

## **REGIONAL DIFFERENCES IN OBTAINING EU FUNDS SUPPORTING COMPETITIVENESS OF AGRI-FOOD SECTOR IN POLAND IN THE YEARS 2002–2013**

Maria Kierepka<sup>1</sup>, Katarzyna Szmidt<sup>2</sup>, Andrzej Samborski<sup>1</sup>

<sup>1</sup>State Higher School of Vocational Education in Zamość

<sup>2</sup>University of Life Sciences in Lublin

**Abstract.** This paper presents the EU support for the competitiveness of the Polish agri-food sector in the years 2002–2013. Authors singled out 15 measures of SAPARD, SPO-ROL, RDP programmes, which directly and indirectly affected the achievement of the objective of this analysis. Authors evaluated budget support across the country and in particular provinces (voivodships). Agri-food entities and general business environment in rural Poland has been subsidised to the tune of PLN 30,452 million. Most of the funds were assigned to farmers (80%), whereas the processing industry and infrastructure improvements acquired similar amounts of around 10% of the budget allocated for this purpose.

**Key words:** EU support, agriculture, processing industry

### **INTRODUCTION**

The development of agriculture in the modern world is the result of both spontaneous economic processes and implementation of national agricultural policy, taking into account both internal conditions and global trends, which define the place of the agricultural sector in the economy of each country and its importance and direction of development [Kowalski et al. 2011].

Agriculture is a sector of the economy, which is not, by itself, able to produce a specific economic surplus that ensures a continuous development. In developed countries, subsidizing of investments in the agricultural sector has been common and widespread [Poczta 2005, Bożek 2010]. However, in Central and Eastern Europe the situation was the

---

Corresponding authors – Adres do korespondencji: Maria Kierepka, State Higher School of Vocational Education (PWSZ) in Zamość, Pereca 2, 22-400 Zamość, Poland, e-mail: kierepka.maria@pwszzamosc.pl; Andrzej Samborski, State Higher School of Vocational Education (PWSZ) in Zamość, Pereca 2, 22-400 Zamość, Poland, e-mail: andrzej.s.samborski@gmail.com; Katarzyna Szmidt, University of Life Sciences, Department of Agricultural Sciences in Zamość, Szczepkowska 102, 22-400 Zamość, Poland, e-mail: katarzyna.szmidt@up.lublin.pl

opposite, and after the fall of communism there has been a general decline in state support for agriculture [Donald et al. 2002]. In Poland, in spite of the importance of socio-economic development, agriculture received much less support than that in other countries. Particularly low levels were observed in the period before the accession to the EU. It indicated the possibilities of production development capacity in Polish agriculture, and as a result, the ability to compete with farmers in other countries [Poczta 2005].

Polish agri-food sector, therefore, required certain measures to be taken in order to improve its competitiveness. Any adoption of investment activities naturally required huge capital investment [Żuk 2006].

However, modernization of Polish agriculture would not have been possible without external financial support from the European Union, both in the period before and after accession [Chmurzyńska 2008, Kowalski 2008, Czubak 2009, Kielbasa 2009, Kusz 2009, Podstawka 2009].

The support system for the countries of Central and Eastern Europe, which were to join the EU after 2000, was essential because of the need of the agricultural sector in each country to adjust to the new market regulations, to improve competitiveness and to improve the overall economic climate [Hertel et al. 1997]. The candidate countries implemented various agricultural policies and the integration required comprehensive harmonization across the EU [Regorsek et al. 2011]. Due to the relatively high share of agriculture in the economy and significant structural differences among the candidate countries and the EU-15 [Bożek 2010] various integration scenarios were carried out, as a result of which financial assistance was finally formed [Swaminathan et al. 1997, Bach et al. 2000, Nello 2002]. The main pre-accession assistance programme for agriculture and rural areas was SAPARD (Special Accession Programme for Agriculture and Rural Development) [Buchta 2005, Iacovoiu 2006, Kesner-Škreb 2006, Kónya 2012], and after the accession, the support was implemented within the framework of the Structural Funds [Jankowska et al. 2004].

Assistance programmes were aimed at improving the economic efficiency of farms and increase the quality of manufactured products. This process was closely associated with the investment and implementation of innovations. [Juchniewicz 2008, Grębowiec 2009, Jurkowski 2009, Lizińska 2009, Wasilewski et al. 2010]. The effect of these measures was to reduce the technological gap, which characterized the Polish agri-food sector in relation to other member states [Łapińska 2008].

The aim of the study was to analyze the competitiveness of EU support for the Polish agri-food sector in the period 2002–2013 in terms of regions (provinces, voivodships). The analysis covered the following programmes: SAPARD, Sectoral Operational Programme “Restructuring and modernization of food sector and rural development” (SOP-ROL) and the Rural Development Programme (RDP), implemented in the years 2002–2013.

## **MATERIAL AND METHOD**

The source material was the statistical information sourced from the Agency for Restructuring and Modernisation of Agriculture. We used information on the funds allocated to the Polish beneficiaries in the years 2002–2013 applying for funding aimed at

improving the competitiveness of farms, agri-food businesses, as well as the financing of infrastructure.

For the analysis, the following activities within individual programmes were taken into account:

a) SAPARD:

- Improving the processing and marketing of agricultural and fishery products,
- Investments in agricultural holdings,
- Development and improvement of rural infrastructure,
- Reparcelling (land consolidation);

b) SOP-ROL:

- Investments in agricultural holdings,
- Setting up young farmers,
- Improving the processing and marketing of agricultural products,
- Development and improvement of infrastructure related to agriculture;

c) RDP 2004–2006:

- Early retirement of farmers,
- Support for semi-subsistence farms;

d) RDP 2007–2013:

- Setting up young farmers,
- Early retirement for farmers,
- Modernisation of agricultural holdings,
- Improving and developing infrastructure related to agriculture,
- Agricultural producer groups.

Source materials used in the study were systematized and analyzed using statistical and analytical methods. The object of the study was the budget of support for the competitiveness of the agri-food industry across the country, and as well as broken down by particular provinces. The analysis also covered the structure of this budget because of the components forming it, both in relation to programmes within which a specific pool of support was acquired, as well as in relation to particular groups of beneficiaries (farmers, entrepreneurs and local governments).

## RESULTS AND DISCUSSION

Beneficiaries in Poland in the years 2002–2013 received a total of PLN 30,452 million<sup>1</sup> to improve the competitiveness of the agri-food sector. The budget was made up of 69% of RDP funds, 17% of the SOP-ROL and 14% of SAPARD funds (Fig. 1).

The highest funding in excess of the national average of PLN 1,903 million, was received by six provinces, which together acquired 62% of the pool of contracted resources, and the support in the remaining 10 provinces ranged between 2 and 6% of the total funding paid out (Fig. 2).

The deployed support budget for changes and adjustments in the agri-food sector accounted for the largest share of the funds raised to improve the competitiveness of

---

<sup>1</sup>Information Management System of ARMA, data retrieved 30 April 2014.

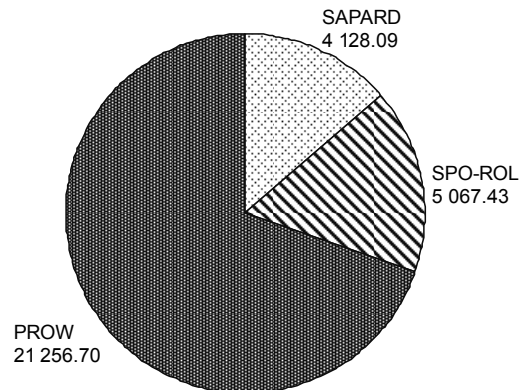


Fig. 1. The budget of support of agri-food sector competitiveness in Poland in the years 2002–2013 (in million PLN)

Source: Author's calculation based on data of ARMA.

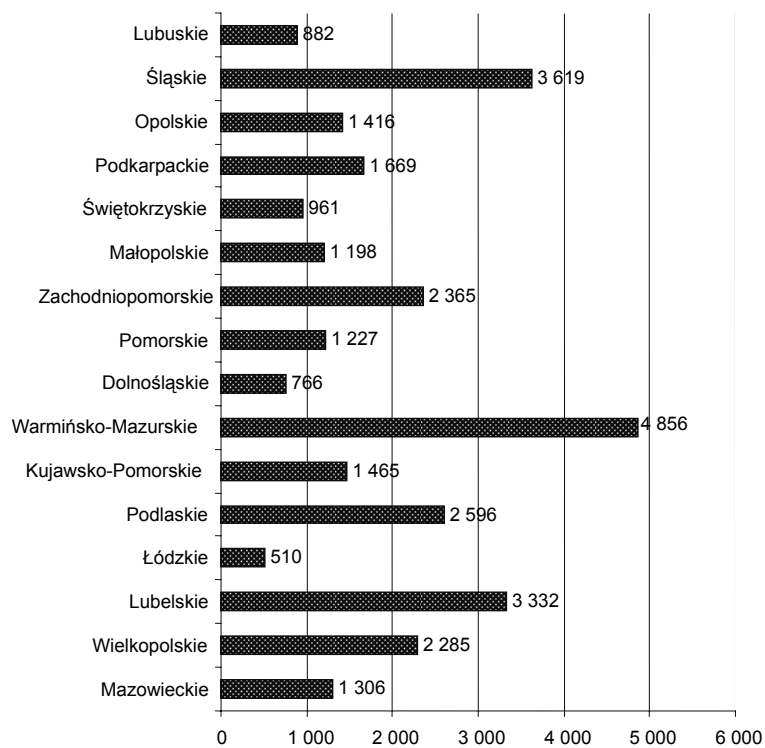


Fig. 2. The regional diversity of the competitiveness support of agri-food sector in Poland, by region (in million PLN)

Source: Author's calculation based on data of ARMA.

agriculture, namely 80%. About 10% of the funds were addressed to companies within the processing industry, and similar levels of funding were allocated for the improvement of infrastructure in rural areas (Fig. 3).

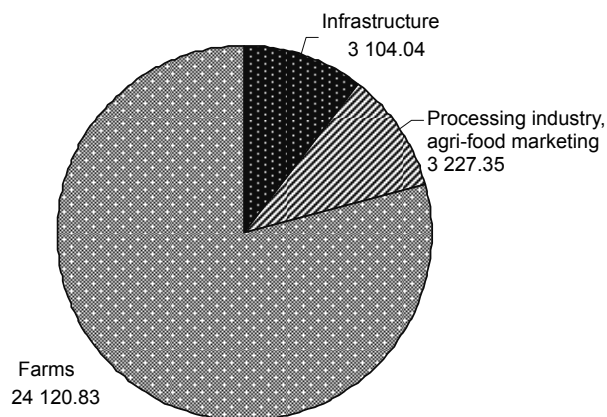


Fig. 3. Structure of support the changes and adjustments in the agri-food sector in Poland in the years 2002–2013 (in million PLN)

Source: Author's calculation based on data of ARMA.

The acquired funds were intended to increase the efficiency of farms by making better use of production means, the introduction of modern technology, improvements in the quality of production and the adjustment of the agricultural production to EU standards. Projects in receipt of funding included the construction and modernization of production buildings, purchase of technical equipment, livestock and agricultural land, establishment of permanent crops, preparation of the production base for the implementation of special branches of agricultural production and measures to improve the agrarian structure.

The competitiveness of agriculture in Poland in the years 2002–2013 was supported with PLN 24,120.83 million. For this purpose, funds were allocated from SAPARD (2%), SOP-ROL (20%) and RDP (78%). The main beneficiaries were Mazowieckie, Wielkopolskie, Lubelskie, Łódzkie, Kujawsko-Pomorskie, Podlaskie Provinces, which used 65% of the total budget. The remaining amount (35% of the budget) went to other provinces, whose funding did not exceed the average grant in the region (PLN 1,507.55 million) – Figure 4.

In the financing structure of agriculture the largest share of resources were those for investment in agricultural holdings – 44%. These projects were funded primarily of funds applied for in 2007–2013. As much as 72% of all funds allocated for this purpose were obtained in those years. In previous years, 23% of funding came from the SOP-ROL and only 5% were sourced from SAPARD. These proportions are due, of course, to the size of the budgets of individual programmes, because the level of funding use of the sanctioned limit in each of them was always on a very high level. Most of the money was in fact received in Poland between 2007 and 2013. A high proportion of the funding pool for farms were used by funds for early retirement (37%). The purpose of this

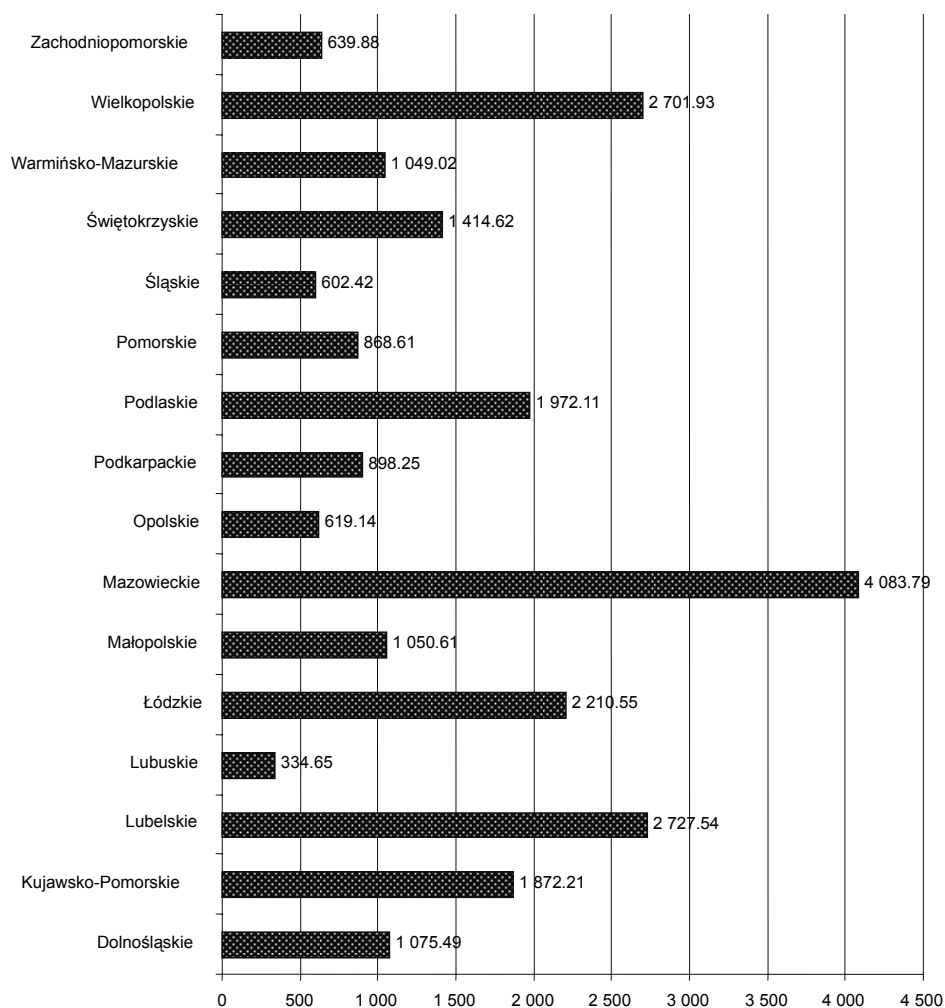


Fig. 4. Support of agriculture in Poland in the years 2002–2013, by region (in million PLN)

Source: Author's calculation based on data of ARMA.

measure was to accelerate the transformation of the agrarian structure and speed up the process of generation exchange among agricultural operators and to improve the profitability and competitiveness of farms and their transfer to younger people, well prepared for the tasks of professional farmers. Stimulation of structural changes in the agricultural sector was also a major purpose of the funds allocated in 2004 and aimed at facilitating young farmers. In Poland, the funds obtained in this area at that time accounted for 10% of the budget for the financing of agriculture. The research literature shows that the result is more than 37 thousand new farms run by young, well-educated and prepared farmers, and the average age of Polish farmers is the lowest in the EU [Department of Communications ARMA 2014]. That budget also included funding (9%) to support farm holdings

facing structural problems, especially farms with low levels of market participation. Only 0.21% of funds were attracted by the measures aimed at strengthening the institutional structure in the primary agricultural production by encouraging manufacturers to create groups of agricultural producers. In April 2014, the records of Province Administration recorded 1,379 agricultural producer groups. In 2004, 31 groups were recorded, in 2007, 104 producer groups, and in 2013 – 486 groups. The best organized groups were present in the following provinces: Wielkopolska (427 groups), Lower Silesia (130) and Kujawsko-Pomorskie (126 groups). The fewest groups were present in Świętokrzyskie and Małopolska (<http://ksow.pl/grupy-producentow-rolnych>). The smallest amount – 0.38% of support was given to land consolidation – a measure aimed at improving the economic conditions in agriculture (Fig. 5).

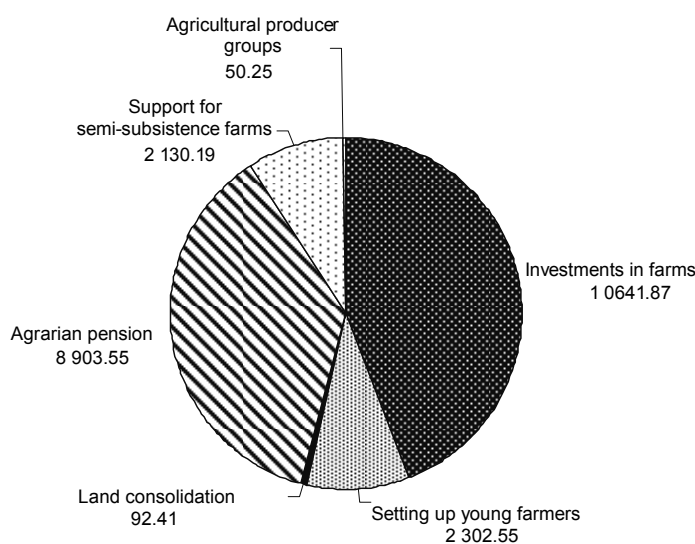


Fig. 5. The structure of agricultural financing in Poland in the years 2002–2013 (in million PLN)

Source: Author's calculation based on data of ARMA.

Another group of beneficiaries obtaining funds for improving the competitiveness of their enterprises were the processors of agricultural products. The primary purpose of supporting projects in the field of processing and marketing of agricultural products was a fast adaptation of meat, dairy, fruit and vegetable enterprises to the requirements of the domestic and international standards relating to veterinary – sanitary and hygienic conditions, and quality; in other words, the preparation of these entities to functioning in conditions of strong competition in the Single Market. Funding could be used for keeping production in line with foreseeable market trends, supporting the development of new markets, improving or rationalizing marketing channels, new technologies, improvement of quality control, implementation of the HACCP system, as well as environmental protection [Drożdziel 2007].

Agri-food industry in Poland was financed by funds from SAPARD and SPO-ROL in the proportions of 47 and 53% respectively. For the improvement of processing and marketing of agricultural products a total amount of PLN 3,227.35 million was obtained. Grants in excess of the provincial average (PLN 202 million) were received by the beneficiaries in 7 provinces of Wielkopolska, Mazowieckie, Lubelskie, Łódzkie, Podlaskie, Kujawsko-Pomorskie and Warmińsko-Mazurskie – 70% of the budget allocated for this purpose (Fig. 6).

Infrastructure development was supported with funds coming from the state budget, budgets of municipalities and aid funds (domestic and foreign). Measures for the im-

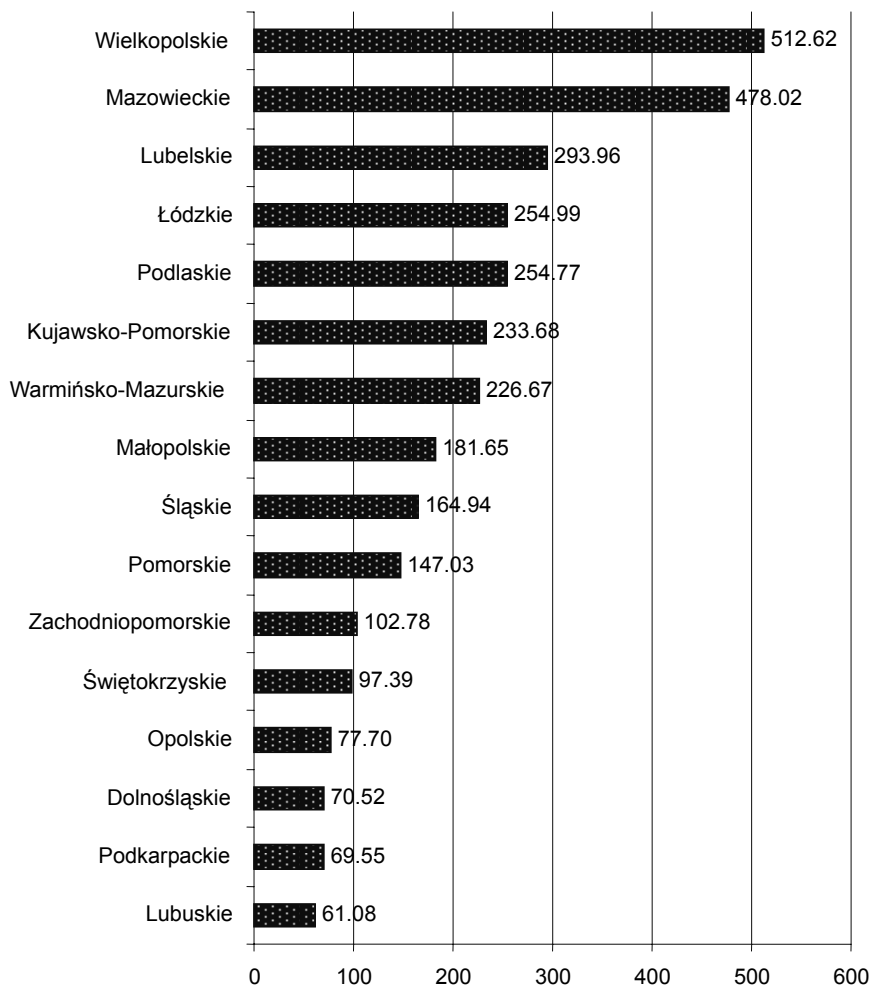


Fig. 6. Support for the processing sector in Poland in the years 2002 – 2013, by region (in million PLN)

Source: Author's calculation based on data of ARMA.



provement of infrastructure in rural areas indirectly contribute to improving the competitiveness of the agri-food industry by improving the business environment. For this purpose a total of PLN 3,104.04 million was acquired, of which 65% of the support came from the SAPARD Programme, 30% – RDP and 5% were measures originating from SOP-ROL. The activity of the beneficiaries in raising funds for the development of infrastructure varied. Projects with the highest value were realized in the regions of Wielkopolska, Lubelskie, Mazowieckie, Podkarpackie, Małopolskie and Śląskie – the total value representing 55% of the budget allocated for the financing of infrastructure investments (Fig. 7).

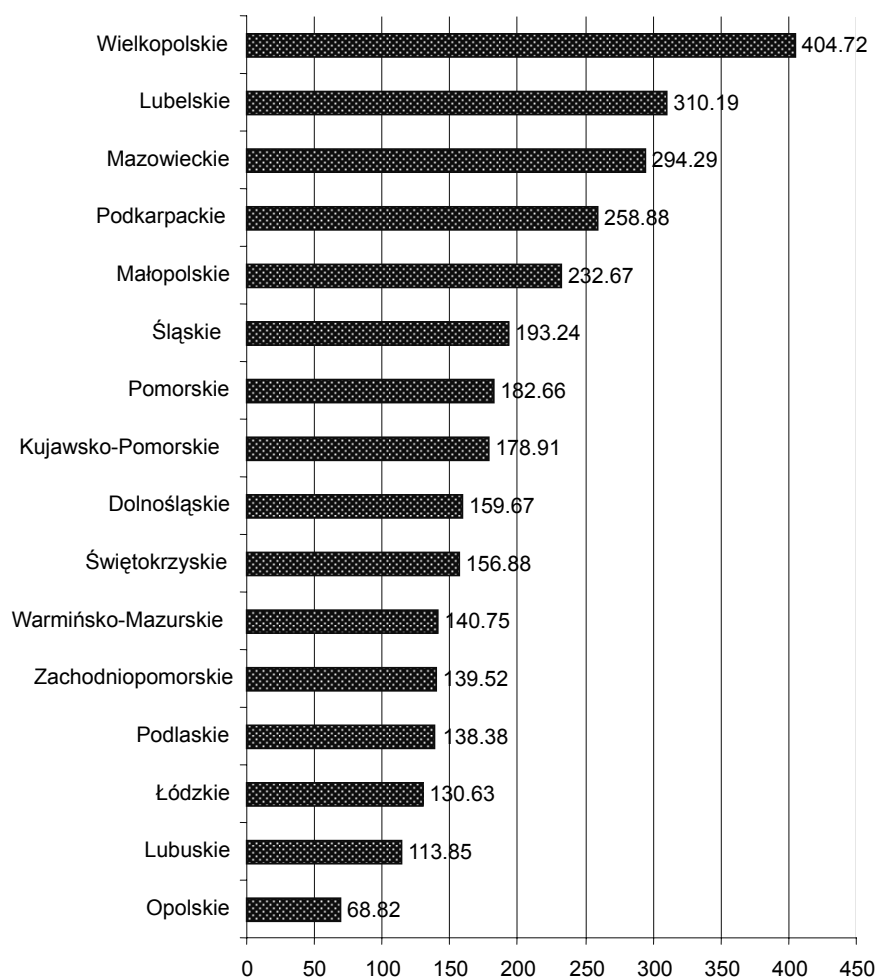


Fig. 7. Financing infrastructure investments in Poland in the years 2002–2013, by region (in million PLN)

Source: Author's calculation based on data of ARMA.

## CONCLUSIONS

The analysis showed regional differences in raising funds for the improvement of the competitiveness of the agri-food industry, both for farmers, businesses and local governments. Agri-food entities and the measures aimed at improving the business environment in rural Poland received subsidies amounting to PLN 30,452 million. Most of the funds were directed at farmers (80%), whereas the processing industry and infrastructure improvements acquired similar amounts of around 10% of the budget used for this purpose.

Financial support, both before and after the Polish accession to the European Union was of great importance because of the huge investment needs in this area. The analyzed support instruments in the period 2002–2013 were primarily addressed for the improvement of the technical condition of farms and processing plants to adapt to the veterinary and sanitary requirements of the EU standards. Investment in tangible assets, for particular periods of time, lead to lower production costs and thereby increase financial profits, leading in turn to development of businesses and shaping their competitive advantage.

The possibility of obtaining support from EU funds and their proper use has been and still is an important factor in improving the competitiveness of both farms and processing sector entities.

## REFERENCES

- Bach C.F., Frandsen S.E., Jensen H.G., 2000. Agricultural and Economy-wide effects of European enlargement: Modelling the Common Agricultural policy. *Journal Of Agricultural Economics* 51 (2), 162–80.
- Bożek J., 2010. Typologia krajów Unii Europejskiej pod względem podobieństwa struktury agrarnej. (Typology of European Union countries in terms of the similarity of the agrarian structure). *Acta Scientiarum Polonorum, Oeconomia* 9 (3), 17–23.
- Buchta S., 2005. Regional aspects of the SAPARD programme implementation in the Slovak Republic. *Agric. Econ. – Czech* 51 (12), 539–546.
- Chmurzyńska K., 2008. Wpływ SPO-Rolnictwo na poprawę konkurencyjności gospodarstw rolnych i przedsiębiorstw przemysłu spożywczego. (The eEffect of SOP-Agriculture on improving the competitiveness of farms and food industry companies). *Annals of The Polish Association of Agricultural and Agribusiness Economists* X, 3, 67–72 [in Polish].
- Czubak W., 2009. Ocena procedur pozyskiwania środków UE na cele inwestycyjne w gospodarstwach rolnych. (The assessment of procedures for obtaining EU funds for investment in agriculture). *Zeszyty Naukowe SGGW. Polityki Europejskie, Finanse i Marketing* 2 (51 – T. II), 319–330 [in Polish].
- Departament Komunikacji Społecznej, 2014. 10 lat WPR w Polsce. (10 years of the CAP in Poland). *ARiMR – Biuletyn Informacyjny* 6, 24–29 [in Polish].
- Donald P.F., Pisano G., Rayment M.D., Pain D.J., 2002. The Common Agricultural Policy, EU enlargement and the conservation of Europe's farmland birds. *Agriculture, Ecosystems & Environment* 89, 3, 167–182.
- Drożdziel L., 2007. *ARiMR – trzy lata po akcesji. (ARMA – three years after accession). ARiMR, Warszawa* [in Polish].
- Grębowiec M., 2009. Wpływ integracji polski z UE na przemiany jakości produkcji przedsiębiorstw rolno-spożywczych. (The influence of Polish integration with the EU on the transforma-

- tion the quality of production agri-food companies). *Zeszyty Naukowe SGGW. Problemy Rolnictwa Światowego* 8 (XXII), 64–74 [in Polish].
- Hertel T.W., Brockmeier M., Swaminathan P.V., 1997. Sectoral and economy-wide analysis of integrating Central and Eastern European countries into the EU: Implications of alternative strategies. *Eur. Rev. Agric. Econ.* 24 (3–4), 359–386.
- Iacovoiu V., 2006. The role of pre-accession funds in the Romanian Economy. *Buletinul Universitatii Petrol – Gaze din Ploiesti LVIII*, 2, Seria Stiinte Economice, 65–70.
- Jankowska A., Kierzkowski T., Knopik R., 2004. Fundusze pomocowe dla Polski po akcesji – fundusze strukturalne i Fundusz Spójności. (Polish aid funds for the accession – Structural Funds and the Cohesion Fund). *Polska Agencja Rozwoju Przedsiębiorczości, Warszawa*, 1–92 [in Polish].
- Juchniewicz M., 2008. Jakość jako czynnik wzrostu konkurencyjności przemysłu spożywczego w Polsce. (Quality as a factor of increasing the competitiveness of the food industry in Poland). *IERiGŻ, PIB. Wybrane aspekty konkurencyjności polskich producentów żywności* 110, 101–120 [in Polish].
- Jurkowski R., 2009. Finansowanie działalności rolniczej ze środków publicznych. (Financing of agricultural activities from public funds). *Annals of The Polish Association of Agricultural and Agribusiness Economists XI*, 5, 100–105 [in Polish].
- Kesner-Škreb M., 2006. The pre-accession programmes. *Financial Theory and Practice* 30 (3), 295–297.
- Kielbasa B., 2009. Ocena działalności inwestycyjnej przedsiębiorstw sektora rolno-spożywczego z uwzględnieniem wykorzystania funduszy europejskich. (Assessment of the investment companies agri-food sector including the use of EU funds.) *Zeszyty Naukowe SGGW. Problemy Rolnictwa Światowego* 8 (XXIII), 95–103 [in Polish].
- Kónya E., 2012. Impact of the Sapard Programme on the Rural Development System in Eastern-Central European Countries. Thesis of doctoral (PhD) dissertation. PhD School of Management and Business Administration, 1–32. Retrieved from [https://szie.hu/file/tt/archivum/Konya\\_Edit\\_thesis.pdf](https://szie.hu/file/tt/archivum/Konya_Edit_thesis.pdf).
- Kowalski S., 2008. Wykorzystanie środków pomocowych UE do modernizacji gospodarstw rolnych (The use of EU aid funds for modernization of farms). *Inżynieria Rolnicza* 5 (103), 15–19 [in Polish].
- Kowalski A., Figiel S., Halamska M., 2011. Społeczne i ekonomiczne uwarunkowania rozwoju sektora rolno-żywnościowego. (Social and economic conditions of development of the agri-food sector). *Polish Journal of Agronomy* 7, 29–42 [in Polish].
- Kusz D., 2009. Nakłady inwestycyjne w rolnictwie polskim w latach 1990–2007. (Capital expenditures in Polish agriculture in the years 1990–2007). *Annals of The Polish Association of Agricultural and Agribusiness Economists XI*, 2, 131–136 [in Polish].
- Lizińska W., 2009. Wyzwania rynku unijnego wobec polskich eksporterów sektora rolno-żywnościowego. (The challenges of the EU market to Polish exporters of agri-food sector). *Zeszyty Naukowe SGGW. Problemy Rolnictwa Światowego* 8 (XXII), 116–123 [in Polish].
- Łapińska J., 2008. Pozycja konkurencyjna polskiego handlu rolno-spożywczego. (The competitive position of Polish agri-food trade). *Annals of The Polish Association of Agricultural and Agribusiness Economists X*, 4, 243 [in Polish].
- Nello S.S., 2002. Preparing for Enlargement in the European Union: The Tensions between Economic and Political Integration. *International Political Science Review* 23, 3, 291–317.
- Poczta A., 2005. Poziom i struktura wsparcia finansowego rolnictwa w krajach OECD po powstaniu WTO. (The level and structure of financial support for agriculture in OECD countries after the establishment of the WTO). *Annals of The Polish Association of Agricultural and Agribusiness Economists VII*, 7 [in Polish].

- Podstawka M., 2009. PROW w perspektywie 2007–2013 (RDP in the perspective of the 2007–2013). *Roczniki Naukowe SERiA XI*, 4, 251–260 [in Polish].
- Regorsek D., Erjavec E., Kozar M., Kavcic S., 2011. Economic Effects of Integration and Reform Processes – Partial Equilibrium Approach. *Bulg. J. Agric. Sci.* 17, 721–729.
- Swaminathan P.V., Hertel T.W., Brockmeier M., 1997. European Union enlargement: What are the agricultural trade models missing? American Agricultural Economics Association Annual meeting, July 27-30, Toronto, Canada. Retrieved from <http://ageconsearch.umn.edu/bitstream/21030/1/spswamin.pdf>.
- Wasilewski M., Wasilewska A., Bezat A., 2010. Innowacyjność przedsiębiorstw przetwórstwa rolno-spożywczego: stan wiedzy i kierunku badań (Business innovation agri-food processing: state of knowledge and research direction). *Zeszyty Naukowe SGGW. Ekonomika i Organizacja Gospodarki Żywnościowej* 82, 103–114 [in Polish].
- Żuk J., 2006. Perspektywy rozwoju rolnictwa i gospodarki żywnościowej w Polsce po przystąpieniu do UE (Prospects for the development of agriculture and food economy in Poland after EU accession). *Zeszyty Naukowe SGGW. Problemy Rolnictwa Światowego XV*, 104–114 [in Polish].

## ZRÓŻNICOWANIE REGIONALNE W POZYSKIWANIU ŚRODKÓW UNIJNYCH WSPIERAJĄCYCH KONKURENCYJNOŚĆ SEKTORA ROLNO-ŻYWNOŚCIOWEGO W POLSCE W LATACH 2002–2013

**Streszczenie.** W artykule przedstawiono unijne wsparcie konkurencyjności gospodarki rolno-żywnościowej Polski w latach 2002–2013. Wyodrębniono 15 działań z programów SAPARD, SPO-ROL, PROW, które w sposób bezpośredni i pośredni miały wpływ na realizację celu niniejszej analizy. Oceniono budżet wsparcia w skali kraju i w układzie województw. Analiza wykazała, że na poprawę warunków prowadzenia działalności gospodarczej na obszarach wiejskich Polski oraz na rozwój podmiotów sektora rolno-żywnościowego wydano kwotę 30 452 milionów PLN. Najwięcej środków trafiło do rolników (80%), natomiast na przemysł przetwórczy oraz poprawę infrastruktury pozyskano zbliżone kwoty wynoszące ok. 10% budżetu wykorzystanego na ten cel.

**Słowa kluczowe:** wsparcie UE, rolnictwo, przemysł przetwórczy

Accepted for print – Zaakceptowano do druku: 01.12.2014