

ASSESSMENT OF INVESTING ACTIVITY OF FARMERS USING THE EU FUNDS ON THE EXAMPLE OF LUBELSKIE VOIVODESHIP¹

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Abstract. The paper presents the use of EU funds by farmers on the territory of Lubelskie Voivodeship used for investment activities concerning agricultural technology. Analysis covered pre-accession funds and activities within PROW (the Rural Areas Development Programme). From 2004 to the middle of 2011, 15,410 beneficiaries used over PLN 1.5 mld. Owners of bigger farms of the average area over 40 ha were beneficiaries. The average value of the investment was PLN 238 thousand and was increasing along with the farm area. Average age of beneficiaries was 38 years.

Key words: union funds, farms modernization, agricultural technology, technical investments in agriculture, Lubelskie Voivodeship

INTRODUCTION

Poland's accession to the EU in May 2004 opened new possibilities for farmers concerning support of modernization investments. Before 2004, a program of pre-accession aid SAPARD was available, and then a Sectoral Operational Programme – Restructuring and Modernization of the Food Sector and Rural Areas Development. Improvement of

¹The study was developed within the field research “Assessment of rationality of machinery and agricultural equipment selection and use in the agricultural holdings in Lublin region in the context of improvement efficiency and competition in the market” carried out within a system project “Regional system of management of economical change”, co-financed from the funds of the EU Social Fund and implemented by The Marshall's Office of Lubelskie Voivodeship.

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competitiveness of agricultural and food economy and sustainable development of rural areas was a strategic aim of the programme [Polska w Unii...]. In the first accession period 2004–2006, technical investments which modernized farms were possible in operations “Investments in agricultural farms” and “Setting up facilitation for young farmers”. Within present financial perspective it is an operation “Modernization of agricultural farms” and “Setting up facilitation for young farmers” within “the Rural Development Programme (PROW) 2007–2013” [Raczkowska 2006, Spsychalski 2008]. These funds were used in a different degree by farmers and the scope of investments and the size of the obtained aid depended on both particular aid programmes as well as on economical and production conditions of agriculture in a given voivodeship [Rudnicki 2007, Wojtasik 2008, Figurski i Lorencowicz 2009, Bułkowska 2011]. The support was multidimensional, since the Polish agriculture is highly diverse [Rudnicki 2007, Czubak and Kiryluk-Dryjska 2009, Siekierski 2009, Bułkowska 2011]. The level of structure of production is frequently determined also by experience a farmer has and the equipment of a farm with technical means of work [Szelağ-Sikora 2009]. Availability criteria of particular structural funds verify potential of Polish farms and simultaneously indirectly influence the changes. Agricultural structure changes systematically although slowly; number of farms and at the same time their area changes. Moreover, single-production farms are distinguished to a great extent. They are prepared for commodity production which is the sale object. Technical infrastructure gets modernised, which is an effect of ultimate purpose of the obtained subsidy for the purchase of i.a. agricultural machines, or for construction and equipment of inventory facilities [Szelağ-Sikora and Wojciech 2007, Szelağ-Sikora and Kowalski 2010, Kusz 2011].

PURCHASE WITH THE USE OF PUBLIC AID BEFORE ACCESSION TO THE EU

According to the data obtained from Agency for Restructuring and Modernisation of Agriculture in Lublin and the Ministry of Agriculture and Rural Development [Fundusze Unijne...] total sum of EU means between January 2004 – June 2011 allotted for modernisation of farms in the voivodeship was PLN 1,073 mln. Within SAPARD programme on the territory of Lubelskie Voivodeship, farmers benefited in the amount of PLN 357.15 million (Table 1). During realisation of this programme, 2,718 applications were filed, 2,388 applications were signed out of which 2,184 obtained payments after authorization in the amount of PLN 357.15 million. Payment in the amount of PLN 163.5 thousand was an average per one application. In the investment activity usefull for individual farmers – (Investment in agricultural holdings) – number of the realised and authorised applications was 1,448 to the total amount of PLN 61.2 mln which gives PLN 42.2 thousand per one application. Majority of purchase within operation 2 concerned agricultural tractors and machines, similarly as in case of other voivodeships including Małopolskie Voivodeship [Rabsztyń 2007].

Table 1. General characteristic of financial aid obtained by farmers within SAPARD programme in particular activities in Lubelskie Voivodeship

Applications		Agreements		Application of funding after approval	
Number	Amount (ths. PLN)	Number	Amount (ths. PLN)	Number	Amount (ths. PLN)
Improvement of processing and marketing of agricultural and fisheries articles					
100	126,923.2	80	113,038.8	78	110,244.5
Investment in agricultural holdings					
1,678	72,359.2	1,512	65,110.8	1,448	61,217.2
Development and improvement of rural areas infrastructure					
465	206,268.6	465	164,228.0	372	163,329.6
Differentiation of economic activity in rural areas					
475	41,192.9	331	28,118.9	286	22,354.6
Total					
2,718	446,743.9	2,388	370,496.7	2,184	357,145.9

Source: Data from ARiMR in Lublin.

The next EU programme available for farmers in the post-accession period was SPO “Restructuring and Modernisation of Food Sector and Development of Rural Areas 2004–2006”. PLN 546.05 mln was directed and 6,097 applications on the average sum of PLN 89.5 thousand were carried out within this programme for farmers of Lubelskie Voivodeship (Table 2).

Table 2. General characteristic of aid granted within SPO “Restructuring and Modernisation of Food Sector and Development of Rural Areas 2004–2006” in Lubelskie Voivodeship

Applications		Agreements		Application of funding after approval	
Number	Amount (ths. PLN)	Number	Amount (ths. PLN)	Number	Amount (ths. PLN)
Investment in agricultural holdings					
4,548	378,622.5	3,070	246,489.9	2,997	233,899.0
Setting up facilitation for young farmers					
2,087	104,350.0	1,547	77,350.0	1,547	77,350.0
Improvement of processing and marketing of agricultural products					
134	280,591.9	113	213,831.0	103	167,019.5
Differentiation of agricultural activity and similar activity in order to provide diversity of activities or alternative income sources					
1,273	82,552.0	859	55,298.9	794	49,521.5
Development and improving of technical infrastructure connected with agriculture					
941	31,131.7	707	21,294.2	656	18,256.8
Total					
8,983	877,248.2	6,296	614,264.0	6,097	546,046.9

Source: Data of ARiMR in Lublin.

The biggest number of applications (2,997) was carried out within operation “Investment in agricultural holdings” and “Setting up facilitation for young farmers” (1,547).

In the financial perspective (years 2007–2013) basic possibilities of increasing the technological level of farms result from the implemented PROW 2007–2013. Within this programme, purchase of modern farm equipment is possible from the means designed in five operations: “Setting up facilitation for young farmers “Modernization of farms”, “Restoring the potential of agricultural production destroyed as a result of natural disasters and introduction of proper protective activities”, “Diversifying towards non-agricultural activity” and “Formation and development of micro-enterprises”. Total amount paid off up to 2011 amounted to PLN 569.8 mln (Table 3). Within PROW 1,571 tractors and 7,230 of other equipment were purchased.

Table 3. General characteristic of aid granted within Rural Areas Development Programme (PROW) 2007–2013 in Lublin region

Specification	Value
Stage of aid decision	
Number of applications	15, 578
Requested aid (ths. PLN)	1,733 203.7
Number of included agreements/decisions	9,657
Amount of agreements/decisions	978,907.5
Stage of payment realization	
Number of applications for payment	7,679
Amount of applications for payment (ths. PLN)	627,638.6
Number of paid applications of payment	7,129
Amount of payment (ths. PLN)	569,814.2
Within the activity “Modernization of agricultural holdings” the following were bought:	
Tractors (pc.)	1,571
Agricultural machinery and tools, equipment and means of transport (pc.)	7,230

Source: Data of ARiMR in Lublin.

CHARACTERISTICS OF THE BENEFICIARIES OF EU PROGRAMMES

Analysis of the use of the EU funds in particular provinces of Lubelskie Voivodeship indicated that farmers from Bialski Province used the highest number of subsidies (PLN 91.1 mln), then Łukowski Province (PLN 83.3 mln) and Lubelski Province (PLN 57.3 mln) (Table 4). The following provinces used the lowest amount of subsidies (without magistrate districts): Lubartowski, Janowski and Krasnostawski. It mainly results from the potential of farming in these areas.

On the example of data concerning the use of funds from PROW 2007–2013 (up to 2011) one may determine general dependencies between the size of farms and the sum of the obtained aid. Average economic size of farms filing an application was 20.92 ESU in Lubelskie Voivodeship at fluctuation from 11.24 ESU (Janowski Province) to 73.04 ESU (Biała Podlaska City Province) (Fig. 1). In the whole population of 2,987 farms, where applications were filed, their economic size was between 4 to 2,412 ESU. Similar diver-

Table 4. Total costs (in millions PLN) of investment for purchase of machinery, equipment and tools for agricultural production (including software) in provinces of Lubelskie Voivodeship in years 2007–2011

Province	2007	2009	2011	Total	Number of applications before 2011
	mln PLN				
Bialski	38.16	42.25	10.68	91.09	408
Bilgorajski	11.59	14.52	3.64	29.75	137
Chelmski	14.25	17.04	4.66	35.96	111
Hrubieszowski	17.42	24.18	6.38	47.98	133
Janowski	5.16	7.10	2.80	15.06	84
Krasnostawski	8.49	6.56	1.82	16.87	87
Kraśnicki	9.54	8.58	2.52	20.65	140
Lubartowski	6.74	5.31	2.22	14.28	72
Lubelski	25.30	25.94	6.08	57.33	281
Łęczyński	4.87	3.62	2.15	10.64	49
Łukowski	31.23	42.36	9.70	83.29	306
Biała Podlaska, city	0.27	0.23	0.00	0.50	2
Lublin, city	0.00	0.86	0.15	1.02	6
Opolski	11.92	13.46	2.07	27.46	237
Parczewski	19.57	29.25	7.21	56.02	176
Puławski	9.60	5.84	3.14	18.57	129
Radzyński	13.40	10.17	4.20	27.76	124
Rycki	8.25	10.38	1.33	19.97	112
Świdnicki	10.55	8.16	0.61	19.31	96
Tomaszowski	8.68	18.05	3.09	29.81	92
Włodawski	14.63	12.47	4.15	31.26	95
Zamojski	7.51	12.27	2.47	22.25	100
Total	277.14	319.07	81.07	676.83	2,977

Source: Own research based on ARiMR data in Lublin.

sity was on account of area (Fig. 2). Average area of farms in particular provinces was 40.74 ha, the smallest in Opolskie Province – 12.37 ha and the biggest in Tomaszowski Province – 120, 45 ha. The area range in the whole population was only 0.4 up to 1,522.2 ha.

Average sum allotted for the purchase of machines, devices or tools for agricultural production, including software in the province system, amounted to PLN 238.8 thousand per one application and was within PLN 125.4 thousand in Opolskie Province up to PLN 363.5 thousand in Hrubieszowski Province. The total sum of the investment in the whole population was within PLN 1.9 thousand to PLN 1,320.6 thousand. While, average agreed sum amounted to PLN 107 thousand in Opolski Province up to PLN 150.2 thousand in Parczewski Province (Fig. 3).

One may notice that there is a strong relation between AL area of farms filing applications and the amount of the average sum applied for by the owners in a province.

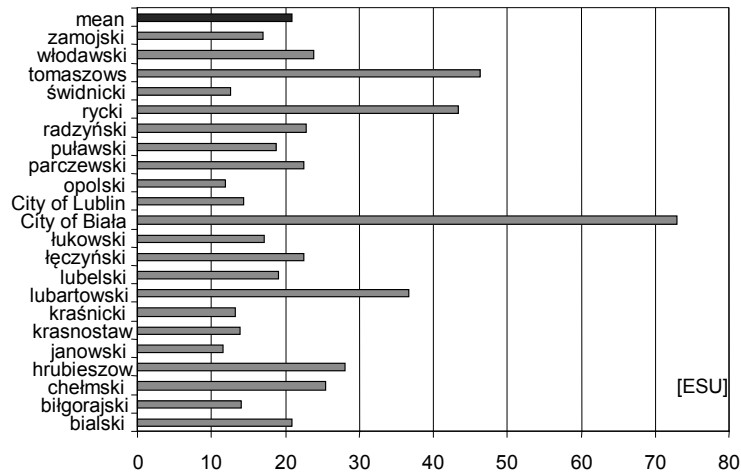


Fig. 1. Average economic size of farms benefiting from PROW by provinces (in ESU)
Source: Own research based on ARiMR data in Lublin.

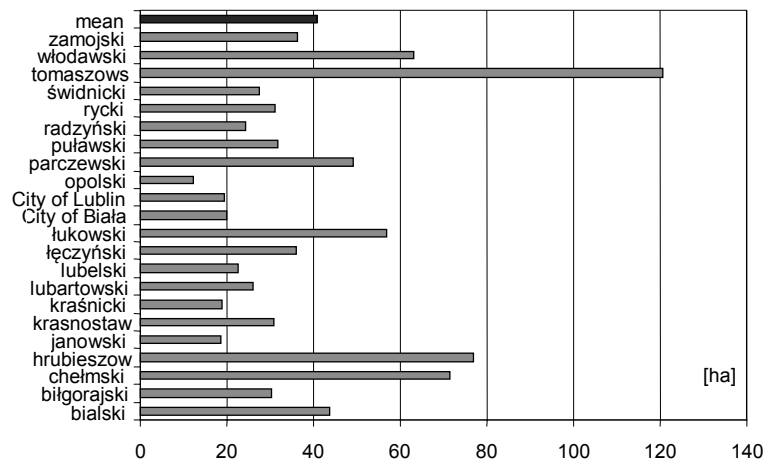


Fig. 2. Average area of farms benefiting from PROW by provinces (in ha)
Source: Own research based on ARiMR data in Lublin.

Higher sums were agreed in bigger farms (Fig. 4). In regard of the amount of money and its relation to the number of the purchased equipment (including software) relation was decreasing which results from the fact that the higher quantity of purchase concerned cheaper products (Fig. 5).

No relation between the size of a farm expressed in ESU and the sum of aid was reported (within the range up to 25 ESU) which may result from the fact that a tractor was the most frequently included in the purchase, the price of which was between approx. 100 to over 300 thousand PLN. As a result farmers from farms of different economic sizes

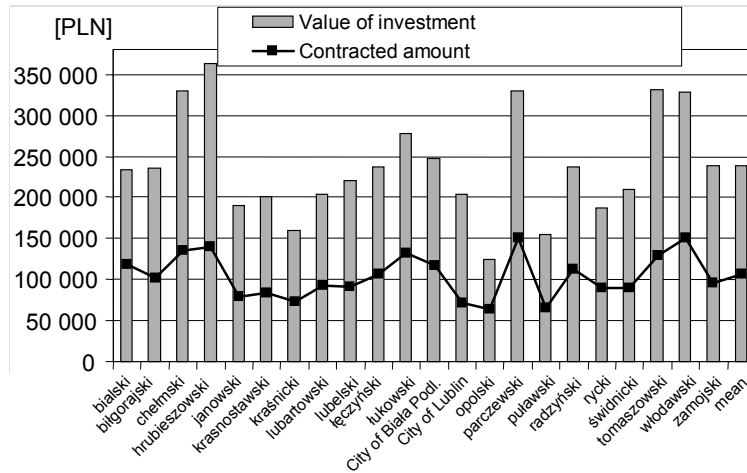


Fig. 3. Average value of the investment in machines and the contracted sum in PROW per one farm by provinces in 2007–2011

Source: Own research based on ARiMR data in Lublin.

often purchased tractors of similar values. It should be emphasised that within PROW in total 1,786 tractors, 9,963 machines, tools and transport means (including software), 1,701 positions from the group “Machines, tools, devices and equipment for animal production” and 7,749 positions described as “Equipment elements, machines, tool parts, additional equipment including software” were purchased. Farmers mainly from farms declaring the production orientation “field crops” (805 applications), “milk production” (720), “horticulture” (383), “pigs” (349), “permanent crops” (313), “mixed production”

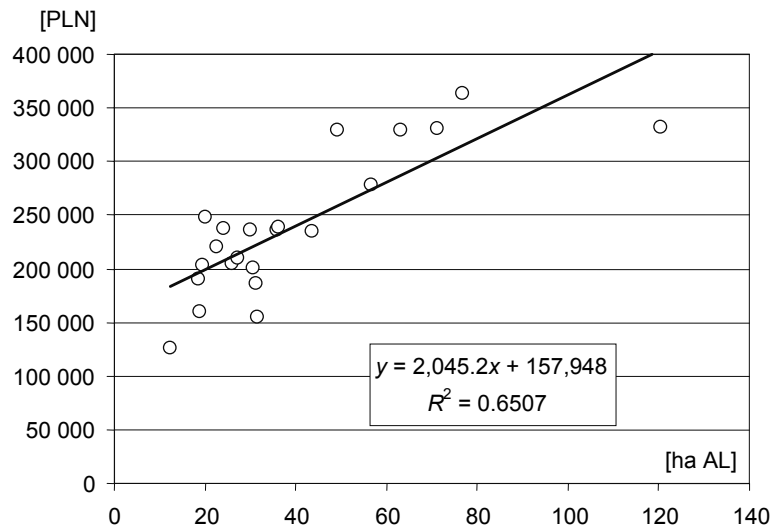


Fig. 4. Area of farms benefiting from PROW and the average value of the investment

Source: Own research based on ARiMR data in Lublin.

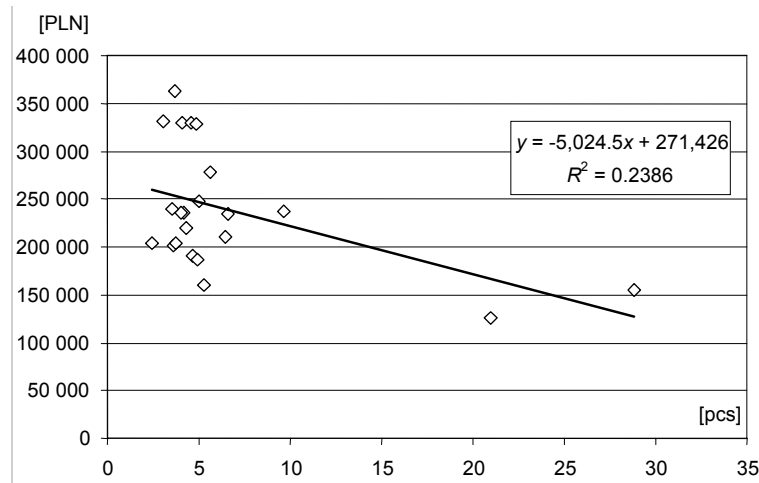


Fig. 5. Number of purchased equipment versus contracted funds in PROW
Source: Own research based on ARiMR data in Lublin.

(296) and less than 50 applications – “meat production” (46), “poultry” (32) and “others” (33) applied for aid.

Farmers investing with the use of PROW means were middle-aged, about 38 years of age (Table 5). The youngest beneficiary was 19 years old and the oldest – 61. Almost half of the beneficiaries (47.9%) had agricultural education background (vocational, high school or university), 22.5% of beneficiaries had higher education or high school education not related to agriculture and at least 3-years of working experience. Almost 1% of beneficiaries used the operation “Setting up facilitation for young farmers” and declared that they would complete qualifications in a specified time.

Table 5. Education and age of farmers benefiting from PROW

Specification	Average age [yrs]	Share in the number of beneficiaries [%]
Average age	37.9	100.0
Including: agricultural vocational, high or higher education	36.7	47.9
Education different than agricultural and minimum 3 years practice in agriculture or higher education other than agricultural and post diploma studies in agriculture, or high non-agricultural education and minimum 3 years practice in agriculture	37.1	22.5
Professional title similar to agriculture and minimum 3 years of practice in agriculture	45.1	5.6
Operation realized by a beneficiary in the activity “Setting up facilitation for young farmers”, who will complete qualifications pursuant to provisions on special conditions and the mode of granting aid	22.5	0.8
Grammar, secondary or vocational education other than agricultural and minimum 5 years practice in agriculture	40.0	23.2

Source: Own research based on ARiMR data in Lublin.

Beneficiaries of the operation "Setting up facilitation for young farmers" were the youngest, which results from the aim of this operation. It may be found that older farmers, about 45 years old, had higher complimentary education (e.g. qualifying title), while younger – about 37 years old – were beneficiaries with agricultural education on the level at least vocational or with higher education other than agricultural.

CONCLUSIONS

According to the analysis carried out in particular years, the use of the EU funds increased. It proves the growth of awareness of farmers from the voivodeship and probably greater motivation to modernize their farms. When analysing data according to provinces, strong diversity of aid funds allotted for the investment in technical means of production was reported. It is caused by considerable differences in the potential of farmers living in particular provinces. As it results from the research, farmers who possessed bigger farms carried out investments of higher value, which results on one hand from their bigger investment potential, and on the other proves the stronger motivation to modernize their production technology. Simultaneously, there is a necessity to purchase bigger and more expensive machines in bigger farms. The fact that investments were carried out not only by young farmers, but also by older ones, should be emphasised. Farmers of a varied level of education were beneficiaries. No relation between the level of education and efficiency of obtaining means was reported. One may guess that farmers with better education are more active since their participation in the group of beneficiaries is higher in the whole population of farmers from Lubelskie Voivodeship. Although, the analysis which was carried out above concerning the investments costs proves the increase of farmers activity, it is necessary to simplify procedures and changes in a further, effective use of funds, which are indicated by other authors [Błażejewska 2006, Sawicka 2009].

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OCENA AKTYWNOŚCI INWESTYCYJNEJ ROLNIKÓW WYKORZYSTUJĄCYCH FUNDUSZE UNIJNE NA PRZYKŁADZIE WOJEWÓDZTWA LUBELSKIEGO²

Streszczenie. Przedstawiono wykorzystanie funduszy unijnych przez rolników na terenie województwa lubelskiego na działania inwestycyjne w zakresie techniki rolniczej. Analizą objęto fundusze przedakcesyjne oraz działania w ramach PROW. Od 2004 roku do połowy 2011 roku 15 410 beneficjentów wykorzystało ponad 1,5 mld zł. Beneficjentami byli właściciele większych gospodarstw o średniej powierzchni ponad 40 ha. Średnia wartość inwestycji wyniosła 238 tys. zł i wzrastała wraz z powierzchnią gospodarstwa. Średni wiek beneficjentów wynosił 38 lat.

Słowa kluczowe: fundusze unijne, modernizacja gospodarstw, technika rolnicza, inwestycje techniczne w rolnictwie, województwo lubelskie

Accepted for print – Zaakceptowano do druku: 28.02.2013

²Opracowano w ramach badań dziedzinowych „Ocena racjonalności doboru i wykorzystywania maszyn i urządzeń rolniczych w gospodarstwach rolnych Lubelszczyzny w kontekście poprawy ich efektywności i konkurencyjności na rynku” realizowanych w ramach projektu systemowego „Regionalny system zarządzania zmianą gospodarczą”, współfinansowanego ze środków Europejskiego Funduszu Społecznego i wdrażanego przez Urząd Marszałkowski Województwa Lubelskiego.