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SHORT FOOD SUPPLY CHAINS – BENEFITS FOR CONSUMERS AND FOOD PRODUCERS

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Abstract. In the age of globalization of food markets, short supply chains are the reversion to traditional food distribution systems. A large group of consumers is willing to reach for local food, frequently also buyers of organic food delivered directly from food producers. The paper presents the characteristics of short food supply chains, food distribution system is shown by: markets, direct purchases from producers and modern forms of providing consumers with local products. Qualitative study was conducted among organic food markets participants – exhibitors (food producers), and visitors (customers). Consumers notice many benefits from buying and consuming local food, among others, higher quality of products, favorable price-quality performance ratio, and assurance of purchased products origin. Producers for the most important find greater share in the total price of products and receiving feedback information from consumers. Short supply chains are also resulting significant environmental benefits eg. limited transport. A new approach to the subject of local foods and the benefits of shortening the supply chain is reflected in the policy of the European Union – including through programs on rural development.

Key words: food supply chains, short supply chains, local food, organic food markets

INTRODUCTION

The supply chain should be understood as a group of organizations jointly executing the actions necessary to meet the demand for certain products in the movement

of goods throughout the chain – from sourcing raw materials to delivery to the final recipient. These actions may include: the development, production, sale, service, supply, distribution, management, operations support (Słownik..., 2006). In the literature of logistic there is a lack of the “short supply chain” definition. It is possible to find the term, that in a short supply chain there is a maximum of one intermediary between the producer and the final consumer. The role of transparency of short food supply chains is emphasized. Transparency means easy identification of all the participants of this chain (Lisińska-Kuśnierz and Cholewa, 2006). The characteristics of the supply chain due to the structure and range is shown on Fig. 1.

According to the opinion of the Committee of the Regions (Opinia..., 2011) short supply chain can be considered the distribution system in which producers are also consumers, where consumers grow their own products, there is a partnership of producers and consumers. This system is also characterized as the one in which consumers share with the manufacturer or manufacturers the risks and benefits associated with the production. Producers sell products directly to consumers by selling at markets for farmers, regular or occasional local fairs, open air-markets and farms. It is also possible for manufacturers’ sales through local outlets or collective marketing mechanisms including new media such as online sales portals on the Internet, which allows a more direct or easier delivery of

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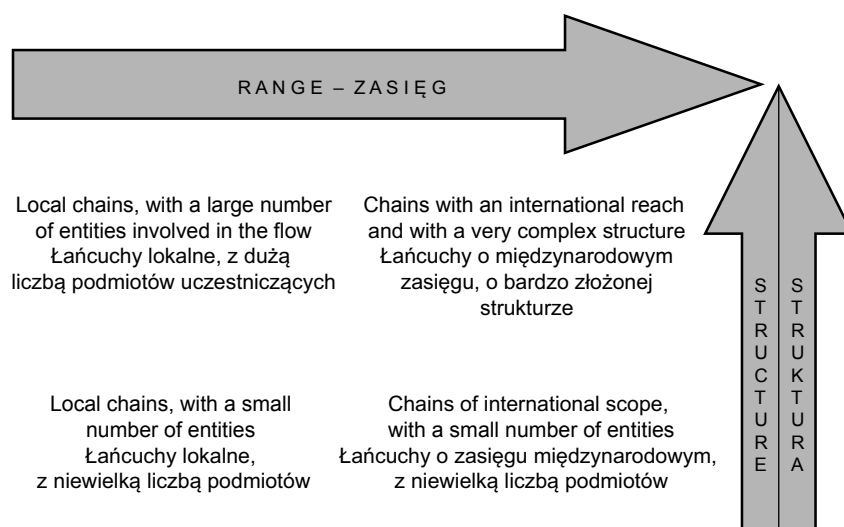


Fig. 1. Characteristics of supply chains with respect to the range and structure
Source: own elaboration.

Rys. 1. Charakterystyka łańcuchów dostaw ze względu na zasięg i strukturę
Źródło: opracowanie własne.

products to final consumers than via traditional channels (Opinia..., 2011). Not without significance is the fact that regional supply chains are also short-range. Short food supply chains and local food distribution systems is a subject very interesting and current, are the subject of many research projects and programs, eg. “The development of the local food sector in 2003 and 2000 is its contribution scheme is sustainable development” (2003), Encouraging Collective Farmers Marketing Initiatives (COFAMI) (2005–2008), Making Local Food Work (2007–2012), LoMiS Local Food in Svartådalén (2007–2010), FAAN – Facilitating Alternative Agro-Food Networks: Stakeholder Perspectives on Research Needs (2008–2010), “Żywność wysokiej jakości. Krótsza droga od producenta do konsumenta”, carried out by the Europejski Fundusz Rozwoju Wsi Polskiej or Foodlinks (2011–2013).

In many studies Polish and European consumers indicated moderate to high interest in regional and local products (Borowska, 2008; Karner, 2010; Żakowska-Biemans, 2012; Chudy and Gierałtowska, 2013). Food products associated with the region contribute to the improvement of the tourist attractions (Gębarowski, 2010). Not without significance is the fact that along with food, it is necessary to provide appropriate information concerning the nature and origin of food products

(Lisińska-Kuśnierz and Borusiewicz 2007). The product of a local nature is characterized by the fact that (Opinia..., 2011):

- It is produced locally;
- Contributes to the implementation of the local or regional rural development strategy;
- It is sold to the consumer through the shortest possible, the most rational and efficient chain. This chain should consist of no more stakeholders than:
 - the manufacturer or local organization of producers,
 - the entity or entities responsible for the association of mutual matching of supply and demand,
 - the consumer;
- Can be sold in the local retail store or in the marketplace. It may not be sold, with signs of local food, to a central collection point;
- It is addressed to consumers as a product with unique features, such as taste, freshness, high quality, cultural background, local tradition, local specialty, animal welfare, environmental value, health aspects or sustainable production;
- It is sold as close as possible to the customer in the most efficient and effective way – the distance may vary depending on the product, the region and the situation, but the question comes down to one fundamental question: whether selling point is the closest

point to which access a consumer (this distance may be in the range from 1 km to over 50 km);

- It is connected with the local food system.

Local food systems and short supply chains can be divided into three types of systems (Lokalna żywność..., 2012):

- direct sales by individuals,
- collective direct sales,
- partnership.

Fundamental and simplest type of local food distribution channel is direct sales. It is based on direct contact between the food producer and the final consumer. This contact can take place at the farm or at markets, periodically or occasional organized a local food fairs, exchanges, or marketplaces.

Collective sale, attempts to work and taking joint initiatives by food producers enables efficient operation, mutual support and sharing of business, marketing and other. Cooperation of manufacturers in formalized nature can take many forms, eg. associations, cooperatives or companies based on commercial law. Each of these forms has its advantages and disadvantages, so initiators of such activities must accurately determine strategies, the level of engagement and choose the appropriate form of cooperation (Winawer, 2013).

Purchasing groups operating in the formal or informal manner can unite consumers who, as a community make purchases directly from individual food manufacturers or their associations. In Poland this way of shopping is very rare, but such purchasing groups operate in other European countries such as Italy and Spain (Inteligentna komunikacja..., 2014).

Alternative food distribution channels using modern forms of communication are for example internet shops. Types of online stores because of the breadth and depth of the assortment can be divided into (Gregor and Stawiszyński, 2002):

- horizontal – selling a wide range of products designed for a broad group of consumers;
- vertical – selling an assortment of narrow, deep, often destined for niche consumer groups with specific requirements.

An example of online stores offering local food include e.g. www.odrolnika.pl, www.ekomiodek.pl, ecomania.com.pl, www.jesz-zdrowo.pl.

MATERIALS AND METHODS

The research material was collected during qualitative research using interview method (Silverman, 2012). Used method was semi-structured, Individual in Depth Interview (Marek, 2005). Interviews were conducted among the participants of the organic and traditional open-air food markets organized in Krakow, in October 2014. Respondents were sellers – mainly food producers and farmers from the Małopolska voivodeship and markets' customers (people who have made at least one purchase). 40 responses were obtained from sellers and 120 from clients. Researched costumers were city residents, in the age from 20 to 65 years old, in the vast majority of women. In Table 1 demographical structure of clients is presented. In the part concerning results and discussion quoted example, the literal expression of respondents.

Table 1. Demographic structure of interviewed consumers

Tabela 1. Struktura demograficzna badanych konsumentów

Feature Cecha	Size of the group Liczebność grupy	Share in the studied population (%) Udział w badanej populacji (%)
Gender – Płeć		
Women – Kobiety	81	67.5
Men – Mężczyźni	39	32.5
Age – Wiek		
20–35	58	48.4
35–50	46	38.3
50–65	16	13.3
Education – Wykształcenie		
Vocational – Zawodowe	1	0.8
Secondary – Średnie	54	45.0
Higher – Wyższe	65	54.2

Source: own elaboration based on tests.

Źródło: opracowanie własne na podstawie badań.

RESULTS AND DISCUSSION

Interviews which took place during the open-air market events showed that food manufacturers offer their products for sale primarily driven by economic considerations and the possibility of obtaining a higher share in the final price of the product. Often it was the main motivation to participate in this event, 90% of the examined exhibitors. Primarily remembered: “it is more profitable”, “I got more (money) for my fruits and vegetables than if I sold them to collection point”, “I do not want to give earn intermediaries”. Some of them indicated that the obtained funds were kept for investments and development of their farms and companies.

Respondents also pointed other than economic benefits, including the ability to contact directly with consumers: “I can talk with people, I could tell them how to make bread”, “it is nice to hear that someone had bought my fruits, and they found it tasty”, “often people come back and say something nice about our products”.

Some participants indicated that such direct contacts with consumers, resulted in the production change: “three years ago, someone asked about gluten-free flour.

Said it was difficult to find, and that a lot of people do not eat wheat. So I started to grow buckwheat, grind it and sell the flour. Now we even bake bread”, “customers have asked for cold pressed juice, we started to produce it from our apples”.

Some of the participants in markets and similar events, saw an opportunity to build their own brand and influence the image of their company: “we label our packaging, there is our name, address, and then people come”, “I have flyers of our agriturismo farm”, “we have nice packaging, we came up with this idea, our clients like them, remember us”, “I am my best advertisement”, “I can show awards, certificates”.

Detailed research results are presented in Table 2.

Interviews with customers also revealed a number of benefits that are noticeable in buying food directly from the manufacturers. Customers pay special attention to the higher products quality (85% of customers group): “everything is fresh”, “is not stored for who knows how long and where”, “bought here vegetables have different taste, are better”, “apples are juicier”. Buyers are also convinced that purchased products have greater health benefits and nutritional value: “these things are

Table 2. Benefits identified by food producers

Tabela 2. Korzyści zidentyfikowane przez producentów żywności

Benefits for food producers Korzyści dla producentów żywności	Size of the group Liczebność grupy	Share in the studied population (%) Udział w badanej populacji (%)
Economical factors – Czynniki ekonomiczne	38	95.0
Larger share of the price of the final product Większy udział w cenie końcowej produktu	36	90.0
Development of farms, the opportunity to invest Rozwój gospodarstw, możliwość inwestowania	28	70.0
Non-economic factors Czynniki pozaekonomiczne	24	60.0
Feedback from customers Uzyskiwanie informacji zwrotnych od klientów	21	52.5
Production assortment better adopted to the needs of the final consumer Lepsze dopasowanie produkowanego asortymentu do potrzeb konsumentów finalnych	14	35.0
Possibility to influence the image of own company Możliwość wpływania na wizerunek własnego przedsiębiorstwa	22	55.0

Source: own elaboration based on tests.

Źródło: opracowanie własne na podstawie badań.

healthier”, “small farmers do not use so much chemistry”, “these fruits are sure to have more vitamins than supermarket ones”, “I may buy normally ripened fruit, and not some driven, without colour and flavour”.

Customers are also confident of a favourable relationship prices of purchased products to their quality: “I prefer to pay more, but I have a good product”, “shopping here is profitable for me, because everything is fresh and I do not waste products”, “I can pay more for organic food”.

Consumers also reported that by purchasing through a short supply chain have greater certainty regarding the origin of the product and purchase security is much higher: “there are no apples and garlic from China”, “I am sure that honey is from Poland, not some mix from do not know where”, “I buy eggs from that woman here, has some hens, it is not a big farm”, “have a real sausage from Liszki”, “they sell fruits from neighbourhood”.

Consumers praise the possibility of direct contact with farmers and producers who often advise in choosing the right product: “The man advised me what kind of apples to buy for baking purposes”, “I may ask what bread it is, what it has inside, not as in the supermarket”.

Many consumers also draw attention to the greater availability of niche products, alternatives to mass production: “I buy gluten-free bread”, “here are the good

things, without artificial additives, no preservatives, not like in the regular stores”, “juices without added tons of sugar”, “organic products are available”, “they have local hams, traditionally made”.

Some customers also draw attention to the economic aspects of their purchases and their impact on the local economy: “I have to pay for products so I may let of Polish farmer have something to do with profits”, “I do not want to enrich the foreign companies”, “maybe at least unemployment will be lower”.

Among the responses of consumers on the benefits of shopping at organized markets, directly from the manufacturers also appeared such environmental aspects associated with shorter transport of products, and associated with maintaining relationships in society. Benefits cited by consumers in a grouped manner are shown on Figure 2.

Ranked the most attractive benefits associated with short supply chains was higher quality of offered products (85% of respondents) and their health and nutritional values (65% of respondents). Than the favourable relationship prices of food products for their quality and certainty of origin was pointed out. Less frequently indicated benefits were: direct contact with the producer (25% of respondents), the increased availability

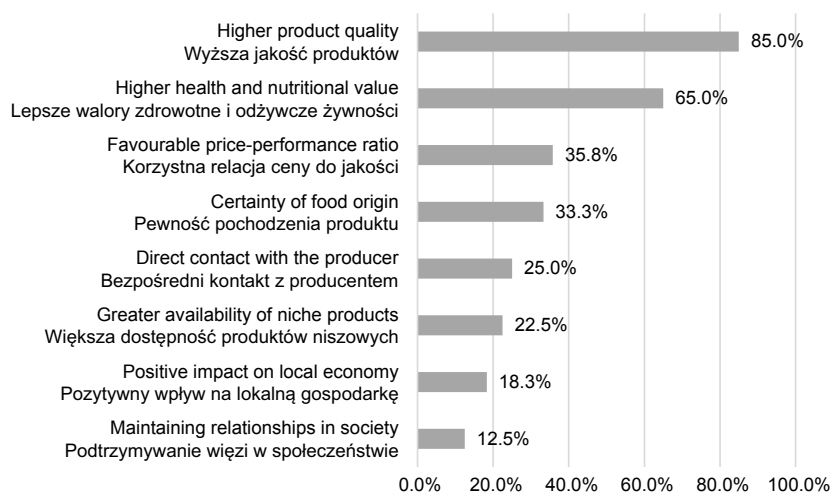


Fig. 2. Benefits of short food supply chains indicated by customers

Source: own elaboration based on tests.

Rys. 2. Korzyści wynikające z krótkich łańcuchów żywności wskazywanych przez nabywców

Źródło: opracowanie własne na podstawie badań.

of alternative products (22,5% of respondents) and the positive impact on the local economy and maintain of social bonds.

The results were analysis of the independence, testing the hypothesis regarding the independence of the gender of respondents and the response on the benefits of shopping through short supply chains. The test χ^2 was used. The test value less than 0.05 meant that answer was independent of the gender of the respondent. The results are shown in Table 3.

In analysing the above data it can be seen that almost all indicated by the consumer answers about the benefits of shopping through short supply chains were dependent on the gender of the respondents. Only the indication of the benefits of certainty regarding the origin of a food product could benefit indicated regardless of gender of the respondent. Based on these results it can be concluded that men pay more attention to the economic benefits associated with purchases through short supply chains. Female respondents often indicated non-economic benefits, particularly those associated with direct contact of

the consumer with food producer and maintaining social bonds, thanks to this type of shopping.

Although some statements and opinions expressed by the respondents might be controversial, presented benefits identified by the manufacturers offering their products on the market and customers, participating in that events are consistent with presented in the Report FLAIR (Delow and Couzens, 2003). The benefits of the local distribution system is divided into five basic groups that relate to (Report FLAIR, 2003):

- Human capital – generating more employment opportunity at the local level;
- Financial capital – supporting local business and local service providers, resulting in retention of financial capital in the local economy;
- Physical capital – to support local shops and markets;
- Social capital – to improve diet by eating foods with improved nutritional value, increased social interaction between members of the local community, a better understanding of the relationship between food, environment and health, increased community

Table 3. Analysis of responses depending on the gender of respondents

Tabela 3. Analiza zależności odpowiedzi od płci respondentów

Benefits Korzyści	Women Kobiety	Men Mężczyźni	χ^2 test value Wartość testu χ^2
Maintaining relationships in society Podtrzymywanie więzi w społeczeństwie	15	0	0.0025
Positive impact on local economy Pozytywny wpływ na lokalną gospodarkę	4	18	0.0000
Greater availability of niche products Większa dostępność produktów niszowych	24	3	0.0070
Direct contact with the producer Bezpośredni kontakt z producentem	30	0	0.0000
Certainty of food origin Pewność pochodzenia produktu	25	15	0.4082
Favourable price-performance ratio Korzystna relacja ceny do jakości	7	36	0.0000
Higher health and nutritional value Lepsze walory zdrowotne i odżywcze żywności	69	9	0.0000
Higher product quality Wyższa jakość produktów	81	21	0.0000

Source: own elaboration based on tests.

Źródło: opracowanie własne na podstawie badań.

involvement, increasing cooperation between local businesses;

- Natural capital – an incentive for farmers to conduct their business more environmentally friendly, reducing the distance the food has to cover from producer to consumer ie. ‘Food miles’, increasing the diversity of crops, reduction waste and pollution.

SUMMARY

Buying local products, in short food supply chains for example via organized occasional or regularly food markets or sale on marketplaces are frequently occurring way of purchasing food. This is consistent with the currently present megatrends on the food market, which include: health, convenience and pleasure (Szymanowski, 2008). Conducted qualitative research has identified benefits in such a way of making purchases as food producers and consumers see them. It may be noted that the benefits are linked with economic benefits for both parties – producers and consumers, are also relevant for improving confidence in origin and quality of food, and are also associated with reducing the impact on the environment. It is worth noting that the farms are ready to reduce their impact on the environment, if at the same time, these activities will be economically beneficial to them (Wrzaszcz and Zegar, 2014). Therefore, the institution of the European Union shall endeavor to promote local food distribution systems and short supply chains. Support for this type of logistics systems is also a flexible approach to the application of food safety assurance systems, expressed in the “Opinion of the Committee of the Regions – Local food systems”. An expression of policy to promote traditional and regional products is the implementation of the Regulation of the European Parliament and Council Regulation (EU) 1151/2012 of 21 November 2012 on quality systems for agricultural products and foodstuffs. It can be concluded that the benefits resulting from short food supply chains have an economic, health, social, and environmental dimension.

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KRÓTKIE ŁAŃCUCHY DOSTAW ŻYWNOSCI – KORZYŚCI DLA KONSUMENTÓW I PRODUCENTÓW ŻYWNOSCI

Streszczenie. W erze globalizacji rynków żywnościowych krótkie łańcuchy dostaw to powrót do tradycyjnych systemów dystrybucji żywności. Znaczna grupa konsumentów coraz chętniej sięga po żywność lokalną, nierzadko też żywność ekologiczną, dostarczaną nabywcom bezpośrednio od producentów. W artykule przedstawiono charakterystykę krótkich łańcuchów dostaw żywności, przedstawiono system jej dystrybucji poprzez: targi, zakupy bezpośrednie u producentów oraz nowoczesne formy dostarczania konsumentom produktów lokalnych. Badanie o charakterze jakościowym, prowadzone metodą indywidualnych wywiadów pogłębionych i częściowo ustrukturyzowane, przeprowadzono wśród uczestników targów żywności ekologicznej – wystawców (producentów) oraz zwiedzających (klientów). Celem prowadzonych badań była identyfikacja ewentualnych korzyści wynikających z takiej formy dystrybucji żywności, dostrzeganych zarówno przez konsumentów, jak i producentów. Konsumenty podkreślali wiele korzyści płynących z nabywania i spożywania żywności lokalnej, m.in. wysoką jakość produktów, atrakcyjną relację ceny do jakości, a także bezpieczne pochodzenie. Producenci za najistotniejszy uważali swój większy udział w cenie końcowej oferowanych produktów i uzyskiwanie informacji zwrotnej od konsumentów. Krótkie łańcuchy dostaw to także znaczne korzyści ekologiczne, wynikające np. z ograniczonego transportu. Nowe podejście do tematyki żywności lokalnej i korzyści płynących ze skrócenia łańcuchów dostaw ma odzwierciedlenie w polityce Unii Europejskiej, między innymi w programach na rzecz rozwoju obszarów wiejskich.

Słowa kluczowe: łańcuchy dostaw żywności, krótkie łańcuchy dostaw, żywność lokalna, targi żywności ekologicznej

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