

Economics of agriculture

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## GLOBAL ORGANIC PRODUCTS MARKET

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### Summary

*The increased demand for food in the world has caused the development of intensive agriculture that is based on the use of considerable amount of chemical substances. The high level of use of fertilizers and plant protection substances damages the environment and has a bad impact on the food quality, whose repercussions can often be felt on environment and human health. In contrast to conventional agricultural production, healthy safe food is produced within the system of organic farming and processing. This type of food is completely grown and produced without synthetic substances (mineral fertilizers, pesticides, plant growth stimulators, hormones, etc) and genetically modified organism (GMO). The production of healthy food currently has an upward trend worldwide, and it is the result of constant demand for such products. There are attempts to initiate the use of healthy food in nutrition and thus contribute significantly to human health and environment protection. There is, however, a question arising of whether global economic crisis is likely to reduce demand for organic products.*

**Key words:** organic agriculture, global market

### Introduction

Organic (alternative, ecological, biological) agriculture involves making the development harmonized with the needs of market and environment protection. According to the definition offered by FAO (The Food and Agriculture Organization of the United Nations) and WHO (The World Health Organization), organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity and biological cycles. It emphasizes the use of management

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practices in preference to the use of off-farm inputs. The term organic (ecological) agriculture was first employed by Lord Northbourne in 1940 in his book 'Look to the Land' where he describes a holistic and ecologically balanced approach to agriculture.

The key aim of organic agriculture is the production of food having high nutritive value, sustainable development of agriculture along with ecosystem protection, and soil amelioration. Organic agriculture includes the maximum use of renewable energy sources, maintaining genetic variety of agro-ecosystem and environment protection, reducing environmental degradation that can result from agricultural production in order to get better conditions for meeting basic needs of farmers and generate secure financial income.

The aim of this paper is to overview the basic characteristics of global market for organic products. Therefore, an image of transparency is obtained with the aim of getting our country involved in international market.

## **Global organic food market**

### ***Global organic food markets worldwide***

Organic agriculture is intensively developing in the world – throughout 145 countries of different sizes and with different intensity (2009). 35 million hectares of land is cultivated organically; also, it is estimated that non-certified production is carried out on additional 20 million hectares of land, which totals more than 50 million hectares of organically cultivated land in the world [1]. Most of this land is non-cultivated certified land comprising pastures and forests where livestock feeds on grass, beekeeping is practiced and herbs are collected. The process of certification of this land is simplified and does not require excessive funding, and the meat of such livestock is mainly exported [2]. Globally, organic agricultural land in all regions increased by 3 million hectares in 2008 in comparison with the year of 2007 (by 9%) [3].

Regionally, the largest areas of organic land are located throughout Oceania (35%). Europe holds second place with 23% of organic agricultural land. The smallest areas are in North America and Africa, with 7% and 3% respectively as of 2008. According to countries worldwide, Australia has the largest area of organic land (12 million hectares), followed by Argentina (4 million), China, the USA and Brazil with 2 million hectares each (2008). Despite the fact that this type of production is rising considerably, it takes up a small portion of global agricultural production. The largest share of organic agricultural land in total land may be found in the Falkland Islands (36.9%), Lichtenstein (29.8%) and Austria (15.9%). Above ten percent of organic agricultural land there is in Switzerland, Sweden and Guyana. It is generally accepted that a country is organically developed if there are more than two percent of its territory under organic agricultural production [4].

There are more 650 thousand farms in the system of organic production all over the world. Most farms are located in South America (30%), followed by Europe (27%) and Asia (21%). In 2008 there were 1.38 million registered farmers throughout EP 2010 (57) SI – 2 (350-355)

the world dealing with various types of organic agricultural production. Most organic producers are located in Africa (34%) and in Asia (29%) of the total number of producers of organic food in the world. The countries with the largest number of these producers are India (340,000), Uganda (180,000) and Mexico (130,000) [4].

The turnover of organic food and drinks in the world accounted for 16 billion US dollars in 2000. Global organic food market rose to 26.5 billion US dollars in 2004, whereas in 2008 it reached 50.9 billion US dollars. The value of this market increased by over 34 billion US dollars for eight years [1]. The rise of global organic food market accounted for 43% in the period between 2002 and 2006. The demand for organic food is going up, especially in the USA and Europe, where sales increase by five or six billion US dollars every year; likewise, as expected, developing countries may benefit from this type of production. North America and Europe comprise 97% of the total sales of organic food in the world.

Organic products account for only one percent of the total global food market. The demand for these products in recent years has been increasing. The developed countries of Western Europe, the USA, Canada, Japan and Australia have fully built awareness of organic food resulting in increased demand for organic products.

The United States of America is a country with the highest demand and consumption of organic food. The sales have soared. In 1990 they totalled about a billion dollars in contrast to 24.8 billion dollars in 2009. Compared with the year of 2008, the sales rose by 5.1% in 2009 [1]. Organic food and drinks sales account for 3.7% of the total sales in the USA in 2009. The Government plans to encourage its increase in future years. The most significant demand is the one for fruit and vegetables (39%), followed by the demand for drinks, milk and dairy products (2008). The least demand is for meat, spices, bread and cereals [6].

Organic food is available in over 30 thousand specialized retail outlets and in almost 80% of outlets where conventional goods can be bought. Large retail chains, such as *Wallmart*, *Price Chopper* and *7-Eleven*, have permanent and varied offer of organic products, and top food industry companies, such as *Campbell's*, *Archer Daniels Midland* and *General Mills*, increased their production of organic food beside their conventional products. Multinationals, such as *McDonald's*, have recognised and accepted this customers' trend, so considerable amounts of conventional coffee and milk have been replaced by their organically produced counterparts.

### ***Organic food market in Europe***

Since early 1990s, organic production had been developing rapidly in most European countries, but due to the effects of global economic crisis in 2009 its development was hindered. In European Union there are more than 7 million hectares of certified land for organic production, which comprises about 3.6% of the total agriculture land (2008). There was 1.5 million hectares in the system of organic production. Therefore, organic agricultural land has risen by almost five million hectares for about ten years. In the same period the number of organic farms increased from 50 thousand to

almost 200 thousand [7]. The leading countries in Europe according to organic land in 2008 are Spain (1.3 million hectares), Italy (1 million hectares), Germany (0.9 million hectares) and Great Britain (0.7 million hectares). As of 2008, the organic land in these countries is mainly used as meadows and pastures (44%), as plains for growing crops (37%) and for perennial plants, i.e. fruit and vine (10%) [8].

Austria has the largest share of organic land in the total land (15.9%). There are 10% of farms registered for organic production in this country; the other countries with the largest share of organic land are Italy, the Czech Republic and Greece. There are about six percent of fertile soil in the system of organic production in most European countries. It is seen that in the countries of Central and Eastern Europe there is a significant increase in organic production. The European Union is planning to make the production of organic food reach 10% by 2013. Organic food market in Europe reached 17.9 billion EUR in 2008. The largest markets are Germany (5.8 billion EUR), France (2.6 billion EUR), Great Britain (2.5 billion EUR) and Italy (1.9 billion EUR) [9]. In recent years organic food market in Europe has faced a considerable rise between 5% and 30%, depending on the country. When speaking about the demand in the European Union in 2007 for various products which are organically produced, one third refers to fruit and vegetables, followed by baked goods (bread and pastries) with 30%, and milk and dairy products with 27% [4]. In the total sales, the biggest share of organic products is in Denmark where it accounts for 8% (2009), followed by Austria (5.3%) and Switzerland (4.3%) [4]. The largest sales of organic food per capita in 2008 are also in Denmark (132 EUR per capita), followed by Switzerland (119 EUR per capita) and Austria (97 EUR per capita) [3].

The biggest exporter of organic food in 2008 is Italy (900 million EUR), followed by Spain (315 million EUR) and Denmark (88 million EUR) [3]. The country that has progressed significantly is Denmark, where almost a quarter of the total agricultural production is under BIO certificate. In the structure of the total demand, organic products account for 8.1% (2009). The most important products that are organically produced are milk and dairy products (38%), fruit and vegetables (20%), wheat, bread and flour (15%) and meat (9%). Almost all the supermarkets have their own organic or bio brands [11].

According to the results of research [12] on an analysis of condition and predictions for trends on the organic food market, it is seen that the market of Denmark, Austria and Switzerland is saturated and in future period they will have an increase by 5% yearly. The market of Germany and Great Britain is rising (between 5% and 15% a year). At the same time the market of Hungary, the Czech Republic and Spain will have the same increase because they are currently at a low level. It is predicted that the lowest increase rate is in Denmark (approximately 1.5%), and the highest is in Great Britain (approximately 11%). Besides, it is expected that cereals will be a type of products with the lowest increase, whereas meat and meat products will rise most. Also, the demand for fruit and vegetables might be larger than the supply of these products in future years [13].

In Germany, global economic crisis influenced consumers to buy less organic products. In 2009 there was a decrease in the demand for organic products. In 2009 consumers spent four percent less of funds on organic products (food and drinks) than in the previous year [14]. About 85% households in Germany in 2009 bought at least one

organic product. Despite the fact that the prices of these products dropped by about two percent in comparison with the prices in 2008, the spending on them slightly decreased. The most dramatic fall in spending is seen in low-budget stores although they reduced the prices (about 7%), whereas specialized stores kept the previous level of sales, and prices remained at the level of the year 2008. The consumption of organic products is strongly influenced by income of the household. The reduction in consumption is not seen only in the group of consumers (28%) who think that the available home budget and the period of crisis enable them to spend money without rationalization. The other consumers, who have limited home budget, take into consideration whether organic products are worth paying so much (even 75%) in comparison with conventional products [15].

Financial crisis also influenced a reduction in demand for organic food in Great Britain. The rise in sales of organic products in 2008 accounted for 1.7%, whereas it rose by 26% on average in the last decade. However, there was a significant fall in 2009. That year, the sales of organic food and drinks dropped by 12.9%, and it was the first fall since 1993. The research showed that not only consumers spend less on organic products, but sellers reduced their offer significantly. There are three categories of organic food that have a significant fall in sales: the sales of dairy products fell by 5.5%; fruit and vegetables by 14.8%; meat by 22.7%. The consumption of bread and baked goods showed the most dramatic fall – by 39.3%. Simultaneously, the demand for organic milk has gone up. The analysts believe that it is inevitable in every area struck by financial crisis; furthermore, organic food costs far more than conventional products [16].

The main obstacles to the development of organic food market in the European Union are as follows: fragmented and weak market; lack of marketing knowledge; weak cooperation and communication; and low output prices formed by farms. The key problems of the demand are: high retail prices; limited availability of ecological products; consumers are insufficiently informed; competition of non-ecological substitutes; the lack of credibility of certification institutions, etc [13]. The European Commission launched a campaign for promoting ecological production of food under the slogan: ‘**Organic farming. Good for nature, good for you.**’ Its aim is to get consumers informed about the significance and benefits of organic farming and organic food production. This campaign will focus on raising consumers’ awareness, especially on young people who are supposed to transfer the idea of organic food in future [17]. A fast process of getting the biggest world’s food industry companies involved in organic production is the most convincing evidence that this category of products does not mean fashion or a consumers’ fad but their permanent attitude.

## Conclusion

Organic agriculture primarily emphasizes food quality and safety in contrast to conventional food that aims, above all, to increase the production. Organic agriculture is closely connected to the concept of multifunctional agriculture.

Organic farming land has had a considerable rise all over the world. There are 35 million hectares of land cultivated organically; in addition, it is estimated that non-

certified production is carried out on about 20 million hectares of land. More than 650 thousand farms are involved in this type of food production. In 2008 global organic food market reached 50.9 billion US dollars. For eight years the value of this market rose by over 34 billion US dollars. The highest demand for organic food is in the USA, Germany, France, Great Britain and Italy.

Financial crisis, however, influenced a reduction in demand for organic food on various markets. The main factor for limiting further expansion is considerably higher price of organic food compared by conventional food.

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