Bogna Pilarczyk
Renata Nestorowicz

Bogna Pilarczyk – Professor at Poznań University of Economics, Department of Marketing Strategies, al. Niepodległości 10, 61-875 Poznań, tel. 48 61 854 37 72, b.pilarczyk@ue.poznan.pl

Renata Nestorowicz – Assistant Professor at Poznan University of Economics, Department of Marketing Strategies, al. Niepodległości 10, 61-875 Poznań, tel. 48 61 854 37 69, r.nestorowicz@ue.poznan.pl

The organic food market in Poland – opportunities and threats to its development

Abstract

The organic food market in Poland is growing quite rapidly, but it's still small compared to Switzerland, Germany or France. This paper will present the factors positively and negatively influencing its development. The analysis are based on the results of research conducted in Poland, and a part of the analysis comprises a regional market (Wielkopolska). In their study the authors will also refer to examples from other European markets, which will enable them to show the influence of the selected factors on certain elements of the organic food market.

Key words: organic food market, distribution of organic food

Introduction and objectives

In recent years the organic food market has been one of the fastest growing sectors of the food economy. The ratio of its growth is caused by two factors – firstly, the development of the production of food based on the ecological raw materials (supply) and secondly, the rise in the affluence of the society and consumer awareness of healthy food and healthy life style (demand). Compared to conventional food, organic food is more expensive, due to the higher production costs. However, the higher price is offset by a bigger added value for consumers, which may give it competitive advantage in the market.

In the European Union the sales of of organic food has been dynamically developing since the 1980s. In Poland its development became more dynamic only in the middle of the first decade of the 21st century. In spite of the fact that the Polish market is developing dynamically, in comparison to other European countries it is still at the early stage of development. Whereas in Western Europe the sales dynamics has recently decreased (in Great Britain the market has been shrinking since the crisis), in Poland the sales growth in this market is still a two-digit figure (cf. tables 1 and 2). Despite the recent drop in the European market, it is clearly visible that the sales of organic food is developing more dynamically than that of conventional food. At present, the value of the organic food market in Poland is assessed as PLN 550-560m [Przybylak 2013]. It means that an average Pole annually spends about PLN 15 (3.5 - 3.75 euros) on organic food.

The organic food market in Poland has certain characteristics which affect, among others, the marketing orientation used by companies active in this market. In spite of its dynamic development mentioned earlier, it is still a relatively small market. Additionally, it is also characterized by a weak adaptation of the supply areas (considerably dispersed) to the demand areas (concentrated in big urban regions) [Pilarczyk, Nestorowicz 2010].

The purpose of this article is to analyze and assesss the significance of the factors which shape the basic components of this market, i.e. supply, demand and price, as well as the purchasing behavior of buyers of organic food. The analysis of these issues will be based on the example of Poland, which is characterized by the specific conditions of the development of supply and demand in this market. A part of the analysis comprises a regional market (Wielkopolska). In their study the authors will also refer to examples from other European markets, which will enable them to show the influence of the selected factors on certain elements of the organic food market.

Conceptual Framework

In the relatively scarce literature on the organic food market there are various classifications of factors influencing this market. One of them divides these factors into: external, including determinants not controlled by either the producer or the consumer (e.g. types of soil, climate, an organism's need for certain substances), and internal (e.g. productivity, needs and motivation of customers, personality and a consumer's knowledge about organic food). Another relatively frequently used classification is based on different types of factors. This criterion lets us distinguish the following groups of factors:

- economic,

- demographic,
- legal-organizational,
- social-cultural,
- natural and technological [Pilarczyk, Mruk 2006]

In our study we will take into consideration the first four groups of factors, obviously not forgetting about the undeniable influence of the natural factors on companies' activities in terms of supply, as well as the price level. However, these factors are beyond companies' control and that is why we will ignore them in the further part of the article.

Among the **economic factors** determining the volume and the structure of organic food supply, the following are worth mentioning:

- production costs;
- distribution costs;
- domestic and UE subsidies for the organic farming (financing research in organic farming; subsidies within the framework of the Rural Areas Development Programme, e.g. RADP 2007-2013, meant to improve the competitiveness of this branch of farming. These subsidies also reimburse fixed costs connected with the participation in the organic farming system and also it is possibile to receive help in the information and promotional activities of groups of producers, or the promotion of particular categories of products. Apart from the subsidies, another form of support is consulting [Action plan…2011];
- the price level (of means of production, final products, as well as conventional food).

These factors influence:

- the production of feedstock and unprocessed food (it is growing due to the rising number of farms producing this type of food),
- the size and structure of the organic food processing

As for the demand for organic food, it depends mainly on the income level of customers, as well as on the relation of its price to the prices of conventional food. It is estimated that the prices of organic food are 10% - 40% higher than those of the conventional food products. It results from the specifics of the organic farming, where the production costs are higher than in the conventional farming and the production volume – lower. If only costs are taken into account in establishing prices, while demand and price elasticity are ignored, a price paradox may occur. High prices will reduce demand for organic food. Lower demand will decrease the cost-effectiveness of the production and also the sales of this food, among other reasons due to the lack of economies of scale. This will, in turn, lead to lowering the profitability of both the production and the sales of organic food, resulting in the growth of prices. In this way, instead of adapting prices to supply and demand, the price growth spiral occurs, which was pointed out by A. Spiller [2001], in his study on the vicious circle model in the price strategy.

The high prices of organic food mean that it will not be bought on a mass scale. On the other hand, it is worthwhile to point out that along with the growing income, the expenditure on high-quality expensive products (including natural and healthy food) is also rising. A modern consumer seeks the value added food products, putting more emphasis on their freshness, taste and origin, which in fact means the genuineness of organic food. Organic food products promise value added, which the consumer is unable to check either in the purchase or in the consumption. These are the so-called credence-qualities goods, i.e. goods as to the quality of which the consumer must trust the seller. In this case the function of the high price is to inform about the adequately high quality of the offered products.

It should be stressed that economic factors to a large degree determine both the behavior of consumers and the action of producers in the organic food market.

Among the **demographic factors** the important ones are: age, number of people in a household, place of living, etc. According to the research conducted in this area, organic food is most often bought by people of the age 30-40, with the university education, living in big cities [Mackiewicz-Walczak 2006; Dimitri, Dettmann 2012; Bryła 2012]. Organic food is also often bought by families with small children, which is related to the growing number of allergic children and infants and by the fact that the birth of a child in a family frequently changes its attitude to food and nutrition. Development of the organic food market may be also positively affected by ageing of society. It is estimated that by 2035 people over 60 will account for 30% of the Polish society (compared to 20% in 2010) [GUS 2009]. It has been observed that with age there is a tendency to pay more attention to the health issues when buying food products. [Hermann 2003]

The **social-cultural factors** include: the level of education (people with the university education more often buy organic food), the rising interest in the information about the purchased products and the influence of these products on health, as well as the growing proportion of well-informed professional consumers (prosumers). Moreover, factors of constantly growing importance are: the buying habits of consumers, their lifestyle, especially in terms of putting more pressure on healthy eating and fitness (the lifestyle called fitness & wellness). These factors are the reason for the growing interest in healthy food, which is identified with organic food by a number of buyers. The dominating motivation for buying organic food is the consumers' concern with their own and their family's health, the issues connected with the safety of this food, as well as a belief in its better taste in comparison to conventional food. With reference to the health issues, it is also worthwhile to mention the increasing incidence rate of the civilization diseases, such as: overweight/obesity, diabetes, or cardiovascular diseases.

The stronger interest in organic food also results from the increased trust of consumers to this type of food and their belief in the genuineness of organic products, accompanied by their lower trust to conventional food, caused by, among others, incidents of counterfeiting such food, adding harmful substances to it, etc.

This issue is related to another group of factors, called **legal-organizational factors.** Among others, this group includes legal regulations connected with organic food labelling rights and the acceptable technologies of manufacturing and processing these products. The purpose of the legislation binding in Poland is to guarantee the consumer that a product with the "eco-leaf" logo is of the appropriate quality and has been produced in accordance with the regulations for the organic food production binding in the whole area of the European Union. The same regulations must be followed by all producers, intermediaries, processors, and distributors in the whole production and sales chain of this type of food within the European Union. Apart from the EU legislation, (the directives of the European Council and Commission), in Poland there are also domestic regulations (the Organic Farming Bill of 2009, the directive of the Minister of Agriculture and Rural Development), which elaborate on and operationalize the European acts. One of the major issues legally regulated is the certification of organic farms and products. At present there are 9 certification units in Poland. They are supervised by the Food Standards Agency (more information on these issues can be found on the website of the Ministry of Agriculture and Rural Development, www.minrol.gov.pl/pol/Jakosc-zywnosci/Rolnictwo-ekologiczne/Kontrola-i-certyfikacja).

Methods

In order to show the influence of the above described factors on the organic food market in Poland, in the first half of 2013 a quantitative survey was conducted by means of direct structured interviews. The research comprised 239 people from Wielkopolska – the respondents were the purchase decision makers in their families. In this group 12% respondents declared buying organic food regularly (at least once a week), 23.4% respondents buy organic food from time to time and 27.2% - occasionally. 37.2% do not buy such food at all.

Moreover, in the present study we have also used some data derived from a few secondary sources, among others: earlier research conducted by the authors of this study, research carried out in the whole area of Poland by research agencies, such as TNS, as well as statistical data from Polish and German institutions dealing with organic farming and its products.

Findings

The above mentioned factors influence both the level and the structure of the organic food consumption. Although in Poland the ratio of the share of organic food in the overall consumption shows a growing tendency, its level is still low (0.2%), compared to the more economically developed European countries (3%). The data concerning the volume and the dynamics of the organic food sales in Poland and in a few European countries[1] have been shown in tables 1 and 2.

Table 1. The sales revenues in the organic food market per capita in Poland and in a few selected countries (in euros).

Year	PL**	Change*	UE - 27	Change*	CH**	Change*	Germany	Change*	USA	Change*
2008	1,3	-	34,1		119,2	-	71,2	-	50,7	
2009	1,3	0%	34,7	+2%	132,8	+11%	70,7	-1%	57,3	+13%
2010	1,5	+15%	32,2	-7%	152,5	+15%	73,6	+4%	64,3	+12%
2011	3,0	+100%	39	+21%	177	+16%	81	+10%	67	+4%

* the change in relation to the previous year

** PL – Poland, CH - Switzerland

The source: own elaboration based on: FiBL, AMI, cited by: BÖLW 2013, 2012, 2011, 2010.

Table 2. The sales revenues in the organic food market in the selected countries (in euros)

Year	PL**	Change*	UE - 27	Change*	CH**	Change*	Germany	Change*	USA	Change*
2008	50	-	16762	-	905	-	5850	-	15589	-
2009	50	0%	17145	+2%	1023	+13%	5800	-1%	17780	+14%
2010	59	+18%	18121	+6%	1187	+16%	6020	+4%	20146	+13%
2011	120	+103%	19684	+9%	1411	+19%	6590	+9%	20991	+4%

* the change in relation to the previous year

** PL – Poland, CH - Switzerland

The source: own elaboration based on: FiBL, AMI, cited by: BÖLW 2013, 2012, 2011, 2010.

Countries with the highest value of the per capita sales of organic food are those with the highest net salaries: Switzerland ($ 5600), Luxembourg ($ 4230) and Denmark ($ 4037). In Poland the average net salary in the same period (2012) was only $ 842, whereas in Germany - $ 2865. The Swiss, the Luxembourgers, the Cyprians and the Dannish have the highest purchasing power [Muszyński 2013a].

The analysis of the purchasing power of Poles in the organic food market leads us to a conclusion that it is significantly lower than in the countries of Western Europe. For instance, for the Polish average salary a twice smaller amount of organic vegetables and fruit can be bought than for the German one. What is more, the differences between the prices of organic and conventional food are bigger in Poland than in our western neighbor.

A positive fact is that since 2005 the average salary in Poland has increased by 25% (taking into account the inflation) [Muszyński 2013b]. The growth of the salaries and their purchasing power lets us hope for the further dynamic development of the organic food market in Poland.

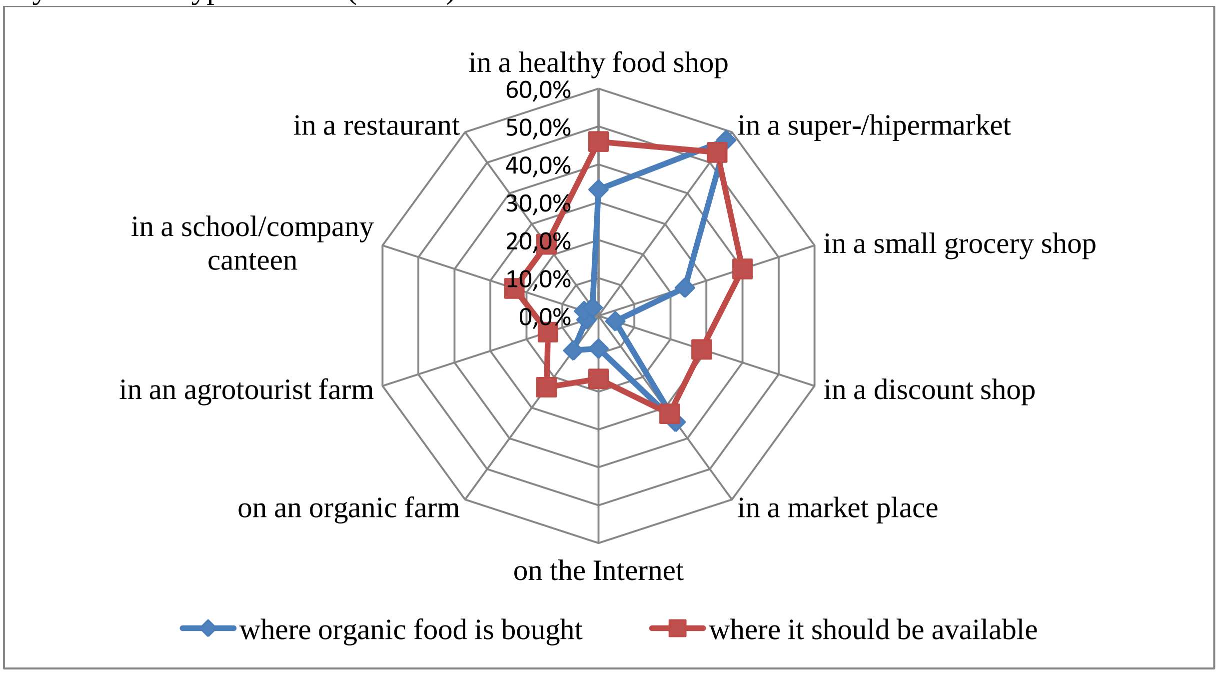
[1] For the comparative study the two selected countries are the leaders in the European Union in the sales revenue in the organic food market.: Switzerland (the highest per capita revenue) and Germany (the highest ovrall revenue)

It is worth noting that the more developed a market is, the bigger are the chances for the differentiation and reduction of prices of organic food. On the one hand it is related to the economies of scale, and on the other – with the differentiation of the distribution channels. A good example of this rule are discount shops in Germany, which offer organic food at prices much lower than those in the specialty shops. The biggest differences in the price levels between discount shops, specialty shops and super- and hypermarkets can be noticed in the case of organic meat and certain types of bread, whereas the prices of apples and milk are similar, although the prices in discount shops are always lower than in the other types of shops [Zahlen, Daten…2010]. The differentiation of the distribution channels and, more importantly, the introduction of organic food to discount shops gave customers a better price offer. Within the period of only a few years discount shops have become ones of the major outlets of organic food in Germany. In Poland Biedronka has attempted to include these products in their offer, but without success. However, Lidl, like its parent company in Germany, has organic products in its offer, sold under their own label. The range is not very broad, but at least customers can get used to this type of products.

In Poland the sales of organic food is run mainly by specialized grocery stores (e.g. shops with natural, "healthy" food), some hypermarket chains (e.g. Tesco, Carrefour), supermarkets and delicatessen chains (Piotr i Paweł, Alma), market places and directly by farmers. It has been estimated that presently there are around 500 shops specializing in organic food or the so-called "healthy food" in Poland. The majority are based in Warsaw – ca. 70 shops. There is a high turnover of such shops – a part of them close down, but new ones replace them. In Poland there are two chains of the organic food shops: Organic Farma Zdrowia (24 shops) and Żółty Cesarz (7 shops) [Przybylak].

Because of the important role of distribution in the development of the organic food market, in the research conducted in Wielkopolska respondents who buy organic food were asked where they bought these products. All the respondents were asked where this food should be available. The findings are presented in charts 1 and 2.

Chart 1. Where organic food is bought and where it should be available in the opinion of buyers of this type of food (N=150).



The source: a survey.

The majority of respondents buy organic food in super-/hypermarkets, in market places and in healthy foods shops[2]. The biggest differences between the present and the preferred outlets occurred for:

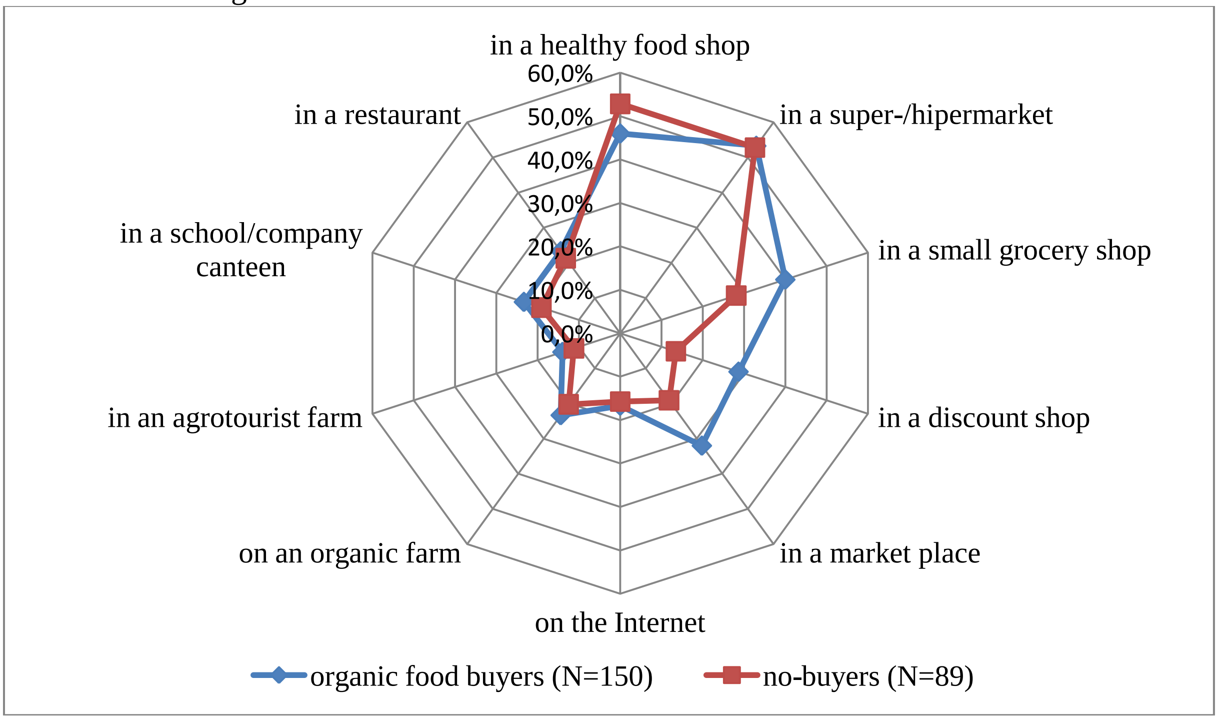
- discount shops (24 percentage points)
- restaurants and school/company canteens (20 percentage points)
- small grocery shops (16 percentage points)

These are the places where organic food still can be found very rarely.

On the assumption that one of the reasons for not buying organic food products is their limited availability, all the respondents, no matter if they buy organic food or not, were asked where this type of food should be available. It turned out that the biggest differences between these two groups of respondents referred to discount shops (over 15 percentage points), market places (almost 13 percentage points), as well as small grocery shops. These points of sale were selected by a relatively bigger number of respondents who at least occasionally buy organic food, compared to the people who never buy such products. The people who do buy organic food products relatively more often pointed out that organic food should be available in each of the listed points of sale. The only exception were the "healthy food" shops, more often chosen by respondents who do not buy organic food.

The findings clearly show that buyers of organic food need the intensification of its distribution. The improvement of the availability of organic food products and selling them in the places where the potential customers usually do their shopping for food is a chance for the development of this market. The majority of Polish consumers who buy organic food are not regular buyers, so the availability of these products in the places where conventional food is sold may remind them about organic food products and encourage them to choose them.

Chart 2. Where organic food should be available



The source: a survey

[2] The all-Poland research show that in big cities organic food is most often bought in the specialty shops with "healthy food" .

The research on the places where organic food is sold and the places where it should be available conducted earlier in Poland [Żakowska-Biemans, Gutowska 2003, Pilarczyk, Nestorowicz 2010, TNS Polska 2012, za Baranowska-Skimina 2012] points to certain tendencies in this respect. The observed changes refer mainly to the increased interest in buying organic food in super-/hypermarkets, the Internet and discount shops.

The relatively low consumption of organic food results not only from its underdeveloped distribution network, but also, among others, from the low degree of processing of this food and from a limited product range. Even though the number of companies involved in the supply of organic food is growing dynamically, which may result in the increased competition in the future, it is still insufficient[3]. A part of organic food products must be imported, which aditionally raises their prices. A positive fact is that the number of non-agricultural producers has begun to grow particularly dynamically (table 3).

Table 3. The number of organic food producers in Poland and the dynamics of its changes

Year	Food producers		Including those involved in:				Processing factories*	
			Farming		Others			
	Number	Change*	Number	Change*	Number	Change*	Number	Change*
2003	2282	-	2260	-	22	-	22	-
2004	3760	+64,8%	3705	+63,9%	55	+150%	55	+150%
2005	7281	+93,6%	7183	+93,9%	99	+80%%	99	+80%
2006	9364	+28,6%	9189	+27,9%	175	+78,6%	170	+71,7%
2007	12121	+29,4%	11870	+29,2%	251	+43,4%	206	+21,2%
2008	15206	+25,4%	14896	+25,5%	310	+23,5%	236	+14,6%
2009	17423	+14,6%	17091	+14,7%	332	+7,1%	277	+17,4%
2010	20956	+20,3%	20582	+20,4%	374	+12,6%	293	+5,8%
2011	23847	+13,8%	23449	+13,9%	398	+6,4%	270	-7,8%
2012	26376	+10,6%	25944	+10,6%	432	+8,5%	312	+15,5%

* Processing factories belong to the category “others”. Others include also: introducing imported organic products to the market, natural harvest, aquaculture and/or harvest of seaweed.

The source: own elaboration based on: IHARS

A factor which, along with the income and the purchasing power of customers, significantly influences the degree of customers’ interest in organic food is their knowledge about this category of products. According to the research done by TNS [Baranowska-Skimina 2012], only 14% Poles mention eco certificates as characteristic elements of this food, whereas this certificate is the only guarantee that the food we buy is genuinly organic. This fact is a threat to the organic food market in Poland, because if consumers asked about the characteristics of this food name among others: the origin from clean regions, abundance of nutrients, or the origin from small farms, it is relatively easy to replace certified organic food products with ones which do not meet these requirements but are associated with ecology and traditional production methods.

Not only is it necessary to be aware that organic food is certified, but it is also indispensable to be able to recognize such food. It is only possible if consumers know the labeling of organic food, particularly the EU logo of eco food, which since 1st July 2012 has been a compulsory element on the packaging of organic food. The European logo of organic

[3] For example, half of the organic farming areas are meadows.

food is recognized by 1 in 10 respondents in Wielkopolska. The all-Poland research conducted by TNS Polska [Sikorska 2013] brought similar results.

The importance of knowing the ecological logo has been proven by research conducted in Germany [Jannsenn and Hamm after: ZAhlen… 2011]. 90% of German consumers know the Bio-Siegel logo and almost 80% - Demetrer. The recognition of the logo was accompanied by trust to the certificate and the readiness to pay more for the certified food. This is why it is worthwhile to run campaigns meant to inform Polish customers about the organic food logos.

Discussion

Taking into account the consumers' preferences as to the points of sale of organic food and also the fact that discount shops are becoming increasingly more popular as outlets of such food, it should be considered whether organic food should be distributed by this channel in Poland. Regular customers more willingly buy this type of food in specialty shops, whereas those less involved in the idea of organic food and irregular buyers – in conventional points of sale.

Taking into account the preferences as to the places of purchase of organic food, along with the fact that discount shops are becoming more and more popular outlets selling food, it might be worthwhile to consider whether organic food should be sold through this distribution channel in Poland. Regular buyers prefer to buy organic food in specialty shops, whereas customers less involved in the idea eco products and buying them the irregularly – in the conventional points of sale. If the objective is to penetrate the market, organic food should be introduced to discount shops, and in super- and hypermarkets its range should be broadened. As it has already been mentioned, Biedronka introduced a few items from the eco category, but then withdrew from this idea. At that time customers were not ready for this offer, because discount shops were not associated with organic food, evidently treated as premium class food. However, for some time discount shops have been changing their strategy, becoming more and more alike supermarkets. One of the indications of this phenomenon is the introduction of premium products. Organic food may become a part of this trend.

Managerial Implications

Taking into consideration the way in which the organic food market is evolving in Poland, managers responsible for the sales of organic food products should focus on following objectives:

- The availability of these products in the places where customers do their shopping for food, which will enable those consumers who rarely buy organic food to buy it "by chance",
- Educating consumers in organic food, so that they know how to choose food which is genuinly organic, with eco certificates.

To sum up, the main objective is to improve the customers' awareness (through information campaigns, educational projects), as well as to facilitate the choice of organic food products by improving their availability. Another factor which should definitely boost sales is the increased purchasing power of consumers (a rise in their incomes and/or a decrease in the prices of organic food in relation to conventional food).

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