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**Mechanisms of Financial Support As A Factor
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Mechanisms of Financial Support As A Factor Determining The Development Of The Organic Farming Sector In The Countries Of European Union

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Abstract

Research background: Agricultural sector of Polish national economy is an example of entrepreneurship - especially individual one, dealing with underdevelopment of technological, intellectual and institutional infrastructure what is a serious threat to the usage of potential of the financial resources available due to Polish membership in the European Union. The possibility of gaining financial support and entering the European market caused dynamic increase in the number of entities engaged in agricultural activities with ecological characteristics - in Poland and whole EU- and mainly this sector of production is treated with priority in currently realized Common Agricultural Policy in European Union countries. At the same time it should be remarked that managing agricultural companies is aimed at achieving their specific goals of a financial nature - as in other sectors of the national economy.

Purpose of the article: The main aim of this thesis is to show the impact of financial support coming from European Union budget on the pace of development of the organic sector in Poland compared to other European Union countries. To fulfill the aim of the thesis the available financial mechanisms (the level of support, the main criteria for accesses) were characterized as well as legal aspects regulating them on the national level and in selected EU countries. General issues included provide also the characteristics of the problem of European market of ecological products. The study contains an assessment of the current use of the financial resources of the EU (after accession to the EU, i.e. 2004) addressed to organic farming.

Methodology/methods: The thesis has been prepared based on the analysis of subject literature, applicable laws, as well as the documents / reports prepared by the major stakeholders in the country and EU responsible for gaining and gathering

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information on country level as well as chosen EU countries. In the thesis a comparative analysis has been carried out as well as tabular – numerical analysis with regard to the volatility during the analyzed events.

Findings: The observed absorption of EU financial resources in the agricultural sector in all European countries – especially in recent years in Poland- shows how big are the needs for financial support of agricultural production for sustaining for example the stability of market prices of food products. In the era of increasing consumer awareness on the rational nutrition we observe revival of market of organic products. However the increase in market absorptive capacity is the only factor determining the development of ecological agriculture? Or are there any other financial support mechanisms? High subsidy rates (an average of approx. 950 PLN/ha and growing every year, with an average area of ecological farms above 20 ha) caused a significant increase in the number of ecological farms (within 10 years of joining the EU over 1400%). It is reasonable to assume that as long as there will be economic incentives, business farmers will be interested in the transition to an ecological way of farming, an example of which are other EU countries.

JEL Classification: *Q12; Q14*

Keywords: *EU funds, agricultural development, eco products market*

Introduction

Poland has many advantages in favor of the development of organic farming; these are primarily little contaminated soils and the environment, which, thanks to the implementation of this production method, can be maintained in good condition. Argument for development of organic agriculture in Poland is also a growing interest in organic farming products and the possibility of exporting organic food. The good brand of Polish organic farming in Europe is also very important as well as the growing demand for organic products both in our country and in the region. Undoubtedly, the law of supply and demand and growing competition are the determinants deciding about the position of agricultural producers in the world markets (Szełąg-Sikora et al., 2015, pp. 249-254, Hamzaoui-Essoussi, 2012, pp. 63-88).

The process of development of Polish organic farming in many stages showed similar directions of change with those in the European Union. The introduction of budget support instruments has allowed farmers, initially with great caution, to convert farms from conventional to ecological production. (Kalfoft, 1999, pp. 39-53).

The aim of the article was to present the impact of European co-financing on the pace of development of the organic sector in Poland in the context of the rest of the European Union countries. To achieve the goal the

level of support received by entrepreneurs, engaged in ecological activities, since the launch of the subsidizing mechanism, was presented. The study also includes the characteristics of the market of organic products and an assessment of the current use of EU financial resources for organic farming.

Methodology of research

The research material was based on statistical data from the Central Statistical Office (CSO), the Ministry of Agriculture and Rural Development, the Management Information System of the Agency for Restructuring and Modernization of Agriculture (ARMA), annual reports of the Quality Inspection of Agricultural and Food Products (IJHARS), Reports from the Swiss Research Institute for Organic Agriculture (FIBL) And the International Federation of Organic Agriculture (IFOAM), literature of the subject and applicable law at the Polish and EU level. In order to fully realize the objective, and for comparison, group's own research -where the amount of support from the EU funds for ecological entrepreneurs was determined-were presented. The work was carried out in comparative and tabular-numerical analysis, taking into account the variability during the analyzed periods.

The development of organic farming in Poland in the face of financial support system

Organic farming in Poland is already over half a century old, but its development has been very slow. At that time, no financial support was available from the state, or even foreign institutions, and the possibility of obtaining higher sales prices for the products offered was limited due to the poor organization of the organic market. For the first time national organic farming was financed by the state budget only in 1998, after the introduction of subsidies to the costs of farm inspections which were granted to the control units (Regulation ..., 1998). In the following year additional direct payments were added to the area of organic farming, which was already benefited by farmers farming organic farms or so-called shifting farms (Regulation ..., 1999). The introduction of the organic farming legislation in 2001, (Act..., 2001) which was also significantly correlated with the European regulations, resulted in a significant increase in the number of ecological farms and ecological areas intended for organic farming (Table 1). The legislation on organic farming allows its development, provides organizational and legal safeguards for both producers and consumers.

Table 1. Characteristics of ecological farms in Poland in the years 1999 - 2015

| Year | Number of certified organic farms in [pcs.] | Area of ecological agricultural land in [thous. ha] | Average size of the farm in [ha] |
|------|---|---|----------------------------------|
| 1999 | 231 | 6.99 | 30.26 |
| 2000 | 338 | 11.66 | 34.50 |
| 2001 | 669 | 14.96 | 22.37 |
| 2002 | 882 | 20.86 | 23.65 |
| 2003 | 1287 | 30.24 | 23.50 |
| 2004 | 1683 | 37.72 | 22.41 |
| 2005 | 1951 | 37.49 | 19.22 |
| 2006 | 3504 | 75.09 | 21.43 |
| 2007 | 6 618 | 137.89 | 20.84 |
| 2008 | 8 685 | 178.73 | 20.58 |
| 2009 | 10 153 | 222.02 | 21.87 |
| 2010 | 12 901 | 308.10 | 23.88 |
| 2011 | 15 234 | 376.04 | 24.68 |
| 2012 | 18 187 | 457.09 | 25.13 |
| 2013 | 19 872 | 492.97 | 24.81 |
| 2014 | 25 427 | 555.90 | 21.86 |
| 2015 | 23 015 | 501.94 | 21.81 |

Source: own elaboration based on CSO data and annual IJHARS reports

It seems reasonable to expect that, as long as there are economic incentives, farmers will be interested in switching to organic farming. In 2002, due to the increasing burden on the state budget, it was necessary to verify the previously applied subsidy rates, which were reduced. Reduction of subsidies did not significantly influence producers' decisions to change management practices (the number of organic farms was still growing). In subsequent years the rates were successively increased (Tab. 2-3). Currently, financial support for organic farming in Poland comes from two sources: the national budget and the EU budget.

Table 2. Amount of subsidies for organic farming between 1999 and 2003

| Crop Type | The subsidy rate for holdings in the control period - the year preceding the certificate of conformity [PLN/ha] | | | | | Grant rate for certified farms certified - certificate of conformity [PLN/ha] | | | | |
|--------------------|---|------|------|------|------|---|------|------|------|------|
| | Years | | | | | Years | | | | |
| | 1999 | 2000 | 2001 | 2002 | 2003 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Vegetable growing | 200 | 600 | 600 | 500 | 500 | 150 | 450 | 450 | 400 | 400 |
| Agricultural crops | 150 | 450 | 450 | 200 | 300 | 120 | 360 | 360 | 150 | 250 |
| Orchard Crops | 220 | 660 | 660 | 550 | 600 | 180 | 540 | 540 | 450 | 500 |
| Berry | 230 | 690 | 690 | 550 | 550 | 200 | 600 | 600 | 500 | 500 |

| | | | | | | | | | | |
|-------------------|----|-----|-----|----|-----|----|-----|-----|----|----|
| plantations | | | | | | | | | | |
| Meadows, pastures | 75 | 150 | 150 | 80 | 100 | 50 | 120 | 120 | 50 | 80 |

Source: Borowska Agnieszka after (Żakowska-Biemans S., Gutkowska K., 2003, p. 39)

Table 3. Level of subsidy rates for farm management costs on the conformity of the way of production with organic methods in years 1999-2004 [PLN/farm]

| Area/surface of the farm | Years | | | | | |
|---------------------------------------|-------|------|------|------|------|------|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| Up to 5 hectares of agricultural land | 100 | 300 | 300 | 300 | 400 | 600 |
| 5 to 10 ha of agricultural land | 130 | 350 | 350 | 350 | 450 | 750 |
| 10 to 20 ha of agricultural land | 150 | 400 | 400 | 400 | 550 | 800 |
| 20 to 50 ha of agricultural land | 180 | 450 | 450 | 450 | 650 | 900 |
| 50 to 100 ha of agricultural land | 200 | 500 | 500 | 500 | 700 | 1000 |
| Above 100 ha of agricultural land | 350 | 600 | 600 | 600 | 800 | 1100 |

Source: Borowska Agnieszka after (Żakowska-Biemans S., Gutkowska K., 2003, p. 39)

After Poland's accession to the structures of the European Union, the Rural Development Plan 2004-2006 was implemented in our country (PROW 2004 – 2006). And the subsequent Rural Development Program 2007-2013 (PROW 2007-2013). At that time, organic farming was included as one of the agri-environmental package. Table 4 presents the payment rates for the organic farming package, the agri-environment program.

Table 4. Payment rates of the organic farming package PROW 2004 - 2006 and PROW 2007-2013

| Name of the variant | Payment rate [PLN / ha] | |
|--|-------------------------|-----------|
| | 2004-2006 | 2007-2013 |
| Agricultural Crop (during transition period) | 680 | 840 |
| Agricultural growing (certified) | 600 | 790 |
| Permanent grasslands (during transition period) | 330 | 330 |
| Permanent grassland (certified) | 260 | 260 |
| Vegetable growing (during transition period) | 980 | 1550 |
| Vegetable growing (certified) | 940 | 1300 |
| Herb growing (during transition period) | - | 1150 |
| Herbal growing (certified) | - | 1050 |
| Horticultural and berry growing (during transition period) | 1800 | 1800 |
| Horticultural and berry growing (certified) | 1540 | 1540 |
| Other orchard and berry crops (during transition period) | - | 800 |
| Other orchard and berry crops (certified) | - | 650 |

Source: own elaboration based on PROW 2004 – 2006 (Plan...2004) & PROW 2007 – 2013 (Program...2007)

Research on organic farming in Poland

In economic studies related to organic farming in Poland, as indicated by Łuczka (2016), two main periods can be distinguished: integration with the European Union and after accession. Based on a review of over 100 research papers on organic farming, the author draws the main conclusion: - the profitability of ecological farms is strongly determined by subsidies.

The subject of own research covered 150 farms from the whole of Poland, which run agricultural production in the ecological system. It turned out that more than 26% of farms without subsidies, has zero gross final production. Only by taking into account subsidies contributes to the improvement of the financial situation of these economies. Table 5 shows support for individual groups of plants grown in the ecological system.

Table 5. European Union grants for particular groups of plants.

| Group of plants | Average EU subsidies | |
|--|----------------------|----------|
| | (PLN/farm) | (PLN/ha) |
| Bean plants | 68 709.91 | 797.12 |
| Fruit plants | 7 186.91 | 1 283.12 |
| Fodder plants | 15 922.34 | 735.82 |
| Cereal plants | 27 058.33 | 656.45 |
| Asteraceae plants | 3 789.50 | 1 325.00 |
| Plants from the rdest family | 4 105.50 | 966.00 |
| Fodder and grain crops | 22 464.70 | 729.09 |
| Fodder plants and the bean family | 19 489.00 | 949.29 |
| Plants from the bean and cereal families | 64 724.15 | 623.97 |
| Root and fodder plants | 5 222.08 | 573.23 |
| Fodder plants and the rdesto family | 16 844.05 | 954.34 |
| Root crops and vegetables | 2 983.32 | 904.03 |
| Fruit and forage plants | 2 476.65 | 1 501.00 |

Source: own research

As IJHARS reported in 2014, the largest share (35.8%) in the area of agricultural crops were the ones planted to feed animals. Meadows and pastures were the second largest, accounting for 31.5% of the agricultural land. Cereals accounted for 16.9% of the organic agricultural land. Remaining groups occupied a total of 15.8% of the agricultural land.

Organic farming on a global and European scale

The Swiss Organic Research Institute for Organic Agricultural (FIBL) and the International Federation of Organic Agricultural (IFOAM) report annually on the state of global organic farming. The report prepared in

2016, "The World of Organic Agriculture: Statistics and Emerging Trends 2016," reports that there are currently 2.3 million organic producers in the world, with 200 000 in 1999. Almost 43.7 million hectares of land worldwide are grown by organic methods (Table 7). Over the past 15 years there has been nearly three-fold increase in the area of ecoproducts land. In 1999 it was un-fulfilled 12 million hectares, and in 2004 already 31.5 million hectares. The highest proportion (almost 40%) of ecologically-active land is in Australia and Oceania, as much as 17.3 million hectares. The next is Europe with 11.6 million hectares, followed by South America (6.8 million hectares), Asia (3.6 million hectares), North America (3.1 million hectares) and Africa (1.3 million hectares).

Market of ecological products.

By definition, organic food is a food produced by organic farming, with the goal of eliminating the use of fertilizers and pesticides. Ecological food production methods are to ensure the protection of public health and the quality of the environment. Natural ingredients and environmentally friendly food are the most important eco-food attributes (Hasselbach & Roosen, 2015). The popularity of the agricultural and organic food market in the world is constantly evolving. Organic products are gaining popularity among consumers. Consumption of organic food continues to grow, mainly in the European Union and North America (Granatstein et al., 2008). An analysis of the market for organic products showed that 97% of the certified products are sold in European markets (51%) and North America (46%). The share of other countries was only 3%. In Poland, however, the organic food market is growing much more slowly than in other European countries. The supply of organic food is low and constitutes a minor share of the purchase of food (Olech & Kuboń, 2015).

Organic products continue to be niche segments in the food market because of their higher price compared to conventional products, although the number of consumers paying particular attention to the way food is produced and the ingredients of food products is steadily growing. The high percentage of people buying organic food regularly or irregularly does so mainly in the interest of the health of their children. Sometimes just having a baby initiates the purchase of organic food (Hjelmar, 2011). Growing consumer demand for organic food is based primarily on food shortages, pesticide use, antibiotics, GMOs (Hamzaoui-Essoussi, 2012, pp. 63-88). Due to compared to conventional foods, higher prices require more promotional and marketing activities. Insufficient promotion can be a demand-pulling factor (Hasselbach & Roosen, 2015).

Summary

In Poland, the organic food market does not develop as dynamically as in other European countries. Despite growing consensual awareness of rational nutrition and fashion for a healthy lifestyle, organic food represents a small share of total food purchases. This allows us to assume that market absorption is not a determining factor for the development of organic farming and that financial supporting mechanisms can be this factor. In countries such as Poland, with a relatively high level of budget support for this form of agricultural farming, the interest of farmers in environmental management practices continues to grow. It seems justified to argue that the possibilities of developing organic farming are determined by the level of income generated by organic farms. The high subsidy rates, which average between 950 PLN/ha and the average organic area of over 20 ha, have resulted in a significant increase in the number of ecological farms (over 1400% since EU accession). It may be assumed that as long as there are economic incentives, it is another example of other European countries, Polish agricultural entrepreneurs will be interested in switching to ecological management. The question is if it is possible to constantly count on providing unlimited budget support?

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