ISSN 1644-0757
www.acta.media.pl

ACTA *Acta Sci. Pol. Oeconomia 14(1) 2015, 47–54*

COMMON AGRICULTURAL POLICY OF THE EUROPEAN UNION AND THE CHANGES IN POLISH AGRICULTURE

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Abstract. In Poland, as early as in the pre-accession period to the European Union, the activities aiming at the creation of conditions for implementation of the principles of Common Agricultural Policy (CAP), which assumed supporting of agricultural production with direct payments and match-funding, had already been undertaken. In order to realize that task, the Agency for Restructuring and Modernization of Agriculture (ARMA) was formed. In the years 2004–2013 it gave agriculture 94,9 billion PLN, within the frames of subsidies and its beneficiaries were farmers. A considerable increase in the development of agricultural production support, from less than 9% in pre-accession period to about 60%, in the years 2009–2010, did become a fact. Those financial means were mainly destined for creating production potential and structural alterations in agriculture. To determine the influence of CAP on Polish agriculture, the following parameters were subjected to analysis: factors of production and their structure, as well as productivity of agricultural production factors and food self-sufficiency. Significant changes, resulting in the increased agricultural productivity and factors of production, were recorded for all the analyzed fields. Also the production of majority of agricultural products per 1 inhabitant has increased, which contributes to food self-sufficiency of Poland.

Key words: agriculture, Common Agricultural Policy, support, subsidies, productivity, self-sufficiency

INTRODUCTION

The Polish agriculture after World War II was functioning in completely different political, economic and legal conditions from that of market economy countries, which formed, and later associated subsequent European Union (EU) countries [Kapusta 2012].

During the European Council summit in Copenhagen, 21–22 June 1993, a political decision about accession of Central Europe countries to the EU and the conditions

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of their membership were established. The challenge for Poland proved to be actual harmonization of the Polish law with the EU law, understood not only as appropriate legislative activities, but also as the change in activities of public authorities, first of all in the field of public administration [Nurzyńska 2012]. Common Agricultural Policy (CAP) of the EU involves mainly:

a) common market – abolition of trading restrictions referring to soil, forest and sea produce inside the EU; common process, fixed exchange-rate in agricultural trade turnover; harmonization of administrative, phytosanitary, veterinary and health protection regulations; structural policy is a component of CAP,
b) main assumptions of agricultural policy: a primary productive unit in agriculture is a farm; agriculture constitutes a special sector of the EU economy, which is to ensure the EU self-sufficiency regarding agricultural produce; agricultural policy requires separate legislative regulations, there are established primary rules of CAP (single market, the EU preferences, financial solidarity).

CAP objectives are to be achieved by:

- regulation of agricultural markets,
- financial support for farmers' income,
- co-financing of investment and modernization projects in agriculture and in rural areas,
- system of storage and sale of agricultural commodities,
- common techniques for import or export stabilization.

Common Agricultural Policy (CAP) possessed the instruments of financial support of agricultural producers and, therefore, the need to establish appropriate government agencies did arise. As early as in pre-accession period, institutional infrastructure, capable of receiving and redistributing support measures among the beneficiaries, was formed, among others, Agricutural Market Agency (AMA) [Ustawa...] and Agency for Restructuring and Modernization of Agriculture (ARMA) [Ustawa...], as well as a number of administrative decisions were taken [Nurzyńska 2012].

RESEARCH OBJECTIVES, RANGE AND METHODOLOGY

The purpose of the work was determination of the effects of CAP on production and structural alterations in Polish agriculture. To capture properly those changes, the research on the state of agriculture in the years 2001–2003 and 2010–2012 was conducted. The first period shows the state of agriculture in Poland's pre-accession period to the EU, the second – after advanced changes in agriculture (nine years of CAP). The pattern of three-year periods in research can be justified by the fact that in agriculture we deal with nature forces, independent from a man, which affect on production and mean values. The latter ones, obtained for three years, at least partially reduce that changeability.

This elaboration was based on such sources as serial and non-serial publications, statistical data by Central Statistical Office (CSO).

The collected material was elaborated and interpreted with the use of the following methods: vertical comparative method [Kapusta 1976; Stachak 2003] and statistical method [Stachak 1997]. The assessment of food self-sufficiency was based on the methodology by Kapusta [2012] using:

a) index S_s, which is a quotient of national production (*Pk*) and national consumption (*Zk*), (in this case: food consumption, sowing, industrial consumption, grazing, as well as loss and shrinkage) according to the formula:

$$S_s = \frac{Pk}{Zk} \times 100$$

where: S_s – degree of self-sufficiency;
Pk – national production;
Zk – national consumption;

b) share of consumption in production (%);
c) share of import in consumption (%);
d) share of export in national production (%);
e) balance of trade (thousands tons).

To analyze the occurring phenomena, indicators of change structure and dynamics. The research results were tabled and provided with the appropriate description.

RESEARCH RESULTS AND DISCUSSION

Analyzing the transfer of financial means from the EU budget it is possible to state that as early as in 2004, the first financial means were received from the EU, among others, to support the development of rural areas, which probably provided for farmers' and village dwellers' increased acceptance of Poland's membership in the EU.

As a result of joining the EU, in Poland the expenditure of national budget on agriculture were supported by the EU funds within the frames of single area payments and complementary national direct payments (Table 1).

Single area payment is a financial instrument from the first pillar of CAP, where 100% expenses are covered by the EU budget. After negotiations with the European Commission (EC), Poland gained the right to co-financing determined amount of direct payments from national budget in particular years, reaching 100% of financing direct payments

Table 1. Single area payments realized within the frame of 2007–2013 campaign

Period	Type of payment (million PLN)		
	single area payment	complementary national direct payment	total
2004	2 853.6	3 486.8	6 340.4
2005	3 160.2	3 529.1	6 689.3
2006	3 881.2	3 915.8	7 797.0
2007	4 242.8	2 763.0	7 005.8
2008	4 759.5	2 560.5	7 320.0
2009	7 071.2	3 384.2	10 455.4
2010	7 815.7	3 093.5	10 909.2
2011	9 875.2	2 579.5	12 454.7
2012	10 210.5	2 684.4	12 894.9
2013	11 092.2	1 909.2	13 001.4
2004–2010	64 962.1	29 906.0	94 868.1

Source: Agriculture in 2012, CSO, Warsaw 2013, p. 39; AMA.

from the EU budget only 2013. Therefore, expenses from national budget had to increase and they amounted (%) in particular years: 2004 – 2.89, 2005 – 3.29, 2006 – 3.74, 2007 – 6.67, 2008 – 8.58, 2009 – 6.18, 2010 – 9.83, 2011 – 9.1, 2012 – 8.34, 2013 – 8.39. It should be stressed, that before accession, in the years 1997–2003, the share of expenses on agriculture ranged, average, 2.23% [Nurzyńska 2012], which meant that the share of expenses on agriculture from national budget in 2013 increased by 2.8 times. Single area payments the highest payment which, in 2011, ranged 61% of all financial means directed to rural areas in Poland by the EU. Moreover, it was the payment whose purpose was to reach particular beneficiaries.

The number of beneficiaries granted single area payments and complementary national direct payments was changed: in 2004 it involved 1,387,842 farmers, in 2005 – 1,468,976 (the highest number) and later it systematically decreased, to reach 1,348,966 in 2013. Each year proportion of granted payments in relation to the number of applications amounted more than 99%.

More and more significant role of direct payments as an income-forming factor in agriculture can be observed year by year. Before the accession, subsidies provided for less than 9% of farmers' income, while in the years 2009–2010 it was more than 60% [Poczta 2012]. Complementary national direct payments, however, underwent the change both regarding the amount and the type of support. The payments (area and complementary) in most cases were destined by farmers to production activities and modernization of farms, which was expressed by the changes in resources of factors of production, as well as in production itself (Table 2).

Table 2. Changes in resources factors of production in the years 2001–2012

Specification	Mean value for the years 2001–2004	Mean value for the years 2010–2012	Changes
Agricultural area (thousand ha)	16 952.2	15 202.0	–1750.2
Agricultural area per 1 inhabitant (are)	44.36	39.45	–4.91
Number of farms (thousand units)	1 899.2	1 519.7	–379.5
Average farm area (ha)	8.93	10.0	+1.07
Employed in agriculture (thousand AWU[b])	2103.5	2 325,7[a]	+222.2
Employed per 100 ha agricultural area (AWU)	12.4	15.3	+2.9
Assets value (million PLN), including:	110 330.8	127 748.8	+17 418.0
buildings and civil engineering works (%)	61.7	56.7	–5.0
machines, technical devices and tools (%)	12.9	16.4	+3.5
means of transport (%)	11.7	11.9	+0.2
Tractors in agriculture (thousand units)	1 348.1	1 466.3[a]	+118.2
Agricultural area 1 tractor (ha)	12.57	10.37	–2.2

[a]Data for 2010, [b]Annual Work Unit = 265 days × 8 hours = 2120 man-hour.

Source: Statistical Yearbook of Agriculture and Rural Areas 2005, CSO, Warsaw 2005, pp. 191, 199, 223–224, 232, 236, 238–239, 246–248, 252, 259–260, 278, 287–288, 296, 300, 304, 481–482, 484; Statistical Yearbook of Agriculture 2012, CSO, Warsaw 2012, pp. 81, 105, 158, 163,184–185, 191, 204; 2013, pp. 79, 103, 125, 130, 132, 145–147, 151, 153; Statistical Yearbook of the Republic of Poland 2003, CSO, Warsaw 2003, pp. 378, 382; 2004, pp. 192, 464, 467–469; 2012, pp. 195, 473–474, 477–480, 482, 484–486.

[1]The increase in the number of the employed probably resulted from: the change in methodology of counting employees, family members coming back to farms from business (results of economic downturn), as well as wilder range of labourious crops.

The factors of production underwent the following changes (Table 3):

- decrease in agricultural area by 10.3%, which brought about diminished agricultural area per 1 inhabitant of the country by 8.9%. To maintain previously obtained level of meeting food demand in the society, it is necessary to increase the development of agriculture,
- the number of farms decreased by 20% and average farm area increased by 12%,
- increase in the number of the employed in agriculture (AWU) by 10.6% and per 100 ha of agricultural area by 23.4%, which results in the development of increased, labourious production,
- increase in production assets value by 15.8% and, within their structure, could be observed the decrease in the share of buildings and civil engineering works by 5 percentage points 5 (p.p.), while the share of machines, technical devices and tools increased by 3.5 p.p., as well as means of transport by 0.2 p.p., also increased the number of tractors owned by farmers by 8.8%, while agricultural area per 1 tractor decreased by 17.5%.

Table 3. Changes in agriculture productivity

Specification	Mean value for the years 2001–2004	Mean value for the years 2010–2012	Changes
Productivity of factors of production (PLN)			
land: gross output – Pg per 1 ha a.a (agricultural area)	3 387.7	6 320.9	+2 933.2
final output – Pk per 1 ha a.a.	2 466.6	4 983.7	+2 517.1
net final output – Pkn per 1 ha a.a.	2 117.9	4 178.5	+2 060.6
assets: Pg per 1000 PLN assets	520.5	755.1	+234.6
Pkn per 1000 PLN assets	325.4	499.2	+173.8
labour: gross output – Pg per AWU	27 302.0	41 317.0	+14 015.0
net final output – Pkn per AWU	17 068.5	27 312.6	+10 244.1
Commercialization			
market output – Pt per 1 ha a.a.	2 108.2	4 507.9	+2 399.7
net market output – Ptn per 1 ha a.a.	2 918.3	3 702.6	+784.3
Pt per Pg × 100 (%)	62.2	71.3	+9.1
Profitability			
gross value added – Wdb per 1 ha a.a.	1 073.0	2 490.9	+1 417.9
gross value added – Wdb per AWU	8 647.1	16 282.0	+7 634.9

Source: Like in Table 2.

The changes in agriculture productivity, commercialization and profitability (Table 4):

- increase in gross output by 67.3%, final production by 81.2%, net final production by 76.9%, commercial farming (commodity production) by 105.7% and gross added value by 108.2%,
- increase in productivity of factor of production measured by net final production: land by 97.3%, assets by 53.4%, labour by 60%. In spite of the increase in labour productivity, it still was significantly lower than its mean value in the EU and in 2010 the mentioned productivity amounted 10008 Standard Output (SO^2) per AWU as compared to 28,429 per AWU in the EU-27 [Kapusta 2014],

[2]SO – Standard Output is mean value for five-year-production from 1 ha in EUR.

– increase in commercial farming: commercial farming by 113.8% per 1 ha a.a., net commercial farming by 26.9% and commercialization index increased by 9.1 p.p.,
– increase in profitability per 1 ha a.a. by 132.1% and per 1 AWU by 88.3%.

Table 4. Changes in Poland's food self-sufficiency

Specification	Mean value for the years 2001–2004	Mean value for the years 2010–2012	Changes
Cereals			
Consumption (thousand tons)	5 834.7	5 280.3	–554.4
Share of consumption in production (%)	23.0	18.9	–4.1
Share of import in consumption (%)	23.9	43.1	+19.2
Share of export in production (%)	1.9	7.8	+5.9
Balance E-I (thousand tons)	–921.7	–157.3	–764.4
Self-sufficienct index	95.7	101.1	+5.4
Potatoes			
Consumption (thousand tons)	5 046.0	4 333.7	–712.3
Share of consumption in production (%)	25.6	47.3	+21.7
Share of import in consumption (%)	6.0	8.6	+2.6
Share of export in production (%)	1.9	6.0	+4.1
Balance E-I (thousand tons)	70.6	177.6	+107.0
Self-sufficiency index	100.4	102.0	+1.6
Cow milk			
Consumption (million l)	9 992.3	9 598.3	–394.0
Share of consumption in production (%)	86.6	79.4	–7.2
Share of import in consumption (%)	2.9	11.0	+8.1
Share of export in production (%)	17.5	24.4	+6.9
Balance E-I (million l)	1 729.3	1 891.3	+162.0
Self-sufficiency index	108.0	127.0	+19.0
Chicken eggs			
Consumption (thousand tons)	438.3	359.3	–79.0
Share of consumption in production (%)	89.6	61.2	–28.4
Share of import in consumption (%)	0.5	10.0	+9.5
Share of export in production (%)	3.3	55.4	+52.1
Balance E-I (thousand tons)	14	289.3	+275.3
Self-sufficiency index	102.9	138.7	+35.8
Meat and offal			
Consumption (thousand tons)	2 911.3	3 034.3	+123.0
Share of consumption in production (%)	89.6	76.4	–13.2
Share of import in consumption (%)	2.9	23.1	+20.2
Share of export in production (%)	8.7	37.8	+29.1
Balance E-I (thousand tons)	198.4	799.3	+600.9
Self-sufficiency index	107.1	124.6	+17.5

Source: Like in Table 2.

The data confirming the increase in self-sufficiency (Table 4): cereals by 5.4 p.p., potatoes by 1.6 p.p., cow milk by 19 p.p., chicken eggs by 35.8 p.p., as well as meat and offal by 17.5 p.p.

The changes in the size of production of particular agricultural products, did influence on the increase in their size counted per 1 inhabitant. None of the analyzed products showed any change threatening foods self-sufficiency.

CONCLUSIONS

Poland, aiming at the transition to market economy in 1990s, was preparing the whole economy for accession to the EU, which especially involved agriculture and rural areas. At the moment of accession, a number of institutions and legal solutions had already existed, which allowed to accept and appropriately manage financial support directed to rural areas and agriculture. That support provided for the necessity to increase expenditure on agriculture, also from country's public funds (co-financing). Eventually, financial support for agriculture increased from less than 9% in pre-accession period to 60% in the years 2009–2010. The subsidies – direct payments and complementary national direct payments directed to farmers constitute about 61% of all financial means destined for rural areas by the EU. The subsidies contribute to the increase in production potential of agriculture, the changes in its structure, increased productivity of factors of production, as well as to foods self-sufficiency.

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WSPÓLNA POLITYKA ROLNA UNII EUROPEJSKIEJ A PRZEMIANY ROLNICTWA POLSKIEGO

Streszczenie. W Polsce już w okresie przedakcesyjnym do Unii Europejskiej podejmowano działania mające na celu stworzenia warunków wdrażania zasad wspólnej polityki rolnej (WPR), która zakłada wsparcie produkcji rolniczej dopłatami bezpośrednimi i uzupełniającymi. Dla realizacji tego zadania została powołana Agencja Restrukturyzacji i Modernizacji Rolnictwa (ARiMR), która w latach 2004–2013 do rolnictwa przekazała 94,9 mld PLN w ramach dopłat, a beneficjentami byli rolnicy. Wyraźnie wzrosło wsparcie rozwoju produkcji rolniczej z niespełna 9% w okresie przedakcesyjnym do około 60% w latach 2009–2010. Środki te zostały przeznaczone w większości na tworzenie potencjału produkcyjnego rolnictwa i zmiany strukturalne w nim. Aby uchwycić wpływ WPR na polskie rolnictwo, w opracowaniu poddano analizie: zasoby czynników produkcji i ich strukturę, produktywność czynników produkcji rolniczej oraz samowystarczalność żywnościową. Stwierdzono we wszystkich analizowanych dziedzinach znaczące zmiany, których efektem jest wzrost produktywności rolnictwa i czynników produkcji. Wzrasta również produkcja większości produktów rolniczych na 1 mieszkańca, co przyczynia się do poprawy samowystarczalności żywnościowej Polski.

Słowa kluczowe: rolnictwo, wspólna polityka rolna, wsparcie, dopłaty, produktywność, samowystarczalność

Accepted for print: 18.02.2015