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The distribution systems for organic farming produce in Poland and Spain – similarities and differences

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Abstract

At the turn of the 21st century, European countries experienced a dynamic growth of interest in organic farming and the development of distribution systems for organic farming produce. This article is an attempt to assess the development of the distribution systems for organic farming produce in Spain and Poland and to identify the key drivers determining the systems. A hypothesis has been adopted that, despite different conditions, the systems operate in a similar way in both countries (though various distribution channels have different significance), and that they are becoming more and more similar to the distribution systems for conventional farming produce. New trends in the development of Polish and Spanish distribution channels for organic farming produce have also been identified.

Zusammenfassung

An der Wende zum 21. Jahrhundert erlebten die Länder Europas ein stark zunehmendes Interesse an der ökologischen Landwirtschaft und die Entwicklung von Vertriebssystemen für Erzeugnisse des ökologischen Landbaus. Dieser Artikel versucht, die Entwicklung der Vertriebssysteme für Erzeugnisse des ökologischen Landbaus in Spanien und Polen darzustellen und die wesentlichen das jeweilige System bestimmenden Faktoren zu identifizieren. Dabei wird die These vertreten, dass die Vertriebssysteme trotz der unterschiedlichen Bedingungen in beiden Ländern vergleichbar funktionieren (obwohl jeweils verschiedene Absatzwege in unterschiedlicher Weise von Bedeutung sind) und den Vertriebssystemen für konventionelle Erzeugnisse immer ähnlicher werden. Darüber hinaus werden neue Trends in der Entwicklung der Absatzwege für Erzeugnisse des ökologischen Landbaus in Polen und Spanien identifiziert.

Keywords Organic farming, distribution for organic farming produce, Spain, Poland

1. Introduction

The distribution system for organic farming produce is very dynamic, and in particular, the significance of its individual distribution channels is changing, new channels are being introduced and the integration of its individual links is becoming stronger.

The system was created on the initiative of people engaged in putting the organic farming concept into operation. Their actions were innovative in nature – the distribution of organic farming product was developed "from below" (*Michelsen* el al. 1999). As time went by, the distribution system for organic farming produce became linked together with the distribu-

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tion system for conventional farming produce. The relation between them is growing in strength, and the distribution system for organic farming produce is becoming more and more similar to the standard food market (*Tondel* and *Woods* 2006). The changes were triggered by many factors including an increase in demand for organic food and growing requirements of consumers as regards the product variety of organic food and also expectations of continuous and easy access to such products.

Although the assimilation process is progressing, there are still many differences in the structure and operation of the distribution system for organic farming produce in different countries. They are related to the agricultural structure (in particular, the size of farms), the scale of organic production, the agricultural policy in use, the aid granted (for example, financial, legal or organisational) or even the tradition of developing organic farming. In some countries (Central and Eastern Europe), the distribution system for organic food is still in the initial phase of development and it is only just being created.

The purpose of this article is to assess the development of the distribution systems for organic farming products in Poland and Spain, to specify trends in the development of distribution channels within such distribution systems, and to identify the most important factors affecting the establishment and functioning of such systems. The analysis was conducted taking into account the development of organic farming and of the distribution system for organic farming produce in the EU countries.

A hypothesis has been adopted that, despite different conditions, the system operates in a similar way in both countries (though various distribution channels have different significance), and that it is becoming more and more similar to the distribution system for conventional farming produce.

Both Spain and Poland in the 21st century are characterised by a dynamic development of organic farming. The number of organic farms and the area under organic cultivation in those countries is increasing. However, at the same time the two countries differ significantly in terms of the area under organic cultivation, the number of organic farms, the scale of organic farming production and its product range, as well as the time of adoption of the legislation regulating the activities of entities operating on the organic food market.

2. Methods and source materials

As part of the assessment the development of the distribution systems for organic farming produce in Spain and Poland, field research was conducted. Important material used in the preparation of this publication includes the results of a study conducted in Poznań (Wielkopolska Province in Poland) and in Logroño (Rioja in Spain). Much primary information that has been significantly important for the research and its findings was collected during expert opinion surveys conducted with the representatives of individual links in the distribution system and of entities responsible for controlling the organic food market in Spain and Poland.

Some of the material used was obtained from the following institutions: ministries responsible for agriculture-related issues (Ministerio de Agricultura, Alimentación y Medio Ambiente in Madrid, Ministry of Agriculture and Rural Development in Warsaw), Eurostat and Forschungsinstitut für Biologischen Landbau (FiBL), as well as institutions dealing with the control and certification of organic production in Spain and Poland (in particular, Consejo de la Producción Agraria Ecológica de La Rioja – CPAER, Agricultural and Food Quality Inspection, Main Inspectorate – GIJHARS in Warsaw). Due to a lack of data or incomplete databases regarding individual distribution links in Poland (only the lists of organic farms and organic processing plants are available), the required information was collected from their websites and literature research was also conducted.

3. Factors determining the development of distribution systems for organic farming produce in Poland and Spain

The development of a distribution system for organic farming produce is affected by many factors. Similarly to other countries, in Poland and in Spain such a development is mainly determined by agricultural production potential, legislation, the level of support (financial, political, organisational), consumer behaviour, the development of organic processing industry and the import of organic food.

At the turn of the 21st century, the organic food market was one of the fastest developing food sectors in the world (*Bavec* and *Bavec* 2007, *Kilcher* et al. 2011, *Krystallis* and *Chryssohoidis* 2005, *Sadek* and *Ok-*

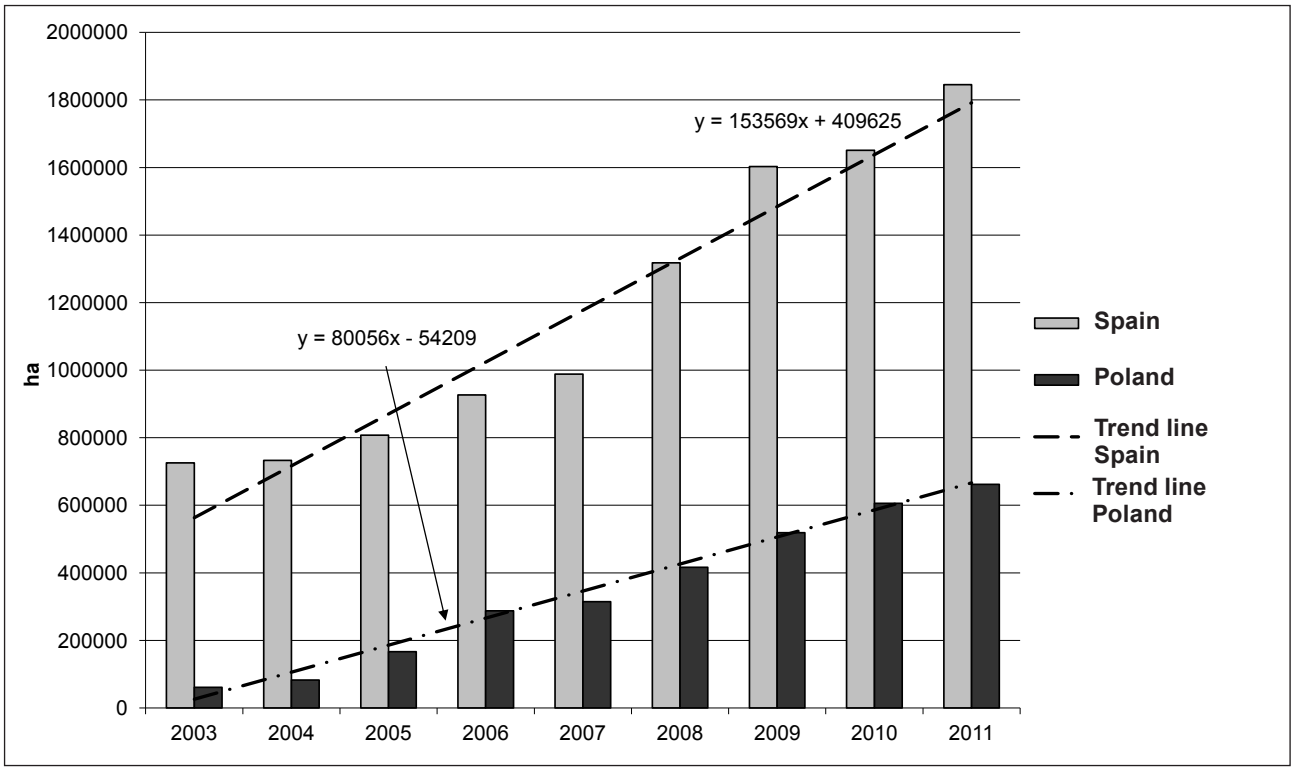

Fig. 1 Area of land used for organic farming in Spain and in Poland, 2003-2011. Source: own study based on data published by Eurostat (http://epp.eurostat.ec.europa.eu)

tarani 2009). Dynamically developing organic farming has also been gaining significance in Poland and Spain (*González de Molina* et al. 2007, *Łuczka-Bakuła* 2007, *Zuba* 2011). Between 2003 and 2011 both countries experienced continuous growth in the area of land used for organic farming (*Fig. 1*). In Poland, this area increased almost 12 times, with approximately 80,000 ha gained on an annual basis, and currently the area of land used for organic farming is 662,000 ha (6th place in Europe). While in Spain the area of land used for organic farming increased two and a half times, the average annual increase was as much as 153,600 ha. In terms of the area of land used for organic farming (1,845,000 ha) this country is a leader in Europe (first place, 15 % of all such land in Europe) and is one of the leading countries worldwide (5th place following Australia, Argentina, USA and China). In 2011, Spain became third (following China and India) in the group of countries with the largest growth in the area of land used for organic farming. In this category Poland became sixth (*Willer* and *Kilcher* 2012). The disparity between the two countries in terms of the area of land used for organic farming decreased. In 2003, the area of land used for organic farming in Spain was 12 times bigger and eight years later it was only three times bigger. Simultaneously, in both countries the share of land used for organic farming in the total area of agricultural land increased, to 4.1 % in Poland and 7.5 % in Spain (http://epp.eurostat.ec.europa.eu). Both countries are characterised by strong regional differentiations in the distribution of organic farms and organic production. In Poland, most organic farms are located in the Zachodniopomorskie Province and the Warmińsko-Mazurskie Province, while in Spain they are located in Andalusia and in Castile-La Mancha.

An increase in the area was accompanied by an increase in the number of organic farmers (*Fig. 2*). Between 1997 and 2011, their number increased in Poland from 324 to 23,449 (by over 7,000 %). The linear trend function (y = 1,696.3x – 5,700.6) demonstrates that the number of organic farms grew on average per year by approximately 1,696 farms in the period analysed. In Spain, the number of organic farms also increased (over 9 times); however, the dynamic development was halted in 2004 and 2005, when the number of farmers temporarily dropped. This was prompted by the detection of traces of GMO at some organic farms specialising in growing corn (especially in Catalonia). The crisis was averted, though, and the regular increase in the number of organic farms, which

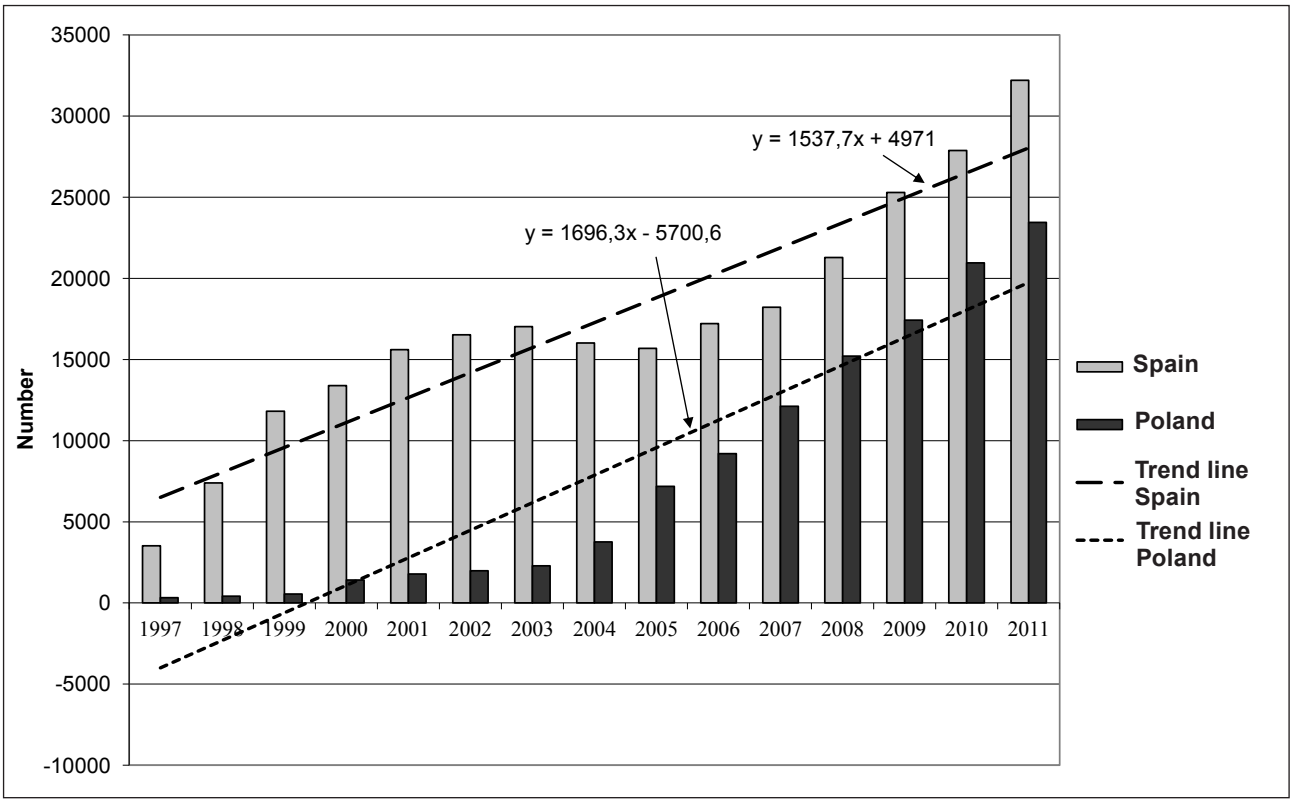

Fig. 2 Number of organic farmers in Spain and in Poland between 1997 and 2011; Source: Own study based on Agricultura ecológica. Estadísticas 2011 (2012), IJHRS (http://www.ijhar-s.gov.pl/raporty-i-analizy.html) and MRiRW (http://www.minrol.gov.pl/pol/Jakosc-zywnosci/Rolnictwo-ekologiczne/Rolnictwo-ekologiczne-w-Polsce)

was re-established in 2006, resulted in their number exceeding 32,000 in 2011. Spanish organic farming is characterised by a significantly larger average area of an organic farm, which is 57.3 ha (in Poland it is 25.8 ha, *Tables 1* and *2*). In both countries, the indicator shows wide regional differences. In Spain, it ranges between 6.7 ha in the Basque Country and 90.3 ha in Andalusia and 116.0 ha in Navarre. In Poland, the indicator is the highest in the provinces of the central and western part of the country (Wielkopolskie Province: 43.3 ha, and Lubuskie Province: 40.9 ha) and the lowest in the southern part (Małopolskie Province: 10 ha, and Świętokrzyskie Province: 11 ha), and it is higher than for conventional farms. Spain and Poland are countries where the potential of organic farming is also displays sharp regional differences. This is especially notable in the case of organic farming in Spain, where almost 70 % of the area of land used for organic farming is concentrated in two provinces, namely Andalusia (52.7 %) and Castile-La Mancha (16.7 %). These provinces are also leaders (over 55.9 %) in terms of the number of organic farmers (Andalusia: 33.5 %, Castile-La Mancha: 22.4 %). It may almost be concluded that these provinces specialise in organic farming. Andalusia is a well-known producer of organic foods not only in Spain but also in other European countries. In Poland, the concentration is less prominent. 46.5 % of the area of land used for organic farming is in three provinces located in the north-eastern part of the country (Warmińsko-Mazurskie Province: 16.3 %, Zachodniopomorskie Province: 19.8 % and Podlaskie Province: 10.4 %, *Table 1*) and 26.0 % of organic farms operate in the Warmińsko-Mazurskie Province (12.9 %) and Zachodniopomorskie Province (13.1 %). In 2010, land used for organic farming in Poland consisted in 44.4 % of arable land and in 42.3 % of meadows and pastures. The share of orchards was 13.3 %. In terms of land used for cultivating plants, the highest area was used for cultivating plants for animal feed (20.6 % of agricultural land), followed by cereals (19.6 %). Polish organic farmers are more frequently engaged in plant production activities. In 2009, 63.3 % of farms carried out plant production activities. In turn, 36.7 % organic farmers carried out both plant and animal production activities. Unfortunately, it is impossible to determine the total scale of organic plant production activities in Poland. The official statistics reveal only that in 2010 a total of

Table 1 Organic processing plants in Poland and Poland's provinces (voivodeships) in 2011: total area, number of businesses, average farm size; share of the provinces in total organic area and number of farms. Source: own study based on IJHRS (http://www.ijhar-s.gov.pl) and MRiRW (http://www.minrol.gov.pl)

Province	Organic area			Producers	
	ha	%	Average farm size in ha	Number	%
Dolnośląskie	45546.5	7.5	34.5	1322	5.6
Kujawsko-Pomorskie	8375.9	1.4	22.6	371	1.6
Lubelskie	34837.1	5.8	16.9	2065	8.8
Lubuskie	44259.4	7.3	40.9	1081	4.6
Łódzkie	8746.3	1.4	18.3	478	2.0
Małopolskie	21395.8	3.5	10.0	2138	9.1
Mazowieckie	50099.9	8.3	23.4	2140	9.1
Opolskie	2702.9	0.4	31.4	86	0.4
Podkarpackie	32358.5	5.3	15.8	2045	8.7
Podlaskie	52065.9	8.6	21.3	2440	10.4
Pomorskie	27356.5	4.5	35.9	763	3.3
Śląskie	6786.7	1.1	28.5	238	1.0
Świętokrzyskie	14301.0	2.4	11.0	1296	5.5
Warmińsko-Mazurskie	98473.1	16.3	32.5	3033	12.9
Wielkopolskie	38434.4	6.3	43.3	888	3.8
Zachodniopomorskie	119780.0	19.8	39.1	3065	13.1
Polska	605519.6	100.0	25.8	23449	100.0

376.3 hectolitres of cow milk and 37.8 tonnes of processed fruit and vegetables were produced (Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych 2011). The absence of data results from the fact that the national regulations do not require farms to report their production figures. In Spain, the use of land shifted towards the development of cultivation areas and permanent grassland. The area of land used for organic purposes include grassland (47.1 % in 2011 and 44.8 % in 2009), arable land (45.3 % in 2011 and 34.5 % in 2009) and other land (7.6 % in 2011 and 20.7 % in 2009). An increase in the number of organic farms and in the area of land used for organic farming, as well as the development of the processing industry, resulted in an increase in the value of organic production. In Spain, in 2011, it was valued at approximately EUR 813 million (increase by over ¼ in comparison to 2009). In Spain too, as in Poland, organic farming focuses mostly on plant production. Therefore, the value of organic plant production was decidedly higher, i.e. EUR 667 million (82.0% of total organic production of Spanish origin), and was generated by cultivation of vegetables, cereals, fruit, olives, grapes and nuts. The value of animal production was EUR 146 million and its main produce was beef. The majority of farms specialising in organic animal production are located in Andalusia. Spanish organic production is characterised by strong concentration and sector specialisation. Simultaneously, there are opportunities for increasing the production, in particular products of animal origin.

Both in Spain and in Poland, the most important conditions determining the development of organic farming include the following: natural conditions (in particular, the sanitary condition of soils – pollution caused by heavy metals), legal regulations regarding organic farming, financial aid from EU funds, state aid (for example, financial aid, advisory support, organic food promotional campaigns), wealth of the society, awareness of consumers, awareness of farmers, return on organic farming, competition (domestic and

Table 2 Organic processing plants in Spain and Spain's regions (autonomous communities) in 2011: total area, number of businesses, average farm size; share of the regions in total organic area and number of farms. Source: own study based on Agricultura ecológica. Estadísticas 2011 (2012)

Autonomous communities	Organic area			Producers	
	ha	%	Average farm size in ha	Number	%
Andalucía	973239.1	52.7	90.3	10778	33.5
Aragón	61119.6	3.3	81.2	753	2.3
Asturias	21735.2	1.2	49.7	437	1.4
Baleares	28309.5	1.5	36.8	769	2.4
Canarias	3684.4	0.2	4.6	808	2.5
Cantabria	5820.8	0.3	38.3	152	0.5
Castilla-La Mancha	307612.4	16.7	42.6	7214	22.4
Castilla y León	31350.6	1.7	59.9	523	1.6
Cataluña	92435.0	5.0	61.9	1494	4.6
Extremadura	91108.6	4.9	26.4	3455	10.7
Galicia	14430.1	0.8	29.8	484	1.5
Madrid	6677.6	0.4	30.6	218	0.7
Murcia	59645.4	3.2	26.1	2282	7.1
Navarra	73432.0	4.0	116.0	633	2.0
La Rioja	7017.3	0.4	28.6	245	0.8
País Vasco	1960.5	0.1	6.7	293	0.9
Comunidad Valenciana	65461.0	3.5	39.2	1668	5.2
Spain	1845039.1	100.0	57.3	32206	100.0

foreign organic foods, domestic and foreign conventional foods), focus on environmental protection.

In both countries, the legislation was of key significance for the development of organic farming and the creation and operation of a distribution system for organic farming produce. In Spain, the current legal framework, which covers organic farming, was provided by the Royal Decree of 1993 (No. 1852; dated 22 October 1993). It is worth emphasising that Spain was one of the pioneers (early 1990s) in developing regulations regarding organic animal production. In Poland, legal issues related to organic farming were regulated (at the national level) significantly later than in Spain, i.e. shortly before the country's EU accession. In 2009, the regulations were modified and the most important national document became the Act on Organic Farming of 25 June 2009 (Ustawa o rolnictwie ekologicznym 2009). Currently, of course, Spain and Poland are EU members, which means they respect relevant EU legal acts that govern the operation of the organic farming market. They both have the above-mentioned national regulations, and legal acts relevant in Spain were also adopted at the regional level. Both countries were obliged to create a control system for organic farming. In Poland and Spain, this system is based on the appointed public certification authority and the approved private certification bodies. Bureaucracy is mentioned as one of the main problems concerning the system of controlling organic agriculture in Spain. Moreover, it is often stressed that the diversity of certification systems favours large farms.

Support in the development of production and processing of organic farming produce in Spain takes on various forms and is granted both at the national and regional level (in particular, the Regional Organic Farming Development Plan 2002-2006 implemented in Andalusia with a budget of EUR 3 million). Between 2006 and 2008, the organic food promotional campaign was launched, which was supervised by the Spanish Ministry of Agriculture and funded by the state and the EU; its budget was EUR 2.32 mil-

lion. The First National Organic Farming Development Plan (2007-2010) whose main aim was to increase the number of organic farms was also put into operation. A new plan of measures for organic food and farming was announced in 2011. It emphasised the fact that organic farming was a strategic sector that combines the production of high-quality food with environmental protection and helps in creating so-called "green places of work". Organic farming in Poland was granted state financial support for the first time at the end of the nineties of the 20th century. In 1998, subsidies to the costs of controlling organic farms were introduced. In 1999, the subsidy to the area of organic farming was introduced. Since 2004, when Poland accessed the EU, the support for the organic sector has been granted from both the national budget and the EU budget. The Rural Development Plan for the years 2004-2006 supported organic farming under the agri-environmental programmes. Afterwards, the Rural Development Programme for the years 2007-2013 modified the agri-environmental instrument in such a way as to provide more support for marketing measures applicable to organic farming. In Poland, like in Spain, special documents supporting the production of organic food were developed. In 2007 the first Action Plan for Organic Food and Farming in Poland for the years 2007-2013 was introduced which, due to modifications in legal acts regulating the functioning of organic farming, was later replaced. Its main objectives are: the development of the market for organic products, boosting consumer awareness of the products, streamlining the system of control and certification and encouraging the collaboration between entities functioning on the organic food market (Ministerstwo Rolnictwa i Rozwoju Wsi 2011). It is immensely difficult to assess the role played by the support directed towards the organic sector. Both in Spain and Poland, the measurable effect of aid offered under the Common Agricultural Policy and via any other forms of support is the regular increase in the area of land used for farming and in the number of producers (*Gil* et al. 2000). According to *Sanders* et al. (2011), however, it is not enough just to take into account the degree and type of support, which differ significantly among individual countries and regions in the EU, but it is also necessary to consider the role of policy. They emphasise that the area payments play a very important role in increasing the supply and they may have a dynamic impact on the development of the organic sector at its early stage. At the same time, other types of support are also necessary to develop a professional distribution system. A comprehensive development and support strategy, coordinated with other relevant policy fields, is necessary in many European countries and also for the organic sector in Poland.

The development of organic farming and the distribution system for organic farming produce was boosted by growing consumer interest in organic food, both on the domestic market and abroad (export opportunity). When deciding on whether to buy organic food, consumers have different motives. Increasing health awareness, care for the environment, a fashion for an organic lifestyle, anxieties regarding diseases caused by the consumption of contaminated food produced using conventional methods (for example, BSE) and by genetically modified food are among the key factors affecting the demand for organic products (*Łuczka-Bakuła* 2005). The public consultation carried out by the European Commission on the review of the EU policy on organic farming (an online questionnaire, 45 000 replies given by farmers, consumers and representatives of companies and organisations operating on the organic farming market) has demonstrated that the main reason why consumers prefer buying organic products is their concern about the environment (83 %), followed by the fact that such products are not modified genetically and contain no residues of non-authorised substances (81 %). In general, consumers of organic food accept the fact that it is more expensive than conventional foods. The aforementioned public consultation has demonstrated that 78 % of the interviewees are willing to pay more for the organic farming produce. However, the majority of consumers believe that the difference in price should not be higher than between 10 % and 25 % (European Commission Directorate-General for Agriculture and Rural Development 2013). Other research also demonstrates that consumers that want a healthy diet and oppose the degradation of environment are willing to buy organic food and pay additionally for the application of organic production methods (*Gil* et al. 2000).

In Poland, demand for organic farming produce is still relatively limited. It is predominantly determined by price factors (higher than the prices of conventional farming produce), limited availability and market, as well as by a small variety of products. In Poland, organic produce is more expensive than conventionally produced food, on average by between 20 % and 30 %. The research demonstrated that the difference is often large (in particular, in the case

Table 3 Organic processing plants in Poland in 2011; Source: own study based on IJHRS (http://www.ijhar-s.gov.pl/raporty-i-analizy.html) and MRiRW (http://www.minrol.gov.pl/pol/Jakosc-zywnosci/Rolnictwo-ekologiczne/Rolnictwo-ekologiczne-w-Polsce)

Province	Organic processing plants		Organic farms	Area of organically farmed land
	Number	%	Number/one processing plant	ha/one processing plant
Dolnośląskie	11	4.1	120.2	4,140.6
Kujawsko-Pomorskie	12	4.4	30.9	698.0
Lubelskie	28	10.4	73.8	1,244.2
Lubuskie	6	2.2	180.2	7,376.6
Łódzkie	12	4.4	39.8	728.9
Małopolskie	23	8.5	93.0	930.3
Mazowieckie	54	20.0	39.6	927.8
Opolskie	1	0.4	86.0	2,702.9
Podkarpackie	20	7.4	102.3	1,617.9
Podlaskie	6	2.2	406.7	8,677.7
Pomorskie	11	4.1	72.1	2,487.0
Śląskie	13	4.8	18.3	522.1
Świętokrzyskie	9	3.3	144.0	1,589.0
Warmińsko-Mazurskie	7	2.6	433.3	14,067.6
Wielkopolskie	41	15.2	21.7	937.4
Zachodniopomorskie	16	5.9	191.6	7,486.2
Polska	270	100.0	86.8	2,242.7

of meat) and the price of an organic product is then even 2 times higher than that of its counterpart produced conventionally. Limited availability and a still unvaried product range are typical characteristics of the organic food markets in Central and Eastern Europe (*Łuczka-Bakuła* and *Smoluk* 2006). In 2010, the annual spending on organic food by an average Pole was only EUR 1.5 per inhabitant. In Spain, this figure was higher and oscillated around EUR 19.5. However, a Spaniard still spends 9 times less than a Swiss does on organic food. The average annual consumption of organic products is estimated at 35.4 kg per year, and the spending on organic food is 1.9 % of total spending on food by an average household (*Martín Cerdeño* 2010). A common feature of the Spanish and Polish markets of eco-food is a very small share – below 1 % – of eco-food in the general sale of food. Huge discrepancies can be noted, in turn, in domestic sales levels. In Poland, in 2010, the total value of ecological produce sold on the domestic market was EUR 57 million and EUR 905 million in Spain (2009). In Spain, the situation is paradoxical. On the one hand, organic farming is developing rapidly, and on the other hand, domestic consumption is very low. That is triggered, in particular, by weak organic awareness among the Spaniards, the improper designation of organic products (between 2001 and 2006 also non-organic products were designated as "bio" (organic) and a decrease in income due to the economic crisis.

The development of the organic produce processing industry is of an important significance for the distribution of organic food. In Poland, the number of organic produce processing plants started to grow a little more rapidly only just in the first years of the 21st century. In 2011, there were 270 organic food processing plants. Their distribution was subject to strong spatial differentiation. They were concentrated in the Mazowieckie Province, the Wielkopolskie Province and the Lubelskie Province (*Table 3*). The location of organic food processing plants depends on the market (agglomerations) and raw materials (*Kacprzak* 2011). Organic processing plants mostly processed fruit and vegetables (32.4 %), produced so-called other agricultural and food products (32.1 %) and carried out production activities

Table 4 Organic processing plants in Spain in 2011; Source: own study based on Agricultura ecológica. Estadísticas 2011 (2012)

Autonomous communities	Organic processing plants		Organic farms	Area of organically farmed land
	Number	%	Number/one processing plant	ha/one processing plant
Andalucía	421	15.4	25.6	2311.7
Aragón	113	4.1	6.7	540.9
Asturias	48	1.8	9.1	452.8
Baleares	119	4.4	6.5	237.9
Canarias	96	3.5	8.4	38.4
Cantabria	30	1.1	5.1	194.0
Castilla-La Mancha	185	6.8	39.0	1662.8
Castilla y León	118	4.3	4.4	265.7
Cataluña	606	22.2	2.5	152.5
Extremadura	77	2.8	44.9	1183.2
Galicia	94	3.4	5.1	153.5
Madrid	50	1.8	4.4	133.6
Murcia	210	7.7	10.9	284.0
Navarra	80	2.9	7.9	917.9
La Rioja	88	3.2	2.8	79.7
País Vasco	88	3.2	3.3	22.3
Comunidad Valenciana	306	11.2	5.5	213.9
Spain	2729	100.0	11.8	676.1

related to the milling of grains (19.4 %). In Spain, organic processing industry has been developing very rapidly. In 2011, there were 2,729 registered plants that carried out activities in the area of industrial processing of organic produce – most of them in Catalonia, Andalusia, Valencia (*Table 4*). They usually processed products of vegetable origin.

The distribution system for organic farming produce is also affected by imports (*Żakowska-Biemans* 2006, *Zientek-Varga* 2009). Any organic farming produce imported to EU countries from any third country (countries other than EU members) must comply with the requirements regarding the production methods and control principles regarded as being equivalent to those applicable to the EU producers. The EU countries primarily import organic cereals, fruit, vegetables, juices, milk, meat and cheese (*Łuczka-Bakuła* 2007). In Poland, due to a lack of data, it is difficult to unambiguously determine the significance of import of organic food and its impact on the development of the system for its distribution. In 2010, according to IJHRS, 219 organic farmers were carrying out activities consisting in marketing organic products and 17 of them imported such products from third countries. According to *Václavik* and *Szeremeta* (2008), approximately 30 % of organic food products (cereal preparations, juices and oils) are imported predominantly from Germany, Italy and France. The research conducted on specialised stores with organic food located in the area of the Poznań agglomeration and the analysis of product range offered by Internet shops demonstrate that the position of imported organic food is considerably strong. The product range of German organic food is exceptionally rich and generally includes processed products, starting from milk and yoghurts and ending with sweets. Organic produce from China is also becoming more and more prominent. It often happens that an imported product offered within such a product range could have been successfully produced in Poland. In the opinion of the surveyed experts, Polish organic production is much too dispersed, and therefore it is often very difficult to find a regular supplier. Imports are necessary due to the poor development of the organic food processing industry that is not able to guarantee a wide variety of products. On the Spanish organic food market, there are 101 importers and the majority of them operate in Catalonia

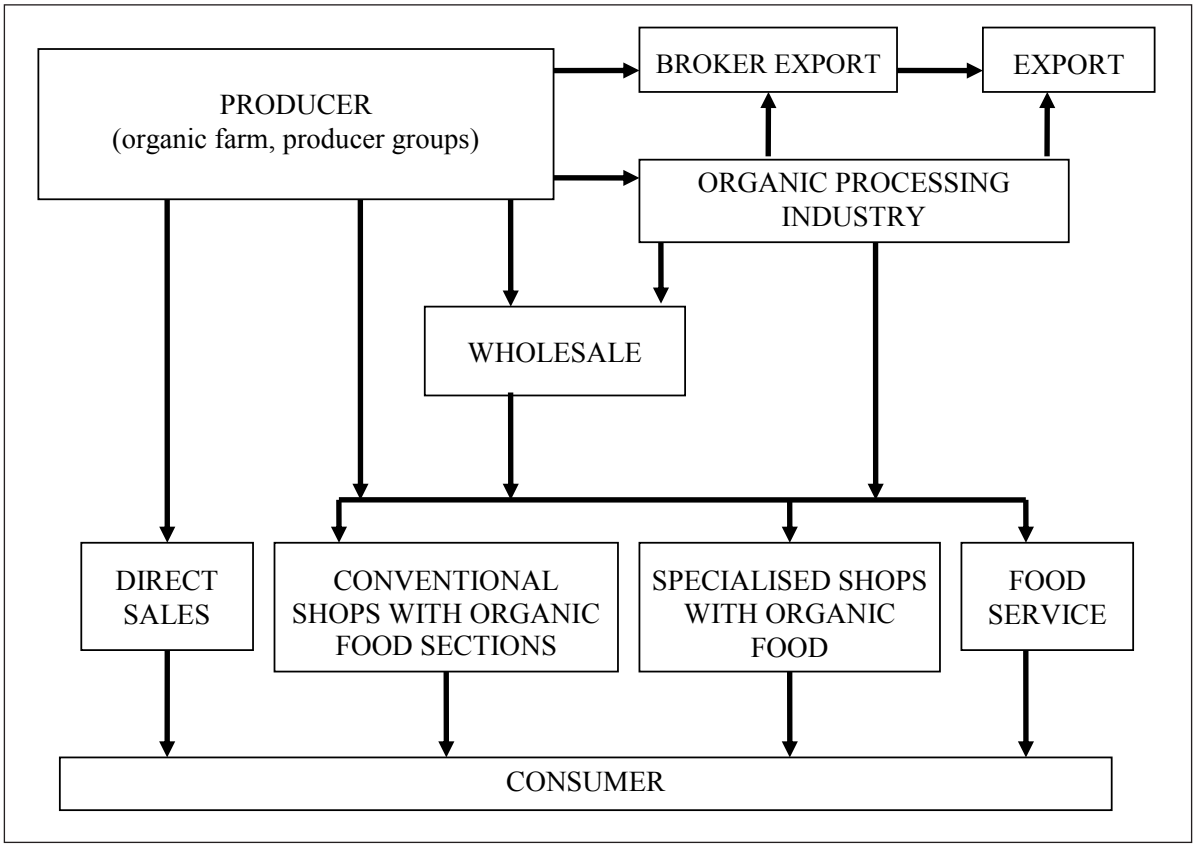

Fig. 3 Distribution system for organic agricultural products in Spain and in Poland; source: own research and Caracterizacion del Mercado de Productos Ecológicos en los Canales Especialistas de Venta (2012)

(35) and Valencia (20). The estimates demonstrate that between 2009 and 2011 the value of imports increased by approximately between 10 % and 20 % from EUR 190 million to EUR 219 million. The most significant is the import of processed organic plant products, which is approximately 3/4 of total import.

4. Operation of the distribution system for organic farming produce in Poland and Spain

Spanish and Polish systems of distributing eco-food have developed under different conditions. Therefore, they are at different development levels. In Poland, just like in all countries of Central and Eastern Europe, the system of eco-food distribution is only at the stage of construction and initial phase of development. The Spanish market of eco-food, on the other hand, is developing dynamically and the distribution system is already mature, although it keeps changing. Despite these differences, both analysed distribution systems are made up of the same links and sales channels (*Fig. 3*). Organic farming produce is received by consumers through direct sales channels, traditional and specialist shops with eco-food sections and wholesale stores, it goes into export and also forms the raw material for processing.

In Poland, the most important distribution channels include direct sales (66 %) and shops specialising in ecological foods (27 %), usually based in large cities (*Żakowska-Biemans* 2008, *Václavik* and *Szeremeta* 2008). The importance of direct sales has increased and its new forms appeared when the Internet became more popular. Ecological farming produce can be bought from producers at e.g. their farms, local fairs and farmers' markets, traditional food markets, or through the farms' websites. There are more and more farms using door-to-door sales. Direct sales is a manner of sales of big importance for farms of small area and multidirectional production, however, some of its forms are time consuming and require greater engagement from the farmer. Food markets are one of the oldest forms of trade. However, "Biobazar", i.e. the first market with a wide offer of organic farming products, was established in Warsaw only in 2010. As time went by, similar investment projects were started in other large cities (e.g. "Tygiel", "Zielony Rynek" in

Poznań). Grocers' cooperatives appear as new forms of direct sales. In Poland, the operations of cooperatives are limited to the largest cities, i.e. Warsaw (3 cooperatives), Gdańsk, Poznań, Łódź and Katowice. One of such rank-and-file initiatives is the Poznań Food Cooperative, which commenced its operations in 2012. It is a group of people, who are not profit-orientated and who want to purchase food directly from producers in order to obtain more attractive prices and to know the origin of products. The main objective of the cooperative is to make joint purchases of products (once a week) directly from an organic farm. An interesting initiative in the distribution of eco-products is the website: Wiemcojem.pl – it has been operating in Poznań since 2009. It is a specific local market that operates through the internet. Farmers and processing plants themselves offer their products on the website. "Think globally, eat locally" is the slogan of the originators. The other main distribution channel for eco-food is specialised shops with organic food products (the so-called health food = food products for diabetics, allergic people, vegetarians and also supporters of organic production). In 2009 there were approx. 500 shops offering organic products (*Zientek-Varga* 2009). Their location is typically market-related – they are usually to be found in large cities, e.g. 40-50 in Warsaw, 15-20 in Poznań. Disadvantages of specialised shops mainly include a low share of domestic products (in particular, processed products) and a meagre variety of products (most propagated products are plant products; meat is offered much less frequently). It is worth mentioning that initial networks of shops offering organic products have been created. The largest network of self-service delicatessen, called Organic Farma Zdrowia, has 33 outlets (of which 19 are in Warsaw) and offers approx. 4500 ecological products (most holding certificates). Organic Farma Zdrowia shops serve 1 million customers a year and cooperate with more than 100 suppliers (50 % of which are Polish companies). An online store has been opened, too. When expanding the network, owners used the funds available as part of the Programme for the Development of Rural Areas 2007-2013. Vita Natura network, in turn, combining processing and trade, is a family business and its origin goes back to 1991. The network is made up of: an online shop (www.sklepvita.pl), conventional shops with health food in Poznań, an organic processing plant (in Gądki near Poznań) and a wholesale business which supplies the largest commercial networks, in particular Piotr i Paweł, Społem, Złoty Grosz and Intermarché. In Poland, the sale of organic food is becoming more and more popular also among conventional shops. Large-format retail shops in both Polish networks (for example, Piotr i Paweł, a group of shops within the PSS network) and foreign networks (for example, TESCO, Auchan, Real) started selling organic food only just in the 21st century. In 2002, organic foods (mainly vegetables) first appeared in Tesco. However, the initiative collapsed and was not revived until 2010. In Piotr i Paweł shops, organic foods have been sold since 2004. Cooperation with commercial networks is difficult mainly due to the need to constantly supply the goods and ensure large batches thereof. Most Polish eco-farms are not capable of fulfilling such requirements – their production is too small. However, as the time passes, this link will become the basis for the system of distribution of eco-farming products. The study demonstrates that in recent years organic products have begun to be offered in very small shops in rapidly developing suburban areas, for example, in the suburban area of Poznań (urban sprawl), as well as at some fuel stations. In turn, the assessment of the development of the organic processing industry demonstrates that it is only just in its initial phase of development in Poland. Despite the fact that the number of plants processing organic farming produce is increasing, the development of the Polish organic processing industry is still insignificant. The development of this kind of processing industry is, in particular, one of the methods for increasing the sale of organic farming produce. The activities of processing plants also contribute to the higher diversity of the organic farming product range. Organic food processing is done predominantly by various partnerships and companies (first and foremost limited liability companies) – in 2009 they accounted for nearly 88 % of all processing plants. Farmers rarely decide to operate organic food processing facilities. Farmers seem to be discouraged by the regulations and the formalities connected with running an organic food processing business. Although in the analysed period there were more and more certified processing plants, their development was too slow to meet the increase in the number of organic farms and the area of ecologically farmed land – particularly at the end of the first decade of the 21st century. This negatively affects the organic food supply in Poland, which continues to be insufficiently diversified. The significance of e-commerce is also increasing. In Poland, online purchases of organic food are simply booming. This is the way in which individual organic farms are selling their products. In addition, specialised shops with organic food are popping up like mushrooms. Rank-and-file initiatives aimed at

organising distribution links for organic products on a local market, such as food cooperatives and specialised markets (Warsaw, Poznań, Lublin), are also being introduced. It is worth noting that in Poland, the use of organic produce in mass catering (for example, school canteens) or in gastronomy is decidedly marginal. Organic restaurants or organic cafés are not very popular. In Poznań, a city of more than 500 000 inhabitants, there is only one café offering eco-products. Wholesale stores and exports are distribution channels which are most popular among farmers running large eco-farms. Unfortunately, there are not too many such producers. Hence, exports of Polish eco-farming produce are not significant.

It is worth noting that changes in the system of distribution of eco-farming products reflect trends visible in countries of a higher level of development of the eco-food market (*Żakowska-Biemans* 2008). Although the distribution system for organic farming produce in Poland is developed, it is necessary to integrate individual links of the organic food market chain. At the moment, there are not enough organisational structures, for examples, clusters that would combine the links of the distribution system for organic products. A very strong dispersion of organic production impedes the efficient operation of the organic farming produce market. As a consequence, it is necessary (for example because of the needs of the processing industry) to introduce joint operations on a larger scale, in the form of producer groups whose members are farms that apply organic production methods. The significance of organic e-commerce, organic farming produce processing and organic food exporting will undoubtedly increase in the nearest future. There will also be more cluster initiatives introduced, which will focus on the production and distribution of organic food. In Poland, the first attempt to integrate individual links in the distribution system for organic farming produce in the form of a cluster (from an organic farm, through organisations and institutions supporting and controlling organic farming, processing industry and trade industry up to agricultural training and research institutes) is Organic Food Valley Cluster (Klaster Ekologiczny Dolina Ekologicznej Żywności) that operates in the eastern-southern part of Poland. The initiator of creating the cluster was the Institute of Soil Science and Plant Cultivation in Puławy. The cluster currently has 20 members, including eco-farms, eco-processing companies, certification bodies and ecological organizations. It is open and can be accessed by entities interested in the development of food production using ecological methods in Eastern Poland. Among the effects of the cluster operating for three years, the following must be mentioned, e.g. 13 new products placed on the market or using 26 innovative methods of production and sale of eco-food (*Kacprzak* 2014).

In 2011, there were 36,400 participants (operators) on the Spanish organic farming market. The majority of them were producers (88.6 %). The majority of them, i.e. as many as 28,000 (77 %), carried out organic farming activities. The second largest group of participants were organic food processing plants (7.5 % of all the participants). Nearly 4 % of the market participants provided trade services, including 1,017 that offered wholesale services. Export plays a key role in the Spanish distribution system for organic farming produce. It is estimated that almost 80 % of organic farming produce is exported. In 2011, among the market operators there were 65 exporters in two provinces, namely 44 in Andalusia and 21 in Valencia (Ministerio de Agricultura, Alimentación y Medio Ambiente 2012a). The distribution networks in these areas are orientated towards export. Strong demand on organic products outside Spain and their attractive prices contributed to this country's specialisation in export. Export is primarily directed to the EU countries (89.2 % of production), and in particular to Germany, Great Britain and France (*Weiss* 2013). Among exporters, there are only 6 % of farmers directly exporting their organic farming produce. The wholesalers of organic farming produce are concentrated in Andalusia, where almost 75 % of them operate. Retail distribution of organic products takes many forms. The most important among them are specialised shops (50 %-60 %), conventional stores (35 %-40 %) and gastronomy (2 %-3 %). In the largest cities of Spain, located, in particular, in Catalonia, Madrid, Andalusia and Valencia, there are approximately between 50 and 100 large shops/supermarkets that offer organic food in their product range. Their area ranges from 140 square metres to 500 square metres and their annual turnover is between EUR 1 and 3 million. They also sell their products online. Small and medium stores (between 40 square metres and 140 square metres) that specialise in selling organic products are very numerous – around 1,000, and their turnover oscillates between EUR 100,000 and 300,000 per year. This is a type of "local shop" that has established contacts with regular customers. Herb shops are also a type of retail channels that specialise in selling organic food and drinks. They are very popular. It is estimated that there are around 5,000 of them operating on the Span-

ish market. The distribution channel for organic food, which is significantly much more developed in Spain than in Poland, is a channel that includes various associations of organic food consumers (food cooperatives, consumer organisations, etc.). In the 21st century, their number has been increasing on a regular basis and currently it ranges between 500 and 600. Initially, they were established in Andalusia and Extremadura and later on also in Catalonia and Madrid. It is estimated that organic food is purchased via this short distribution channel by over 25,000 families. Specialised distribution channels also include direct sales by phone, fax and through Internet (e-mail, website) or by home deliveries. Organic farming produce is sold at markets, fairs and during occasional events (for example, at shopping centres or during countryside festivities). On the other hand, conventional stores selling organic products include, in particular, modern and traditional general convenience shops and also local corner shops. Although, as already mentioned, the gastronomy channel (food service) is not very important for the retail distribution of organic food in Spain, it is worth noting that it is not limited only to the restaurant industry. It also includes tastings, conferences, fairs exhibitions and school catering, etc. It is estimated that total turnover of retailers operating in Spain (traditional stores, general convenience shops and specialised stores) could have been approximately EUR 920 million in 2010 (Ministerio de Agricultura, Alimentación y Medio Ambiente 2012c).

5. Similarities and differences in the distribution system for organic farming produce in Poland and Spain

Among the most important common characteristics of the Polish and the Spanish distribution system for organic farming produce is, in particular, its dynamic development. Its modification and expansion have been aimed at taking into account the expectations of both the producers of organic food and its consumers. The Spanish and the Polish distribution systems for organic farming produce consist of the same links and distribution channels. In both countries, the number of organic farms is continuously growing and in both cases their distribution is still subject to strong regional differentiation. Unfortunately, both in Spain and in Poland domestic demand is still relatively insignificant, though it is gradually increasing. In recent years, the significance of e-commerce has been becoming more prominent. In Poland, online purchases of organic food have simply been booming. This is the way in which individual organic farms are selling their products, in particular, via their own websites and using the websites of formal and informal organisations promoting organic food. The number of internet-specialised shops with organic food is growing rapidly. Both in Spain and Poland, rank-and-file initiatives aimed at organising distribution links for organic products on a local market, such as food cooperatives and specialised markets, are being introduced. It is also worth noting that the distribution is adjusted to the type of organic farming, i.e. the size of organic farms and their scale of production are important. This can, in particular, be observed in Spain. In the regions where large organic farms operate, and a given region specialises, for example, in the cultivation of olives or oranges, it is easier to organise the distribution and the products are usually exported. In turn, the highly dispersed size structure of Polish organic farms does not favour the development of a similar distribution channel on a large scale. That explains the popularity of direct and retail sales.

The differences in the Spanish and the Polish distribution systems for organic farming produce include, in particular, the differentiated development of individual links and distribution channels. In Spain, the key distribution channel is export, which in turn in Poland is of a secondary significance. The position of the organic processing industry is also different. The organic food processing industry in Poland is still in its initial phase of development. The Spanish organic processing industry is definitely much more developed. In Poland, the significance of large-format retail shops in the sale of organic food is higher both in the Polish networks and the foreign ones. The sale of organic produce by large-format retail shops has many advantages, in particular, a decrease in trade margins contributes to lower prices, consumers may benefit from a diversified product range in one location, organic food becomes more accessible and therefore more popular, which leads to an increase in demand (*Hamm* et al. 2002; *Hamm and Gronefeld* 2004). However, one has to be aware of the fact that such a form of sale has also its drawbacks. An increase in the significance of supermarkets leads to small shops with so-called health food being driven out of the market. This leads to the paradox that the discount stores, which years ago by following bad policies in selling food products (low-quality products) considerably contributed to the opening of health food stores, ben-

efit the most from the bio-boom. In Spain, organic products are used on a larger scale in gastronomy (organic food restaurants or cafes are quite scarce in Poland) and also in mass catering operations.

6. Conclusion

The distribution systems of organic farming produce in Poland and Spain are determined by a number of factors including financial aid (in particular, EU funds), introduction of clear legislation, scale of organic farming and demand for organic farming produce. The Polish distribution system for organic farming produce started to develop later than the Spanish one, and it is still in the initial phase of development. Despite that, the systems in both countries in fact operate in a similar way, although there are marked differences in the extent of development of individual distribution channels and their importance. This is visible especially in the exports of organic farming produce. In Spain, export represents a key distribution channel, whereas in Poland its significance is secondary. Differences in the degree of development are also notable in the organic produce processing industry. The Polish organic processing industry embarked on a more rapid development only after Poland's EU accession, while in Spain it represents one of the most prominent distribution links. In Poland, however, as opposed to Spain, the significance of large-format retail shops in the sale of organic food is higher. Eco-products are available both in Polish and foreign chain stores.

In both countries organic produce has only just started to conquer gastronomy. In Spain, however, organic food products have a much more widespread use in mass catering. In Poland, this distribution channel is only just being developed. Similarities existing between Spanish and Polish organic distribution include, in particular, a steady increase in the number of organic farms, whose distribution is characterised by pronounced regional differences, a strong position of shops specialising in organic food, and a rapidly growing significance of e-commerce, as well as insignificant domestic demand. In both countries, the distribution system continues to develop and its development is very dynamic. Importantly, new distribution channels are being created. For example, in the case of direct sales of organic farming produce they include food cooperatives or specialised markets (eco-fairs, eco-markets). Both in Spain and in Poland, the distribution system for organic farming produce is becoming more and more similar to the distribution system for conventional farming produce.

In the nearest future, the development of organic farming and the distribution system for organic products in both countries will remain affected by the EU funding and available forms of state support. Assuming a support at a comparable level as so far implemented, increased awareness of consumers and a constant increase in their income, one should expect e.g. a further increase in the potential of eco-farming (increased number of eco-farms and acreage of eco-crops), a strengthened position of ecological e-commerce and the processing of ecological farming produce. To follow the example of countries with developed, mature systems of distribution of eco-farming products, e.g. Germany, the sale of eco-food in general, large-size grocer's stores will be run at a greater scale. Certainly, in particular in large cities, large-size stores specializing in eco-food as well as eco-fairs will be opened. Spain will still be a well-known exporter of eco-food, although competition will increase. In the case of Poland, given distributed production and a rather scarce scope of cooperation among producers and a too low level of development of eco-processing, chances of dynamic development of exports are rather low. It is worth paying greater attention, particularly in Poland, to horizontal integration (groups of producers) and vertical integration (e.g. closer cooperation of producers and processors) in a system of distribution of eco-farming produce. This would certainly improve the position of producers of eco-farming produce on the market. One of the possibilities of establishing relations contributing to the development of the food sector is the construction of clusters.

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