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Małgorzata Matyja[1]
Wrocław University of Economics

Position of Polish Agricultural Production Cooperatives on the International and Domestic Market

Abstract. The historical as well as recent experiences show that in some countries and sectors cooperatives play a key role. The agricultural cooperatives are the organizations where farmers pool their resources in certain areas of activity. A fundamental differences between the agricultural cooperatives in develop countries and the CEEC exist. To add insight to the understanding these differences the paper presents some relevant, secondary data. Precisely, the purpose of the article is to investigate the position of Polish agricultural production cooperatives (APCs) on the domestic market and in comparison to cooperatives in developed countries. A main finding is that there is observed a phenomenon of decreasing number of APCs, poorly recognized brands, a relative small turnovers and market shares in comparison to agricultural cooperatives in developed countries.

Key words: agricultural cooperatives, turnover, market share

Introduction

Cooperatives play a prominent role in the agricultural sector, both in developed and developing countries (Tortia et al., 2013). The agricultural cooperatives, also known as a farmers' cooperatives, are the cooperatives where farmers pool their resources in certain areas of activity (Smith, 2011). Similarly to co-operatives in other sectors, they are organized according to fundamental principles and values, which are the following: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for community (Majee & Hoyt, 2011). In addition, they are based on the values of self-help, self-responsibility, democracy, equality, equity, and solidarity. The benefits to members and to the community are both tangible and intangible (Zeuli & Cropp, 2004). Tangible benefits may be seen immediately in improved services, more product availability and better prices, whereas it may be some time before the intangible value from organizing cooperatives becomes apparent. Through governing their cooperatives members develop leadership and problem-solving skills and confidence in their ability to help themselves. Agricultural cooperatives play an important role in supporting small agricultural producers and marginalized groups (Agricultural cooperatives…, 2012). They:

- empower their members economically and socially;
- create sustainable rural employment through business models that are resilient to economic and environmental shocks;
- offer small agricultural producers opportunities and a wide range of services, including improved access to markets, natural resources, information, communications, technologies, credit, training and warehouses;
- facilitate smallholder producers' participation in decision-making at all levels;

[1] PhD Eng., address: Komandorska Str. 118/120, 53-245 Wrocław, e-mail: malgorzata.matyja@ue.wroc.pl

- support members in securing land-use rights;
- negotiate better terms for engagement in contract farming and lower prices for agricultural inputs such as seeds, fertilizer and equipment.

The political, demographic, social, economic and technological changes have brought about the development of new forms, roles and fields of activity for agricultural and rural co-operatives both for spread of innovations and for poverty reduction (Munkner, 2012). There are huge differences of productivity, income and co-operative structures, between small farmers operating near subsistence level and large, professionally managed agribusinesses. This is because agricultural cooperatives help farmers gain market power by joining together to market their crops, increase their bargaining power by achieving economies of scale and by processing their commodity to add value, and/or purchase supplies and services. Benefits and profits gained from the cooperative are distributed equitably to members-farmers on the basis of use of the cooperative (Agricultural Cooperative…, 2013, p. 12).

The historical as well as recent experiences show that in some countries in the world cooperatives play a key role on the market (Chloupkova, 2003). In Europe, for example, there are two different models for developing agricultural cooperative entities, namely (Popescu, 2014):

- in the Nordic countries (Scandinavia, Germany, Belgium, United Kingdom) there are a relatively small number of cooperatives, but with a greater economic value and specialized on different channels;
- in Southern Europe the cooperatives are more numerous, but generally lower economic size.

However, in Central and Eastern Europe (CEEC), including also Poland, the agricultural cooperatives formerly remained strongly influenced by the idea of communist. This has led to a peculiar, deformed model of so called “production cooperative” usually composed of landowners and employees. As a consequence such cooperatives nowadays do not use their potential and cannot grow. Based on the positive experiences from a number of cooperatives that exists in the EU countries and wider in the world, many sources advocate that cooperatives should be reintroduced in the postcommunist European countries in order to iron out problems inherited from transforming their agricultural sectors (Chloupkova, 2003).

To add insight to the understanding the differences between agricultural cooperatives in developed and post-communist countries the paper presents some relevant market data. Precisely, the purpose of the article is to investigate the position of Polish agricultural production cooperatives (APCs) on the domestic market and in comparison to cooperatives in developed countries.

Data and methods

The basic methods used in the paper were the analysis and critique of literature and writing, as well as logical conclusion. The lack of current and comparative data on the cooperative sector makes definitive conclusions about its global size and scope difficult (Shaw, 2007, p. 6). It is not easy to classify and quantify such heterogeneous and changing cooperative sector. However, there are some statistics in this field, conducted mainly by institutions related to cooperatives. The statistical data sources in the article were the following:

- annual reports of the National Auditing Association of Agricultural Production Cooperatives, published in “Biuletyn Informacyjny” (Sprawozdanie…, 2011, 2012, 2013, 2014, 2015);
- the “List of the 300 best agricultural enterprises” prepared annually by the Institute of Agricultural and Food Economics – the National Research Institute in Poland (Lista…, 2013);
- “Measuring the Size and Scope of the Cooperative Economy” – the recent report of United Nations (Measuring…, 2014);
- the “World Co-operative Monitor” – a robust and comprehensive report published annually by the International Co-operative Alliance and the European Research Institute on Cooperative and Social Enterprises (World…, 2015);
- “Development of Agricultural Cooperatives in the EU 2014” – the report of Copa-Cogeca (Development…, 2015);
- Support for Farmer’s Cooperatives – the report prepared for European Commission (Bijman et al., 2012).

The collected data included such aspects as: number of cooperatives, number of members and employees, scope of activity, turnover and market share. To develop, organize, present and segregate the data tabular and graphical methods were used.

Research results

Polish agricultural production cooperatives – key facts

The long history of Polish cooperativeness in rural areas begins basically with the activity of Stanisław Staszic in the early nineteenth century. But first “truly” agricultural cooperatives were organized spontaneously after the end of the Second World War, mainly by former employees of the manor and the farmers themselves (Bajan, 1988). They were parceling-settlement in nature, and they appeared in order to improve the land use by means of the deficient amount of livestock and farm equipment (Matyja, 2012). During the period 1949 – 56 their number increased remarkably from 243 to 10 452 (Rocznik Statystyczny GUS, 1957). Unfortunately, over the next thirty years APCs became a tool in the hands of political and administrative authorities of that socialist time in Poland. This led to dramatic decrease not only of their number to 2 177 in 1989 (Guzewicz et al, 2001), but also to their negative image, because they were associated with the forced collectivization of agriculture. This image have remained until today and APCs are still perceived as a relic of a previous system (Dzun, 2009). This may be the one of important reasons of continuously declining number of APCs.

During the period analyzed in this paper the general number of APCs in Poland fell by 7% from 1 083 to 1 007. Moreover, there is observed a relatively huge, almost 15-percent drop in the number of actively operating APCs over the last five years. In the light of well doing agriculture in Poland (Agriculture…, 2015) this downward trend seems to be disturbing and confirms that there are some obstacles, probably of an internal nature, that inhibit the development of Polish APCs.

Table 1. Number of APCs in period 2010 – 2014

Year	2010	2011	2012	2013	2014	2010/2014 (%)
General	1 083	1 065	1 055	1 024	1 007	-7.0
Actively working	818	785	774	708	696	-14.9
In liquidation, bankruptcy or suspended operations	265	280	281	316	311	17.4

Source: (Sprawozdanie…, 2011, 2012, 2013, 2014, 2015).

Nowadays, agricultural production cooperatives in Poland cultivate over 245 thousand of UAA (utilised agricultural area). They focus on plant production (mainly cereals, oilseed rape, sugar beet) and livestock (mainly pigs and poultry) (Brodziński, 2014). In 2012 the structure of sales consisted in 61.1% of crop products, in 35.5% of livestock products, in 1.7% of food processing and in 1.7% of production and services of mechanical workshops, wood departments, building materials departments and others (Brodziński, 2014). However, in previous years the APCs were more diversified. The share of sales of processed products and services in total revenues was higher and achieved even the level of 13% in 2006. It is worth mentioning, that the larger cooperatives organize their sales network, both wholesale and retail. Some APCs develop the tourist infrastructure, combining fruit, vegetable and meat processing with gastronomy, hotel services, medicinal treatments, horse riding, etc.

Almost 70% of APCs have signed long-term contracts with customers, through which they sell approx. 53 – 65% of their agricultural production. In this field they also cooperate with individual farmers. The prices obtained by the APCs are generally lower than the average in agriculture, but thanks to contracts cooperatives obtain higher prices during periods of oversupply. By participating in the market exchange APCs are under pressure towards acquiring the competitive advantage and rationalizing the use of resources by increasing their economic efficiency (Brodziński, 2014). They compete with agricultural enterprises on national and foreign market, however in terms of their organizational and legal form they could be compared more with their analogues in other countries.

Agricultural cooperatives in the world

Cooperatives are known worldwide. They are found in sectors like agriculture, housing, insurance, wholesale and retail trade, industry and utilities, banking, health and social care and many others (World…, 2015). The recent report of United Nations stated that the most common type of cooperative is an agricultural cooperative (Measuring, 2014). This is influenced by large numbers of cooperatives in India and China where the small size of land holdings fosters working together to gain economies of scale and scope. As such, both of these markets have large numbers of agricultural cooperatives and control significant market share in certain sectors. For example, Indian cooperatives have 36% market share of the fertilizer market. Chinese cooperative have 60% market share in cotton, 68% in agri-processing, 70-80% market share in tea production and more than 80% market share in fertilizer. According to the same report over 1.2 million agricultural cooperatives associate over 122 million of members, hire 1.2 million people, have over 35 thousand offices/outlets and dispose of assets worth almost USD 134 billion.

The World Co-operative Monitor presents, among others, the 30 largest cooperatives in the agriculture and food industries. The top three of them are characterized in table 2.

Table 2. The three largest agricultural cooperatives in the world by turnover

Cooperative	Country	Members	Personnel	Turnover (billion USD)			
				2013	2012	2011	2010
NH NONGHYUP (NACF)	Republic of Korea	2 431 353	almost 80 000	55.05	50.71	31.27	na*
ZEN-NOH	Japan	1 032	over 8 000	48.37	56.85	62.44	60.88
CHS INC.	USA	625 000	over 11 000	44.48	40.60	36.92	25.27

* na – data not available

Source: own study on the basis of (World…, 2015).

Table 3. Top-ten meat, cereals supply and horticulture cooperatives in Europe (by turnover in 2013)

Sector	N°	Cooperative	Country	Turnover (m EUR)
Meat	1	Danish Crown	DK	7 844
	2	Vion Food	NL	7 033
	3	Agricola Tre Valli SCA	IT	3 135
	4	Westfleisch	DE	2 507
	5	HKScan	FI	2 100
	6	Cooperl Arc Atlantique	FR	2 100
	7	Atria	FI	1 411
	8	Gesco Consorzio Cooperativo SCA	IT	1 352
	9	Coren	ES	982
	10	Grandi Salumifici Italiani	IT	675
Cereals	1	VIVESCIA	FR	4 209
	2	Limagrain	FR	1 938
	3	CAP Seine	FR	900
	4	SCAEL	FR	798
	5	CAVAC	FR	798
	6	Arterris	FR	778
	7	EMC$_2$	FR	602
	8	AVEBE	NL	591
	9	ACOLYANCE	FR	525
	10	Noriap	FR	518
Horticulture	1	FloraHolland	NL	4 350
	2	Landgard	DE	2 035
	3	Coforta (The Greenery)	NL	1 293
	4	Conserve Italia	IT	980
	5	Apo Conerpo	IT	723
	6	Anecoop	ES	593
	7	ZON fruit & vegetables	NL	362
	8	BELORTA	BE	350
	9	CONSORZIO MELINDA	IT	286
	10	AGRIINTESA	IT	274

Source: own study on the basis of (Development…, 2015).

The world largest agricultural cooperatives are located in Asia and North America. NH Nonghyup (NACF) is a Korean cooperative that associates almost 2.5 million members and hires almost 80 thousand employees. Its turnover reached over USD 55 billion in 2013. Japanese ZEN-NOH (National Federation Of Agricultural Co-Operative Associations) associates 1 032 co-operative unions (including 156 secondary unions) and provides employment for over 8 000 people. Its turnover varies between USD 48.37 billion in 2013 and USD 60.88 billion in 2010. The third world largest agricultural cooperative – CHS INC. – is a US enterprise joining over 600 thousand producers and employing over 11 000 people. Each year it increases its turnover from USD 25.27 billion in 2010 to USD 44.48 billion in 2013. These numbers are impressive especially when compared to the above global summaries of UN report.

European agricultural cooperatives also are doing quite well. They maintain a strong market presence in the food supply chain (Development…, 2015). In particular, in 2013 the total turnover of all agricultural cooperatives was in the range of some EUR 347 billion. Such enterprises as Arla Foods, Danish Crown and DMK Deutsches Milchkontor GmbH are the ones of the largest and well-known agricultural cooperatives in Europe, with annual revenues of EUR 5-10 billion (Development…, 2015). European agricultural cooperatives are present in different sectors of agriculture, including farm supply, dairy or even olive and wine, especially in southern countries. In order to enable the reference to Polish conditions the table 3 contains the list of top-ten European cooperatives operating in such branches of agriculture as: meat, cereals and horticulture. Indeed, as stated above, Polish agricultural production cooperatives also operate in these areas.

Comparison of Polish and European agricultural cooperatives

It turns out, that the largest Polish APCs (table 4) do not perform so well as their analogues in other European countries. Their turnover in 2013 was significantly small in comparison to the cooperatives listed in table 3. They are rather known on the domestic market, but they do not have international brands.

Table 4. Top-ten agricultural production cooperatives in Poland (by turnover in 2013)

N°	Cooperative	The type of production	Turnover (m EUR)
1.	RSP Rzecko	Non-agricultural, some plant and livestock	14,53
2.	RKS Bądecz	Mainly livestock	7,96
3.	RSP Wydrowice	Mainly plant	4,88
4.	RKS Czempiń	Plant, livestock	3,90
5.	RSP Hopkie	Mainly plant	3,43
6.	SGR Baszewice	Mainly plant	2,83
7.	RSP ZJEDNOCZENIE Janocin	Plant, livestock	2,61
8.	SPR DIAMENT Otfinów	Mainly livestock	2,45
9.	RSP PRZEŁOM Linowo	Plant, livestock	2,41
10.	RSP NOWE POLE Górzno	Mainly plant	2,27

Source: own study on the basis of (Lista…, 2013).

Generally in Poland, cooperatives have a significant (in fact – dominant) position only in the diary sector (Development…, 2015). In other sectors, the role of cooperatives is much smaller. Figure 1 shows a relative importance of cooperatives in European countries, based on the estimated market share of all cooperatives at farm gate sales level weighted for eight agricultural sectors: dairy, pig meat, sheep meat, wine, olive, fruit and vegetables, cereals. Poland is in the second half of this summary, with the market share slightly more than 20%. The strongest cooperatives, having over 60-70% of the agricultural market, are located in Finland, Netherlands and Denmark.

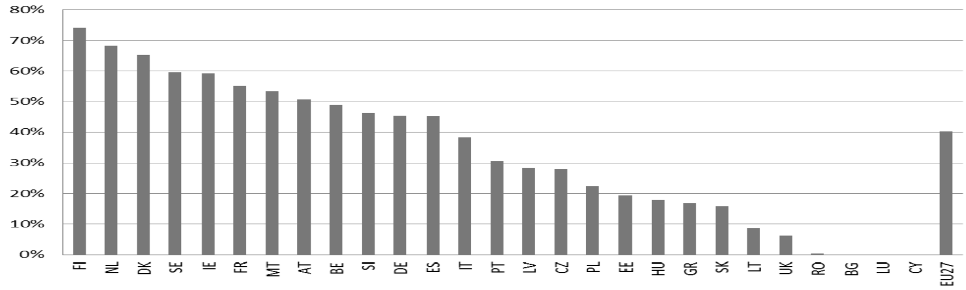

Fig. 1. Market share of cooperatives, per country, 2010

Source: (Bijman et al., 2012).

Market shares of cooperatives differ substantially across sectors and countries. Figure 2 presents the share for the EU as a whole, per sector, and for all sector together (weighted for the relative importance of the sector in total EU agriculture). European cooperatives are most important in dairy. Other sectors with an important role for cooperatives are olives, wine, cereals, and fruit and vegetables (Bijman et al., 2012).

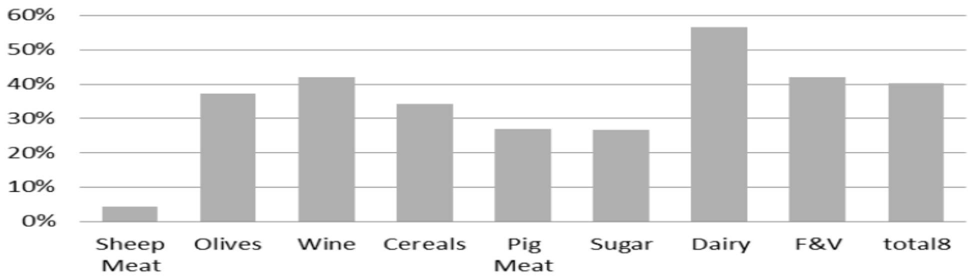

Fig. 2. Market share of cooperatives, per sector and total EU, 2010

Source: (Bijman et al., 2012).

In discussing market share of European cooperatives by sectors in which Polish agricultural production are operating (cereals, pig meat, fruit and vegetables), one can easily notice, that Poland is the country where cooperatives do not have a significant role. Table 5 confirms this statement. Polish APCs occupy the first quarter of cooperatives' market shares. Precisely, in crop production their market share is around 6-7% (Development…, 2015). In production of pig meat, where cooperatives are usually associated in producers groups, it amounts to 7%. In production of fruit and vegetables 90 cooperatives, 150 producers groups and 20 other producers organizations have around 10-12% of the market. In comparison to Scandinavian countries, France, Belgium and Netherlands, in which cooperatives' market share exceeds 50% and even 75%, the agricultural production cooperatives in Poland are far away from achieving the market advantage.

Table 5. Market share of cooperatives in European countries*, per selected sectors, 2010

Sector	1 – 25%	25 – 50%	50 – 75%	>75%
Cereals	Belgium, Estonia, **Poland**, Slovakia, Hungary	Finland, Germany, Italy, Latvia, Slovenia, Spain	Austria, France, Netherlands	
Pig meat	Belgium, Czech Republic, Hungary, Germany, **Poland**, Slovakia, Spain		Sweden	Denmark, Finland, France
Fruit & vegetables	Estonia, Hungary, Latvia, **Poland**, Portugal, Spain	Austria, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Italy, Spain	Slovenia, Sweden	Belgium, Netherlands

* table does not include all of European countries due to the lack of the relevant data

Source: own study on the basis of (Bijman et al., 2012).

Conclusion

A fundamental differences between the cooperatives in EU countries and the CEEC exist (Chloupkova, 2003). The paper investigated these differences on the example of Polish agricultural production cooperatives. A main finding is that there is observed a phenomenon of decreasing number of APCs, poorly recognized brands, a relative small turnovers and market shares in comparison to agricultural cooperatives in developed countries. The above, together with the atmosphere of hostility around cooperatives (both from the outdoor environments, as well as cooperative members), the crisis of identity and management and the scarcity of research cause that in Poland the cooperative movement in agriculture does not use its potential and, instead of develop, successively ceases its activities. It seems disturbing because the cooperative movement has a role to play in countering the economic and social inequalities. The author believes that this article has helped to draw attention to the discrepancy between the strong, well-organized and cost-effective agricultural cooperatives in developed Western countries and forgotten and fading agricultural cooperatives in Poland.

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