

FINANCING OF ORGANIC AGRICULTURE IN THE NORTH-EAST DEVELOPMENT REGION OF ROMANIA. A TERRITORIAL PROFILE ANALYSIS

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Abstract

The North-East Development Region of Romania has a relatively longstanding history of practising organic agriculture. This paper introduces the way adopted by the farmers from this region, either they are certified or under conversion, for accessing the financing packages for organic agriculture within Measure 11 of National Programme of Rural Development (NPRD)2014-2020, in 2019. If we run a territorial profile analysis, there were requests for granting the compensatory aid for 81.17% of the organic agricultural area (certified or under conversion) in all six counties of the North-East Region. There are territorial differences within the region partly due to each county’s particularity along with the durable experience gathered in practising this type of agriculture. The analysis relies on the official data released by the Ministry of Agriculture and Rural Development (MARD) about the state of the areas utilized in organic system and, also by the Agency for Payments and Intervention for Agriculture (APIA) about accessing Measure 11 – Organic Agriculture in 2019.

Key words: organic agriculture, measure 11, organic agriculture, rural financing, NPRD 2014-2020, North-East development region

INTRODUCTION

The organic agriculture is a key sector of the European strategies. New Green Deal and Farm to Fork have established a series of targets for the EU states, geared toward the development of the organic farming system. Accordingly, the areas cultivated in compliance with the rules and principles of organic agriculture must reach a percentage of 30% of the total farmland by 2030 [5].

In Romania, although it has been practised since time immemorial, the organic agriculture was officialy enacted and acknowledged in 2000 [7]. The areas cultivated in organic system, despite recording an increase in the later years, hold a small fraction of the country’s total agricultural area, approximately 2.73%, which is far from the EU intended target. The North-East Development Region of Romania (RDNE) is an area where the organic farming has been well-represented since the early days of this agricultural practice in the country. In 2013, the farmers from the region were working

nearly 20% of the total organic areas (certified) from Romania [4].

It is common knowledge that practising an organic agriculture brings vital contributions to the water, soil, air pollution, and provides safer working conditions for farmers, not to mention a superior comfort level for animals too [10]. However, at the same time, adopting an organic farming system can generate a series of income losses, namely crop losses, high operating costs and additional expenses for certification.

Romania’s status of EU member-state secures similar rights with other European farmers for the Romanian farmers. Among these, a key role is played by the funds for agriculture and rural development, while a significant element of these funds is represented by financial allocations for compensatory aids addressing organic farmers, allocations laid down in the specific measures within the National Programme of Rural Development (PNDR) 2014-2020.

To financially compensate the negative side effects of the agricultural practices of organic farming, EU, through the policies supported

from European funding for agriculture and rural development, provides the possibility of granting compensatory payments for the farmers engaged in an environmentally friendly type of agriculture. According to the Rules of Rural Development no. 1305/2013, minimum 30% of the allocation of the European Agricultural Fund for Rural Development (EAFRD) is directed to the measures contributing to the achievement of climate change and environmental objectives. The Romanian governance, through Measure 11 – Organic Agriculture within NPRD 2014-2020, makes specific compensatory payments on two directions: support for conversion to the methods and practices of organic agriculture (sub-measure 11.1) and support for maintenance of the organic farming practices (sub-measure 11.2). These compensatory payments for the farmers involved in organic farming and who have signed agreements with APIA (Agency for Payments and Intervention for Agriculture) are directed to compensating the extra costs and income losses resulted from applying the particular practices of the organic farming. Additionally, these payments are set as fixed amounts on hectare, paid annually and vary depending on the stage of certification and crop category (Table 1).

Table 1. The value of compensatory payments within Measure 11 – Organic Agriculture, 2019

Measure 11 – Organic Agriculture	Value of the compensatory payment (Euro/ha/an)	
	Sub-measure 11.1	Sub-measure 11.2
Package 1 – agricultural crops on arable land (including fodder plants)	293	218
Package 2 – vegetables	500	431
Package 3 – orchards	620	442
Package 4 – vineyards	530	479
Package 5 – medicinal and aromatic herbs	365	350
Package 6 – permanent pastures	-	-
6.1 (applicable at national level on areas without engagement M.10)	143	129
6.2 (applicable in eligible areas along with engagement M.10)	39	73

Source: [2].

The recipients of these payments are active farmers who are registered in the organic agricultural system with certified or under conversion farming areas. The granting of compensatory payments depends on assuming

voluntary engagements; for instance, in the case of sub-measure 11.1, maintaining the organic practices for annual crops for a 2-year period and for perennial crops for a 3-year period, while in the case of sub-measure 11.2 maintaining these certified practices for 1 5-year period. The Measure 11 – Organic Agriculture has been implemented through APIA in Romania.

MATERIALS AND METHODS

The main objective of this research relies on analyzing the way in which Measure 11 – Organic Agriculture was accessed in the North-East Development Region of Romania, in 2019.

The study has been conducted within the North-East Development Region of Romania, on each county, and it has employed the data released by the Ministry of Agriculture and Rural Development (MARD) in 2019 regarding the certified areas in organic system, as well as the data taken from the Agency for Payments and Intervention for Agriculture (APIA) on the situation of the requests for compensatory payments within Measure 11 of NPRD 2014-2020. Further, data coming from the National Institute of Statistics, literature review and ministry structures have been employed for completing the analysis in this paper.

Additionally, an analysis on the compliance with specific packages of measure 11 has been run for each county, and the requested sums of money (registered in 2019 as compensatory payments) have been calculated as well. The graphic representation has been made by using QGIS 3.16.0 "Hannover" [9].

RESULTS AND DISCUSSIONS

The North-East Development Region broadly covers the historical provinces of Moldova and Bukovina, and has a total area of 3685 ha, which represents 15.5% of the country's total area and makes it the largest region in terms of terrain expanse in Romania. It borders Ukraine in the North, Moldavia, on Prut river, in the East, the South-East Development Region of Romania in the South, and the

Central and North-West Development Regions of Romania in the West.

The landscape features a wide range of forms, such as mountains, hills, depressions, valleys, fields, streams, lakes, and meadows, and it has a scale-arrangement, ranking from the highest forms in the West (Călimani and Ceahlău are the high-profile massifs) to the lowest land configurations in the East. The region climate is continental temperate, strongly shaped by each zone's landforms and Eastern influences, namely frequent draught periods in summer and snow blizzards in winter. The annual medium temperature rises from the West to the East, in inverse proportion with the rainfall which is decreasing to the East. The hydrographic network is abundant in streams, among which Prut, Siret, Moldova, Bistrița, Suceava, Jijia, Bârlad and Trotuș are the most important rivers, flowing from North to the South. Flora and fauna is also rich and diverse, displaying exquisite natural parks (Ceahlău, Cheile Bicazului – Hășmaș, Rodna, and Călimani) and boasting an impressive forest coverage (including forest areas) of 33.4% of the total regional area [3].

The national land fund of the North-East Development Region of Romania, according to the latest data made available in 2014, is

represented by 57.66% agricultural area, and 42.24% non-agricultural land. At county level, in 2014, the land fund ranges between 498.6 thousand ha (Botoșani) and 855.4 thousand ha (Suceava) per total area, having the following uses: agricultural land – 281.6 thousand ha (Neamț) and 401.0 thousand ha (Vaslui); arable land – 168.9 thousand ha (Neamț) and 298.8 thousand ha (Botoșani); pastures – 68,8 thousand ha (Neamț) and 90.5 thousand ha (Suceava); meadows – 7.9 thousand ha (Vaslui) and 74.2 thousand ha (Suceava); vineyards and vine nurseries – zero thousand ha (Suceava) and 11.7 thousand ha (Iași); orchards and fruit tree nurseries – 1.8 thousand ha (Neamț) and 6.8 thousand ha (Iași); non-agricultural land – 105.8 thousand ha (Botoșani) and 507.7 thousand ha (Suceava); forests and other forest vegetation – 58.3 thousand ha (Botoșani) and 453.7 thousand ha (Suceava); land covered by water, ponds – 8.3 thousand ha (Vaslui) and 15,0 thousand ha (Bacău); developed land covered with buildings and railroads – 7.9 thousand ha (Neamț) and 10.6 thousand ha (Vaslui); degraded and unproductive land – 13.5 thousand ha (Bacău) and 26 thousand ha (Iași) (Table 2).

Table 2. The structure of the land fund in the North-East Development Region

Indicator	RDNE	County (ha)					
		Bacău	Botoșani	Iași	Neamț	Suceava	Vaslui
Total	3,684,983	662,052	498,569	547,558	589,614	855,350	531,840
Agricultural area	2,124,775	320,756	392,761	381,256	281,649	347,632	400,721
Arable land	1,381,790	186,332	298,741	256,098	168,906	179,954	291,759
Pastures	491,639	86,323	75,146	84,231	68,145	90,512	87,282
Meadows	200,983	39,503	14,635	22,465	42,283	74,179	7,918
Vineyards and vine nurseries	31,238	5,930	1,680	11,679	548	0	11,401
Orchards and fruit tree nurseries	19,125	2,668	2,559	6,783	1,767	2,987	2,361
Non-agricultural land, total	1,560,208	341,296	105,808	166,302	307,965	507,718	131,119
Forests and other forest vegetation	1,231,943	280,918	58,370	97,890	260,950	453,661	80,154
Land covered by waters, ponds	72,964	14,955	13,797	13,106	10,623	12,232	8,251
Developed land covered with buildings	102,444	21,719	11,632	19,022	15,224	19,405	15,442
Ways of communication and railways	55,811	10,244	8,396	10,285	7,912	8,293	10,681
Degraded and unproductive land	97,046	13,460	13,613	25,999	13,256	14,127	16,591

Source: data processed based on [8].

In 2019, in the North-East Development Region of Romania, 35,837.47 ha were administered (Table 3) in accordance with the rules and principles of organic agriculture, which translates into 1.68% of the agricultural area reported in the region in 2014 [8], and

9.06% of the total organic agricultural area from Romania in 2019.

In Iași county, the significant percentage of areas used in organic system stands out: 41.19% of the total certified area in the region, followed by Botoșani (22.47%) and Suceava (20.77%). Regarding the

implementation stage of the organic practices in all six counties of the region, it has been noticed an increased interest in this agricultural system for the past 2 years, especially in the case of the farmers from Iași and Botoșani, which has been also outlined by the areas registered in the first and second year of conversion.

Table 3. Structure of the areas registered in the organic agriculture of the North-East Development Region of Romania in 2019 (ha)

County	Total area in organic system	Area under conversion			Organically certified area
		1 st Year	2 nd Year	3 rd Year	
Bacău	1,933.75	774.94	376.84	1.60	780.37
Botoșani	8,055.32	2,482.53	1,372.50	54.18	4,146.11
Iași	14,764.88	2,201.28	1,509.64	11.83	11,042.13
Neamț	1,663.62	274.36	612.70	22.95	753.61
Suceava	7,444.40	780.21	872.19	25.54	5,766.46
Vaslui	1,977.49	543.89	399.92	7.30	1,026.38
RDNE	35,839.46	7,057.21	5143.79	123.40	23,515.06

Source: own calculus based on data supplied by MARD, 2020 [6].

In 2019, the farmers registered in the organic agriculture from the North-East Development

Region of Romania have applied for compensatory payments associated with Measure 11, for a total area of 29,092.96 ha (Table 4), which represents 81.17% of the total organic area in the region and 1.37% of the agricultural area. The areas concerned vary depending on package and county. Thus, according to the data held in table 4, it can be seen that 60.8% of the areas for which were submitted requests for aid are organically certified (17,697.55 ha), and the rest of 39.2% are under conversion (11,395.41 ha). This feature highlights that organic farming, in these parts of the country, is a state of consolidation. If we run a territorial profile analysis, there are major differences between counties concerning the percentage of the certified areas in terms of areas under conversion.

Accordingly, in the counties of Iași and Suceava, there are certified areas covering 72.7%, and 71.6% of the total areas for which were submitted request for aid, while, by contrast, there are the counties of Bacău (23.7%) and Vaslui (34.5%).

Table 4. Structure of the areas for which were submitted applications for compensatory payments in the North-East Development Region of Romania, in 2019 (ha)

Package	RDNE	Bacău	Botoșani	Iași	Neamț	Suceava	Vaslui
11.1.1	7,192.01	775.34	3,021.68	1,869.60	382.68	206.06	936.65
11.1.2	124.13	5.87	75.77	39.37	0.40	0.30	2.42
11.1.3	512.02	45.87	103.98	73.57	154.61	61.34	72.65
11.1.4	8.92	0.39	0.20	6.18	0.31	0	1.84
11.1.5	64.35	8.93	18.45	5.70	1.64	2.33	27.30
11.1.6.1	2,557.74	38.66	878.86	548.54	314.89	283.35	493.44
11.1.6.2	936.24	132.27	0	0	33.69	770.28	0
11.2.1	14,512.87	222.81	4,438.82	6,235.55	1,466.62	1,462.10	686.97
11.2.2	34.77	6.00	1.64	17.93	4.28	0.40	4.52
11.2.3	542.88	30.32	217.3	131.03	60.08	74.57	29.58
11.2.4	72.66	0	0	7.34	0.11	0	65.21
11.2.5	14.57	0	0	0	3.37	0	11.20
11.2.6.1	963.32	52.34	19.51	334.07	147.34	397.85	12.21
11.2.6.2	1,556.48	0.56	0	35.21	117.19	1,403.52	0
TOTAL	29,092.96	1,319.36	8,776.21	9,304.09	2,687.21	4,662.10	2,343.99

Source: own calculus based on data supplied by APIA, 2020 [1].

Concerning the requested amounts as compensatory payments associated with Measure 11 – Organic Agriculture, in the North-East Development Region in 2019, they reach the amount of 6,613,081 Euros in compliance with the packages on organic areas and specific value on area unit for each package (Table 5). The territorial profile analysis shows there are two counties in the region, namely Iași and Botoșani, where the

sum requested exceeds the amount of 2,000,000 Euros, and three counties, namely Neamț, Suceava and Vaslui, where the amount is slightly 600,000 Euros. In the remaining county, specifically Bacău, the requested amount of money as compensatory payments is nearly 340,000 Euros. As percentages, 56% of the requested amount of money in the region is associated with the sub-measure 11.2 – aid for maintaining the

organic farming practices, while 44% is related to sub-measure 11.1 – aid for conversion to organic farming methods.

Table 5. Distribution of requested amounts as compensatory payments in the North-East Development Region of Romania, in 2019 (Euro)

Package	RDNE	Bacău	Botoșani	Iași	Neamț	Suceava	Vaslui
11.1.1	2,107,259	227,175	885,352	547,793	112,125	60,376	274,438
11.1.2	62,065	2,935	37,885	19,685	200	150	1,210
11.1.3	317,452	28,439	64,468	45,613	95,858	38,031	45,043
11.1.4	4,728	207	106	3,275	164	0	975
11.1.5	23,488	3,259	6,734	2,081	599	850	9,965
11.1.6.1	365,757	5,528	125,677	78,441	45,029	40,519	70,562
11.1.6.2	36,513	5,159	0	0	1,314	30,041	0
11.2.1	3,163,806	48,573	967,663	1,359,350	319,723	318,738	149,759
11.2.2	14,986	2,586	707	7,728	1,845	172	1,948
11.2.3	239,953	13,401	96,047	57,915	26,555	32,960	13,074
11.2.4	34,804	0	0	3,516	53	0	31,236
11.2.5	5,100	0	0	0	1,180	0	3,920
11.2.6.1	124,268	6,752	2,517	43,095	19,007	51,323	1,575
11.2.6.2	113,623	41	0	2,570	8,555	102,457	0
TOTAL	6,613,081	344,055	2,187,155	2,171,063	632,207	675,617	603,706

Source: own calculus based on data supplied by APIA, 2020 [1] and [2].

A territorial profile analysis for 2019, in view of the sums requested as compensatory aid by the farmers (from RDNE) registered in the organic farming system and eligible in compliance with the specific requests of Measure 11 within PNDR 2014 – 2020, reveals the agricultural particularity of each county in accordance with the temporal experience of practising organic farming (Figure 1).

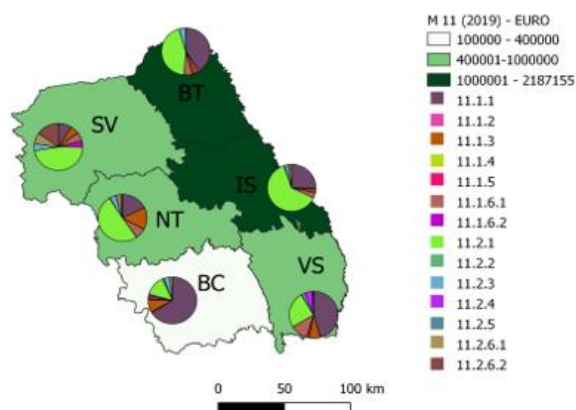


Fig. 1. Distribution of requested sums as compensatory payments for agricultural practices in the North-East Development Region of Romania, in 2019
 Source: [10].

The counties that have attracted the highest amounts through this measure, namely Iași and Botoșani, are ascertained by significant percentages of the crops grown on arable lands. In 2019, in Iași county, 88% of the sums requested were for the areas from

packages 11.1.1 (25%) and 11.2.1 (63%), agricultural crops grown on certified arable or under conversion lands which make an important feature of the county's organic agriculture. The farmers from Botoșani county managed to develop the organic farming system at a sustained pace, and, accordingly, in 2019, 44% of the sums requested as compensatory payments are associated with crops grown on arable, under conversion lands.

When analysing the compliance of the sums of money requested on specific packages, in Suceava county, which has a long-standing of organic farming, we can notice that 75% of the sums are requested for certified areas, out of which 23% for areas included in the packages 11.2.6.1 and 11.2.6.2 (permanent pastures), and 47% in the package 11.2.1. Further, the aids requested for areas covered by crops on arable lands (fodder plants too) and under conversion, represents merely 9% of the total amount of aids requested by farmers in this county.

Neamț and Vaslui county, despite being counties of a different agricultural specificity, are on the same level in terms of amount of the sums requested through measure 11-organic agriculture in 2019. The differences emerge in the context of compliance with eligible crops on various specific packages. Thus, Neamț county, the main percentage of the sums requested (51%) represents the input

of the crops grown on certified arable land (package 1.1.2.), while in Vaslui county, the main percentage (45%) corresponds to the crops grown on arable, under conversion lands (package 11.1.1).

In Bacău county, the amount claimed as compensatory payments for organic practices mainly (66%) fits package 11.1.1, namely crops grown on arable, under conversion lands. Bacău county occupies the last position among the counties of the region.

CONCLUSIONS

In the North-East Development Region of Romania, the organic farming covers merely 1.68% of the agricultural lands, which is a very low percentage by comparison with the targets set by EU about the development of this agricultural sector by the end of 2030. The financial aid granted as compensatory payments through Measure 11 – Organic Agriculture is a stimulus for the development of this sector in the region. In 2019, the organically certified farmers have applied for compensatory payments associated with a significant percentage (81.17%) of the areas operated in organic system in the region, and the amount claimed exceeded 6 million Euros. The high level of financial support granted for each package within Measure 11 has presented an appealing feature for farmers, especially in the case of perennial crops of high-economic value (orchards, vineyards). The continuity of financial aids for the organic agricultural sector through compensatory measures, along with introducing new stimulative measures for developing the zootechnical sector, organic product processing and valorification, can create hallmarks for increasing the organically certified areas in the North-East Development Region of Romania.

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