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# COMPENSATORY PAYMENTS GRANTED BY MEASURE 11 -ORGANIC AGRICULTURE IN VÂLCEA COUNTY (2015-2020)

## Gheorghe MATEI<sup>1</sup>, Dragoș Ionuț POPESCU<sup>2</sup>, Radu Lucian PÂNZARU<sup>1</sup>, Mirela PARASCHIVU<sup>1</sup>, Valentin VLADUȚ<sup>3</sup>, Lorena Diana POPA<sup>4</sup>

<sup>1</sup>University of Craiova, Faculty of Agronomy, 19 Liberty Street, 200421, Craiova, Romania, Phone: +40 741 180 976, Fax: + 40 251 418 475, Emails: matei.gheorghe@gmail.com, rlp1967craiova@gmail.com; paraschivumirela@yahoo.com;

<sup>2</sup>Payments and Intervention Agency for Agriculture Vâlcea County Center (APIA), Romania, Email: popescu.dragos@apia.org.ro;

<sup>3</sup>The National Institute of Research – Development for Machines and Installations Designed for Agriculture and Food Industry – INMA Bucharest, 6 Ion Ionescu de la Brad Blv., 013811, Bucharest, Romania, Emial: valentin\_vladut@yahoo.com;

<sup>4</sup>Research Development Agricultural Station Secuieni, 377 Principal Street, Secuieni, Neamț County, Romania, Email: dy.hemp420@gmail.com;

*Corresponding author*: rlp1967craiova@gmail.com; paraschivumirela@yahoo.com;

### Abstract

In this paper we intend to provide an updated situation on the land used in organic agriculture system and registered in the database of the Agency for Payments and Intervention for Agriculture - Vâlcea County Center, during the campaigns for submitting single payment applications, related PNDR framework 2014-2020. The amounts granted as financial support for the implementation of Measure 11 - organic agriculture are also highlighted in terms of value. Compared to the areas that benefited from support through Measure 11, it was observed an increase during the studied period from 10.56 ha in 2015 to 6,054.98 ha in 2020, areas that include several categories of land uses: arable land, permanent crops and permanent pastures. As for the number of farmers who have accessed this form of support, it has increased from 3 in 2015 to 37 at the end of 2020. The average value of payments - expressed in euro - at the farmer level registered an increasing trend, starting from 2,138.21 euros in 2015 and reaching a maximum of 16,625.58 euros in 2020, with a total of payments of 615,146.67 euros related to this measure in Vâlcea County, in the year 2020.

Key words: organic agriculture, arable land, permanent crops, compensatory payments amount

### **INTRODUCTION**

Through the National Rural Development Program (NRDP) 2014-2020, a specific measure of organic farming was implemented, financed by the European Agricultural Fund for Rural Development (FADR), respectively: Measure 11 - organic agriculture. The measure is one of the main used tools for minimizing water pollution in sustainable land management systems which aimed the fertilizer management, crop protection management, water management and land erosion protection management [6]. The practice of organic farming brings many benefits to the rural environment at EU level, elements highlighted in numerous studies on: the integration of economic aspects with those

of environmental protection [1, 7]; the production and promotion of authentically traditional foods both in terms of taste and nutritional quality of ingredients [4, 10] thus leading to a projected growth in the EU's Common Agricultural Policy for the organic food market [5].

Farmers, as owners of agricultural land used for organic farming, benefit from compensatory payments, following the conclusion of voluntary annual/multiannual commitments aimed at compensating: additional costs and loss of income generated bv the implementation of extensive management measures on agricultural land, designed for achieving environmental objectives (biodiversity conservation, water and soil protection); additional costs and loss

of income resulting from the application of organic farming practices; the additional costs and loss of income that farmers suffer due to natural and specific constraints in areas with an impact on agricultural production [9].

The current context of support policies defined at the level of the European Union is extremely favorable for the development of organic agriculture in Romania as well.

Accessing programs through which payments are granted to certified organic farmers or which are in the conversion period had registered an increasing trend in last years in all regions of the country [3], including Vâlcea County. The use of agricultural land, starting from the categories of use [11], is achieved through field crops, vegetables and fodder plants - arable land, vineyards and orchards (including nurseries) - permanent crops, natural pastures and hayfields - natural meadows.

Vâlcea County, located in the South-West of Oltenia Development Region, has an agricultural area of 242,856 ha, of which arable land of 86,857 ha, vineyards and vineyards nurseries of 3,622 ha, orchards and orchards nurseries of 12,952 ha, natural pastures of 106,894 ha and natural grasslands of 32,531 ha [12].

# **MATERIALS AND METHODS**

The work involved an adequate documentation, by completing the field phase - travel to APIA Vâlcea headquarters, consulting the database [2] and procuring the related data, but also by going through the office phase - processing the data extracted from the records of the institution mentioned above. In order to achieve the goals of paper, based on the discussions with the specialized staff, we collect a series of information related to: land areas (by categories of use) that benefited from support through Measure 11 -Organic farming; the number of farmers who benefited from these measures; the amount of financial support (euro). For the inclusion in the time horizon of PNDR 2014-2020, the situation specific to the interval 2015-2020 was analyzed. Thus, in addition to the specific annual indicators (land areas, number of 408

farmers and the level of compensatory payments), we also added a synthetic indicator - the average value of payments per farmer. Related to the terminology used, it should highlight that this is specific to the institution where the documentation was carried out. It should be noted that, in order to determine the amount of the payments at the farmer's level, we started from the land areas, their use and the specific financial values of the packages associated with sub-measures 11.1. - areas under conversion and 11.2. ecologically certified areas [8], for which the land has been framed. Comparison was used as a method of analysis.

## **RESULTS AND DISCUSSIONS**

Table 1 present the areas of arable land who received compensatory payments.

Related the arable land areas that received support, except for the first year of the studied time interval 2015 (0.22 ha) and the year of 2017 (66.73 ha) when the surface was below 100 ha, there are areas of 129.95 ha in 2018, 298.84 ha in 2016, 324.33 ha for 2019 and respectively 1,156.38 ha for 2020.

In the same interval there is a marked diversification of the crops for which a compensatory amount has been granted. Thus, starting in 2015 with maize and counting in 2016 with winter wheat, maize, sunflower, medicinal and aromatic plants, alfalfa and other fodder plants. In 2017 there are new crops as fresh annual vegetables, but corn, sunflower and alfalfa have disappeared. The crops variety is more present in the following years and continues with maintenance of the nomenclature of crops in 2018 compared to 2017 and the transition to autumn oats, peas, in solariums, tomatoes medicinal and aromatic plants, alfalfa, trefoil, other fodder plants and perennial leguminous mixtures with perennial grasses used as fodder in 2019. In 2020 we observe that the biggest areas were occupied by alfalfa and trefoil which represent the majority areas from the total of 1,156.38 ha. Also, sorghum and common sainfoin appear, but peas and solarium tomatoes disappear during this year as crops who received financial support.

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Table 1. Arable land (ha)\*

OPCIEICATION	Year							
SPECIFICATION	2015	2016	2017	2018	2019	2020		
Winter wheat	-	48.9	0.44	0.44	-	-		
Oat	-	-	-	-	54.7	13.5		
Maize	0.22	40.5	-	-	-	-		
Sorghum	-	-	-	-	-	2.85		
Pea	-	-	-	-	15.2	-		
Sunflower	-	198	-	-	-	-		
Fresh vegetables	-	-	2.09	2.09	-	-		
Solarium tomatoes	-	-	-	-	0.12	-		
Medicinal and aromatic plants	-	7.07	10.5	7.42	7.42	7.42		
Alfalfa	-	2.4	-	-	24.9	472		
Trefoil	-	-	-	-	23.9	79.5		
Common sainfoin	-	-	-	-	-	1.05		
Other forage crops	-	1.97	53.7	120	194	576		
Perennial leguminous mixtures with perennial grasses used as fodder	-	-	-	-	4.09	4.06		
Total	0.22	298.84	66.73	129.95	324.33	1,156.38		

Source: \*alphanumerical data from Agency for Payments and Intervention for Agriculture - Vâlcea County Center.

Table 2 lists the areas for permanent crops. For 2015, there are areas with apples and quinces for which financial support was obtained (9.3 and respectively 0.67 ha). In 2016, in addition to these two species (with identical areas as in the previous year) there are also plum tree and other fruiting shrubs (0.93 and respectively 9.57 ha).

Table 2. Permanent crops (ha)\*

SDECIEICATION	Year						
SPECIFICATION	2015	2016	2017	2018	2019	2020	
Young orchards that do not bear fruit	-	-	-	3.89	4.13	7.18	
Apple tree	9.30	9.30	9.30	9.93	9.63	9.63	
Plum tree	-	0.93	8.98	60.61	60.13	61.64	
Quince tree	0.67	0.67	0.67	0.67	0.67	0.67	
Walnuts and hazelnuts	-	-	-	8.41	23.75	23.75	
Other fruit trees	-	-	1.31	1.92	1.92	2.61	
Blueberry	-	-	-	0.1	0.1	0.1	
Other fruiting shrubs	-	9.57	9.38	9.38	9.38	21.54	
Vineyards for wine	-	-	8.68	8.33	8.23	8.23	
Vineyards financed thru the reconversion program	-	-	12.4	12.38	12.38	12.38	
Total	9.97	20.47	50.72	115.62	130.32	147.73	

Source: \* alphanumerical data from Agency for Payments and Intervention for Agriculture - Vâlcea County Center.

In 2017 there is a more pronounced diversification of the species for which the compensatory payment was obtained (apple - 9.30 ha, plum - 8.98 ha, quince - 0.67 ha, other fruit trees - 1.31 ha, other fruit bushes 9.38 ha, vineyards producing grapes for wine - 8.68 ha and vineyards in reconversion program - 12.4 ha). For the years of 2018, 2019 and 2020, payments were granted (in addition to those specified in 2017) for the young orchards do not bear fruits, nuts and hazelnuts, respectively blueberry. Thus, we are discussing of areas between 0.1 ha and 60.61 ha for currants and plums in 2018; 0.1 ha and 60.13 ha for the same species in 2019;

0.1 ha and 61.64 ha for blueberry and plums in 2020.

It is noteworthy that the vineyards had shares between 13.95% and 17.91% for the years 2020 and respectively 2018. The total area increases of 2.05 times in 2016 compared to 2015 (20.47 and respectively 9.97 ha), of 2.48 times in 2017 (50.72 ha) compared to the previous year, of 2.28 times in 2018 (115.62 ha) compared to 2017, and of 1.13 times for years 2019 and 2020 (130.32 and 147.73 ha) compared to previous years.

The area of permanent meadows included in Measure 11 is presented in Table 3. At county level, the permanent meadows had subsidized

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areas of 0.37 ha in 2015, 0.84 ha for 2016 (of 2.27 times - in dynamics), 10.88 ha in the case of 2017 year (of 12.95 times), after which for the period 2018-2020 there are marked

significant increases of the areas at 816.49 ha (of 75.04 times), 1,065.26 ha (of 1.30 times) and respectively 4,750.87 ha (of 4.46 times).

Table 3. Permanent meadows and pastures (ha)\*

SPECIFICATION	Year						
SPECIFICATION	2015	2016	2017	2018	2019	2020	
Permanent communal meadows used individually - exploited by grazing	-	-	-	505	1,331	1,429	
Permanent meadows commonly used - mixed exploitation	-	-	-	207	-	-	
Permanent meadows used individually - mixed exploited	0.37	0.84	10.5	103	112.8	271.8	
Pastures used individually - exploited by grazing	-	-	-	-	2,615	3,046	
Meadows used individually - exploited by mowing	-	-	0.38	1.49	6.09	4.07	
Traditional orchard exploited extensively thru grazing	-	-	-	-	0.37	-	
Total	0.37	0.84	10.88	816.49	1,065.26	4,750.87	

Source: \* alphanumerical data from Agency for Payments and Intervention for Agriculture - Vâlcea County Center

This situation is generated, in particular, by the access to payment of the areas related to the communal permanent meadows used individually, exploited by grazing and to the pastures used individually and also exploited by grazing.

It is noted that in the first two years of the specified interval they had access to payment only permanent meadows used individually - mixed exploitation.

In 2017, the meadows used individually exploited by mowing, are also included in the financing program. For the year of 2018 are also accepted areas of permanent communal meadows used individually and commonly.

In the case of 2019 there are not included for payment program the permanent meadows shared use - mixed exploited, but there is the traditional orchard exploited extensively thru grazing, while at the level of 2020 year we found that did not include for payment the areas related to permanent shared use - mixed exploited, respectively the traditional orchard exploited extensively thru grazing.

If we take into account the information presented above (Tables 1, 2 and 3), we find a total county area, which benefited from support through Measure 11 according to Figure 1.



Fig. 1. Total area that received payments (ha) Source: Own calculation.

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The evolution of the surfaces was fluctuating. There was an increase of 30.32 times in 2016 compared to 2015 (320.15 ha and respectively 10.56 ha); a decrease of 59.92% in the case of 2017 (128.33 ha) compared to 2016, then there is a spectacular increase in 2018 year compared to the previous term of the dynamic series (of 8.27 times - area of 1,062.06 ha), a trend that moderates in 2019 year (1,519.91 ha - overtaking 1.43 times related 2018 year), but which is accentuated again for 2020 (6,054.98 ha - exceeding of 3.98 times in the situation of previous year).

If we refer to the farmers who received support, there is an increase in their number during the analyzed period (Figure 2).

The increases were more pronounced in 2016 and 2019 (the number of farmers doubled compared to previous years) and less pronounced in 2017 (+ 42.87% compared to 2016), 2018 (+ 30% compared to the previous year) and 2020 (+ 48% compared to 2019).

Table 4 list the level of payments distributed in Vâlcea County, for the interval 2015-2020.

The total value of the support increased, from one year to another, as follows: of 2.30 times in 2016 (14,731.91 euro) compared to 2015 (6,414.63 euro); of 2.92 times in 2017 (43,078.74 euro) compared to 2016; of 2.32 times in 2018 (100,088.70 euro) compared to 2017; of 2.20 times for 2019 (220,150.56 euro) compared to 2018 and of 2.79 times at the level of 2020 (615,146.67 euro) compared to the specific situation of 2019.

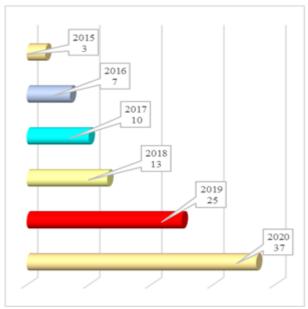


Fig. 2. Number of farmers who received support Source: alphanumerical data APIA Vâlcea [2].

SPECIFICATION	Year								
SPECIFICATION	2015	2016	2017	2018	2019	2020			
Total/year*	6,414.63	14,731.91	43,078.74	100,088.70	220,150.56	615,146.67			
Average amount/farmer**	2,138.21	2,104.56	4,307.87	7,699.13	8,806.02	16,625.58			

 Table 4. Value of compensatory amount (euro)

Source: \* alphanumerical data from Agency for Payments and Intervention for Agriculture - Vâlcea County Center [2]; \*\*own calculation.

The level of average amount/farmer (as a synthetic indicator) varied from 2,104.56 euro in 2016 to 16,625.58 euro in 2020.

The trend of evolution of the average value on the farm decreases in 2016 compared to 2015 by 1.58%, after which there is an ascending trend more or less accentuated from year to year (of 2.05 times in 2017, of 1.79 times in 2018, of 1.14 times in 2019 and of 1.89 times in 2020).

### CONCLUSIONS

Under the NRDP, Measure 11 supports the necessity to maintain biodiversity, protection

and rational use of natural resources, especially the quality of water resources. The main objectives of the measure, namely to promote the biodiversity of agricultural land, to reduce the environmental impact of agricultural production and to promote the production of healthy food, are an essential step for positive change at national and regional level to promote a healthy diet. The most important aspect resulting from the data presented is the fact that organic farming in Vâlcea County has a positive dynamic evolution, largely due to the compensatory payments granted by the measures carried out by NRDP program. The practice of organic farming is a chance for the rural environment, contributing to sustainable development by increasing employment, avoiding the depopulation of the rural areas.

It is clear that the local specificity defines the mode of action of farmers. For farmers in Vâlcea County, the implementation of Measure 11 can be the basis for the development of family farms, with main activity in animal husbandry, large areas of permanent grassland and meadows, included in the system of organic farming, allowing the development of real organic farms, combining local practical knowledge with the opportunity offered by European funds.

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