		South-West Oltenia Region			Vâlcea County		
	Ef.*	Dynamics lbm**	Ef.*	Dynamics lbm**	% compared to the national level	Ef.*	Dynamics lbm**	% compared to the national level
2015	68,749,578	100	7,778,900	100	11.31	1,228,015	100	15.77
2016	69,348,614	100.87	7,817,485	100.49	11.27	1,202,008	97.88	15.38
2017	78,494,105	114.17	9,858,469	126.73	12.56	1,346,384	109.64	13.66
2018	86,349,291	125.60	10,655,981	136.96	12.34	1,534,705	124.97	14.40
2019	89,989,063	130.89	11,114,739	142.88	12.35	1,595,086	129.89	14.35

<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (12.01.2022)

own calculations

Romania achieved a total agricultural production of between 68,749,578 thousand lei (2015) and 89,989,063 thousand lei (year 2019). The following groups of values of total agricultural production are distinguished: below 70,000,000 thousand lei – 2016 (69,348,614 thousand lei); values between 70,000,000 and 80,000,000 thousand lei – 2017 (78,494,105 thousand lei); over 80,000,000 thousand lei – 2018 (86,349,291 thousand lei). The dynamics of the indicator was an increasing one, a phenomenon highlighted by the exceedances of the comparison base (2015), as follows: +30.89% in 2019, +25.60% at the level of 2019, +14.17% for 2017 and +0.87% in 2016.

In the case of the South-West Region, the total production shows extreme levels of 7,778,900 and 11,114,739 thousand lei (years 2015 and 2019). There are years in which the indicator exceeded the level of 8,000,000 thousand lei (2017 – 9,858,469 thousand lei, 2018 – 10,655,981 thousand lei), respectively years in which this level was not exceeded (2016 – 7,817,485 thousand lei). Regarding the evolution of the indicator, for the analyzed interval, its strictly increasing trend is noted. After 2015 (comparison period), the indicator is exceeded as follows: +42.88% in the case of 2019, +36.96% at the level of 2018, +26.73% for 2017 and +0.49% in 2016.

Vâlcea County presents variations in total agricultural production from 2016 to 2019 (1,202,008 respectively 1,595,086 thousand lei). The rest of the terms, the dynamic series, recorded values of: 1,228,015, 1,346,384 and 1,534,705 thousand lei (years 2015, 2017 and 2018 respectively). Following this state of affairs, it can be appreciated that the evolution of the indicator was uneven: decreases in the case of 2016 (97.88%), after which, until the end of the dynamic series, strictly increases compared to the reporting period (+9.64% in 2017),

+24.97% for 2018 and +29.89% for 2019).

At the national level, the region assigned weights between 11.27 and 12.56% (years 2016 and 2017 respectively). The rest of the terms of the dynamic series register weights below 12% in 2015 (11.31%) and above 12% (2018 and 2019 – 12.34 and 12.35%, respectively - fig. 1). For the county of Vâlcea, at the regional level, there are variable weights (below 16%) as follows: 13.66% in 2017, 14.35% in 2019, 14.40% in the case of 2018, 15.38% for 2016 and 15.77% in 2015 (fig. 1).

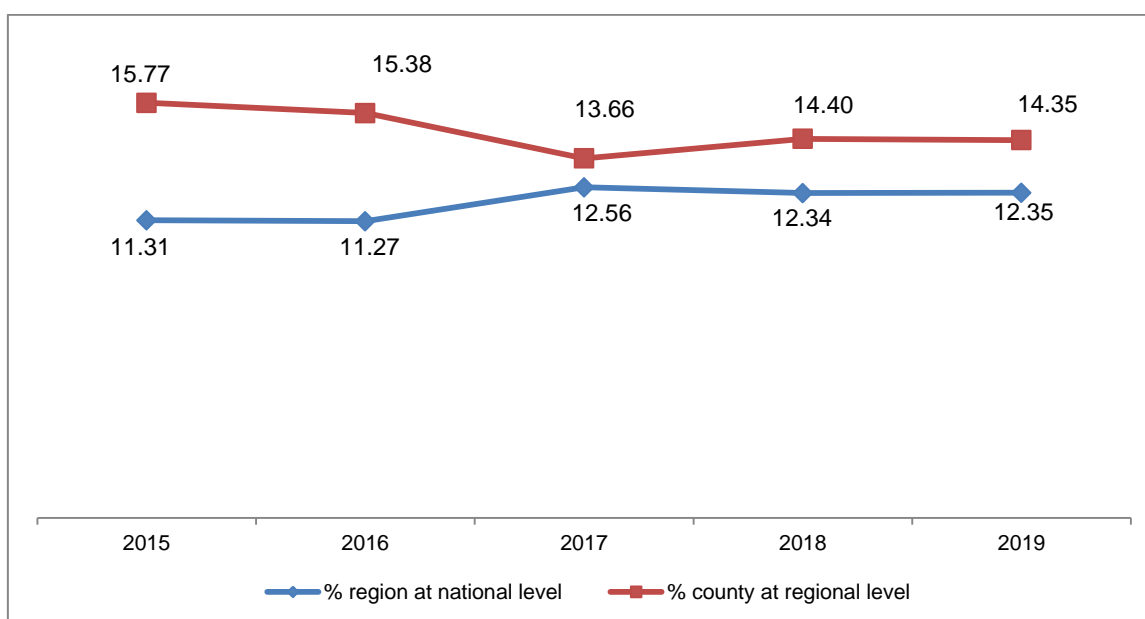


Fig. 1. South-West region, Vâlcea County  
- Weights within the total national and regional agricultural production - %  
(processed after: [www.inse.ro](http://www.inse.ro))

Table 2 shows the data related to vegetable agricultural production.

At the national level, agricultural vegetable production varied between 43,574,128 thousand lei in 2015 and 62,967,346 thousand lei in 2019. The rest of the terms, analysed, recorded the following situations: less than 50,000,000 thousand lei - 2016 (45,155,180 thousand lei); between 50,000,001 and 6,000,000 thousand lei - year 2017 (53,216,739 thousand lei); more than 60,000,000

thousand lei - year 2018 (61,216,194 thousand lei).

For the evolution of the indicator, there are increases, as follows: +44.51% at the level of 2019, +40.49% for 2018, +22.13% in the case of 2017 and +3.63% in 2016.

The South-West region achieved a vegetable agricultural production between 5,207,919 thousand lei (year 2015) and 8,368,584 thousand lei (year 2019). The situation characteristic of the rest of the

analyzed years highlights positions as follows: from 5,000,000 to 6,000,000

Table 2. Vegetable agricultural production (thousands lei)

Year	National level		South-West Oltenia Region			Vâlcea County		
	Ef.	Dynamics lbm**	Ef.	Dynamics lbm**	% compared to the national level	Ef.	Dynamics lbm**	% compared to the national level
2015	43,574,128	100	5,207,919	100	11.95	673,281	100	12.93
2016	45,155,180	103.63	5,428,648	104.24	12.02	685,184	101.77	12.62
2017	53,216,739	122.13	7,427,260	142.61	13.96	836,621	124.26	11.26
2018	61,216,194	140.49	8,140,954	156.32	13.30	964,470	143.25	11.85
2019	62,967,346	144.51	8,368,584	160.69	13.29	1,012,545	150.39	12.10

<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (12.01.2022)

own calculations

thousand lei (in 2016 – 5,428,648 thousand lei); from 7,000,000 to 8,000,000 thousand lei (year 2017 – 7,427,260 thousand lei); over 8,000,000 thousand lei (year 2018 – 8,140,954 thousand lei). Regarding the dynamics of the indicator, it is noted its increasing evolution (annual forwards of 1.04, 1.42, 1.56 and 1.60 times for 2016, 2017, 2019 and 2019).

In the case of Vâlcea county, the vegetable agricultural production had variable levels ranging from 673,281 thousand lei in 2015 to 1,012,545 thousand lei in the case of 2019. For the other years, of the dynamic series, values of: 685,184, 836,621 and 964,470 thousand lei are observed - the years 2016, 2017 and 2018 respectively. The dynamics of vegetable agricultural production, in Vâlcea County, shows a definite upward evolution. As a result, the specific increases of 2016, 2017, 2018 and 2019 (+1.77, +24.26, +43.25 and +50.39%) should be highlighted.

Under the report of regional and county contributions to the achievement of the national and regional levels of the indicator (fig. 2), it can be seen that, at the national level, the region had variable weights: over 13% (years 2019, 2018 and 2017 – 13.29, 13.30 respectively 13.96%), between 12 and 13% (2016 – 12.02%), below 12% in the case of 2015 (11.95%). Vâlcea County, at the regional level, had fluctuating contributions, as follows: over 12% in 2019, 2016 and 2015 (12.10, 12.62 and 12.93%

respectively), below 12% in 2017 and 2018 (11.26 and 11.85% respectively).

The situation related to agricultural production in the livestock sector is presented in table 3.

For Romania, animal agricultural production varied from 23,293,590 thousand lei (2016) to 25,228,818 thousand lei (2019). In the rest, the components of the dynamic series were presented as follows: from 23,300,000 to 24,000,000 thousand lei - year 2018 (23,903,451 thousand lei); more than 24,000,000 thousand lei – the years 2015 and 2017 (24,315,779 and 24,331,854 thousand lei, respectively). The dynamics of the indicator show decreases compared to the reporting base in 2018 and 2016 (-1.76 and -4.21%, respectively) and increases, compared to this, in 2019 and 2017 (+3.75 and +0.07%, respectively).

In the South-West Region, livestock production was between 2,334,247 thousand lei (year 2016) and 2,601,279 thousand lei (year 2019). Between these extremes, the components of the analyzed series were, as follows: between 2,400,000 and 2,600,000 thousand lei in the years 2018 and 2015 (2,452,769 and 2,486,707 thousand lei respectively), below 2,400,000 thousand lei (year 2017 – 2,376,539 thousand lei). The dynamics of livestock production, in the case of the interval 2016-2019, is characterized by exceeding, at the level of 2019, the comparison term (+4.61%), decreases for the years 2018, 2017 and

2016 (-1.36, -4.43 and -6.13%, respectively).

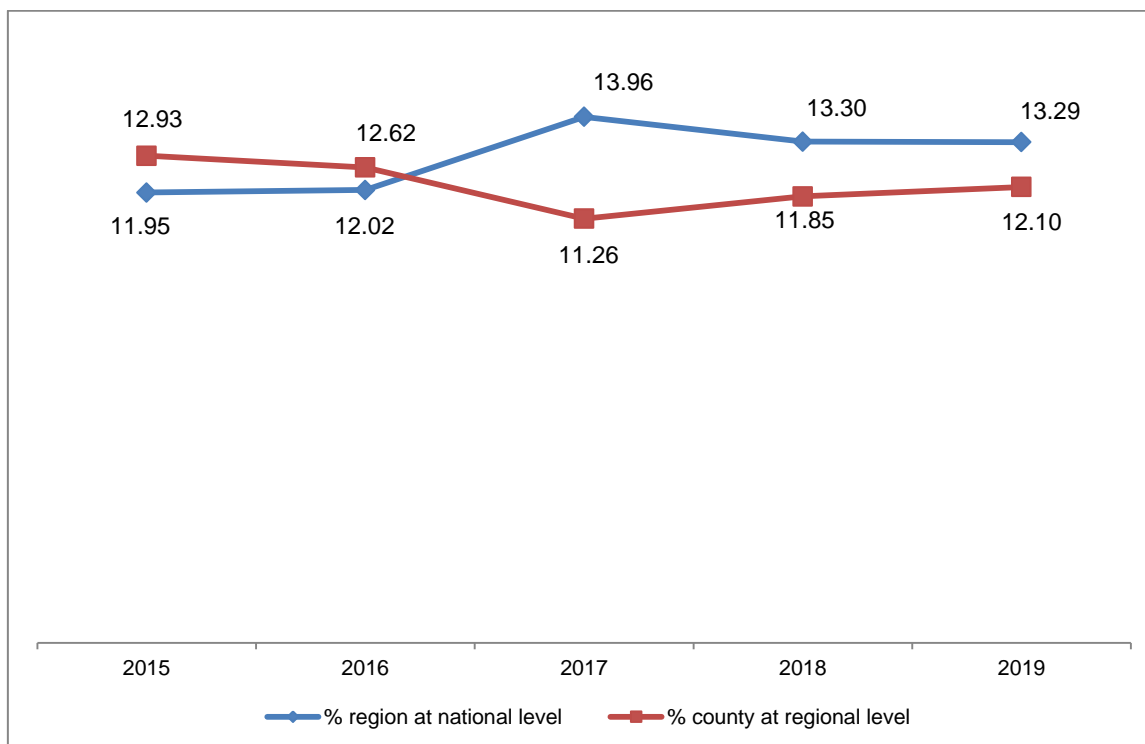


Fig. 2. South-West Oltenia region, Vâlcea county  
- weights within the national and regional vegetable agricultural production - %  
(processed after: [www.inse.ro](http://www.inse.ro))

Table 3. Animal agricultural production (thousands lei)

Anul	National level		South-West Oltenia Region			Vâlcea County		
	Ef.	Dynamics lbm	Ef.	Dynamics lbm	% compared to the national level	Ef.	Dynamics lbm	% compared to the national level
2015	24,315,779	100	2,486,707	100	10.23	548,877	100	22.07
2016	23,293,590	95.79	2,334,247	93.87	10.02	514,473	93.73	22.04
2017	24,331,854	100.07	2,376,539	95.57	9.77	506,464	92.27	21.31
2018	23,903,451	98.30	2,452,769	98.64	10.26	566,608	103.23	23.10
2019	25,228,818	103.75	2,601,279	104.61	10.31	578,654	105.43	22.24

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (12.01.2022)

\*\* own calculations

Animal agricultural production in Vâlcea county was between 506,464 and 578,654 thousand lei for the years 2017 and 2019, respectively. The rest of the terms are below the threshold of 570,000 thousand lei: 566,608, 548,877 and 514,473 thousand lei at the level of 2018, 2015 and 2016, respectively. The dynamics of the indicator are characterized by uneven developments, decreases in 2016 and 2017 compared to the first term of the dynamic series (-6.27

respectively -7.73%), increases for 2018 and 2019 (+3.23 respectively +5.43%). The regional levels of livestock production compared to the national situation, show variable levels, as follows (fig. 3): over 10% in the years 2016, 2015, 2018 and 2019 (10.02, 10.23, 10.26 and 10.31% respectively), below 10% for the year 2017 (9.77%). Vâlcea County was positioned between 21 and 24% compared to the regional situation (21.31, 22.04, 22.07, 22.24 and 23.10% for the



years 2017, 2016, 2015, 2019 and 2018 respectively - fig. 3).

The data related to the value generated by agricultural services, for the analysed interval, are presented in table 4.

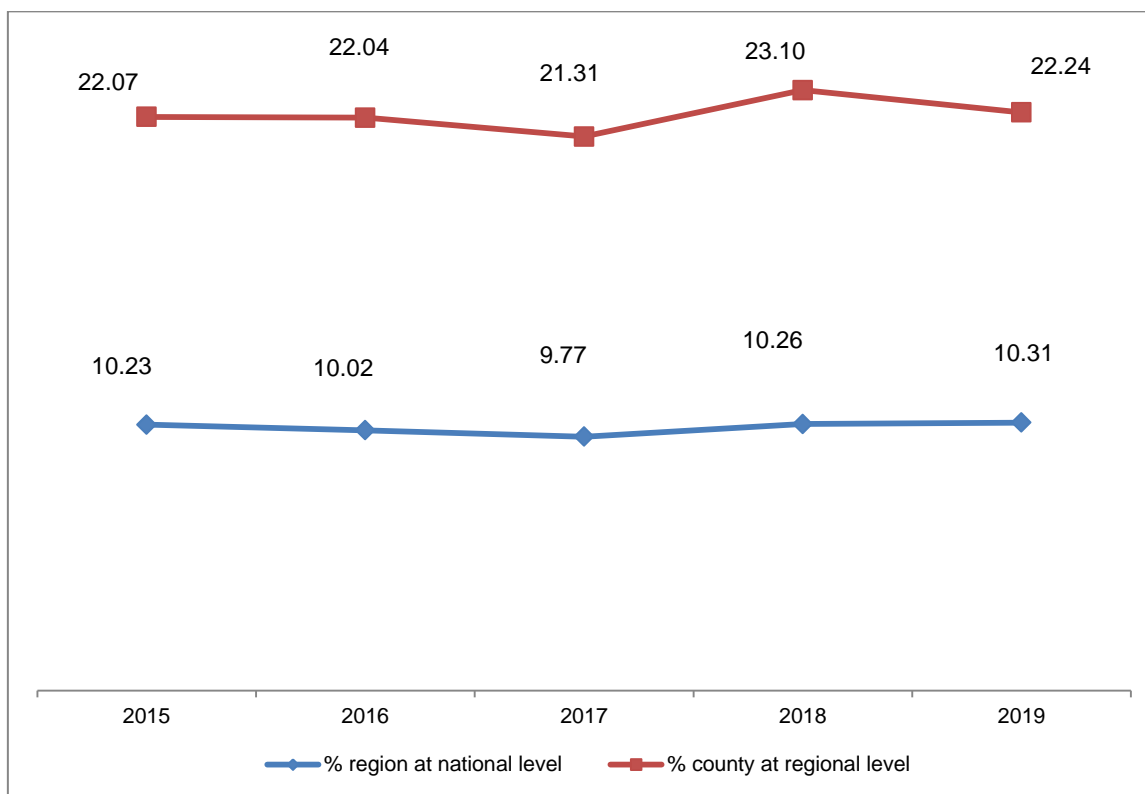


Fig. 3. South-West region, Vâlcea county - positions in relation to the national and regional animal agricultural production - % (processed after: [www.inse.ro](http://www.inse.ro))

In Romania, the value of agricultural services was between 859,671 thousand lei (year 2015) and 1,792,899 thousand lei (year 2019). Under the ratio of the value provided by the services, the components of the dynamic series can be grouped as follows: up to 1,000,000 thousand lei – 2016 and 2017 (899,844 and 945,512 thousand lei respectively); over 1,000,000 thousand lei - year 2018

(1,229,646 thousand lei). The dynamics of the indicator was an increasing one, characterized by advances in the basis of comparison, as follows: 1.04, 1.09, 1.43 and 2.08 times at the level of the years 2016, 2017, 2018 and 2019 respectively. In the case of the South-West Region, agricultural services had values between 54,590 and 144,876 thousand lei (years 2016 and 2019 respectively).

Table 4. Agricultural services (thousands lei)

Year	National level		South-West Oltenia Region			Vâlcea County		
	Ef.	Dynamics lbn**	Ef.	Dynamics lbn**	% compared to the regional level	Ef.	Dynamics lbn**	% compared to the regional level
2015	859,671	100	84,274	100	9.57	5,857	100	6.95
2016	899,844	104.67	54,590	64.78	6.07	2,351	40.14	4.31
2017	945,512	109.99	54,670	64.87	5.78	3,299	56.33	6.03
2018	1,229,646	143.04	62,258	73.88	5.06	3,627	61.93	5.83
2019	1,792,899	208.56	144,876	171.91	8.08	3,887	66.37	2.68

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (12.01.2022)

\*\* own calculations

There are years in which the indicator was less than 60,000 thousand lei (year 2017 – 54,670 thousand lei), it varied between 60,000 and 100,000 lei for (years 2018 and 2015 – 62,258 and 84,274 thousand lei respectively). The evolution of the indicator, for the analyzed interval, presents an uneven trend. After three years when the indicator decreases (2016, 2017 and 2018 – 64.78, 64.87 and 73.88% respectively compared to the comparison period), an increase follows, accentuated in 2019 (171.91%).

Vâlcea County is characterized by variations in the value of agricultural services from 2,351 thousand lei in 2016 to 5,857 thousand lei in the case of 2015. The rest of the levels are below 4,000 thousand lei (3,229, 3,627 and 3,887 thousand lei, in the case of years 2017,

2018 and 2019 respectively). Following this state of affairs, it can be appreciated that the evolution of the indicator was downward-uneven: -59.86% in 2016, -43.67% for 2017, -38.07% in 2018 and -32.63% in the case of 2019.

The region achieved, at the national level, between 5.06 and 9.57% of the value of agricultural services (years 2018 and 2015 respectively). In the rest, variable contributions are registered at the national level: 8.08% for 2019, 6.07% for 2016 and 5.78% in 2017. For Vâlcea county, at the regional level, fluctuating contributions are found as follows: between 6 and 7% in the case of the years 2015 and 2017 (6.95 and 6.03 respectively), between 4 and 6% for 2018 and 2016 (5.83 and 4.31 respectively), under 3 % for 2019 (2.68% - fig. 4).

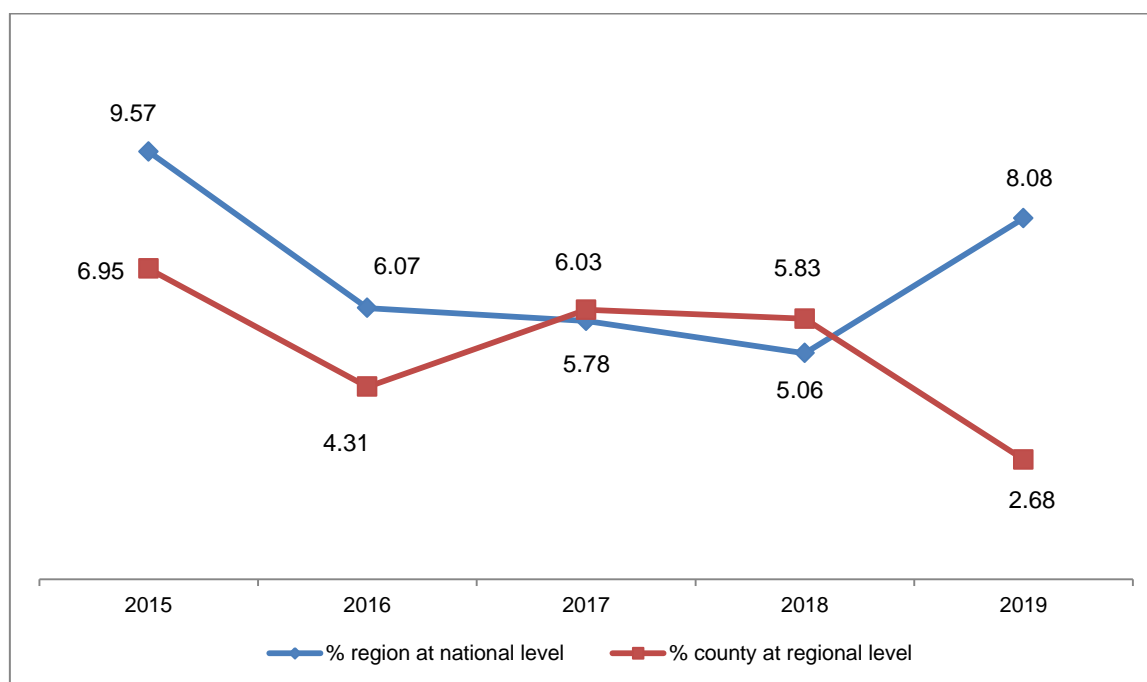


Fig. 4. South-West Oltenia region, Vâlcea County  
- weights within the national and regional agricultural services - %  
(processed after: [www.inse.ro](http://www.inse.ro))

## CONCLUSIONS

For Romania, the preponderance of plant production (67.73% - 53,225,917 thousand lei), are followed by animal production (30.81% - 24,214,698.60 thousand lei) and the activity of the

agricultural services sector (1.46% - 1,145,514.40 thousand lei).

In the South-West Oltenia development region, vegetable production is predominant with 73.21% of the total (6,914,673 thousand lei against

9,445,115 thousand lei), followed by animal production - 25.94% (2,450,308.40 thousand lei) and agricultural services - 0.85% (80,133.60 thousand lei).

At the level of Vâlcea county, vegetable production is predominant - 60.41% (834,420.20 thousand lei compared to 1,381,239.60 thousand lei), followed by animal production - 39.31% (543,015.20 thousand lei) and respectively agricultural services - 0.28% (3,804.20 thousand lei).

It can be appreciated that Vâlcea county represents a less important component for the South-West Oltenia region - at the level of the agricultural field, starting from the fact that at the regional level there are five counties, and consequently the average share would be 20%. This average level was exceeded for livestock production.

## REFERENCES

- Barbu C., Pânzaru R.L. (2000). Agrarian economy, Publishing house Hyperion, Craiova
- Brezuleanu S. (2009). Agricultural management – theory and practice, Publishing house Performantica, Iași
- Oancea Margareta (2007). Management, economic management and strategy of agricultural units, Ceres Publishing House, Bucharest
- Oțiman P.I. (1999). Rural economy, Publishing House. Agroprint, Timisoara
- Pânzaru R.L. (2015). Management in agriculture, Publisher. Sitech, Craiova
- Ștefan G. (2006). Agrarian economy, Publisher House. Junimea, Iași

[www.insse.ro](http://www.insse.ro)