

CONTRIBUTION OF THE EUROPEAN GRANTS TO DEVELOPMENT OF AN AGRICULTURAL UNIT

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Abstract

The study aims to highlight the positive influence of the European grant instruments developed in Romania. Our country is currently benefiting of the third European Union financial grant for the 2014-2020 period, and the second since its accession to the European Union in 2007. This current one occurs after the successful implementation of the pre-accession SAPARD program between 2000 and 2006 and the first post-accession EAFRD framework during 2007-2013. The paper follows the course of an agricultural unit in Iasi County which has carried out, since 2012, a number of four investments with the support of the grant projects, the fourth being currently in the final implementation phase. The non-refundable amount of the four investment projects provided by the European Fund for Agriculture and Rural Development is 2,245,396.45 lei, equivalent to 501,775.78 Euro. All the four projects aimed at modernization of the vegetable production farm by purchasing of new and state-of-the art agricultural machinery and equipment. The authors have proposed to elaborate a case study materialized in this paper as a continuation of the previous research of this unit. Initial research tracked the evolution of the unit from the first investment to the end of the third implementation. The implementation of the fourth financing project required further research into the subsequent evolution of the agricultural operator. The unit under study is an example of good practice on terms of attracting the European grants available for farmers and their contribution to the development of the agricultural sector and the rural area in general at the level of the Member States or candidate countries.

Key words: European grants, agricultural machinery, financial competitiveness

The following study follows the evolution of an agricultural producer from the crop sector based in Iași County and the positive influence the European grants had over the development of its economic and financial indicators. The target unit is only one of the thousands of economic units operating in the agricultural or non-agricultural sector in rural areas and benefiting, since 2000, from European non-reimbursable funding.

The Common Agricultural Policy is the agricultural policy of the European Union which purpose is on the one hand the sustainable growth of agricultural productivity in order to ensure food security for Union citizens and on the other hand to ensure a reasonable standard of living for agricultural producers and rural residents.

Through the Common Agricultural Policy, Romania benefits from two types of financial support: direct payments granted under the 1st Pillar and non-reimbursable financial aid granted on the basis of investments made by farmers, through the 2nd Pillar (NRDP 2014-2020).

Each of the two pillars provides support through two different European funds. Thus, direct payments through Pillar I have as their source EAGF (European Agricultural Guarantee Fund), while Pillar II payments have as source EAFRD (European Agricultural Fund for Rural Development). The latter, whose tools have benefited the unit analyzed in the present paper, is carried out in Romania through the National Rural Development Program (NRDP 2014 – 2020).

Starting from the initiative of the European Council on support for rural development through the European Agricultural Fund for Rural Development (EAFRD), the National Strategic Plan for Romania, which is the instrument for the implementation of the National Rural Development Program for the period 2007 - 2013, was developed. Finally, NRDP is the instrument for accessing the European Agricultural Fund for Rural Development (EAFRD) and has been developed for the 2007 - 2013 and 2014-2020 intervals (AFIR, 2018).

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The EAFRD is complementary to direct area payments to farmers, respectively natural and / or legal persons engaged in agricultural production. While the Agency for Payments and Intervention in Agriculture (APIA) manages these direct payments, the Agency for Rural Investment Financing (AFIR) manages European non-reimbursable funds for the modernisation of the agricultural sector (ROBU *et al.*, 2016).

MATERIAL AND METHOD

The necessary studies for the elaboration of the present paper were carried out during the years 2017 - 2018, using primary data as the main source of information. In this regard, a series of interviews took place at the headquarters of the agricultural unit under study, in the Andrieșeni commune, Iași County. The documents of the company on the evolution of the crop areas in the period 2010-2017, the financial accounting documents regarding the evolution of the economic indicators, the evolution of the technical capacity in terms of attracting the European funds through the three investments and others were analysed thoroughly.

On the other hand, data from secondary sources, respectively Romanian and foreign specialised literature, have been used, available and applicable at a national level.

Both the data obtained from the analysis of agricultural unit documents and those from the specific literature have been processed and interpreted in order to highlight the effect of attracting European grants by farmers in general and by this particular agricultural unit.

RESULTS AND DISCUSSIONS

The evolution of the economic operator has been in the attention of the authors for several years. Having an efficient management since its emergence, the unit has managed to extend the areas exploited in parallel with the range of crops. In this context, the technical capacity has become insufficient in relation to the demand and the first financing project, carried out in 2012, addressed this shortcoming.

After the completion of the first project and the gathering of experience with its implementation, the unit has also submitted and implemented two other projects targeting, similarly to the first project, the purchase of agricultural machinery and equipment for the exploitation of arable land. Through the three projects whose implementation has been successfully completed, a total of 10 machines and equipments have been purchased: a harvesting combine, three tractors, a self-propelled sprayer and various auxiliary agricultural machinery (*table 1*).

At the end of 2017, the studied company submitted its fourth funding project aimed at acquiring a powerful tractor and a mower, having the implementation process finalized in the fall of 2018.

The total value of the investments based on the four financing projects is of 3,905,479.66 lei and 872,752.38 Euro, respectively (considering the exchange rate average Euro / lei for the year before the signing of the financing contracts – 4,4749 lei for one euro); of this value, the beneficiary economic unit had a support for the first three projects of 40% as its own financial contribution, and in the case of the fourth project, 50% of its own financial contribution, the rest of the funds being provided by European non-reimbursable EAFRD funds; All four investments made by the company in these years have brought significant benefits. With a range of machines whose capacity has grown significantly, and with the latest market technology used to exploit arable land, the unit has begun a series of collaborations in seed production. As it is known, seed production is carried out by multinational companies through collaborations with various local farmers. The most important criterion is the precision of field work alongside their very strict span.

With the latest technology adopted through the implementation of funding projects, the unit started production of seed in 2013 and increased its allocated area annually (National Institute of Statistics).

Table 2 and *figure 1* show how the total area of land exploited by the unit under study increased each year, from 889.75 ha in 2012 to 1,097.18 ha in 2018. These areas were centralized according to surface declarations submitted by the unit to the Agency for Payments and Intervention in Agriculture in order for collecting direct area payments.

Also, as seen in *table 1*, the agricultural unit is a diverse range of crops in each agricultural year. As for the 'Other crops' category of *table 2*, it covers green peas, sugar beet, beans, chickpeas, vegetables and vineyard. The unit also cultivates crops for feed, namely alfalfa, sainfoin and other fodder plants. Fodder crops are used for own consumption, as the unit owns 50 cows of meat breed. Also, green peas, beans, vegetables, vineyards are partly used for the farm's own consumption.

The seed production crops are the most cost-effective and the entry to this market was possible by the unit only thanks to the 12 agricultural machinery and equipment it acquired through the four investments made with European non-reimbursable funds.

As it can be seen in *table 2*, the unit has entered this market in 2013, for corn and sunflower crops. Unlike classical crops, seed production for

multinational companies has several advantages for farmers.

Table 1

Centralization of purchased agricultural machines and the values of the four financing projects

Project	Implementation period	Project Title	Goods purchased	Total eligible project value
Project no. 1	February 2012 → September 2012	Purchase of agricultural equipments for the modernization of vegetable farm, commune Andrieșeni, Iași county	FENDT 828 VARIO SCR - 280 HP tractor	1,766,414.00 lei
			LEMKEN EUROPAL 9 – 6 mouldboards reversible plough	
			FENDT 6275 L MCS - 260 hp combine harvester, 9000 liter hopper	
			GERINGHOFF PCA 670 Maize harvester - 7 m working width	
			KNOCHE TERRA DRT 60 H-CK 500 - 6 m working width combinator	
			HORSCH PRONTO 4 DC Starr seed drills – 4 m working width	
Project no. 2	April 2013 → September 2013	Purchase of tractor for modernization of vegetable farm, commune Andrieșeni, Iași county	FENDT 313 VARIO SCR - 140 HP tractor	296,270.16 lei
Project no. 3	June 2015 → November 2015	Modernization of vegetable farm by acquisition of agricultural machinery in the commune Andrieșeni, Iași county	FENDT 313 VARIO SCR - 140 HP tractor	863,882.00 lei
			Valtra Valtra A93H - 93 hp	
			LEMKEN KORUND 8/600 combinator with 8 rows and 6 m working width	
Project no. 4	November 2017 → June 2018	Purchase of tractor for modernization of the vegetable farm by the economic operator, Andrieșeni commune, Iași county	FENDT 828 VARIO S4 Profi Plus - 287 hp tractor	978,913.51 lei
			FELLA RAMOS 320 disc mower, working width 3.00 m	
TOTAL				3.905.479,66 lei

Source: ROBU A.D. et al, 2016

Firstly, the farmer will not sell the seed obtained on the free market at the current market price. It will have the sales secured at a previously

set price when signing the contract, ensuring revenue predictability.

Table 2

The evolution of the areas and crops exploited by the studied agricultural unit

Crop / year	2012	2013	2014	2015	2016	2017	2018
Grain corn	352.22	352.22	155.31	213.18	80.98	191.16	97.00
Wheat	183.06	183.06	153.96	116.85	219.73	102.99	140.09
Soy	50.00	50	34.81	82.01	31.50	93.77	9.56
Barley	0	0	67.89	54.24	43.23	24.29	22.97
Barley	6.60	6.60	2.09	11.56	0	0	0
Sunflower	189.14	188.95	141.24	150.67	114.01	46.78	4.35
Fodder plants	0	1.51	17.3	126.55	151.47	96.17	2.97
Rapeseed	109.36	0	123.63	16.87	61.03	70.92	142.55
Other crops	0	0	0	0	0	201.05	290.47
Seed lots – corn	0	97.95	185.00	185.00	250.08	187.69	267.22
Seed lots – sunflower	0	102.00	17.18	45.76	51.50	82.01	120.00
TOTAL seed lots	0	199.95	202.18	230.76	301.58	269.70	387.22
TOTAL	889.75	982.29	933.41	1,002.69	1,003.53	1,096.83	1,097.18

Source: APIA, 2018

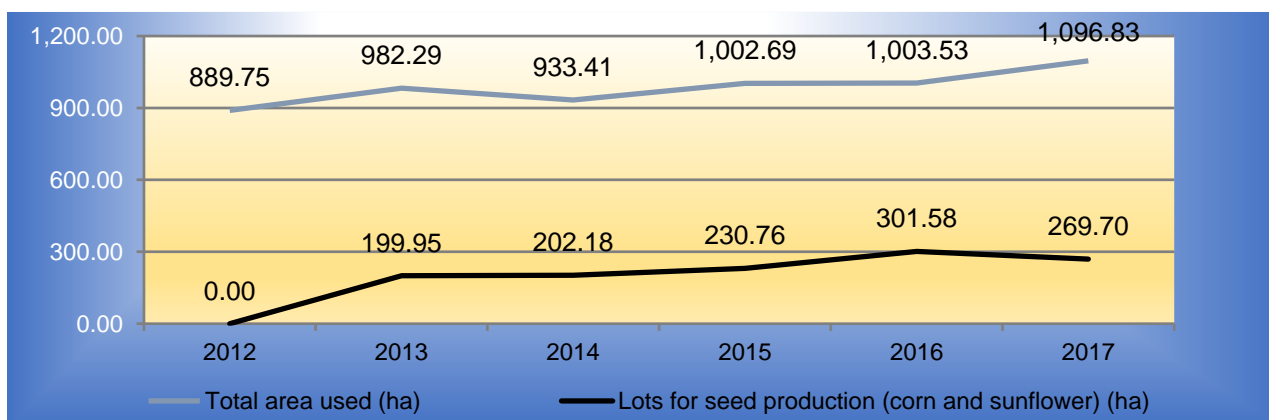


Figure 1 Evolution of surface area exploited within the studied unit and the areas allocated to seed production (maize and sunflower)

Table 3 shows an increase in the main economic indicators of any economic unit, namely in both turnover and profit. The improvement of these indicators is mainly due to investments made through the financing projects and the total non-

reimbursable amount collected by the unit, of over 2.2 million lei.

Those have contributed to increase its technological endowment by obtaining higher yields and breaking into the seed production market.

Table 3

Evolution of turnover and Gain during 2013 – 2017 of the analyzed agricultural unit, lei

Name / year	2013	2014	2015	2016	2017
Turnover	4,032,859	5,240,364	5,095,204	4,350,840	4,600,094
Gain	125,263	263,582	200,938	29,634	105,681

Source: Ministry of Public Finance, 2018

The exception from the trend is the year 2016, when the indicators were lower due to unfavorable weather conditions. Also, in terms of 2015, the indicators are slightly lower in terms of investments made by the unit and its expansion in the livestock sector (meat breed beef).

CONCLUSIONS

The agricultural unit under study had four investments with European non-reimbursable funds between 2012 and 2018. The total value of these investments was of 3.905.479,66 lei, out of which, for the first three investments, their own contribution was 40%, as for the last investment their own contribution was 50% of the value of the investment.

One of the major benefits of modernizing and increasing the technical capacity of the agricultural unit by purchasing ten machines consisted in the possibility of unity to break into the seed production market.

Seed production is a much more profitable activity than crops for consumer production, it has a predictability of revenue and offers the possibility of further development of technological links.

In order to further optimize the financial indicators, the analyzed company could aim on different investments regarding the efficiency of seed production like irrigation infrastructure and machines, or a computer-based technology regarding the handling of the tractors or other equipment on duty.

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BIBLIOGRAPHY

- ROBU A.D. et al, 2016** - *An analysis of an agricultural company evolution as a European Funds Beneficiary*. Lucr. St., vol. 59/2016, Agronomy.
- *** - **Ministry of Public Finance, 2018** - Public reports concerning the financial indicators of traders;
- *** - **National Institute of Statistics, 2018** - Romanian Statistical Yearbook for 2017;
- *** - **Agency for Payments and Intervention in Agriculture – APIA, 2018** - Yearly reports on agricultural areas;
- *** - **Agency for Rural Investment Financing - AFIR, 2018** - Applicant's Guide for sub-measure 4.1 available online at www.afir.info;
- *** - **National Rural Development Programme 2014-2020** - NRDP 2014-2020 working procedures available at <http://portal.afir.info>.