



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**Ola Bareja-Wawryszuk, Jarosław Gołębiowski**

*Szkoła Główna Gospodarstwa Wiejskiego w Warszawie*

## **ECONOMIC FUNCTIONS OF OPEN-AIR TRADE IN THE CONTEXT OF LOCAL FOOD SYSTEM DEVELOPMENT**

### *ZNACZENIE SPRZEDAŻY TARGOWISKOWEJ W KONTEKŚCIE ROZWOJU LOKALNYCH SYSTEMÓW ŻYWNOŚCIOWYCH*

**Key words: local food systems, short food supply chains, open-air markets**

*Słowa kluczowe: lokalne systemy żywnościowe, krótkie łańcuchy dostaw, targowiska*

**Abstract.** The food sector is constantly reformulating, adjusting to technological changes, consumer needs, trends and habits. In recent years the local food system approach applied in rural development has gained much popularity. Consuming locally produced food is not only a matter of health care or fashion, but also environmental protection, sustainable rural development or identification with tradition and cultural heritage. In this study, local food systems have been reviewed explaining the significance of short supply chains and direct sale. The main part of the article aims to focus on open-air markets in Poland as the most popular form of direct sale. The arguments presented in this article indicate that open-air trade has a positive effect on the development of local food markets and the local economy as a whole.

### **Introduction**

Together with the exceeding consciousness of food security and health protection, consumers have revealed increasing interest in locally produced food. The terms “more natural” or “more local” have attracted the attention of short food supply chains (SFSCs) and direct sale which gives opportunity to buy fresh, organic, tasty food [Marsden et al. 2000]. Global changes of patterns in food consumption forced governmental institutions to work on new legal regulations and rural policy. As an outcome, local food systems (LFS) were significant building blocks in The Common Agriculture Policy for 2014-2020 established by the European Commission. European policy reflected the need for changes in Polish regulations as well. One of the elements of local food systems with high social and economic importance in Poland is open-air sale. For centuries, open-air markets have been used by agricultural producers and small retailers as a place to sell food and agriculture products, and by consumers as a supply of fresh food products.

The main objective of this study was to determine the economic importance of open-air market sales in the operation of local food systems. Three main research tasks were undertaken:

- specification of the essence and importance of local food systems,
- review of the development of open-air trade in Poland,
- review of the impact of open-air sale on local food markets.

All of the presented information is based on secondary data collected for the European Commission or presented in publications of the Central Statistical Office of Poland. A literature review in terms of LFS/SFSC is presented as well.

### **Relevance of Local Food Systems**

Literature provides differentiated definitions of local food systems. On the one hand, “A local food system is one in which food is produced, processed and retailed within a defined geographical area” [Balazs et al. 2013]. A range of geographical areas can be subjected, while some sources claim that local food systems are in a range of 20 km, others state that it is up to 100 km. However, local food systems are also defined as the smallest unit of food production where consumers

and producers are well known to each other and there is a direct relation between them [*Lokalna żywność...* 2012]. Despite defined geographical areas and the relationship between a consumer and a producer, a minimum number of intermediaries [Ilbery, Maye 2006] or ideally nil [*Marketing on local...* 2010] is an important feature of the LFS. The lower the amount of intermediaries between a producer and a consumer, the greater the possibility for delivering fresh and organic products. Exceeding supply chains results in the application of preservatives. According to G.W. Feenstra [1997] local food systems “are rooted in particular places, aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practices and enhance social equity and democracy for all members of the community”.

Elements that can be distinguished within the local food system are short supply chains, direct sales, local farming systems and local production. Short supply chains play a crucial role in the LFS as the basic tool for local product distribution. T. Marsden et al. [2000] indicates that while short food supply chains consist of a direct relationship between a producer and a consumer, the key characteristic of SFSCs is their “capacity to re-socialize or re-spatialize food, thereby allowing the consumer to make value – judgments about the relative desirability of food on the basis of their own knowledge, experience or perceived imagery”.

Based on the main assumption concerning short supply chains i.e. the connection between a food consumer and a food producer, information about the product, and the range of products, we can distinguish three types of SFSCs (Tab. 1).

Local food systems and short food supply chains are regarded as an alternative agro food network against mass food production. An increase in the popularity of LFS and SFSC occurs simultaneously with a rising scale of negative effects of conventional food systems based on large-scale production [*Local food...* 2010]. Alternative agro food networks are said to create new models that engage public concerns about community, social justice, health issues such as nutrition and food safety and environmental sustainability [Gottlieb, Fisher 1998].

Despite the fact that local food systems and alternative agro food networks are gaining popularity around Europe, we can observe a strong differentiation between countries. The differences depend on the context of production, culture and tradition, terrain, climate or local knowledge systems [*Local*

Table 1. Types of Short Food Supply Chains  
*Tabela 1. Rodzaje krótkich łańcuchów dostaw*

Type of SFSC/ <i>Typy SFSC</i>	Characterisation/ <i>Charakterystyka</i>	Example/ <i>Przykład</i>
Face-to-face/ <i>Bezpośredni</i>	Direct contact between a consumer and a producer/ <i>Bezpośredni kontakt między konsumentem a producentem</i>	Farm market, roadside sale, food festivals/ <i>Targowiska, sprzedaż przydrożna, festiwale żywności</i>
Spatial proximity/ <i>Bliskość przestrzenna</i>	Product grown in a particular area; produced and retailed in a specific region; the consumers are informed about locality of the product/ <i>Dobro wyprodukowane w określonym regionie, produkcja charakterystyczna dla danego regionu, konsumenci są poinformowani o źródle pochodzenia danego produktu</i>	Local shops, specialist retailers/ <i>Sklepy lokalne, specjalistyczni sprzedawcy</i>
Spatially extended/ <i>Oddalenie przestrzenne</i>	Purchase outside of the production region; a product strongly associated with a production place; product packaging and labelling inform about its origin/ <i>Zakup poza regionem produkcji, produkt ściśle powiązany i utożsamiany z danym regionem, opakowanie produktu informuje nas o jego źródle pochodzenia</i>	Export, e.g. Champaign, Parmigiano Reggiano/ <i>Eksport, np. szampan, sery Parmigiano Reggiano</i>

Source: own study based on [Marsden et. al. 2000]

*Źródło: opracowanie własne na podstawie [Marsden et. al. 2000]*

*food... 2010*]. High demand for local, fresh food products reflects the variety of different retail possibilities. Based on the report carried out by the organization called “Facilitating Alternative Agro-Food Networks” [*Local food... 2010*] some examples of direct sale organization can be observed:

- open-air markets,
- annual events such as local food festivals,
- farm shops or sales points,
- box schemes,
- specialist retailers selling more directly to the consumers via supermarkets,
- formally organized groups offering catering services,
- consumers as producers,
- community supported agriculture, consumers share the risk and rewards of production,
- public procurement.

Each European country represents a different model of LFS. In Poland, a strong attachment to tradition and natural production processes gives open-air markets great possibilities for development.

From an economic point of view, an important factor in promoting the development of local food systems, including market sales, are instruments of economic policy. In many countries these systems are supported by funds from public sources [Martinez 2010]. As noted in the introduction, in the EU, the formation of local food systems and short supply chains is also becoming an important area of intervention. According to the Committee of the Regions of 2011 [*Opinia perspektywiczna... 2011*], local food systems support the local and regional economy. These systems are an incentive for the use of local potential and a factor to improve the image of the regions that are often unappreciated and neglected. Short distribution channels increase the interaction between consumers and producers, and allow for building relationships based on trust and immediate traceability of food products for consumers. They also provide a basic level of food sovereignty. Local food systems also bring environmental benefits through sustainable production [*Local food... 2010*]. Hence, the EU Member States introduce Local Food Systems in the development strategies for rural development. In Poland, the Rural Development Programme for the years 2007-2014 under the priority axis “Quality of life in rural areas and diversification of the rural economy”, has been running a campaign entitled “Basic services for the economy and rural population” under which investment in the construction or modernization of markets were supported [*Program Rozwoju... 2013*]. Intervention activities, designed within the framework of the rural development strategy for 2014-2020, assume and support local food systems. Under the priority “Support for the organization of the food chain” all of the activities are planned to support the processing and marketing of agricultural products, to promote animal welfare and risk management in agriculture. The improvement of competitiveness of agricultural producers through better integration of the agri-food chain using quality systems, groups and organizations of agricultural producers are also seen as a priority.

### **The role of open-air market sales in retail trade in Poland**

Open-air markets and fairs have been known for centuries as a form of trade. As it is emphasized in literature, open-air markets were already operating in ancient Greece and Rome, and later also remained in many other countries in Mediterranean culture [Pasiut 2012]. Street trade is an important component of local markets, including the markets of agri-food products. Both in large cities as well as in small towns, open-air markets and market sale is an important element of urban commercial infrastructure that is used by food manufacturers as a direct sales channel. In Poland, we have seen a dynamic development of trade infrastructure, especially such forms as shopping centres, supermarkets and hypermarkets since the 90s. As a result, this alters the importance of open-air trade on a retail market. Nevertheless, both in food and non-food trade, open-air markets are an important complement to the commercial infrastructure that operates on local markets.

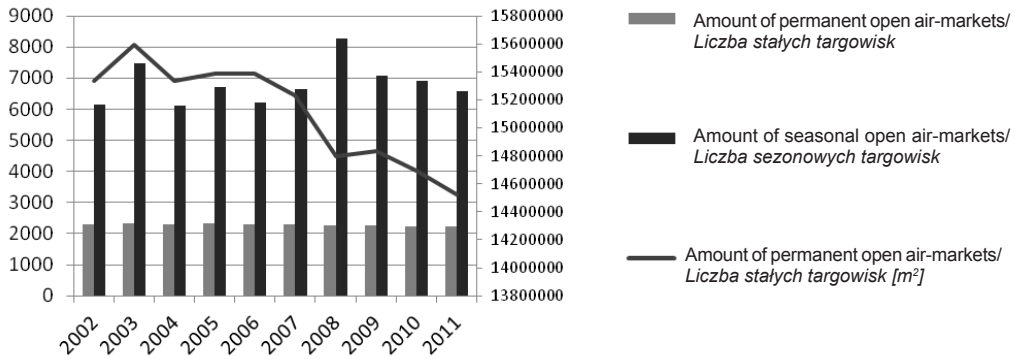


Figure 1. The overall amount of permanent and seasonal markets in Poland in 2002-2011

Rysunek 1. Liczba stałych oraz sezonowych targowisk w Polsce w 2002-2011

Source: own study based on CSOs [Rynek wewnętrzny... 2012]

Źródło: opracowanie własne na podstawie danych GUS [Rynek wewnętrzny... 2012]

Based on data collected by the Central Statistical Office in Poland, the overall number of open-air markets in 2011 reached almost 9000. We can distinguish permanent and seasonal markets among open-air markets. Seasonal markets are places located on squares or streets where, for a period of 6 months, retail outlets are in operation. It is connected with the seasonal increase of demand caused by, e.g. holiday, and this activity is repeated in other seasons. Whereas, permanent markets are specific areas or buildings (at squares, streets, market halls) with permanent or seasonal retail sales outlets or equipment designed to trade every day or on specific days of the week [Rynek wewnętrzny... 2012]. Figure 1 below shows that the number of seasonal markets is much higher than permanent ones, which is strongly connected with the seasonal character of agro-food production in Poland, as well as with holidays. The number of permanent markets has been quite stable over the years and fluctuates at around 2000. However, we can observe a slightly decreasing trend in the overall area of open-air markets. Nevertheless, permanent open-air markets in Poland took over 14 million square meters: which is more than 14 km<sup>2</sup> in 2011.

Table 2 below presents data on the number and size of fixed open-air markets in Poland against the number and sales floor of retail stores. This information shows that the volume of infrastructure in the retail marketplace in Poland is regionally differentiated. In terms of the number of permanent marketplaces and sales area, the Mazovian Province is dominant. In this region there are more than 14% of the total number of markets operating in Poland, which have more than 2 million m<sup>2</sup> of sales area. In addition to the Mazovian Province, a high proportion of the total number of markets are found in Wielkopolska, Lublin and Lodz. In these five provinces, 50% of the total number of markets in Poland can be found. The share of markets in these regions in the general area of markets in Poland exceeds 55%. Development of marketplace infrastructure is related to the state of retail network. Open-air market infrastructure complements the retail market. An analysis of the relationship between the sales area of open-air markets and retail sales area indicates that the biggest part of open-air market infrastructure in relation to retail infrastructure was in the Provinces of Podlaskie, Świętokrzyskie and Mazovia. In Podlaskie and Świętokrzyskie, 1 m<sup>2</sup> of retail stores accounted for more than 0.5 m<sup>2</sup> sales area available on the open-air markets.

As it is seen in table 2, the region with a high relation of open-air market sales area to retail sales area is also Mazovia Province. In 2012, there was 0.47 m<sup>2</sup> sales area per 1 m<sup>2</sup> of sales in retail trade.

Table 2. Number and sales area of permanent open-air markets and retail stores by voivodship in Poland in 2012  
 Tabela 2. Liczba i powierzchnia sprzedażowa targowisk stałych i sklepów detalicznych według województw w Polsce w 2012 r.

Province/ Województwo	Permanent open-air markets/Targowiska stałe					Retail Stores/ Sklepy detaliczne		Relation of sales area of the open-air markets to retail stores/ Relacja powierzchni sprzedażowej targowisk do powierzchni sklepów detalicznych
	number of open-air markets/ liczba targowisk	area of open-air markets [thous. m <sup>2</sup> ]/ powierzchnia targowisk [tys. m <sup>2</sup> ]		the number of fixed locations of retail sale [thous.]/liczba stałych punktów sprzedaży drobnodetalicznej [tys.]		number of stores [thous.]/ liczba sklepów [tys.]	sales area [thous.m <sup>2</sup> ]/ powierzchnia sprzedażowa [tys. m <sup>2</sup> ]	
		total/ ogółem	including sales/ w tym sprzedażowa	total/ ogółem	including markets active every day/w tym na targowiskach czynnych codziennie			
Poland/Polska	2 215	14 500	8 985	103,4	61,5	357	33 695	0.27
Dolnośląskie	145	855	433	7,4	4,8	28	2 699	0.16
Kujawsko-pomorskie	134	637	381	5,7	4,1	19	1 783	0.21
Lubelskie	185	1083	738	4,4	2,7	18	1 736	0.42
Lubuskie	74	396	198	5,6	4,0	10	945	0.21
Łódzkie	183	1458	856	7,6	3,4	27	2 307	0.37
Małopolskie	147	867	661	5,7	3,0	30	2 543	0.26
Mazowieckie	320	3 130	2 007	17,8	8,6	47	4 307	0.47
Opolskie	50	167	97	2,2	1,7	8	935	0.10
Podkarpackie	131	634	401	3,6	2,8	18	1 731	0.23
Podlaskie	78	857	542	4,3	2,9	10	1 010	0.54
Pomorskie	89	365	194	4,1	2,0	22	2 197	0.09
Śląskie	186	1 081	561	12,6	7,3	42	4 364	0.13
Świętokrzyskie	81	792	657	3,7	1,2	12	1 013	0.65
Warmińsko-mazurskie	77	410	233	2,8	2,4	14	1 279	0.18
Wielkopolskie	234	1 293	850	11,5	6,8	33	3 081	0.28
Zachodnio-pomorskie	101	477	175	4,5	3,9	19	1 763	0.10

Source: see fig. 1

Źródło: jak na rys. 1

### The impact of open-air market sales on local food markets

In this part of the article the main attention will be paid to assessing the economic impact of open-air market trade of foodstuffs. Whilst analyzing the economic effects of open-air market development, we should pay attention to its role in the supply of consumers, the impact on the income of food producers, the impact on employment in food production and business development.

The development of open-air market sales in the food market means that consumers purchase more food from nearby local sources, which means that more income spent by them remains in the local community. Currently, open-air markets, being mainly local in nature, are a supplement to other forms of retail sales. The role of open-air trade in Poland is important due to the fact that its share in the retail market (FMCG) is estimated at a range of



5-10% [Wojdacki 2011]. According to a survey conducted for the European Commission by IPSOS, Poles are the biggest supporters of purchases in such places in Europe. Almost half of consumers in Poland usually buy fruits and vegetables at open-air markets, while the EU average is only 33 percent. In the case of meat products, nearly 29% of consumers in Poland declare purchasing at open-air markets. The average for EU countries in this category of products is about 11% [Mazurkiewicz 2011].

In recent years, processors and retailers gained a high share of food market value in conventional food chains. Farmers sell basic goods at a low price and they have trouble getting a satisfactory return on sales. This is especially true for small farms. Globalization and a greater concentration of food distribution resulted in an increase in the difference between production costs (3.6% per year since 1996), consumer prices (3.3% annually) and prices for farmers (2.1% per year). In this context, the development of short supply chains can increase the bargaining power of farmers and inhibit the negative effects of globalization and concentration of the food sector. Zepeda and Li [2006], Darby et al. [2008] suggest, on the basis of empirical research, the possibility of increasing the participation of farmers in the retail price by the development of local food systems. This can be achieved in several ways: by eliminating some of the intermediaries, enabling direct sales to consumers by adding local value (processing), extending the scope of our products and increasing the sales price through regional branding and other awards. Local Food Systems make it possible to provide farmers with higher incomes and restore the balance of power in the food chain.

## Conclusions

Local Food Systems support the local and regional economy by providing employment in agriculture and food production, including processing, distribution, and activities related to marketing and sales, and services. An increase in employment results from the application of more labour-intensive production techniques than conventional production. This is of great importance in remote rural areas, suburban areas, and mountainous areas in a difficult economic situation. These systems are incentives to use local capacity and to improve the image of little-known and often neglected regions.

Local food markets can stimulate additional economic activity in the local economy by improving business skills and capabilities. Open-air market sales, in terms of medium and large enterprises, can complement or extend the existing distribution areas. In terms of small businesses, open-air markets are characterized by a relatively low risk. They can become a primary place for part-time jobs.

## Bibliography

- Balazs B., Blackett M., Bos E., Eyden-Wood T., Kneafsey, M., Schmutz U., Sutton G., Trenchard L., Venn L. 2013: *Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics*, JRC Scientific and Policy Reports, European Commission.
- Darby K. 2008: *Decomposing Local: A Conjoint Analysis of Locally Produced Foods*, Am. J. Agric. Econ., vol. 90, 476-486.
- Feenstra G.W. 1997: *Local Food Systems and Sustainable Communities*, Am. J. Alternative Agric., vol. 12, issue 1, 28-26.
- Gottlieb R., Fisher A. 1998: *Community food security and environmental justice: Converging Paths Toward Social Justice and Sustainable Communities*, Community Food Security News (Venice, CA, newsletter of the Community Food Security Coalition).
- Ilbery B., Maye D. 2006: *Retailing Local Food in the Scottish-English Borders: a Supply Chain Perspective*. Geoforum, vol. 37, issue 3.
- Local Food Systems in Europe, Case Studies From Five Countries and What They Imply for Policy and Practice*. 2010: Facilitating Alternative Agro-Food Networks, FAAN.
- Lokalna Żywność i krótkie łańcuchy dostaw*. 2012: Przegląd Obszarów Wiejskich UE, Magazyn Europejskiej Sieci na rzecz Rozwoju Obszarów Wiejskich, vol. 12.

- Marketing on local markets*. 2010: Progress Consulting Srl, Brussels, 172, European Union.
- Marsden T., Banks J., Bristow 2000: *Food Supply Chain Approaches: Exploring Their Role in Rural Development*, Sociologia Ruralis, vol. 40, issue 4.
- Martinez S. (red). 2010: *Local Food Systems: Concepts, Impacts, and Issues*, ERR 97, U.S. Department of Agriculture, Economic Research Service.
- Mazurkiewicz P. 2011: *Na zakupy nie tylko do sklepu: Polacy zwolennikami bazarów*, Rzeczpospolita.
- Opinia perspektywiczna Komitetu Regionów „Lokalne systemy żywnościowe”*, Dz.Urz. UE 2011/C 104/01.
- Pasiut A. 2012: *Targowisko we współczesnym mieście-w poszukiwaniu formy*, Przestrzeń i Forma Nr 17/2012.
- Program Rozwoju Obszarów Wiejskich na lata 2007-2013*. Ministerstwo Rolnictwa i Rozwoju Wsi. *Rozporządzenie Ministra Rolnictwa i Rozwoju Wsi z dnia 1 kwietnia 2008 r. w sprawie szczegółowych warunków i trybu przyznawania oraz wypłaty pomocy finansowej w ramach działania „Podstawowe usługi dla gospodarki i ludności wiejskiej” objętego Programem Rozwoju Obszarów Wiejskich na lata 2007-2013*, Dz.U., poz. 1419.
- Rynek wewnętrzny w 2011 r.* 2012: Główny Urząd Statystyczny (CSO – Central Statistic Office Internal Market Report), Warsaw.
- Wojdacki K.P. 2011: *Przestrzenne aspekty rozwoju handlu targowiskowego w Polsce*, Handel Wewnętrzny, nr 6.
- Zepeda L., Li J. 2006: *Who Buys Local Food?* J. Food Distrib. Res., vol. 37, 1-11.

### **Streszczenie**

*Ukazano znaczenie lokalnych systemów żywnościowych oraz znaczenie sprzedaży bezpośredniej. Analizie poddano formy sprzedaży bezpośredniej w Polsce ze szczególnym uwzględnieniem targowisk. Sektor rolno-spożywczy stale ulega przemianom, dostosowuje się do zmian technologicznych, potrzeb konsumentów, trendów, nawyków żywieniowych. W ostatnim czasie obserwuje się wzrost popularności lokalnych systemów żywnościowych. Produkcja na potrzeby lokalne oraz promocja produktów lokalnych stała się nie tylko przejawem mody, ale także wyrazem dbania o trwałość, zrównoważony rozwój, o środowisko, zachowanie dorobku kulturowego oraz unikalności regionów. Z analizy wynika, że sprzedaż targowiskowa pozytywnie oddziałuje na rozwój lokalnych rynków żywnościowych i całej lokalnej gospodarki. Analizując skutki ekonomiczne rozwoju handlu targowiskowego należy podkreślić jego znaczenie w zaopatrzeniu konsumentów, wpływ na dochody producentów żywności, wpływ na zatrudnienie w sektorach produkcji i dystrybucji żywności oraz oddziaływanie na rozwój przedsiębiorczości.*

Correspondence address  
Msc. Ola Bareja-Wawryszuk, dr hab. Jarosław Gołębiowski  
Warsaw University of Life Sciences – SGGW  
Faculty of Economic Sciences  
Nowoursynowska 166 St., 02-787 Warsaw  
phone: (48) 22 593 40 10,  
e-mail: ola\_bareja@sggw.pl, jaroslaw\_golebiowski@sggw.pl