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STATUS AND POSSIBILITIES OF THE DEVELOPMENT OF COMMUNITY SUPPORTED AGRICULTURE IN POLAND AS AN EXAMPLE OF SHORT FOOD SUPPLY CHAIN

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Abstract. This article aims to analyse the current state of Community Supported Agriculture (CSA) as an example of a short food supply chain in Poland in terms of the characteristics of the farms, spatial distribution of the producers and consumers of food, and principles of operation of the CSA groups. The analysis is based on the survey data collected through telephone interviews. The results indicate a rapid increase in the number of CSA groups. CSA groups operate mainly in large cities. Their principles of operation vary; however, the common element is that consumers prepay for organic high-quality produce at the beginning of growing season.

Keywords: short food supply chain, Community Supported Agriculture, local food, organic food production

INTRODUCTION

Short food supply chains gain more interests among the producers and consumers due to the mutual benefits that this kind of chains provides (La Trobe, 2001). Short food supply chains are defined as a consumption of self-produced food, or direct sale of locally produced food. The sale can be made either upon a prior agreement between farmer and consumer or without such prerequisite (for ex. at the farmers' market, on-farm, at the local food hubs, or on-line) (The European..., 2011). Support of existing and creation of new short food supply

chains are described as an element of re-regionalisation of food markets that aims to reduce the mounting impacts of food crises (Chemnitz and Santarius, 2013; European..., 2010; Rogala, 2015). Such food supply chains are perceived as an element of locally embedded, ecologically and economically sustainable food systems (Zegar, 2012).

Short food supply chains can be realised through different types of direct sale. For instance, seasonal farmers' market, consumer cooperatives or other forms based on a direct cooperation between farmers and consumers of the produce (Kawecka and Gębarowski, 2015). One example of a short supply chain, which is based on direct exchange agreement between producers and consumers, is the Community Supported Agriculture (CSA) model. CSA requires involvement for both food producers and consumers (Thompson and Coskuner-Balli, 2007) because consumers not only cover the real cost of food production (Sproul et al., 2015), but also ensure a decent wage for the farmer, accept the risk of lower yields and participate in the chosen stages of food production or distribution (Fieldhouse, 1996). CSA in Poland is defined by its members as the direct partnership between a group of consumers and one or multiple farmers (Olszewska and Trzaskowski, 2014). The CSA partnership is bided by a long-term formal or informal agreement. The aim of the CSA, which are mainly operating at the local

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scale, is to supply the consumers with high quality ecological food.

The aim of this paper is to answer the research questions concerning the current state and the possibilities of the development of the Community Supported Agriculture as an example of a short food supply chain in Poland. We analysed CSA in Poland in terms of the characteristics of the farms, location of the producers and consumers of food, and principles of the CSA groups.

CSA IN THE WORLD AND IN POLAND

The CSA model was developed as a response to the effects of the industrial agriculture intensification at the second half of the twentieth century. The increasing use of synthetic plant protection products for crops made consumers concerned about the impacts of such measures on their health (Kazumi, 2015). CSA model derived from the consumers' demand for healthy food from a trusted source and ensuring the maintenance of small farms using ecological methods. CSA's assumptions conform to the ones of the 'civil agriculture' movement which claims to aim at fulfilling the needs of consumers, supporting local entrepreneurship, creating new jobs, and strengthening the sense of belonging to the local community (Lyson, 2004).

CSA is a specific model of a direct cooperation between customers and producers which began to develop independently in Japan in the 1970's and in the United States in the 1980's. Today, CSA groups are spread across all continents.

The movement in Japan was called *teikei*, meaning "work", "joint venture", "connection". *Teikei* is a form of a direct food distribution system based on financial and physical support of producers and consumers. The cooperation requires a mutual understanding that is built through dialogue and direct contact with farmers and consumers. The aim of this partnership is to create an alternative system of food distribution which is independent of conventional markets (Parker, 2005). In 1978, Japan Organic Agriculture Association developed 10 principles of *teikei*: mutual support, acceptance of crops, joint decision-making about the price, deepening friendly relations, self-distribution, democratic governance, mutual learning, maintenance of the group scale and the continuous development (*TEIKEI* system, 1993).

The English term "Community Supported Agriculture" has been proposed by John Vandertuin who was

initially involved in the functioning of the community garden called "topinambour" located near Zurich. In 1986, together with Robyn Van En and Susan Witt, he founded one of the first CSA farms in Massachusetts. The farm had a formal direct cooperation with consumers who paid in advance for participating in the harvest and who could decide on the budget (Henderson and VanEn, 2007; Groh and McFadden, 1998).

Currently, CSA model of cooperation operates on a large scale in France in the form of the so-called the Association to Support Peasant Agriculture AMAP (Association pour le maintien d'une agriculture Paysanne) (David-Leroy and Girou, 2009). There are also many CSA groups in the United Kingdom, the United States of America, and Japan. According to the National Agricultural Census conducted in 2012, there were 12,617.00 farms cooperating according to the CSA rules in the United States (USDA, 2012).

The first CSA group in Poland was founded in 2012 in Warsaw by several members of the Warsaw Social Cooperative with the help of a person experienced in leading CSA from the Czech Republic. In total, the group consisted of 15 households and a few organic farmers from the village of Świerże-Panki (approx. 120 km North-East of Warsaw). CSA group Świerże-Panki was a pilot project aimed at adapting the CSA concept to Polish conditions. The group operated for three full seasons between 2012 and 2014. In the final season, the food was provided to nearly 30 households. In 2014, two new CSA groups were created in Poznan and Szczecin, one in Warsaw, and one in Wrocław. At the end of 2015 there were 11 CSA groups that cooperated with the 8 agricultural farms.

Each of the groups is characterised by the formal written agreement that binds the consumers to pay in advance for the produce that they will receive during the entire growing season. The system of the prepayment enables farmers to invest the consumers' shares in future crops, new tools, new seeds, or reconstructions. The consumer's financial involvement is one of the basic principles of CSA. It implies participation of consumers in the risks associated with the cultivation of food. In practice, consumers participate mainly in the risk resulting from adverse weather conditions. Consumers receive food usually in the form of packages. The size and contents of the package depends on the type of planted seeds and harvest in a given year. Usually, consumers do not choose the produce. However,

some CSA groups offer consumers the ability to choose specific fruits and vegetables based on the information received from farmers about produce availability on the day of delivery. This system, therefore, requires open communication between farmers and consumers. Communication may include simple information about the state of the crops, but the consumers have to be involved in decision-making about the type of cultivated crops. In the case of drought or other undesirable phenomena, the price of products remains the same but the size of the package may vary. In Poland, the delivery system was formulated in the form of packages. In practice, CSA consumers receive shares in paid-up crops. Another very important feature that distinguishes CSA from other models of short supply chains is the consumers and farmers' community. CSA is the model that engages consumers in interactions with farmers by a commitment to mutual support. Local community of consumers and farmers share different responsibilities such as the duty on the day of delivery, a visit to the farm, or assisting in the organization of events and meetings.

MATERIALS AND METHODS

Data for the analysis was collected by the authors as part of the research project "Common Ground – CSA Census" coordinated by the international organization Urgenci. Urgenci was established in 2004 to raise awareness of local food systems. The questionnaire consisted of 25 open and closed questions. It was jointly developed by European researchers representing 19 countries during a 3-day working session in the August 2015 and during on-line consultations in September and October 2015. For the purposes of the survey, researchers agreed on a common definition of CSAs throughout Europe: "CSA is a direct partnership between a group of consumers and producer(s) whereby the risks, responsibilities, and rewards of farming activities are shared through a long-term agreement. Generally operating on small-scale, CSAs aim at providing quality food produced in an agroecological way".

The aim of the project was to collect and systematize the basic information of the existing CSA groups in Europe. The telephone interview method was used to collect the data (Kaczmarczyk, 2011). The telephone interviews were conducted in October 2015. The group of respondents consisted of Polish farmers whose activities are based on cooperation with consumers that is in

line with the CSA definition and who themselves have claimed their affiliation to CSA. According to the best of our knowledge, the respondents' group consisted of all farmers in Poland who work according to the CSA model. Information about the respondents was collected by a mailing network. In addition, we used the knowledge and experience of people who are actively involved in facilitation and promotion of the further development of the CSA model in Poland.

RESULTS

In 2015, there were eight Polish CSA farms that supplied its products to 11 consumer groups (Fig. 1). CSA group operated in six voivodeships: Zachodniopomorskie, Wielkopolskie, Kujawsko-pomorskie, Mazowieckie, Dolnośląskie and Opolskie. The largest number of producers was located in the Dolnośląskie voivodeship, however, most consumers lived in Warsaw. In total, the number of consumers who benefited from the CSA model in 2015 was about 700–800 people. Cities that hosted the largest number were Warsaw, Wrocław, Poznań, Szczecin and Opole. There was also one CSA group in a rural area. Its characteristic feature is the lack of a common delivery point. In response, the food was delivered directly to the homes of consumers.

All CSA groups were characterized by such features as sharing the benefits of agriculture, signing the formal agreement and the delivery of high-quality food (Fig. 2).

All farms operating under the CSA model in Poland provides their consumers with vegetables, and 9 out of 11 of them also provided fruits. Three farms offered meat products and eggs, and two dairy. 62.5% of all CSA farms were certified as organic farming. The rest declared using organic methods of cultivation, but without a certificate. The vast majority of consumers (80 percent) received products at the delivery point in their cities. In practice, the recipients could either meet the farmers personally and get the food or they could pick up food during the day of delivery.

For all groups, the cooperation was based on the written agreement. The document included the value of products and the commitments and obligations of each party. In Poland, the CSA consumers receive harvested produce from farmers who grow it on their land. In the European Union and the United States' CSA practice it happens that CSA group owns agricultural land, it rents the land, or partially owns and partially rents the land.

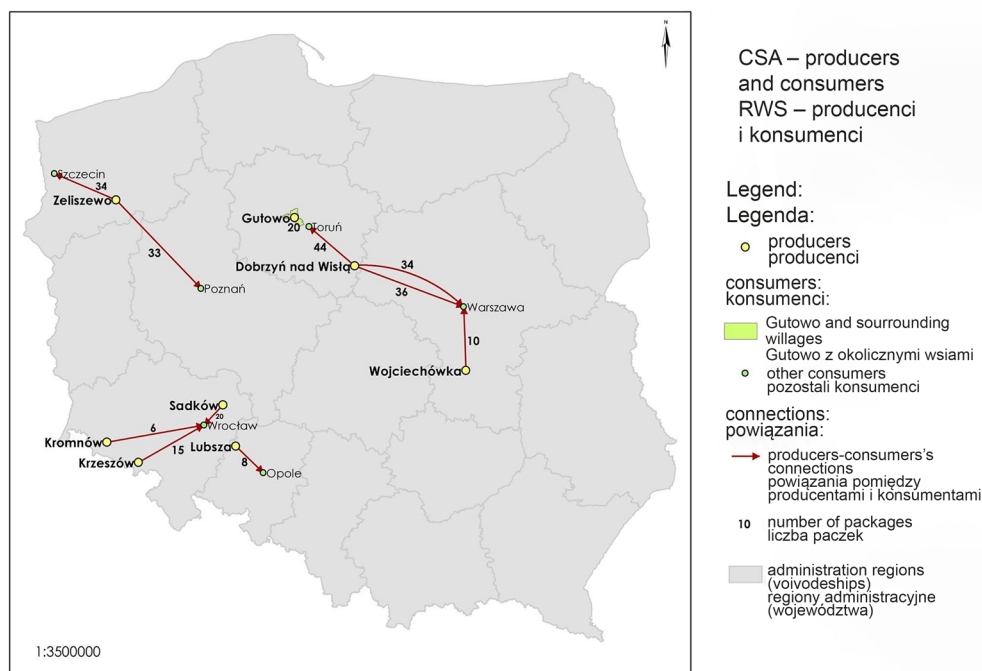


Fig. 1. Spatial distribution of the CSA producers and consumers in Poland in 2015

Source: own elaboration based on survey findings.

Rys. 1. Rozmieszczenie konsumentów i producentów współpracujących w ramach modelu RWS w Polsce w 2015 roku

Źródło: opracowanie własne na podstawie wyników badań.

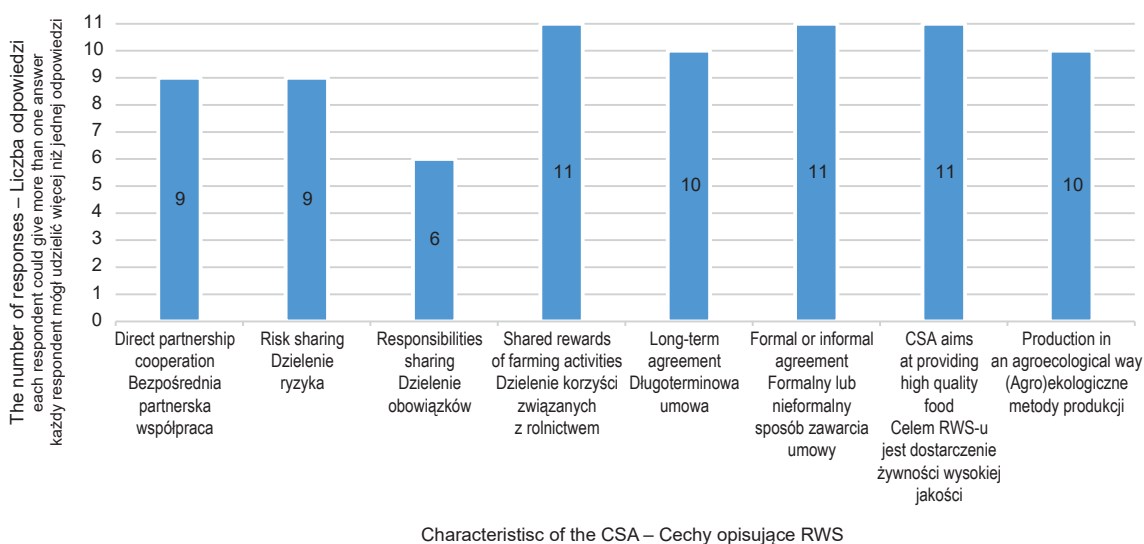


Fig. 2. The characteristics of the CSA groups in Poland

Source: own elaboration based on survey findings.

Rys. 2. Cechy charakteryzujące poszczególne grupy RWS w Polsce

Źródło: opracowanie własne na podstawie wyników badań.

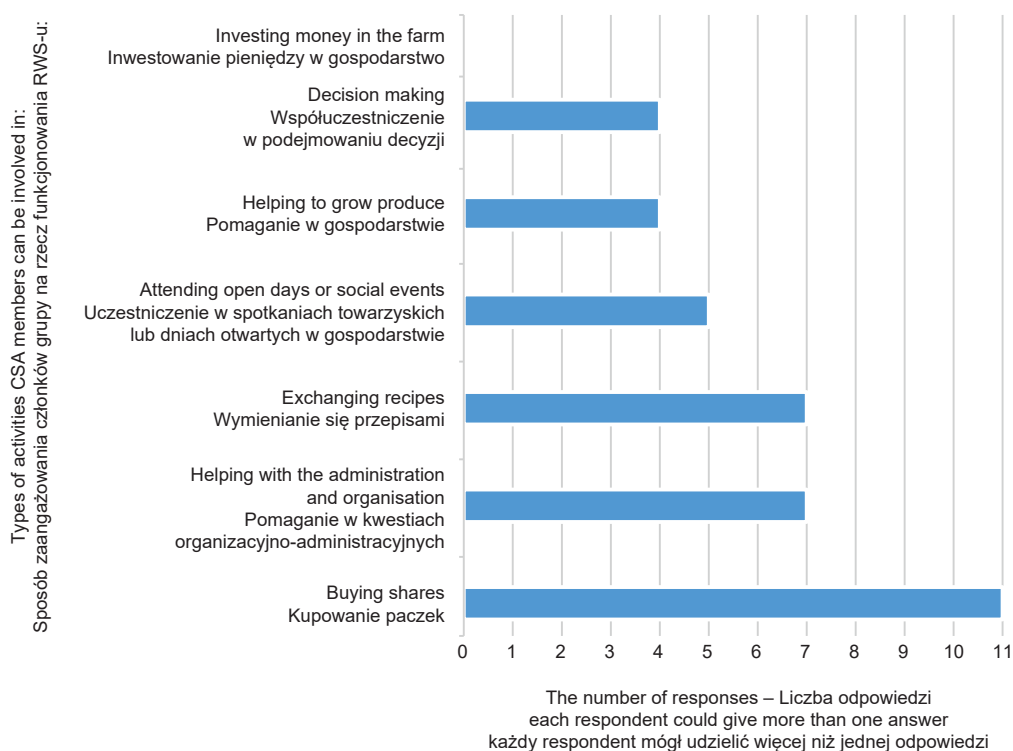


Fig. 3. Involvement of the consumers in the activities of CSA groups in Poland

Source: own elaboration based on survey findings.

Rys. 3. Zaangażowanie konsumentów w funkcjonowanie grup RWS w Polsce

Źródło: opracowanie własne na podstawie wyników badań.

In such cases, the group employs a farmer or a group of farmers to work in their fields. The average CSA farm in Poland has 12,7 ha, with an average area of 4 ha for growing food in CSA model. Almost the whole area is devoted to growing vegetables and fruits. The average size of CSA farms is comparable to the size of an average organic farm in the Małopolska voivodeship (approx. 10 ha) and two times lower than the national average (approx. 25 ha) (GUS, 2014).

The small share of land for CSA stems from the fact that CSA is not the only source of income for farmers. The share of income from CSA in the farms' total budgets is described by the surveyed farmers as marginal or less than half of the total. At the same time, farmers pointed out that the mere fact of receiving even part of the salary "in advance" gives them a significant advantage. It allows them to cover part of the costs at the beginning of the season. The other benefit of CSA model, in the opinion of the respondents, is the direct

cooperation that facilitates integration between farmers and consumers who are usually city dwellers. This makes it possible to work out the terms of cooperation that guarantee fair and decent payment for farmers' work, and consequently the further development of their farms. Our study proves that financial involvement occurs in all CSA groups in Poland (Fig. 3).

Consumers are also willing to help in the organizational or administrative issues. Exchange of recipes for dishes is very common among group members. In less than half of the groups, consumers help on the fields and participate in decision-making. None of the groups, however, additionally invests money in the farm.

CONCLUSIONS AND DISCUSSION

According to Cone and Myhre (2000) and Welsh (2009), the CSA and other organizational models based on the concept of the short food supply chain bring many

benefits to consumers and producers and they are seen as a solution leading to sustainable development. However, the results of the study prove that in 2015, compared with other European countries, the marginal number of consumers in Poland were involved in the CSA model (European..., 2016). The number of groups in Poland was tenfold lower than in Germany and almost three times lower than in the Czech Republic (European..., 2016). Therefore, it should be noted that the CSA groups were operating on a small scale and with negligible impact on the food system in the country. CSA is a way of cooperation that is relatively much more challenging for consumers than other examples of short food supply chain such as food fairs or food co-operatives. The results of the study show that consumers are fully engaged in the model at the basic level of paying for and receiving the produce. They, however, are not very engaged at the decision-making and investment level. This result may be stemming from both consumer and farmers' attitude, experiences, and tradition. All of the above-mentioned challenges can constitute a significant obstacle to further development of CSA groups.

On the other hand, this model brings mutual benefits for both consumers and farmers that are not available in other forms of cooperation. For consumers, these include educational value, resulting from communication with farmers, saving time associated with planning purchases, affordability of the food they buy, and integration with the local community. For farmers, this is primarily a guarantee of financial stability and simplification of the issues related to logistics and distribution of food. The dynamic development of CSA groups for the past four years in Poland indicates the interest and success of this specific model of direct cooperation between farmers and consumers. Thus, it contributes to the support of both organic farming and provides access to affordable fresh foods to consumers in Poland.

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STAN I PERSPEKTYWY ROZWOJU ROLNICTWA WSPIERANEGO PRZEZ SPOŁECZNOŚĆ W POLSCE JAKO PRZYKŁAD KRÓTKIEGO ŁAŃCUCHA DOSTAW ŻYWNOCI

Abstrakt. Celem artykułu jest analiza obecnego stanu Rolnictwa Wspieranego przez Społeczność (RWS) jako przykładu krótkiego łańcucha dostaw żywności w Polsce. W artykule dokonano charakterystyki gospodarstw rolnych zaangażowanych w model RWS, oceniono przestrzenne rozmieszczenie producentów i konsumentów żywności oraz omówiono zasady działania grup RWS. Analizy przeprowadzono w oparciu o dane ankietowe zebrane przy wykorzystaniu metody wywiadu telefonicznego. Wyniki badań wskazują na dynamiczny wzrost liczby grup RWS, składających się z grupy konsumentów i rolników w Polsce. Grupy konsumentów funkcjonują przede wszystkim w dużych miastach. Ich zasady działania różnią się, lecz elementem wspólnym są dokonywane przez konsumentów przedpłaty za otrzymywane ekologiczne produkty żywnościowe wysokiej jakości na sezon.

Słowa kluczowe: krótki łańcuch dostaw, Rolnictwo Wspierane przez Społeczność, żywność lokalna, żywność ekologiczna

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