

## **QUO VADIS ORGANIZATION OF THE FRUIT AND VEGETABLES MARKET IN POLAND? STATE OF ORGANIZATION OF THE POLISH FRUIT AND VEGETABLES MARKET**

**Maryla Bieniek-Majka, PhD<sup>1\*</sup>**

Institute of Law and Economics, Kazimierz Wielki University in Bydgoszcz

\*<https://orcid.org/0000-0003-1448-7406>

### **ABSTRACT**

The article aimed to present the state of the organization of the fruit and vegetable market in Poland in 2020. Based on a library query and available registers, changes in the number of producer groups and organizations, their members, and the selected organizational form and category of products offered in Poland in 2004–2020 were presented. After the introduction of legislative changes in 2012, limiting the co-financing of the market organization process, a chronic decrease in both the number of existing fruit and vegetable producer organizations and their members is noticeable. Such a long-term trend may lead to a decline in the market organization and bargaining power of domestic producers. To prevent further disintegration of producer groups and organizations, it is suggested that they should be provided with institutional support that would be long-lasting and stable.

**Key words:** fruit and vegetable market, integration, competitiveness

**JEL codes:** Q13, Q18, D2

### **INTRODUCTION**

In Poland, groups and organizations of fruits and vegetables producers operate pursuant to the Act of 19 December 2003 on the organization of the fruit and vegetable markets and the hop market (Ustawa z dnia 19 grudnia 2003 r.). After Poland acceded to the European Union, Polish gardeners were included in the Common Agricultural Policy program aimed at reducing the differences between fruit and vegetable producers from various European Union countries. The desirability of horizontal integration of producers is justified by the need to increase competitive-

ness in the market, which is characterized by integration asymmetry. With a large agrarian fragmentation, producers have a weaker bargaining position to more closely integrated recipients, such as, for example, retail chains or processing plants. The process of the organization on the fruits and vegetables market was the goal of researchers' interests, therefore in 2011, the evaluation of the organization was presented by K. Krzyżanowska, in 2013 by W. Sobczak, L. Jabłońska and D. Olewnicki, in 2014, Ł. Kopiński and E. Czernyszewicz. The research conducted so far with A. Matuszczak concluded the observations of the integration process on the fruit and vegetable market

<sup>1</sup> Corresponding author: Weysenhoffa Sq. 11, 85-072 Bydgoszcz, Poland, [maryl.b@wp.pl](mailto:maryl.b@wp.pl), +48663003403

in 2017. They showed that Polish gardeners dynamically started the process of organizing the fruit and vegetable market after the introduction, in 2007, of the Common Agricultural Policy program promoting the establishment of groups and organizations of fruits and vegetables producers in the countries of the so-called new union. However, after the introduction of legislative changes limiting the level of support, inhibition of this process was noted. This study aims to present, based on the literature on the subject and data from government agencies, the status of the organization of fruit and vegetable producers in Poland in 2020.

### **THEORETICAL BACKGROUND**

Nowadays, there are two ways of developing one's competitiveness – functioning independently or together with others. In the conditions of globalization, the concept of independent operation of producers is experiencing a crisis. If the producer does not want to be a small local supplier, only the way of cooperation is promising. Building various relationships between market entities is conducive to creating competitive advantages and is a manifestation of striving to strengthen their competitiveness (Glabiszewski and Sudolska, 2009). Cooperation is an important factor influencing the development of the fruit and vegetable sector, which enables building sustainable competitive advantages. In the development strategy of Polish agriculture, an important place was assigned to activities related to horizontal integration, such as groups and organizations of fruit and vegetable producers, and vertical integration, resulting from the involvement of sector participants and the willingness to achieve common goals. Achieving the goal, especially in conditions of very strong competition, is possible only when using the potential of other enterprises as part of the implemented cooperation.

For several years, Polish producers of fruit and vegetables, using the instruments of the Common Agricultural Policy, have been integrating creating groups and producer organizations. The growing concentration and intensification of the market power of buyers motivated to develop integration processes on the part of suppliers. The distribution system in Poland has evolved and forced the supply side to change the standards of the

sales policy, forcing concentration among producers. Development and concentration among recipients still force changes on the part of producers, therefore, an important role in the development of cooperation between entities in the supply chain should be played by producer groups and organizations, their associations, and interbranch organizations. Glabiszewski and Sudolska (2009) note that building various links between an enterprise and other entities on the market is a sign of strengthening their competitiveness, and the market trends observed by them allow us to conclude that long-term and strategic cooperation to a large extent contributes to creating a competitive advantage. To increase competitiveness in the market, it is important to promote the idea of merging producers. To be successful, producers should offer higher, certified quality, produce local varieties using traditional methods, or use their branding (Guth, Bieniek-Majka and Maican, 2019). However, the economies of scale occurring in agricultural production are not without significance, as they enable larger entities to rationalize costs and a stronger bargaining position, and thus condition the possibility of obtaining larger, less risky income.

In many countries, farmers, seeing opportunities for themselves resulting from shortening the food supply chain by taking over the role of an intermediary, began to take various initiatives to improve their position. One of such initiatives is the cooperation of farmers within producer groups, consisting mainly in organizing joint sales of products produced on their farms (Kozłowska-Burdziak and Przygodzka, 2019). Unfortunately, as noted by Krzyżanowska (2017), the weak point of Polish agriculture is the very low level of organization of producers into groups and organizations. Farmers produce good quality agricultural products and sell them most often to intermediaries who have mastered a large part of the market. Producers are in a losing position by selling in an unorganized way, including to processing plants and trading companies.

In many European countries, associations and organizations of garden professionals are a marker of the development of this market. For example, thanks to its well-organized and highly developed garden industry, Germany boasts some steadily growing

associations, which, importantly, often include representatives of supermarkets and independent garden centre owners. Compared to other European countries, Germany has an unusually large number of associations for professionals in specific market sectors. In the UK the horticultural industry is represented by several major organisations for high-caliber professionals (Fajerski, 2011). In Denmark, the very high (nearly 100%), economic organization of farmers has contributed to the dynamic development of agriculture. In France, on the other hand, cooperatives bring together about 90% of farmers. In the Netherlands, cooperatives are consolidated and also associate almost 100% of agricultural producers. It should be noted that in the Netherlands commodity exchanges operating in the form of cooperatives are very popular, which market 70–100% of products such as fruits and vegetables, milk, fish, ornamental plants, flower bulbs, flowers. Cooperatives in the Netherlands control more than 90% of the fruit and vegetable market, 80% of the milk market, and more than 50% of the grain market (Ciszewski, 2017).

The effect of aid activities as noted by Zielińska-Szczepkowska and Kisiel (2016) is that unions of agricultural producers and processors have become a permanent and socially acceptable element of the EU agrarian structure. They have significantly influenced its modernization, as well as developed various forms of production cooperation in agriculture.

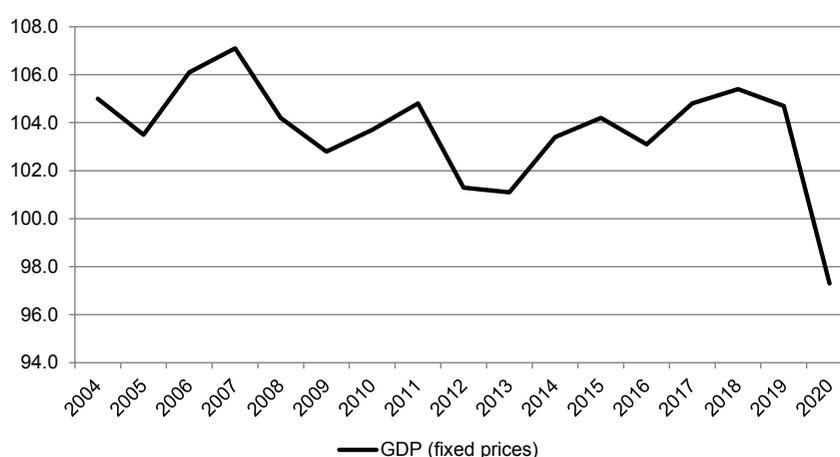
## MATERIALS AND METHODS

Based on a library query and data obtained from the Ministry of Agriculture and Rural Development and the Agency for Restructuring and Modernization of Agriculture, changes in the state of organization of the fruit and vegetable market in Poland after 2004 are presented in a graphical, tabular, and descriptive manner.

The choice of the research period was influenced by previous studies conducted by researchers in Poland (K. Krzyżanowska in 2011, W. Sobczak, L. Jabłońska and D. Olewnicki in 2013, Ł. Kopiński and E. Czernyszewicz in 2014, M. Bieniek-Majka, A. Matuszczak in 2017) and the fact that in the current organizational and legal form fruit and vegetable producer groups and organizations in Poland have been functioning since 2004.

## RESEARCH RESULTS AND DISCUSSION

During the period in question, the macroeconomic situation in Poland affecting the functioning of fruit and vegetable producer groups and organizations was relatively favourable. The value of GDP from year to year (excluding 2020, where the economic effects of the COVID-19 pandemic are preliminarily included in the national accounts) was increasing (Fig. 1). It should be noted that during the financial crisis period



**Figure 1.** GDP in 2019–2020 (%)

Source: own study based on data of the Statistics Poland (GUS).

in 2007–2009 when there was a decrease in the dynamics of GDP growth, it was a period of dynamic development for the process of organizing the fruit and vegetable market in Poland (Fig. 2).

In Poland, under the Act of 19 December 2003, on the organization of the fruit and vegetable markets and the hop market. In 2004, groups and organizations of fruit and vegetables producers began to appear. Earlier, before Poland acceded to the EU structures, Polish gardeners could establish producer organizations under the Act of 15 September 2000, on agricultural producer groups and their associations, or the Act of 29 November 2000, on the organization of fruit and vegetable markets, hops, tobacco market and dried fodder market. However, it was only the inclusion of Polish farmers in CAP programs, and especially in those aimed at them directly that contributed to the popularization of this form of cooperation.

Stagnation of the integration process can be noticed since 2012, the year in which the European Commission introduced several changes in the rules for granting financial aid to fruit and vegetable producer groups, resulting in a limitation of the amount of aid received by newly established entities.

On 5 April 2012, the Commission Implementing Regulation (EU) 302/2012 entered into force concerning the fruit and vegetables and processed fruit and vegetables sectors, where the European Commission introduced restrictions on support for producer groups (Szalczyk, 2013). Legislative changes have been reflected in the behaviour of fruit and vegetable

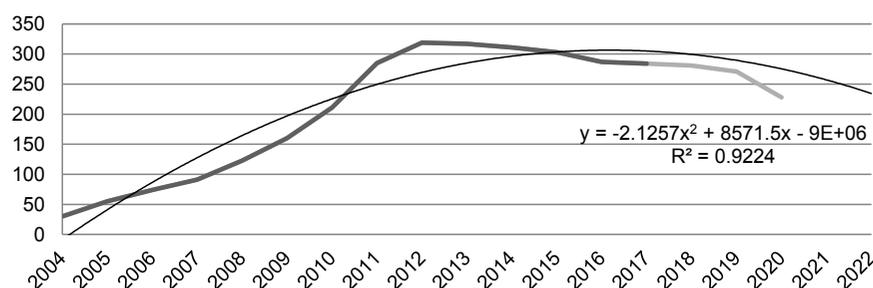
producers, which can be seen in the data presented in Figure 2 or Table 1.

It is disturbing that the limitation of financial support is directly reflected in the existing and forecast number of functioning groups and organizations of producers of fruit and vegetables. You can push for the idea of organizing a market where there will be a small number of organizations associating many members, which we can see, for example, in the countries of Northern Europe, but as we can see, this does not apply in the Polish reality. As late as 2017, we could see an increase in the number of members with the decreasing number of existing groups and organizations (Table 2).

In 2020, however, only in the case of fruit and vegetable producers from the Mazowieckie and Pomorskie voivodeships we can see an increase in the number of members, with a decreasing number of producer groups and organizations. In other cases, both the number of producer groups and organizations and the number of members associated with them decreased.

The reduction in the number of members was also influenced by the dissolution of associations, i.e. the most numerous organizations of fruits and vegetables producers. As can be seen from the data presented in Table 3. Fruit and vegetable producers most often operate as a limited liability companies.

Analysing the data on the profile of activity of producer groups and organizations until 2017, it could be concluded that the diversification of the



**Figure 2.** Number of producer groups and organizations in 2004–2020 with a forecast for the next five years based on the trend

Source: own study based on data of the Agency for Restructuring and Modernisation of Agriculture (ARiMR) and the Ministry of Agriculture and Rural Development (MRiRW).

**Table 1.** Number of producer groups and organizations by voivodship

Voivodship	Number of producer groups and organizations by year				
	2004	2011	2014	2017	2020
Mazowieckie	2	62	95	86	78
Wielkopolskie	8	35	46	46	29
Kujawsko-pomorskie	8	34	43	39	23
Lubelskie	9	25	34	29	24
Małopolskie	0	12	12	11	11
Łódzkie	1	15	20	18	17
Świętokrzyskie	0	9	16	14	11
Lubuskie	1	6	6	5	3
Pomorskie	0	6	11	7	7
Opolskie	0	4	6	5	5
Podlaskie	0	3	3	1	1
Podkarpackie	0	3	6	6	6
Dolnośląskie	0	2	11	10	7
Warmińsko-mazurskie	1	2	2	2	2
Śląskie	0	2	5	4	3
Zachodniopomorskie	0	1	2	1	1
Total	30	221	318	284	228

2011 – as of 16.02.2011, 2014 – as of 05.05.2014, 2017 – as of 02.01.2018, 2020 – as of 24.07.2020.

Source: own study based on Krzyżanowska (2011), Kopiński and Czernyszewicz (2014) and ARiMR (s.a.).

**Table 2.** Number of members associated with fruit and vegetable producer groups and organizations

Voivodship	Number of members			
	2004	2011	2017	2020
Mazowieckie	–	1 077	1 984	2 087
Wielkopolskie	–	901	760	502
Kujawsko-pomorskie	–	592	592	231
Lubelskie	–	877	1380	790
Małopolskie	–	801	445	372
Łódzkie	–	652	419	404
Świętokrzyskie	–	264	638	483
Lubuskie	–	62	48	17
Pomorskie	–	51	83	89
Opolskie	–	20	28	28
Podlaskie	–	10	6	6
Podkarpackie	–	94	135	132
Dolnośląskie	–	6	58	43
Warmińsko-mazurski	–	10	10	10
Śląskie	–	10	23	17
Zachodniopomorskie	–	5	5	5
Total	1 155	5 432	6 614	5 216

2011 – as of 16.02.2011, 2014 – as of 05.05.2014, 2017 – as of 02.01.2018, 2020 – as of 24.07.2020.

Source: own study based on on Krzyżanowska (2011), Kopiński and Czernyszewicz (2014) and ARiMR (s.a.).

**Table 3.** Groups and organizations of fruit and vegetables producers according to legal forms

Legal forms	Number of producer groups and organizations			
	2011	2014	2017	2020
Limited liability company	168	267	234	189
Cooperative	23	24	23	20
Association	30	27	27	19
Total	221	318	284	228

2011 – as of 16.02.2011, 2014 – as of 05.05.2014, 2017 – as of 02.01.2018, 2020 – as of 24.07.2020.

Source: own study based on Krzyżanowska (2011), Kopiński and Czernyszewicz (2014) and ARiMR (s.a.).

offer facilitates functioning on the market, as there was an increase in the number of producer groups and organizations offering both fruit and vegetables, with a decreasing number of organizations offering either fruit or vegetables. However, in 2020 we are not entitled to make such a conclusion. In 2020, compared to 2017, the number of groups and organizations in total decreased by 20% (Table 4). In the same period, the number of fruit and vegetable producers decreased by 28%, and the number of producers offering only fruit by approx. 15%. The smallest drop was recorded among producers offering only vegetables – approx. 8%.

These data confirm the variability of the conditions in which producers of fruit and vegetables operate. Manufacturers' decisions are often determined by exogenous factors beyond their control. For the organization of the fruit and vegetable market in Poland not to decrease further, institutional solutions that would be stable and long-lasting should be introduced.

## CONCLUSIONS

Paying attention to the premises indicating the benefits of integration, it is disturbing that the process of organizing the market is stopped, which may have an impact on the reduction of its bargaining power. It seems, therefore, that a good path of development for Polish producers would be institutional support allowing for the adoption of the model of integration of producers characteristic for Northern Europe (geographically closer), where a smaller number of producer groups/organizations has a larger number of members and thanks to the economies of scale they achieve greater benefits. It would be possible thanks to institutional solutions supporting groups. This policy should be long-term and become an element of the rules of the agricultural market organization. The established rules of operation should be clear and, above all, stable. Because, as noted by Kozłowska-Burdziak and Przygodzka (2019), the biggest problem of currently functioning groups is the changing

**Table 4.** Groups and organizations of fruit and vegetables producers by product category

Product	Number of producer groups and organizations			
	2011	2014	2017	2020
Mushrooms	15	22	22	18
Herbs	2	3	3	1
Fruit	45	83	68	58
Vegetables	50	93	65	60
Fruit and vegetables	109	117	126	91
Total	221	318	284	228

2011 – as of 16.02.2011, 2014 – as of 05.05.2014, 2017 – as of 02.01.2018, 2020 – as of 24.07.2020.

Source: own study based on Krzyżanowska (2011), Kopiński and Czernyszewicz (2014) and ARiMR (s.a.).

and incomprehensible law. This policy should be outlined in the form of a development program for producer groups and their associations, which will include goals, means of achieving them, and the method of financing.

## REFERENCES

1. Agencja Restrukturyzacji i Modernizacji Rolnictwa (ARiMR) (s.a.). Rejestr wstępnie uznanych grup producentów, uznanych organizacji producentów i ich zrzeszeń oraz ponadnarodowych organizacji producentów i ich zrzeszeń. Retrieved from: <https://www.arimr.gov.pl/grupy-i-organizacje-producentow/rejestry-prowadzone-przez-arimr.html> [accessed 11.09.2020].
2. Bieniek-Majka, M., Matuszczak, A. (2017). Integracja pozioma na rynku owoców i warzyw na przykładzie województwa kujawsko-pomorskiego [Horizontal integration in the fruit and vegetable market on the example of the Kuyavian-Pomeranian Voivodeship]. Wydawnictwo KPSW w Bydgoszcz, Bydgoszcz.
3. Bieniek-Majka, M., Matuszczak, A. (2018). Organizowanie producentów owoców i warzyw po 2004 roku. Stan i perspektywy [Organizing fruit and vegetable producers after 2004. Status and prospects]. *Studia Obszarów Wiejskich*, 52, pp. 181-191.
4. Ciszewski, M. (2017). Jak funkcjonują spółdzielnie rolnicze w Danii, Francji i Holandii? [How do farmer cooperatives function in Denmark, France, and the Netherlands?]. Retrieved from: <https://agronews.com.pl/artukul/jak-funkcjonuja-spoldzielnie-rolnicze-w-danii-francji-i-holandii> [accessed 24.09.2020].
5. Commission Implementing Regulation (EU) No 302/2012 of 4 April 2012 amending Implementing Regulation (EU) No 543/2011 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors. OJ L 99, 05.04.2012.
6. Glabiszewski, W., Sudolska, A. (2009). Rola współpracy w procesie kształtowania konkurencyjności przedsiębiorstwa [The role of cooperation in the process of shaping the company's competitiveness]. *Organizacja i Kierowanie*, 2 (136), pp. 9-22.
7. Główny Urząd Statystyczny (GUS) (s.a.). Roczne wskaźniki makroekonomiczne. Retrieved from: [www.stat.gov.pl](http://www.stat.gov.pl) [accessed 24.09.2020].
8. Guth, M., Bieniek-Majka, M., Maican, S.S. (2019). Market adjustments of fruit and vegetable producers to changing distribution channels in selected European Union countries after 2012. *Annals PAAAE*, 21 (3), pp. 134-142.
9. Fajerski, M. (2011). Wszyscy za jednego... Stowarzyszenia i Organizacje [All for one... Associations and Organizations]. Retrieved from: [http://biznes-ogrodnicy.pl/wszyscy\\_za\\_jednego\\_stowarzyszenia](http://biznes-ogrodnicy.pl/wszyscy_za_jednego_stowarzyszenia) [accessed 24.09.2020].
10. Kopiński, Ł., Czernyszewicz, E. (2014). Grupy o organizacje producentów w ogrodnictwie w Polsce w latach 2004-2014 [Groups and producer organizations in horticulture in Poland in 2004-2014]. *Annales Universitatis Mariae Curie-Skłodowska*, 24 (4), pp. 51-60.
11. Kozłowska-Burdziak, M., Przygodzka, R. (2019). Grupy producentów rolnych-szanse i bariery rozwoju [Agricultural producer groups – opportunities and barriers to development]. Wydawnictwo Uniwersytetu w Białymstoku, Białystok.
12. Krzyżanowska, K. (2011). Stan zorganizowania rolników w grupy producentów owoców i warzyw w Polsce [The state of organization of farmers into groups of fruit and vegetable producers in Poland]. *Roczniki Naukowe SERiA*, 13 (2), pp. 256-260.
13. Krzyżanowska, K. (2017). Organizowanie się rolników w grupy i organizacje producentów w obszarze rolnictwa [Organizing farmers into groups and producer organizations in the field of agriculture]. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego Ekonomia i Organizacja Gospodarki Żywnościowej*, 119, pp. 141-153.
14. Sobczak, W., Jabłońska, L., Olewnicki, D. (2013). Stopień zorganizowania producentów owoców i warzyw w Polsce [The degree of organization of fruit and vegetable producers in Poland]. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego. Problemy Rolnictwa Światowego*, 13 (1), pp. 119-127.
15. Szalczyk, Z. (2013). Odpowiedź podsekretarza stanu w Ministerstwie Rolnictwa i Rozwoju Wsi – z upoważnienia ministra – na interpelację nr 20974 w sprawie niekorzystnych zmian w finansowaniu grup producentów rolnych w projekcie Programu Rozwoju Obszarów Wiejskich na lata 2014-2020. Retrieved from: <http://www.sejm.gov.pl/sejm7.nsf/Interpelacja-Tresc.xsp?key=2767EB90> [accessed 11.09.2020].
16. Zielińska-Szczepkowska, J., Kisiel, R. (2016). Zrzeszanie się producentów rolnych jako przykład współdziałania w sektorze rolnictwa – doświadczenia wybranych krajów członkowskich Unii Europejskiej [Association of Agricultural Producers as an Example of Cooperation in the Agricultural Sector – The Experience of Selected EU Countries]. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego*

- w Warszawie. Problemy Rolnictwa Światowego, 16 (2), pp. 372-386.
17. Ustawa z dnia 15 września 2000 r. o grupach producentów rolnych i ich związkach oraz o zmianie innych ustaw. Dz.U. 2000 nr 88 poz. 983 [Act of 15 September 2000 on agricultural producer groups and their associations and amending other acts. Journal of Laws of the Republic of Poland 2000 No 88 item 983] [in Polish].
  18. Ustawa z dnia 29 listopada 2000 r. o organizacji rynków owoców i warzyw, rynku chmielu, rynku tytoniu oraz rynku suszu paszowego. Dz.U. 2001 nr 3 poz. 19 [Act of 29 November 2000 organization of the fruit and vegetable markets, the hops market, the tobacco market and the dried fodder market. Journal of Laws of the Republic of Poland 2001 No 3 item 19] [in Polish].
  19. Ustawa z dnia 19 grudnia 2003 r. o organizacji rynków owoców i warzyw oraz rynku chmielu. Dz.U. 2003 poz. 1131 [Act of 19 December 2003 on the organization of the fruit and vegetable markets and the hop market. Journal of Laws of the Republic of Poland 2003 item 1131] [in Polish].