



Munich Personal RePEc Archive

# **Evolution of social and economic situation in Polish agriculture since the accession to the European Union**

Piecuch, Jakub

University of Agriculture in Cracow

2013

Online at <https://mpra.ub.uni-muenchen.de/70869/>  
MPRA Paper No. 70869, posted 21 Apr 2016 09:17 UTC

# EVOLUTION OF SOCIAL AND ECONOMIC SITUATION IN POLISH AGRICULTURE SINCE THE ACCESSION TO THE EUROPEAN UNION

**Jakub Piecuch**, PhD  
Institute of Economic and Social Sciences, Agriculture University in Krakow

**Abstract.** Ten years after the accession to the European Union, and despite all the funding and efforts, which have been undertaken during the recent years, Polish agriculture is still based on small - sized family-owned farms with low economic efficiency.

The position of agriculture in this Central European country is underprivileged due to its peripherality as well as topographic restrictions and over-employment. This situation causes integration problems with the common market. In the whole country, small-scale and low-tech agriculture still prevails and suffers from a lack of many natural resources and lack of investments. The dominant traditional economy is not adapted to the market conditions. Currently, Polish situation in the primary sector and in the whole economy becomes even more critical due to the problems with global financial crisis and economic problems in the euro-zone countries. The Polish Gross Domestic Product per capita equals only about 60% of the European average. The main goal of Poland's budget strategy for the year 2013 is to reduce the general government deficit below 3% of GDP. In addition, Poland plans to keep public debt below the constitutional threshold of 55% of GDP in the year 2013. During the past years, the population of Poland has witnessed a spectacular decrease in the contribution of the agricultural sector to Poland's total employment and total value added of the whole economy. However, despite this, the process of structural changes in Poland's agricultural employment exceeds 13% of labour force and value added is close to 3% of GDP.

**Key words:** Poland, agriculture, European Union, Structural Funds.

**JEL code:** F150, O100, Q10

## Introduction

The situation in Polish agriculture will be analysed in the present article. This country has been a part of the European Community since the EU enlargement in the year 2004; though, even almost one decade later, the Polish economic situation and the level of development is far behind the West European economies. Unprivileged situation in agriculture is one of the reasons. The primary sector in Poland is still one of the crucial sectors of economy but its lack of efficiency makes reconstruction of this sector the top priority for the Polish government.

The aim of the research is to present the current situation in Polish agriculture. Accession to the European Community, along with uptaking of the Structural Funds, and access to the common market have been the most important factors which have determined positive changes in the whole Polish economy and, in particular, in agriculture over the past ten years. The European structural aid has resulted in a significant reduction of labour force engaged in the primary sector activities and created new jobs outside agriculture, especially in a service sector.

From the perspective of other Central European countries, the changes having taken place in Poland can be very important, since the necessity of structural changes lies ahead of them. Any lessons learned from the mutual experience are crucial for undertaking the right decision in the times of crisis. This paper focuses on changes on the national level. The research is based on the analysis of reports prepared by the European Commission. The data the author analyses here were collected or estimated by the Central Statistical Office

of Poland (Główny Urząd Statystyczny) and Directorate-General for Agriculture. The EUROSTAT and AMECO (annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs) have also been used for the research purpose.

## 1. Situation of agriculture in Poland

After the latest two enlargements in the middle of the first decade of the 21<sup>st</sup> century, over 50% of the European Community population lives in rural areas. This figure underlines the significance of rural areas development and the importance of the aims of the Common Agriculture Policy (CAP) set by the European Commission. Importance of agriculture in Poland is even higher than in the Western countries, and despite all changes, which have occurred in Poland during the past two decades, it is still a crucial sector for the Polish economy. The contribution of agriculture to the total GDP is falling; though, it is still relatively important at an estimated level of 4.0%. The agricultural labour force still holds a 13% share of the total employment. This high figure is inflated by a certain amount of underemployment and hidden unemployment in rural areas. Nevertheless, this essential difference between the GDP contribution and persons employed in agriculture indicates on a very low labour productivity and reflects the importance of part-time farming. Due to strong dependence of Polish economy on agriculture, the financial support under the Common Agriculture Policy of the European Community is a crucial instrument speeding up a process of restructuring the Polish primary sector. The origins

Table 1

## Value added by activity in 2000 - 2010 (%)

	Agriculture, hunting and forestry; fishing		Industry, including energy		Construction		Wholesale and retail trade, repairs; hotels; transport		Financial intermediation; real estate, renting and business activities		Other services activities	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
<b>Poland</b>	<b>5.0</b>	<b>3.5</b>	<b>24.0</b>	<b>24.7</b>	<b>7.7</b>	<b>7.0</b>	<b>27.3</b>	<b>27.3</b>	<b>18.1</b>	<b>18.1</b>	<b>18.0</b>	<b>19.3</b>
Germany	1.3	0.9	25.1	23.7	5.2	4.1	18.2	17.2	27.5	30.5	22.8	23.6
USA	1.2	1.0	18.4	15.9	5.0	4.1	20.0	18.0	31.7	34.2	23.7	26.8
China	15.1	10.3	40.4	39.7	5.6	6.6	8.2	8.5	8.3	10.7	22.5	24.2
Russia	6.4	4.7	31.1	27.3	6.6	5.5	33.1	30.3	4.6	17.6	18.3	14.6
Euro area	2.5	1.7	22.2	18.5	5.7	5.9	21.2	20.6	26.3	29.0	22.2	24.3
OECD	2.3	1.8	22.0	20.6	5.7	5.9	21.4	20.7	27.1	28.6	21.7	22.5
<b>EU-27</b>	<b>2.4</b>	<b>1.7</b>	<b>22.4</b>	<b>18.7</b>	<b>5.6</b>	<b>6.0</b>	<b>21.6</b>	<b>20.9</b>	<b>25.9</b>	<b>28.8</b>	<b>22.1</b>	<b>23.9</b>

Source: author's construction based on the OECD, Fact Book 2011 - 2012, Paris 2012

of the Common Agricultural Policy date back to the late 1950s when the first six Member States started to build a common market.

With time, the system allowed the European Community to achieve not only self-sufficiency but also permanent surpluses of the many farm products. These actions had many consequences (high budgetary cost, distorted world markets, and lack of acceptance of consumers). The European Commission undertook some actions such as introduction of the quota on products as well as a ceiling on the EC expenditure in this area (European Communities, 2004).

Next changes in the CAP were even more far-reaching. Production limits helped reduce surpluses and an accent was put on a shift from price support to direct support as an income compensation for farmers. Environmentally-friendly production became an essential condition for financial support. Finally, at the beginning of the 21<sup>st</sup> century, the EU adopted a fundamental reform of the CAP, based almost entirely on "decoupling" subsidies from a particular crop (Lopaciuk W., Judzinska A., 2011).

Agriculture not only plays an important role for rural communities' standard of living but it is also responsible for ties of cooperation between the members of local communities. As it was mentioned before, the level of unemployment rate in Polish regions is also connected with the necessity of agricultural restructuring. Regions located in the Eastern part of Poland, especially Lubelskie, Podkarpackie, Swietokrzyskie, Podlaskie, and Warminsko-Mazurskie, are highly dependent on activities in the primary sector. These regions also belong to the group of the less developed areas, both in Poland and in the European Union. Difficulties on the labour market had a negative impact on those regions where low level of economic development coexists with the lack of possibility for non-agricultural job creation.

Poland, just like almost all other countries located in the Central and Eastern Europe, can be still described as less developed economy with strong dependence on agricultural production. The position of the analysed country is somehow underprivileged due to topographic limitations and great distance to the main European

marketplaces, which cause integration problems with the common market. Small-scale and low-tech agricultural holdings still prevail in the majority of Polish regions. This traditional economy is not adapted to the market conditions. However, the contributions of primary, secondary, and tertiary activities to the total value added have changed strongly in Poland over the recent decade (Table 1).

Especially, the share of agriculture, fishing, and forestry has sharply decreased in the total value added of the whole economy, and in 2010, it was much closer to well developed economies of the European Union than ten years earlier and accounted for 3.5%. The share of manufacturing has increased only insignificantly, while the sector of services now account for almost 65% of the total gross value added.

A spectacular decrease in the contribution of the agricultural sector in total employment has been observed during the past years (Table 2). In 2000, more than 18% of labour force was employed in the primary sector. The share of employment in agriculture in the total employment in Poland has decreased almost by five percentage points to 13.4% of labour force by 2011. High level of employment is the only one problem connected with labour force in Poland's rural areas; the other one is hidden unemployment and low farms income, which is a characteristic attribute of these areas.

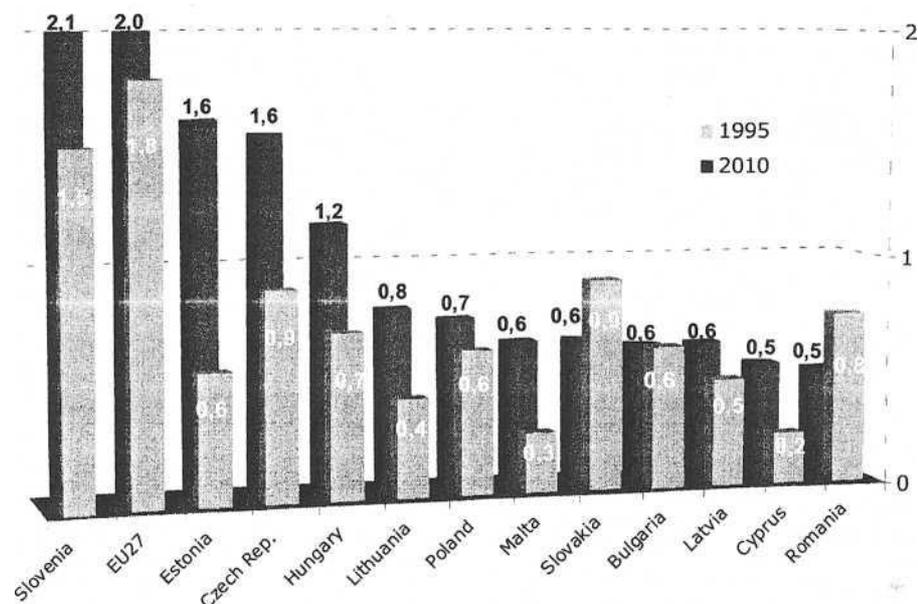
In 2010, approximately 1.5 million of agricultural holdings were recorded in Poland. The General Agricultural Census carried out in 2010 verified the trend of changes in Polish agriculture. Number of holdings has decreased significantly from the time of accession. The number of holdings has decreased by more than 1/4 of the total number compared with 2007 (2.4 million in 2007 and 1.5 million in 2010). All agricultural holdings in Poland occupied little more than 14.4 million hectares (ha) of the utilised agricultural area (UAA). An average physical farm size in Poland amounted to 13 ha in 2007 (compared with 12 ha in 2005), which was less than the average physical farm size in all 27 Member States. In 2007, more than 55% farms had less than 5 ha land, while approximately 10% had more than 50 ha. In 2007, 56% of the farms in

Table 2

## Employment by sectors in Poland in year 2000 and 2011

	2000	2011	2000	2011
	Employees (1000)		%	
<b>Agriculture, hunting and forestry; fishing</b>	2555.1	2114.0	18.1	13.4
<b>Industry, including energy</b>	3489.7	3782.0	24.7	23.9
<b>Constructions</b>	932.2	1216.4	6.6	7.7
<b>Wholesale and retail trade, repairs; hotels and restaurants; transport</b>	3061.1	3753.8	21.6	23.7
<b>Financial intermediation; real estate, renting and business activities</b>	958.8	1405.5	6.8	8.9
<b>Other services activities</b>	3147.4	3545.1	22.3	22.4
<b>Total</b>	14144.3	15816.8	100.0	100.0

Source: author's construction based on the OECD, Fact Book 2011 - 2012, Paris 2012



Source: author's construction based on the European Commission (2011), Science, Technology and Innovation in Europe, Eurostat PocketBooks, European Union 2011 edition

Fig. 1. Gross domestic expenditure on R&D in the new Member States in 2005-2010, % share of GDP

this group had more than 100 ha (Rural Development..., 2009).

In 2010, Polish holdings employed approximately 1886 thousand annual work units (AWU). These holdings had 10.3 million livestock units (LSU), i.e. 3% less than in 2007. In 2007, amongst all holdings, 20% of them produced just for their own consumption and less production was meant for direct sales.

Almost half (42.5%) of the livestock units analysed in the Polish holdings were cattle. Pigs took the second position with the share of 35.2%, followed by poultry with approximately 20% share of the Polish livestock units. Polish agriculture stands out as having one of the biggest

proportions of pigs and poultry in the total LSU. Polish holdings also specialise in cereals, sugar beet, and rape. Poland is the biggest producer of apples in the European Union - 22.5% of the total production (Eurostat, 2012).

Family labour force in Poland accounts for the majority of total labour force. Only 23% of sole workers are women. The major problem of agricultural labour force in Poland as well in other East and Central European economies is the age structure. Majority of Polish workers are of advanced age, just about 23% of them are 55 or more years of age and only 17% of all workers are younger than 35 years. The population working in the primary sector has also a very low degree of training and

Table 3

**Structural Funds and Cohesion Fund in Poland and selected countries in the Central Europe during the programming period 2007 - 2013 (million EUR, in prices of 2004)**

Member States	Convergence Objective			Regional Competitiveness and Employment Objective		European Territorial Cooperation Objective	Total	
	Cohesion Fund	Convergence	Phasing-out	Competitiveness	Phasing-in		Min EUR	%
Czech Rep.	8 819	17 064	-	419	-	389	26 692	7.7
Latvia	1 540	2 991				90	4 620	1.3
Lithuania	2 305	4 470				109	6 885	2.0
Slovenia	1 412	2 689				104	4 205	1.2
Estonia	1 152	2 252				52	3 456	1.0
Hungary	8 642	14 248	-	-	2 031	386	25 307	7.3
Slovakia	3 899	7 013	-	449	-	227	11 588	3.4
Poland	22 176	44 377	-	-	-	731	67 284	19.4
EU-27	69 578	199 322	13 955	43 556	11 409	8 723	347 410	100.0

*Source: author's construction based on the European Commission, 2007; Cohesion policy 2007 - 2013*

education level. What is even more important, the Polish rural areas suffer from the problems of depopulation and migration. This unfavourable process is currently the biggest challenge to the central and local governments. Changes undergone in the first decade of the 21<sup>st</sup> century have resulted in a significant reduction of labour force engaged in the primary sector activities and led to creating of new jobs outside agriculture, especially, in services (Teichgraber M., 2011). Further spending and efforts are necessary to maintain this trend in Poland. In particular, expenditure on research and development is essential. Unfortunately, Poland's expenditure on R&D is almost the smallest of all the countries (Figure 1).

In general, the Member States with the lowest R&D expenditures were located in the Central and Eastern Europe. In 2010, R&D expenditure as a percentage of GDP (R&D intensity) as an average in the EU-27 stood at 2%, which is 1/3 below the 3% target set for 2010 by the Lisbon strategy and Europe 2020 strategy. The 3% target of R&D intensity will be maintained as one of the five key targets of the Europe 2020 strategy. The R&D intensity in the EU was below that in most powerful global economies - Japan, South Korea, or the United States. Without this type of investments, further growth and competitiveness is not possible (European Commission, 2011).

More than half of Poland's territory can be described as less favourable area. Agricultural land in mountain and less favourable areas accounted for 77% of total farming land. Low effectiveness of production in less favourable area forces 32% of all farmers to look for another gainful activity (Rural Development..., 2009).

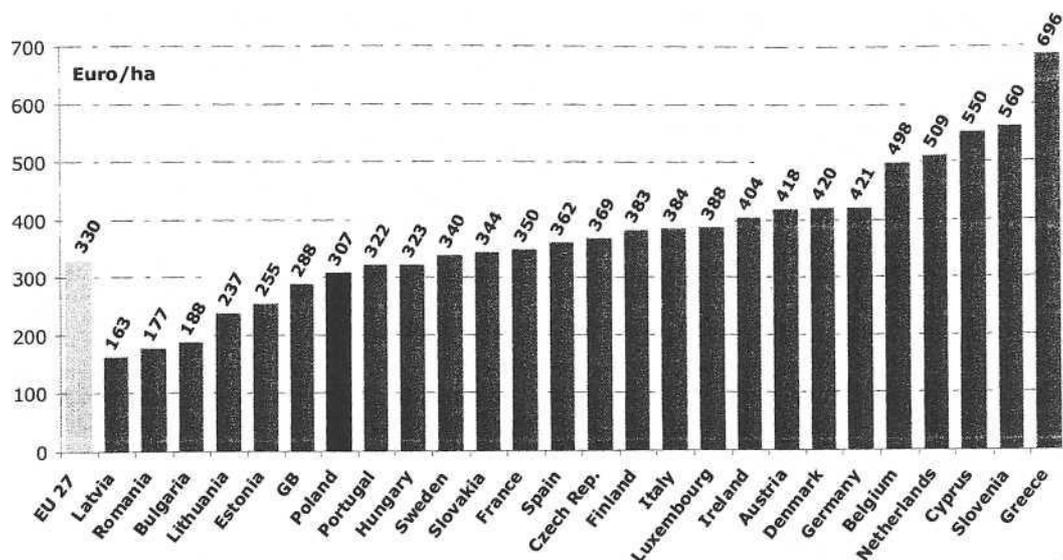
In 2007, the UAA in Poland accounted for approximately 50% of the total land area; in addition, wooded areas on farm holdings accounted for a further 3.8% of the total land area. Arable land made up 76% of the UAA and permanent grassland - 20%, while the land for permanent crops accounted for around 2.5% of the UAA (European Commission, 2012).

The total organic area in Poland (the fully converted area and area under conversion) continues to show an upward trend. The total organic area in 2010 was about 0.5 million ha compared with 0.16 million ha in 2005 (Eurostat, 2012). Among the arable crops, cereals and green fodder occupied the biggest area. In Poland, these two categories together accounted for 87.5% of the fully converted area in 2008. In 2010, there were 20.6 thousand organic producers in Poland. The number of organic producers in the Iberian country rose by 25% between 2008 and 2010 (Eurostat, 2010).

## **2. The role of Structural Funds in the development of the Polish agriculture**

Many of positive changes in Poland and other Central European countries were possible particularly thanks to the European Structural Funds. The European financial aid for less developed regions and agriculture has a significant effect in reducing disparities in economic performance across Europe and in narrowing the gap in GDP per capita between them and the rest of the European Union.

The Structural Funds (ERDF, ESF) and the Cohesion Fund have contributed to three objectives: Convergence, Regional Competitiveness and Employment, and European Territorial Cooperation for the period of 2007-2013 (European Commission- 2007). As before, regions with a regional GDP below 75% of the EU average are eligible for the Convergence objective. The main aim of the Convergence objective is to improve growth conditions and factors, which affect real convergence in less developed regions and all Member States. The whole Poland is eligible for funding from the Structural Funds under the Convergence objective in the current programming period. Poland - with GNP per capita less than 90% of the EU average - is also eligible for resources from the Cohesion Fund.



**Source: author's construction based on the Ministry of Agriculture and Rural Development, 2011; Agriculture and Food Economy in Poland**

**Fig. 2. Pillar I of the CAP (in 2013) and Pillar II of the CAP (average yearly 2007 - 2013)**

**EUR per one hectare**

The financial resources for the three objectives in Poland are shown in Table 3. In the programming period 2007-2013, Poland became the major beneficiary of the European Cohesion Policy and Structural Funds with the Cohesion Fund in Programming Period 2007-2013 reaching the level over EUR 67 billion Poland also benefits from the Rural Development Programme for 2007-2013 (EUR 13.2 bln) and Direct Payments (EUR 3.2 bln per year) with the total value of EUR 307 per one hectare (Figure 2).

The support in the present programming period is implemented within four axes (priorities), concerning the main directions of support for rural and agricultural development:

- Axis 1: Improvement in the competitiveness of agricultural and forest sectors;
- Axis 2: Improvement of natural environment and rural areas;
- Axis 3: Quality of life in rural areas and diversification of farming;
- Axis 4: Leader - to develop social potential in the rural areas by encouraging its residents to be active.

In Poland, the RDP 2007-2013 provides for support out of public funds in the amount of EUR 17.2 billion, whereas EUR 13.2 billion come from the EU budget and the share of national public funding accounts for approximately EUR 4 billion (Ministry of Agriculture, 2011).

The European structural aid has resulted not only in reorganisation of the primary sector but also in a significant reduction of labour force engaged in agriculture. Creating of new jobs outside agriculture, especially, in services, was possible thanks to a wide range of activities undertaken in the framework of structural policy and the CAP.

## Conclusions

The accession of Poland and other countries from the Central and Eastern Europe to the European Union was a right step on the road to better developed and competitive economies. Integration with the EU structures forced them to restructure and liberalise the economy.

These positive changes are currently less obvious when one focuses on some disadvantageous aspects connected with the global financial crisis. The Central and East European countries still have huge amount of unsolved economic and social problems, particularly, in rural areas due to problems of the euro-zone countries and low internal demand contract possibilities of positive economic growth and new jobs creation. Polish agricultural sector, despite the 10 years of the EU membership, provides work for approximately 13% of the total employment. The share of the primary sector in total value added of the whole economy has sharply decreased but it still remains relatively large in comparison with other EU countries. The large part of agricultural land is located in disadvantaged areas, which decrease costs of agricultural production. It also suffers from the structural problems such as small-scale and low-tech agriculture and the domination of traditional economy, which is not adapted to the market conditions. Despite these negative aspects, the primary sector in Poland is currently much more modern and competitive as an effect of implementation of the structural adjustments than it was a decade ago.

Adjustments required by the EU internal market along with the Structural Funds from the EU budget resulted in an increase of competitiveness and higher income from agricultural production. Currently, the biggest challenge for Poland is to stop the process of depopulation in rural areas.

## Bibliography

1. European Commission (2007). *Cohesion Policy 2007-2013. Commentaries and Official Texts*, Luxembourg, pp. 13-25.
2. European Commission (2012). *Eurostat Regional Yearbook 2012*. Publications Office of the European Union. Luxembourg 2012, pp. 384-387.
3. European Commission (2011). *Science, technology and Innovation in Europe*. Eurostat Pocketbooks, European Union 2011 edition, pp. 29-39.
4. European Communities (2004). *The Common Agriculture Policy Explained*. Luxembourg, pp. 24-30.
5. Eurostat (2012). *Agriculture, Fishery and Forestry Statistics. Main Results - 2010-11*, Eurostat Pocketbooks. European Union, pp. 83-93, 125-127.
6. Eurostat (2010). *Area under Organic Farming*, Statistics in Focus No. 10/2010, pp. 2-6.
7. Lopaciuk, W., Judzinska, A. (2011). *Wplyw Wspolnej Poiityki Rolnej na rolnictwo*, Warszawa, Instytut Ekonomiki Rolnictwa i Gospodarki Zywnosciowej, pp. 8-14.
8. Ministry of Agriculture and Rural Development (2011). *Agriculture and Food Economy in Poland*, Warsaw, pp. 75-85.
9. OECD. Fact Book 2011-2012: *Economic, Environmental and Social Statistics*, OECD Publications. Paris 2012, pp. 74-76, 152-154.
10. *Rural Development in the European Union. Statistical and Economic Information*, Directorate- General for Agriculture and Rural Development. European Union. December 2009, p. 96, 164.
11. Teichgraber, M. (2012). *European Union Labour Force Survey - Annual Results 2011*, Eurostat. Statistics in focus 40/2012, pp. 3-7.