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DEVELOPMENT OF ORGANIC FARMING AND ITS ENVIRONMENT IN POLAND IN THE LIGHT OF THE EUROPEAN GREEN DEAL CHALLENGES

Key words: organic farming, organic farming, European Green Deal, Farm to Fork Strategy, Biodiversity Strategy, sustainable development of agriculture

ABSTRACT. The aim of European Green Deal (EGD) is to implement a pro-environmental and pro-climate policy, which should be translated into economic practice. EGD concerns agriculture, including organic, hence the importance of recognizing the current path of development of this management system and future prospects. The aim of this paper is illustration of current challenges in organic farming and its environment in Poland, taking into account European strategic and market goals. The population of organic farms and other organic entities operating in this segment were analyzed. The period covered 2004-2020, and data of Agricultural and Food Quality Inspection and Statistics Poland. Indicator analysis methods were used and trends were established. A comparison of the statistics for 2020 and 2004 showed the development of organic farming in Poland, taking into account the farms' number and the agricultural land in organic system. The period 2004-2020 was not homogeneous, and the last years can be considered as a period of stagnation. In the adopted perspective, the production profile of organic farms changed, which more and more often carried out only crop production, omitting livestock production. The further development of organic farming will be an important challenge, also taking into account the level of development of the market environment of organic farms, in particular the number of processors and operators involved in the supply of certified seed. The main determinant of the development of organic farming in Poland was, and in the next few years probably will be, the institutional factory.

INTRODUCTION

Since 2019, the theme of the European Green Deal (EGD) [EC 2019] has been gradually gaining importance in the European Union. The developed strategic document outlined the desired direction of administrative activities, and then business entities. According to the document, in the perspective of 2050, member states' efforts should be directed towards environmental protection and climate stabilization, mainly due to the creation of an economy not only competitive, but also resource-efficient, in particular in the use of natural resources. The measures taken should aim to achieve net-zero greenhouse gas emissions. The adopted objectives have been highlighted in subsequent EU strategies, namely the Farm to Fork Strategy and the Biodiversity Strategy [EC 2020 a, b]. These documents highlight the need to develop organic farming as measured by the share of organic agricultural land, which in 2030 should occupy at least 25% of agricultural land across the EU[1]. Administrative consensus work is currently underway to translate the EU target into national targets (the state at the beginning 2022).

The progressive greening of the common agricultural policy results from numerous premises, which on the one hand are the environmental costs incurred by society as a result of irresponsible management of environmental resources, and the other are environmental benefits, including ecosystem services, which are necessary for human existence [Zegar 2007, Wrzaszcz, Prandecki 2019]. Organic farming is one of the forms of sustainable farming, which should ensure that the various objectives of the farm are met [Zegar 2012]. According to Community law, organic production is a farm management and food production system that combines the most environmentally beneficial practices, a high degree of biodiversity, as well as the protection of natural resources, or high animal welfare standards [Journal of Laws, 2009. 116.975, EC Council Regulation 834/2007]. Organic production methods should meet the requirements of consumers who prefer products produced using natural substances and processes. "Organic production method therefore has a dual social function: on the one hand, it provides goods (...), and on the other hand, it is an activity in the public interest, since it contributes to the protection of the environment, animal welfare and rural development" [Council Regulation (EC) No 834/2007]. The above issues accurately justify the need to support organic farming in the form of a financial one, i.e. subsidies for the cultivation of various crop species carried out in accordance with the principles of the organic system.

The development of organic farming depends on many factors directly determining the decisions of agricultural producers, including the prices of organic products, demand for organic products, the amount of financial support, etc. An important element is also the development of the environment of organic producers, mainly organic entities involved

[1] The European Green Deal in the context of agriculture is presented in more detail in [Wrzaszcz, Prandecki 2020].

in the preparation of products, including processing and units involved in the supply of certified seed. A properly shaped environment, including institutional ones, determines the development of agriculture and its individual segments [Czyżewski et al. 2008].

The aim of this paper is illustration of current challenges in organic farming and its environment in Poland, taking into account European strategic and market goals.

MATERIAL AND RESEARCH METHODOLOGY

There were used studies and data of Agricultural and Food Quality Inspection (AFQI), and Statistics Poland (statistical annuals of agriculture). The study included the entire population of organic farms in Poland. The research period covered the years 2004-2020. Due to the changing scope of data collected and published, some of the results were presented for a shorter period. Indicator analysis was used, determining trends for the analyzed variables. The article addresses the following issues, appropriately illustrated by the available data, which were relevant in context:

– one of the objectives of the European Green Deal, i.e. the area of organic agricultural land and the total number of organic producers (after conversion – with a certificate of organic production and in the process of being rearranged),
– market – type of crop production and its volume, as well as the scale of livestock production from organic farms, measured by the number of livestock,
– environment – the number of organic entities operating in the environment of the agricultural producer, including the number of organic entities involved in the preparation of products, processing, taking into account the scope of processing activities, as well as the number of other organic producers involved in the supply of certified seed and vegetative propagating material.

RESEARCH RESULTS AND DISCUSSION

Based on the strategy of the European Green Deal, the statistical determinant of the state and development of agriculture is the share of agricultural area used according to the principles of organic farming. The results for the adopted survey period indicate that in the years 2004-2020 the area of organic agricultural land increased significantly (Figure 1). In 2020, the area of organic agricultural land (in total – after conversion and during conversion) was 509 thousand ha. After a systematic and dynamic increase until 2013, there was a several-year period of decline in organic agricultural land, lasting until 2018. The last two years herald a change in the direction of earlier, negative trends. Currently, the share of organic agricultural land area accounts for about 3.5% of the total agricultural

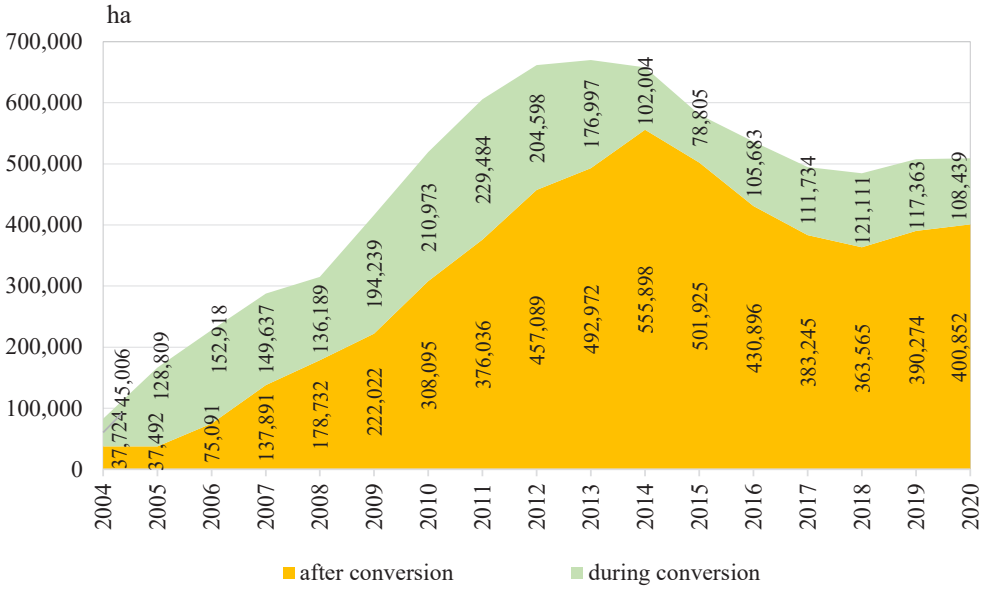

Figure 1. Organic agricultural land after conversion and during conversion
Source: own elaboration based on [Statistics Poland 2005-2020, IJHARS 2021]

land used in Poland, and the realistic scenario assumes a level of 6% in the perspective of 2030 [Jończyk 2021].

In the years 2004-2020, the relationship between the area of organic agricultural land with the certificate and during the transition to the organic production system changed.

In the initial period of development of organic farming (2004-2007), the area during conversion prevailed (52-77% of all organic agricultural land) – which resulted from the current, low level of development of this market segment – while in subsequent years it was certified. Taking into account both the observed trends and the proportion of certified and conversion area, it can be assumed that there will be no significant increase in organic area in the next few years.

The presented statistics inform in favor of refining the administrative actions encouraging agricultural producers to pro-environemntal agriculture, which are an important element of the National Strategic Programme for the years 2023-2027 [MRiRW 2022]. Experience from previous years has shown a growing interest of farmers in ecological activities due to the financial support offered under the Rural Development Plan 2004-2006, Rural Development Programme 2007-2013 and Rural Development Programme 2014-2020 [MRiRW 2004, 2007, 2014, Komorowska 2009]. The gradation of the amount of subsidies depending on the area of the farm was reflected in the reduction

of the organic agricultural area, observed since 2014. Taking into account the need to develop organic farming in the context of the European Green Deal, it is necessary to strengthen on the supply side – producers focused on the organic assortment, as well as demand – determined by awareness (environmental and health), as well as the economic opportunities of consumers [Brzostek-Kasprzak 2013, Biazik, Śmieja 2019].

The population of organic agricultural producers – 18.6 thousand – is currently dominated by farms with a certificate of organic production (84% of all organic farms. Trends and relations between the number of certified farms and during the switch coincided with those illustrated on the Figure 2.

The important determinant of the development of organic farming is the volume of organic production, both crop and livestock. Most organic farms are focused exclusively on crop production – from 2014 until 2018, the percentage of farms with only crop production was gradually increasing (from 81% to 88% of farms). Recent years indicate a slight improvement in the diversification of production directions, as currently every fifth farm runs both directions of production. The requirements of organic farming translate into the

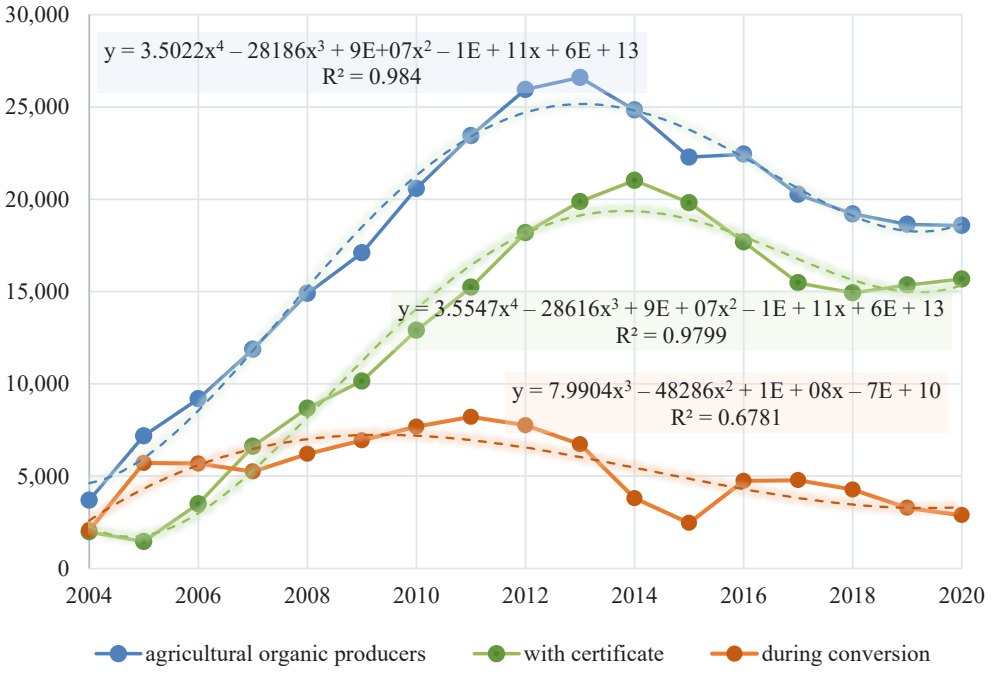

Figure 2. Number of organic agricultural producers

Source: own elaboration based on [Statistics Poland 2005-2020, IJHARS 2021]

organization of farms and condition the decisions of producers and the scope of agricultural activity [Litwinow 2020]. In addition, the level of development of the environment of organic farms is an important condition for the functioning of farms (more onwards).

The structure of cultivation (Figure 3), and further organic production, has changed significantly over the last dozen or so years, indicating progressive changes in the production profile of organic farms. In the initial period, about 60% of organic crops were crops for fodder, including permanent grassland, while others were relatively less important, in particular vegetables and potatoes. Since 2015, the share of area devoted to the cultivation of crops for fodder, as well as fruit and berry crops, has been clearly decreasing in favour of other crops, mainly cereals and other crops, including mainly legumes for dry seeds. The illustrated data confirm the growing diversity of organic farming areas. The presented change in the structure of crops is related, among others, to changes in the area of organic livestock production (Figure 3).

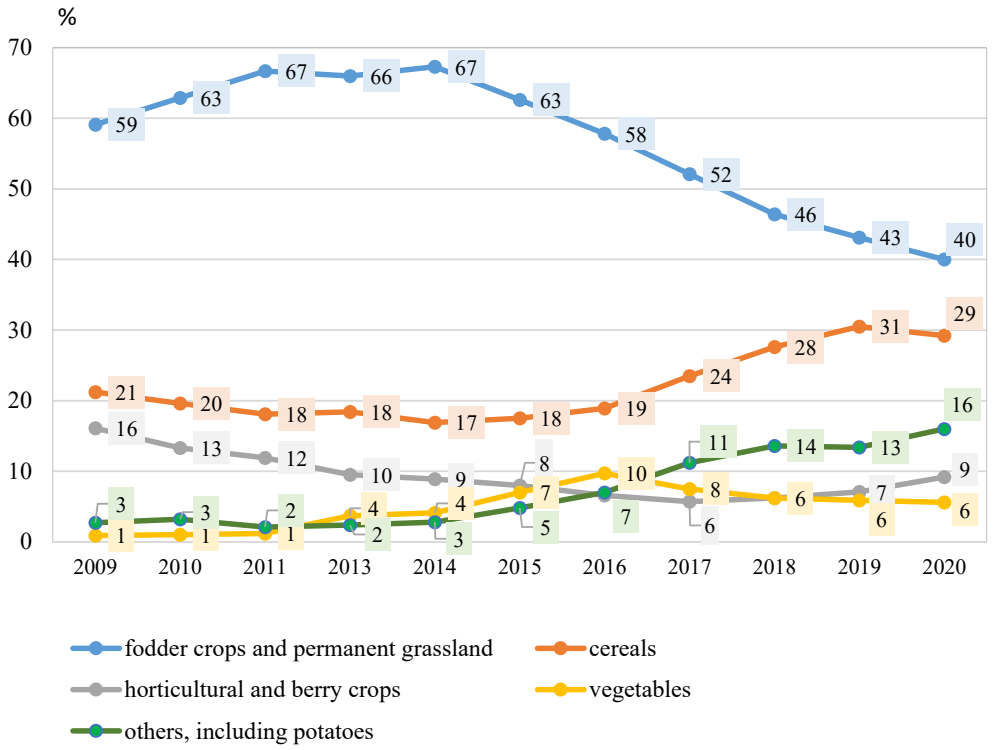

Figure 3. Organic crops on agricultural land (100% = total area of organic agricultural land)
* Other crops included: legumes for dry seeds, industrial crops, potatoes, others
Source: own elaboration based on [IJHARS 2009-2021]

Livestock production takes place in 22% of organic farms, hence it can be considered an unpopular direction of agricultural production. The abandonment of crop production in organic farms raises concerns in the context of, for example, the essence of organic farming (the need to balance crop and livestock production), as well as difficulties in ensuring rational fertilizer management in non-livestock organic farms [Stalenga, Jończyk 2021].

Also, the scale of production resulting from the livestock population is niche in terms of the agricultural sector (Figure 4), although its profile changes significantly. Taking into account the number of physical livestock kept in the organic system, poultry currently dominates, followed by cattle, sheep and goats, while the smallest is the pig population.

In the considered period of the study in the case of poultry, each year there was a gradual increase in the number of poultry kept in the organic system, which indicates the focus of organic producers on the production of eggs from organic farming and meat of this species of domestic birds – the poultry population increased from the level of 171 thousand heads (2015) up to 696 thousand heads (2020), i.e. four times. The opposite trend

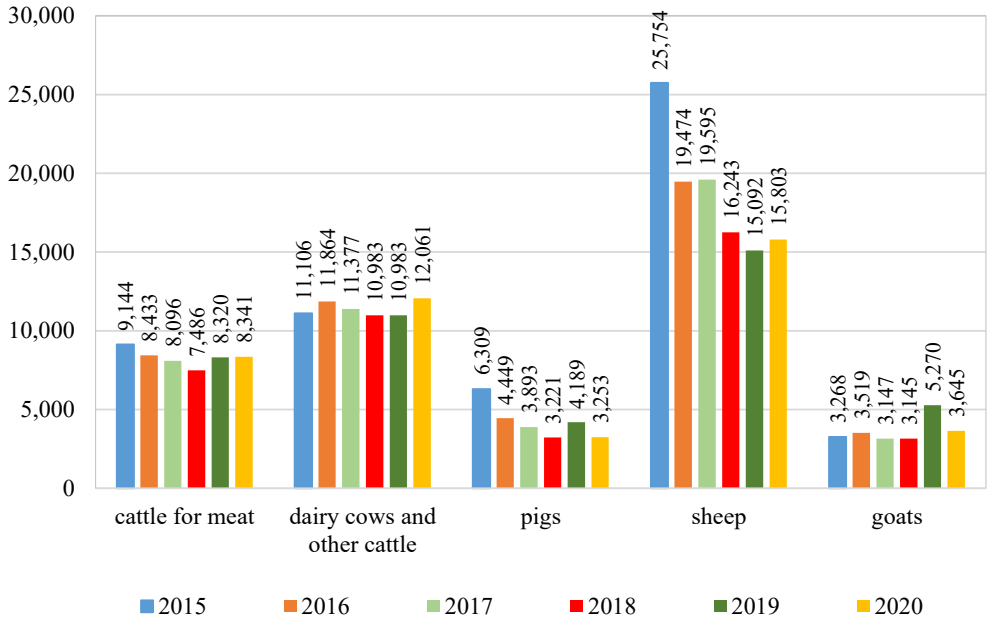

Figure 4. Number of organic livestock – number of livestock heads*

* The poultry number wasn't presented on the figure 4 because od different scale of values. Data on the number of physical units of poultry: 2015 – 171 thousand, 2016 – 216 thousand, 2017 – 223 thousand, 2018 – 316 thousand, 2019 – 481 thousand, 2020 – 696 thousand

Source: own elaboration based on [IJHARS 2016-2021]

occurred for most other livestock categories, although the intensity of the changes varied between them, comparing the extreme years of the adopted study period. In the case of cattle for meat, the herd decreased by 9% over the entire period, while the statistics for the dairy cow herd indicate a much more favorable dynamics of changes – an increase of 9%. Over the entire period, the goat population increased by 12%. Significant changes have occurred in the case of the sheep and pig population. In the first case, it decreased by 39% and in the second by 48%, which indicates the liquidation of these activities under the organic agricultural production system.

To sum up, the development of individual groups/categories of livestock kept in organic farming is different, which indicates the changing profile and scale of livestock production in organic farms.

The volume of organic production is illustrated by Figure 5. In the case of livestock products, initially relatively high milk production decreased by about 30% in favor of the dynamic development of the dairy products segment. 2016 was a special year in this regard. In the case of crop production, the increasing production importance of cereals on organic farms is visible not only in the area of this crop, but also in the volume of

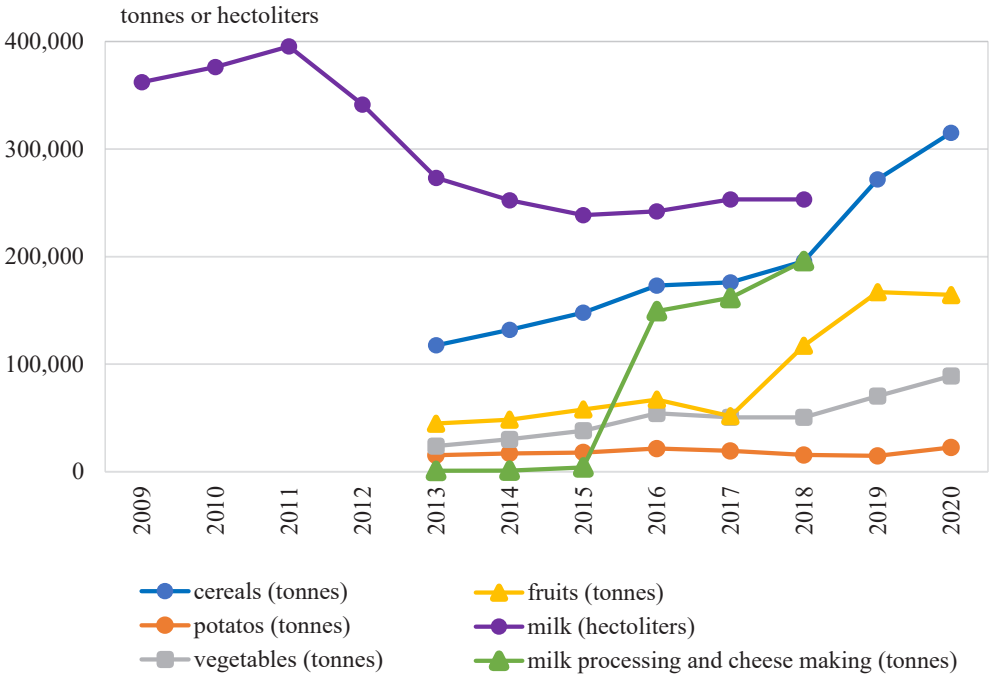

Figure 5. Organic production (data on the indicated organic products were available for selected years, mainly for the period 2013-2020)

Source: own elaboration based on [IJHARS 2007-2021]

production. An important market segment in terms of production volume are vegetables and fruits from the organic production system, whose production volume has almost quadrupled in a few years.

Organic agricultural producers, like other farmers, operate in a certain market environment. Available statistics indicate that in the environment of organic farmers there is a relatively small group of business units dealing with, for example, import or preparation of organic products, although their share in the structure of all organic entities (there are currently 20,274 of them) is gradually increasing (from 1% in 2004 – 55 producers; to 8% of all organic producers in 2020 – 1,699 producers).

In the case of an organic agricultural producer, its immediate environment includes, for example, entities involved in the preparation of organic products, including processors and suppliers of certified seed (Figure 6).

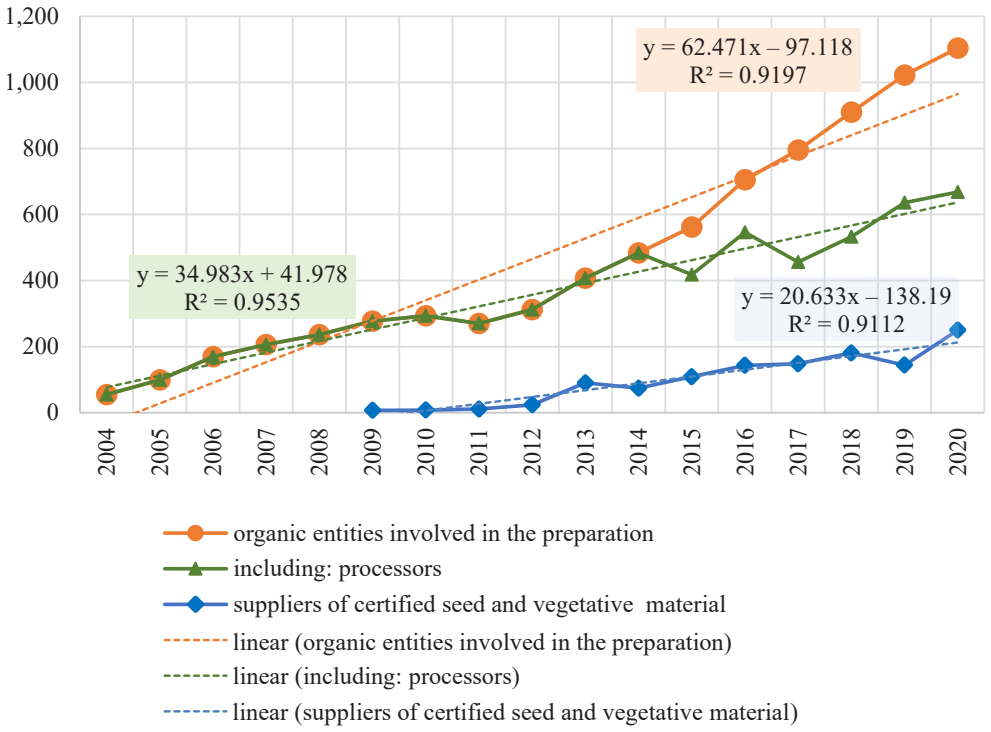

Figure 6. Number of organic producers operating in the environment of organic agricultural producers*

* From 2014, AFQI reported only the number of processors, while in subsequent years a category of operators involved in the preparation of products was distinguished. Since 2009, data on operators involved in the supply of organic material have been published

Source: own elaboration based on [IJHARS 2007-2021]

According to AFQI [IJHARS 2021, p. 42, EC No 834/2007] "… "preparation" means the operations of preserving or processing organic farming products, including the slaughter and cutting of products of animal origin, as well as the packaging, labelling or alteration of the labelling relating to the organic production method". Organic operators involved in preparation are the most numerous group among the other organic entities, i.e. not including organic producers (in 2020 there were 1,104 of them, i.e. they constituted 65% of the group of other organic entities). This segment of the organic market in Poland is developing dynamically (comparing 2022/2004, their share increased 20-fold), but the absolute number of entities involved in this activity is insignificant, taking as a reference all organic entities, including organic agricultural producers.

Currently, more than 60% of operators involved in the preparation of organic products are processors (668 processors, 2020). One third of processors are focused on fruit and vegetable processing, while 16% are focused on grain milling products. The share of processing units dealing with livestock products is particularly low (meat processing – 4%, milk and cheese – 4%, vegetable and animal fats in total – 4%) [IJHARS 2021], which is important information in the context of the resignation of organic producers from the direction of livestock production.

In addition to units involved in the preparation of products, there are organic producers active in the supply of certified seed and vegetative material. Also in the case of entities engaged in the supply of certified seed and vegetative material, the number of units increased dynamically (it increased thirty-six times in the years 2009-2020). Despite the impressive dynamics of changes in the number of these groups of organic entities, their number is still negligible in terms of the agricultural sector.

CONCLUSIONS

The benefits of organic farming are important both for consumers (food products with high nutritional value) and for the environment and climate (due to the low-input – taking into account industrial means of agricultural – agricultural production system and low economic pressure on the environment). In the case of an organic producer, as well as other economic operators, the economic criterion determines the initiation or continuation of specific production, including organic production.

The period 2004-2020 stood out significant dynamics of the development of organic farming in Poland, taking into account the indicators of changes in farms' number and agricultural land in the organic system of production, in particular based on the results from the extreme years studied. However, this period was not homogeneous and can be divided into 3 subperiods based on the data presented, i.e. 2004-2013 – a period of

dynamic growth; 2013-2017 – recession period and 2018-2000 – stabilization period (state of organic farming comparable to 2009/2010).

The indicated periods are reflected in the changing rules of financial support for organic farming in subsequent programming periods included in the Rural Development Programmes.

Based on the presented results on the population of organic producers, it can be concluded that this is still a niche segment of the agricultural market. Taking as a status quo the conditions for the development of organic farming (including the level of demand and prices of organic products, as well as the level of development of the market environment of organic entities), the prospects for its development are not optimistic. Further development of organic farming at the current level of development of its market environment, outlines moderate prospects for the future for this – an important segment of the agricultural market. Reaching 6% of organic agricultural area by 2030 will require the implementation of various administrative measures, including financial and promotional measures.

Previous experience shows that the main determinant of the development of organic farming in Poland was, and in the near future a few years probably will be, an institutional factor translating into transfers of funds directed to organic farms. The presented results indirectly confirm the relatively weak consumer demand for organic products, which may result on the one hand from the limited economic availability of society, and on the other from the level of awareness of the quality and health values of organic products. It is advisable to consider instruments supporting the closest environment of agricultural producers – other organic entities – stimulating the processing sector (particularly important for organic livestock production) and entities involved in the supply of qualified material, as well as promotional activities aimed at building broad consumer awareness. The economic factor – the price level of organic products and the wealth of society – can determine future consumer choices.

The pace and further direction of development of organic farming will probably be determined by new legal regulations, referring to "the Strategic Plan for the Common Agricultural Policy for the years 2023-2027". The amount and titles of support for organic activities are and will be of decisive importance, in particular for this segment of the agricultural market in Poland. Based on the EU's strategic documents, environmental and climate protection will also be crucial in agriculture, which indicates the need to stimulate the organic management system in individual Member States. An important issue is the strategic objectives that will be negotiated with individual Member States, which should be achieved in the perspective of 2030. In the case of Poland, based on current trends, a significant increase in the area of organic agricultural land will undoubtedly be a challenge.

BIBLIOGRAPHY

Biazik Ewa, Michał Śmieja. 2019. *Ekologiczne produkty żywnościowe na polskim rynku: stan i perspektywy* (Organic food products on the Polish market: the state and prospects). Wrocław: Uniwersytet Ekonomiczny we Wrocławiu, https://wir.ue.wroc.pl/docstore/download/ UEWRcc8ed9c7dc234242bce1bf7313ec75bc/Biazik_Smieja_Ekologiczne_produkty_zywnosciowe.pdf, access: 1.06.2022.

Brzostek-Kasprzak Bożena, Mariola Kwasek, Agnieszka Obiedzińska, Mieczyław Obiedziński. 2013. *Z badań nad rolnictwem zrównoważonym (21). Żywność ekologiczna – regulacje prawne, system kontroli i* certyfikacji (From research on sustainable agriculture (21). Organic food – legal regulations, control and certification system). Monografie IERiGŻ-PIB nr 80. Warsaw: IERiGŻ-PIB.

Czyżewski Bazyli, Marcin Gospodarowicz, Danuta Kołodziejczyk, Danuta Lidke, Anna Matuszczak, Anna Wasilewska, Adam Wasilewski. 2008. *Rola instytucji w modernizacji gospodarstw rolnych* (The role of institutions in the modernisation of agricultural holdings). Warszawa: IERiGŻ-PIB.

EC (European Commission). 2019. *Komunikat Komisji do Parlamentu Europejskiego, Rady Europejskiej, Rady, Europejskiego Komitetu Ekonomiczno–Społecznego i Komitetu Regionów, Europejski Zielony* Ład (Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions The European Green Deal). COM(2019) 640 final, 11.12.2019.

EC (European Commission). 2020a. *Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów. Strategia „od pola do stołu" na rzecz sprawiedliwego, zdrowego i przyjaznego dla* środowiska *systemu żywnościowego* (Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system). COM(2020) 381 final, 20.5.2022.

EC (European Commission). 2020b. *Komunikat Komisji do Parlamentu Europejskiego, Rady Europejskiej, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów*, *Unijna strategia na rzecz bioróżnorodności 2030. Przywracanie przyrody do naszego* życia. (Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. EU Biodiversity Strategy for 2030. Bringing nature back into our lives). COM(2020) 380 final, 20.05.2022 r.

GUS (Central Statistical Office – Statistics Poland). 2005-2021. *Statistical yearbook of agriculture*. Warsaw: GUS.

IJHARS (Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, The Agricultural and Food Commercial Quality Inspection – AFQI). 2007-2021. *Raport o stanie rolnictwa ekologicznego w Polsce w latach 2005-2006, … 2019-2020* (Report on the state of organic farming in Poland in the years 2005-2006, … 2019-2020). Warsaw: IJHARS.

Jończyk Krzysztof. 2021. *Rolnictwo ekologiczne w perspektywie założeń Europejskiego Zielonego* Ładu *i jego wpływ na redukcję biogenów* (Organic farming in the perspective of the European Green Deal and its impact on the reduction of nutrients), https://iung.pl/wp-content/uploads/2021/09/Jonczyk-K_Rolnictow_ekologiczne.pdf, access: 1.06.2020.

Komorowska Dorota. 2009. Wpływ wspólnej polityki rolnej na rozwój rolnictwa ekologicznego w Polsce (The impact of the common agricultural policy on the development of organic farming in Poland). *Wieś i Rolnictwo* 2 (143): 163-171.

Litwinow Anna. 2020. *Ekologiczny chów zwierząt w świetle nowych przepisów prawnych* (Organic livestock husbandry in the light of new legal regulations). Radom: Centrum Doradztwa w Brwinowie oddział w Radomiu, https://cdr.gov.pl/images/Radom/2020/brosz_12-11-2020/Broszura_zwierzeta.pdf, access: 1.06.2022.

MRiRW (Ministerstwo Rolnictwa i Rozwoju Wsi, The Ministry of Agriculture and Rural Development – MARD). 2004. *Rural Development Plan 2004-2006*. Warsaw: MARD.

MRiRW (Ministerstwo Rolnictwa i Rozwoju Wsi, The Ministry of Agriculture and Rural Development – MARD). 2007. *Rural Development Programme 2007-2013*. Warsaw: MARD.

MRiRW (Ministerstwo Rolnictwa i Rozwoju Wsi, The Ministry of Agriculture and Rural Development – MARD). 2014. *Rural Development Programme 2014-2020*. Warsaw: MARD.

MRiRW (MARD – The Ministry of Agriculture and Rural Development). 2022. *Strategic Plan for the Common Agricultural Policy 2023-2027*. Warsaw: MARD.

Rozporządzenie Rady (WE) nr 834/2007 z dnia 28 czerwca 2007 r. w sprawie produkcji ekologicznej i znakowania produktów ekologicznych i uchylające rozporządzenie (EWG) nr 2092/91 (Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91). OJ L 189, 20.7.2007.

Stalenga Jarosław, Krzystof Jończyk. 2021. Problemy gospodarki nawozowej w ekologicznych gospodarstwach bezinwentarzowych (Problems of fertilizer management in organic non-livestock farms). *Studia i Raporty IUNG-PIB* 65 (19): 111-121. DOI: 10.26114/sir.iung.2021.65.08.

Ustawa z dnia 25 czerwca 2009 r. o rolnictwie ekologicznym (Act of 25 June 2009 on organic farming). Journal of Laws, 2009, No. 116, item 975, prepared based on Journal of Laws, 2020, item 1324.

Wrzaszcz Wioletta, Konrad Prandecki. 2019. Rozwój rolnictwa indywidualnego w kontekście zachowania usług ekosystemowych gleby (Development of individual agriculture in the context of the preservation of soil ecosystem services). *Zagadnienia Ekonomiki Rolnej* 3 (360): 54-88. DOI: 10.30858/zer/111996.

Wrzaszcz Wioletta, Konrad Prandecki. 2020. Rolnictwo a Europejski Zielony Ład (Agriculture and the European Green Deal). *Zagadnienia Ekonomiki Rolnej* 365 (4): 156-179. DOI: 10.30858/zer/131841.

Zegar Józef Stanisław. 2007. Przesłanki nowej ekonomiki rolnictwa (Prerequisites for the new economics of agriculture). *Zagadnienia Ekonomiki Rolnej* 4: 5-27.

Zegar Józef Stanisław. 2012. *Współczesne wyzwania rolnictwa* (Contemporary challenges of agriculture). Warsaw: PWN.

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ROZWÓJ ROLNICTWA EKOLOGICZNEGO ORAZ JEGO OTOCZENIA W POLSCE W ŚWIETLE WYZWAŃ EUROPEJSKIEGO ZIELONEGO ŁADU

Słowa kluczowe: rolnictwo ekologiczne, gospodarstwo ekologiczne, Europejski Zielony Ład, Strategia od „Pola do stołu", Strategia na rzecz bioróżnorodności, zrównoważony rozwój rolnictwa

ABSTRAKT

Celem artykułu jest przedstawienie dotychczasowych zmian zachodzących w rolnictwie ekologicznym oraz jego otoczeniu w Polsce, z uwzględnieniem założeń Europejskiego Zielonego Ładu oraz uwarunkowań rynkowych. O tych pierwszych celach świadczą zapisy w krajowych i europejskich dokumentach, które wskazują na potrzebę zwiększenia powierzchni ekologicznych użytków rolnych, a o tych drugich, wolumen produkcji. Przedmiotem badania była populacja gospodarstw ekologicznych, certyfikowanych oraz w konwersji w zakresie potencjału produkcyjnego, organizacji oraz skali produkcji, a także populacja innych podmiotów ekologicznych funkcjonujących w tym segmencie rynku. Do badań wykorzystano dane z opracowań IJHARS oraz GUS. Zastosowano metody analizy wskaźnikowej oraz ustalono zachodzące tendencje. Z porównania danych statystycznych za lata 2020 i 2004 wynika, że nastąpił rozwój rolnictwa ekologicznego w Polsce. Zwiększyła się m.in. liczba gospodarstw ekologicznych i powierzchnia objęta systemem ekologicznym. Jednak okres 2004-2020 pod tym względem nie był jednorodny, a ostatnie lata można uznać za okres stagnacji. W przyjętej perspektywie zmieniał się profil produkcyjny gospodarstw ekologicznych, które coraz częściej prowadziły wyłącznie produkcję roślinną. Dalszy rozwój rolnictwa ekologicznego będzie istotnym wyzwaniem, ze względu na poziom rozwoju otoczenia rynkowego, a w szczególności liczby przetwórców oraz podmiotów zajmujących się dostawą materiału siewnego kwalifikowanego. Główną determinantą rozwoju rolnictwa ekologicznego w Polsce był, i w najbliższej perspektywie kilku lat prawdopodobnie będzie, czynnik instytucjonalny.

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