

ORGANIC FOOD LABELING AND CERTIFICATION

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Abstract

In the rush to produce more and more crops to satisfy growing demand producers have had to resort to using a lethal cocktail of pesticides to control disease and insect attack. This has led to numerous international debates about unhealthy food, the effects of it and the measures that must be taken in order to avoid the harmful effects of genetically modified food consumption demonstrated by specialists. These debates evolve around the benefits of the organic products versus the pure trade trick outlined by some. The organic food movement has earned its well deserved place in many markets around the world. Its prestige is lately being widespread to vast parts of Eastern-Europe as well. Based on data collected from specialized reports and articles on organic products, the aim of this paper is to present the importance of organic products, the regulations on organic food and different labels used around the world in order to certify the organic food products.

Keywords: certification, food, labels, organic food, products.

1. Introduction

Based on data collected from specialized reports and articles on organic products, the aim of this paper is to present the importance of organic products, the regulations on organic food and different labels used around the world in order to certify the organic food products.

Organic foods are made according to certain production standards. For the vast majority of human history, agriculture can be described as organic; only during the 20th century was a large supply of new synthetic chemicals introduced to the food supply. This more recent style of production is referred to as "conventional." Under organic production, the use of conventional non-organic pesticides, insecticides and herbicides is greatly restricted and saved as a last resort.

However, contrary to popular belief, certain non-organic fertilizers are still used. If livestock are involved, they must be reared without the routine use of antibiotics and without the use of growth hormones, and generally fed a healthy diet. In most countries, organic products may not be genetically modified. It has been suggested that the application of nanotechnology to food and agriculture is a further technology that needs to be excluded from certified organic food. The Soil Association (UK) has been the first organic certifier to implement a nano-exclusion.

Organic food production is a heavily regulated industry, distinct from private gardening. Currently, the European Union, the United States, Canada, Japan and many other countries require producers to obtain special certification in order to market food as "organic" within their borders. Most certifications allow some chemicals and pesticides to be used, so consumers should be aware of the standards for qualifying as "organic" in their respective locales.

2. Organic Food

Historically, organic farms have been relatively small family-run operations, which is why organic food was once only available in small stores or farmers' markets. However, since the early 1990's organic food production has had growth rates of around 20% a year, far ahead of the rest of

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the food industry, in both developed and developing nations. As of April 2008, organic food accounts for 1–2% of food sales worldwide.

Processed organic food usually contains only organic ingredients. If non-organic ingredients are present, at least a certain percentage of the food's total plant and animal ingredients must be organic and any non-organically produced ingredients are subject to various agricultural requirements. Foods claiming to be organic must be free of artificial food additives, and are often processed with fewer artificial methods, materials and conditions, such as chemical ripening, food irradiation, and genetically modified ingredients. Pesticides are allowed so long as they are not synthetic.

The following chart shows the size of organic farmlands (in ha) in different countries from Europe.

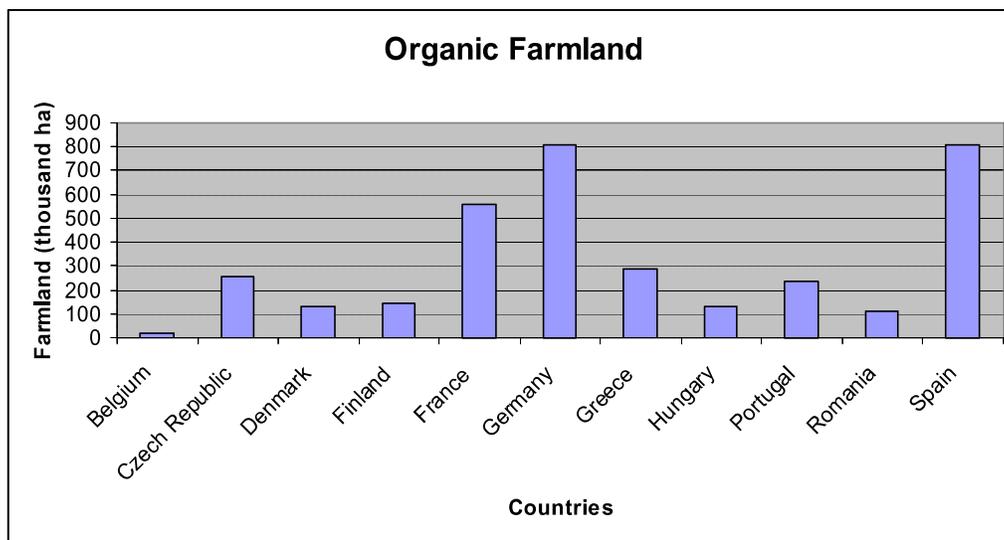


Chart 1.1: Organic Farmland in different European Countries, in thousands of hectares
Source: www.organic-europe.net

However, it must be taken into consideration the total area of these countries. It is logic that bigger countries have a larger farmland.

Early consumers interested in organic food would look for non-chemically treated, fresh or minimally processed food. They mostly had to buy directly from growers: "Know your farmer, know your food" was the motto. Small farms grew vegetables (and raised livestock) using organic farming practices, with or without certification, and the individual consumer monitored. As demand for organic foods continued to increase, high volume sales through mass outlets such as supermarkets rapidly replaced the direct farmer connection. Today there is no limit to organic farm sizes and many large corporate farms currently have an organic division. However, for supermarket consumers, food production is not easily observable, and product labeling, like "certified organic", is relied on. Government regulations and third-party inspectors are looked to for assurance. A "certified organic" label is usually the only way for consumers to know that a processed product is "organic".

The ecological aliments are diversified, healthy, and free of diseases and pets, deprived of noxious residuum, with a balanced content of bioactive substances and minerals.

Advantages of ecological products consumption are:

- to their production are not used herbicides, pesticides, hormones;
- they don't contain additives or other chemical substances;

- they are not genetically modified;
- animal origin products don't contain antibiotics;
- they are healthy products, deprived of noxious residuum;
- they have a balanced content of bioactive substances and minerals;
- their impact of environment is minimal.

The disadvantages of ecological aliments are firstly represented by higher price and limited range. The higher prices are a consequence of lower productivity, because of non using additives, fertilizers and other chemical substances that have the role to increase the production.

Ecological products obtain their status only after the product unity is verified and certified. These products must have a quality certificate and the sigle of Certification Institute.

The label of an ecological product must contain: producer's name and address, the product name, the ecological production method used, the name and sigle of Institute which certify the product.

The traders of products containing 95% organic ingredients must use a EU special logo and a label indicating the product origin. Underneath will be another label indicating the organic ingredients type. This measure will permit to the consumers to easy recognize the ecological products from EU and to know exactly what they are buying. The label can be accompanied by national or private logos, depending of each member state.

The catering companies are excepted from these rules, but states can introduce national rules in that field.

Now, EU has 2 categories of labels:

- gold standard for final products containing minimum 95% of organic ingredients
- emphasized labeling for products with at least 70% organic content.

3. Organic Food in the Czech Republic

The Czech organic food market is developing rapidly. In 2005 the turnover grew by 30% and reached 350 million Czech crowns (ca. €12.5 million). The main reason for this growth is demand from Czech consumers; however, this is predominantly satisfied by increased imports from abroad.

In the retail market there is an ongoing lack of certain basic commodities of organic quality, for instance eggs, certain types of meat (above all poultry), fruit, vegetables, and milk and dairy products, especially butter and cheeses.

In general, organic food in supermarket chain stores is offered under the labels of the producer organizations. Nonetheless, the first organic labels of the retail chains are starting to appear. Super- and hypermarkets are the largest distribution networks for meat (beef from Biopark; pork from Delvita) and dairy products (Olma, Valašská Dairy, Polabské Dairies). Delvita, Tesco and Hypernova offer a limited range of fruit and vegetables (supplied by Ekofarma Deblín).

In 2005 the BIO logo of organic food in CR was transferred from private hands into the state's possession. The state support allocated to organic food producers was renewed in 1998, determining the development of this field. The support given by the state varies according to the type of food product.

The main regulation, which was changed as beginning with 2005, is Act. No. 553/2005 which amends Act. No. 242/2000, came into force as of 30.12.2005. The purpose of this amendment was to omit all the regulations from Act. No. 242/2000, which are duplicated in the European legislation. This lead to a simplification of the legislation.

4. Organic Certification

Organic certification is a certification process for producers of organic food and other organic agricultural products. In general, any business directly involved in food production can be certified, including seed suppliers, farmers, food processors, retailers and restaurants. Requirements generally

involve a set of production standards for growing, storage, processing, packaging and shipping that include:

- avoidance of most synthetic chemical inputs (e.g. fertilizer, pesticides, antibiotics, food additives, etc), genetically modified organisms, irradiation, and the use of sewage sludge;
- use of farmland that has been free from chemicals for a number of years (often, three or more);
- keeping detailed written production and sales records (audit trail);
- maintaining strict physical separation of organic products from non-certified products;
- undergoing periodic on-site inspections.

Organic certification addresses a growing worldwide demand for organic food. It is intended to assure quality and prevent fraud, and to promote commerce. For organic producers, certification identifies suppliers of products approved for use in certified operations. For consumers, "certified organic" serves as a product assurance, similar to "low fat", "100% whole wheat", or "no artificial preservatives".

Certification is essentially aimed at regulating and facilitating the sale of organic products to consumers. Individual certification bodies have their own service marks, which can act as branding to consumers; a certifier may promote the high consumer recognition value of its logo as a marketing advantage to producers.

5. Organic Food Labeling

In some countries, organic standards are formulated and overseen by the government. The United States, the European Union and Japan have comprehensive organic legislation, and the term "organic" may be used only by certified producers. Being able to put the word "organic" on a food product is a valuable marketing advantage in today's consumer market, but does not guarantee the product is legitimately organic.

In the US, federal organic legislation defines three levels of organics:

1. Labeled "100% organic" - products made entirely with certified organic ingredients and methods
2. "Organic" – word can be used for products with at least 95% organic ingredients
3. "Made with organic ingredients" – is a label for products containing a minimum of 70% organic ingredients.

In addition, products may also display the logo of the certification body that approved them. Products made with less than 70% organic ingredients can not advertise this information to consumers and can only mention this fact in the product's ingredient statement.

The following picture presents the logo of organic products in the United States:



*Picture 1.1.: The official seal found on USDA certified organic foods
Source: www.organic-world.net*

EU countries acquired comprehensive organic legislation with the implementation of the *EU-Eco-regulation 1992*. Supervision of certification bodies is handled on the national level.

In March 2002 the European Commission issued a European wide label for organic food however for most of the countries it was not able to replace existing national product labels. It was re-launched in 2009 with a design competition for a new logo to be used throughout the EU from July 2010. The new logo for European Union member states can be seen below:



Picture 1.2: The new official seal for EU organic products

Source: www.organic-world.net

In **France**, organic certification was introduced in 1985. It has established a green-white logo of "AB - agriculture biologique", seen in picture 1.3. The certification for the AB label fulfills the EU regulations for organic food.



Picture 1.3: Organic seal in France

Source: www.organic-world.net

In **Japan**, the Japanese Agricultural Standard (JAS) was fully implemented as law in April, 2001. This was revised in November 2005 and all JAS certifiers were required to be re-accredited by the Ministry of Agriculture.

The seal of JAS can be seen on the picture below:



Picture 1.4: JAS www.organic-world.net

Source: www.organic-world.net

In **Australia**, the Australian Quarantine and Inspection Service (AQIS) is the controlling body for organic certification because there are no domestic standards for organic produce within Australia. Currently the government only becomes involved with organic certification at export, meaning AQIS is the default certification agency. The largest certifier of organic products is Australian Certified Organic (logo seen in picture 2.5), which is a subsidiary of Biological Farmers Australia, the largest organic farmers' collective in the country.



Picture 1.5: Australian organic seal
Source: www.organic-world.net

6. Organic Food in Romania

In Romania, organic food and beverages account for a mere one percent of total food sales, according to Agriculture ministry. "Romanians were fascinated by McDonalds and Coca-Cola after the 1989 Revolution, but today people think more about their health and are starting slowly to come to organic food," said Marian Cioceanu, president of NGO Bio Romania.

The fact that the organic products have an outlet in Romania is proved by imports, which are doubled each year. In 2007, the market of organic products was estimated at 2.5 million EUR, by 1 million EUR more than in 2006. The table below shows the evolution of organic food production in Romania (in tons and hl):

As in the case of land areas and livestock, productions continuously increased in the investigated period. Although the production levels are much higher than those obtained 5-6 years ago, the domestic supply cannot totally meet the demand yet, which makes it possible for the imported organic products to penetrate the Romanian market.

The organic products are found both in the large store network and in the small specialized shops. At the beginning of the year 2007, only two shop networks were registered at MAPDR: the shop "BIOCOOP" (Sibiu) and the shop Naturalia (www.naturalia.ro), with units both in Bucharest and in the county Ilfov (Voluntari).

The sale on the domestic market is through the wholesale networks Metro, Selgros mainly by retail shops. The main stores that introduced organic products in their assortment of goods are: Carrefour, Cora, Gima, La Fourmi, Mega Image, Nic, Primavera, OK.



Picture 3.1: Organic products' logo
Source: www.organic-world.net

EU provides support for the promotion of organic products, through co-financing programs, with a 50% funding from the European Commission, 20% from professional organization, and 30% from the state budget, in conformity with the procedure of the Commission Regulation (EC) no. 1071/2005.

The governmental policy is elaborated and coordinated by Ministry of Agriculture, Forestry and Rural Development (MAPDR), under which the Office of the National Authority for Organic Products (ANPE) is operating, which is the authority in charge of the organic farming sector.

7. Official Control of Aliments

For assuring a consumer proper protection, by Government Order nr 1196/2002 from 12.14.2002, was approved the general Norms regarding food official control.

The Norms establish the general principles for execution the official control of aliments addressed to internal market trade or export, as well as aliments offered for free by economic agents, associations or foundations.

Official control of aliments represents the inspection made by authorities about aliments, additives, vitamins, mineral salts, as well as materials and objects who came in contact with aliments, for checking legal dispositions regarding risks prevention for public health, guarantying proper commercial transactions, protecting the consumer interests and informing them.

The control is made periodically (as a rule without warning) or any time when an illegality is suspected.

The control is done by using aim adequate ways and can target all cycle stages that include the manufacture, import, deposit, delivery and trade.

Executed control includes one or more of next operations:

- a) inspection;
- b) assay and examine samples, tests;
- c) control of personnel hygiene;
- d) documents examination;
- e) examine all the checking systems established by economic agent and obtained results.

During the inspection is checked the following:

- the way of use and the status of terrain, construction and installations, offices and other spaces, neighboring, ways of transport, machines and equipment used;
- raw materials, ingredients, auxiliary technological materials and other products used for food production and preparation;
- the half-finished products;
- the finished products;
- the materials and objects that came in contact with aliments;
- the products and procedures for cleaning and maintaining;
- the procedures used for aliments manufacturing and processing;
- the aliments labeling and presentation;
- the preserving ways.

Through Phare RO 9704 – 02 Project, EU supported Romania food industry companies regarding to products standards harmonization. This project includes activities grouped in two domains: 1. consultant and managerial training for alimentary products suppliers; 2. informing the business environment from alimentary sector regarding products quality.

For aligning to EU norms in products quality domain, Romania took over all ISO 9000 standards appeared by now at world level, being RS (Romanian standard) or EN (EU standard) encoded.

EU 93/43 Directive regarding alimentary products –hygienic requirements- refers to a quality management system implementation, conform standards series ISO 9000, in those organizations that

manufacture and process aliments. Also, the Directive refers to the possibility of using HACCP (*Hazard Analysis Critical Control Points*) as part of a quality management system.

8. Conclusions

The word organic is central to the certification (and organic food marketing) process, and this is also questioned by some. Where organic laws exist, producers cannot use the term legally without certification. To bypass this legal requirement for certification, various alternative certification approaches, using currently undefined terms like "authentic" and "natural" instead of "organic", are emerging. Consumers have to be informed about real organic products and laws must always be adopted in order to certify these products and to regulate their production processes.

As seen from the information presented in this paper, various labels serve the purpose of guiding consumers. They have to pay attention and to closely analyze the available organic products.

From the tables and chart it can be deduced the increasing trend of organic food. In the same time it must be taken into consideration that the certification holds drawbacks as well. It could be seen as a barrier to entry for small producers and an unnecessary bureaucracy.

Taking into consideration all the aspects of this topic the first and most important issue is to be aware of tricks and to know as well as possible the consumer protection regulations that might come in handy if bumping into a false organic product.

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