

T.C.
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**ANALYSIS OF THE DOMESTIC ORGANIC PRODUCT MARKET
IN TURKEY IN COMPARISON WITH THE
EUROPEAN UNION EXPERIENCE**
YÜKSEK LİSANS TEZİ

ZEYNEP ÖZBİLGE

İSTANBUL, 2006

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ABSTRACT

It is a fact that conventional agriculture whose distinctive property is the implementation of agricultural chemicals aims to increase economic productivity at the expense of creating serious side effects on health and environment. Therefore, the spread of this system in time, has led not only to the probing of its sustainability by making the side effects visible, but also to the ascent of organic agriculture. As a result, organic agriculture which began to spread worldwide in the 1970s develops rapidly since the 1990s.

The development of organic agriculture in the EU has also been similar. While the public recognition was realised in the 1990s, the official recognition could not come true before the 2000s. Especially the announcement of the EU in 2001 which put the main emphasis of the CAP on quality, rather than quantity reflects the important change in the EU' s point of view towards organic agriculture. Following this change, the member states have begun to support organic agriculture both by setting their known targets and taking the necessary precautions for further developing it.

On the other hand, the organic agriculture in Turkey is far away from receiving the deserved support and this situation leads Turkey to a position where Turkey is unable to use its high potential in organic agriculture. Regarding the fact that Turkey's ability to use this potential and develop its organic agriculture depends on the development of the domestic organic market, Turkey can only achieve it by the means of state support and the implementation of necessary precautions.

ÖZET

Ayırıcı özelliği zirai kimyasal uygulaması olan konvansiyonel tarımın sağlık ve çevre üzerinde ciddi yan etkiler yaratma pahasına ekonomik verimliliği arttırmayı amaçladığı bir gerçektir. Bu nedenle, bu sistemin zaman içerisinde yaygınlaşması yan etkileri görünür kılarak hem bu sistemin sürdürülebilirliğinin sorgulanmasına neden olmuş, hem de organik tarımın yükselişine zemin hazırlamıştır. Böylece 1970'lerde dünya çapında yayılmaya başlayan organik tarım 1990'lardan itibaren hızlı bir gelişme içerisine girmiştir.

Organik tarımın AB içindeki gelişimi de benzer şekilde olmuştur. Organik tarımın AB içerisinde daha geniş kitleler tarafından tanınması 1990'lı yıllarda olurken, resmi tanıma 2000'li yıllardan önce gerçekleşmemiştir. Özellikle 2001 yılında yapmış olduğu duyuru ile AB, Ortak Tarım Politikası'nın eski odak noktası olan miktarın yerini kaliteye bıraktığını açıklamıştır ve bu duyuru AB'nin organik tarıma olan bakış açısındaki önemli değişikliği yansıtmaktadır. Bu değişikliği takiben, AB'ye üye olan ülkeler hem kendi hedeflerini belirleyerek, hem de organik tarımı daha fazla geliştirmeye yönelik önlemleri alarak organik tarımı desteklemeye başlamışlardır.

Diğer taraftan Türkiye'deki organik tarım ise, hak ettiği desteği görmekten çok uzaktır ve bu durum Türkiye'nin organik tarımdaki yüksek potansiyelini kullanamaması ile sonuçlanmaktadır. Türkiye'nin bu potansiyelini kullanabilmesinin ve kendi organik tarımını geliştirebilmesinin Türkiye'deki organik tarım ürünleri iç pazarının gelişmesine bağlı olduğu gerçeği göz önüne alındığında, Türkiye bunu ancak devlet desteği ve gerekli önlemlerin uygulanması ile başarabilecektir.

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LIST OF ABBREVIATIONS

BSE	Bovine Spongiform Encephalopathy (mad cow disease)
CAP	Common Agricultural Policy
EFTA	European Free Trade Area
EU	European Union
GMO	Genetically Modified Organism
IFOAM	International Federation of Organic Agriculture Movements
UAA	Utilised Agricultural Area

AT	Austria
BE	Belgium
DK	Denmark
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	The Netherlands
PT	Portugal
UK	United Kingdom
NO	Norway

n.a	Not Available
n.d	No data available
ibid.	ibidem

INTRODUCTION

Being one of the oldest economic activities, agriculture still maintains its importance. However, the agriculture of today comprises a great change in the point of view towards it and this situation has mainly affected the agricultural priorities. As a consequence, the main target of agriculture has changed from feeding an increasing human population with regular food to feeding an increasing human population regularly by paying special attention to the non-creation of harmful side effects on environment, health, etc and organic agriculture came out.

Organic agriculture is characterized by the non-use of agricultural chemicals & GMOs and the use of local resources with “the producers’ knowledge of the complexities of biological systems to create a harmonious balance with, not dominion over nature”¹. In this regard, it can be stated that organic agriculture is completely sustainable and environment friendly. It is this reason which has caused the rapid expansion of organic agriculture. According to estimations of Organic Monitor, the worldwide market of organic products reached to 27 billion US dollars in 2004 with a growth rate of 8-10%.²

It is at this point that the crucial question appears: “What is the position of Turkey in organic agriculture?” Regarding Turkey’s advantages in terms of climate, soils, utilisable agricultural area and the agricultural production³ capacity, Turkey has a high potential in organic agriculture. However, Turkey is unable to utilize it at the

¹ David S. Conner (2002). Expressing Values in Agricultural Markets: An Economic Policy Perspective. *Agriculture and Human Values* (21), 27-35. May 26, 2005, Kluwer Academic Publishers
<http://www.springerlink.com>

² *Hurriyet Gazetesi*, October 6, 2005

³ According to a report prepared by the Association of Turkish Agriculturalists, the annual vegetable & fruit production of Turkey is between 43-45 million tonnes. In other words, the annual vegetable production of Turkey corresponds to 20 % of the annual vegetable production of EU 25, while the annual fruit production of Turkey corresponds to 40 % of the annual fruit production of EU 25. For further information, see “Sebze- Meyve Raporu 2006”
<http://www.tzd.org.tr>

moment. Since the precondition for Turkey of a fully developed organic agriculture is the existence of a fully developed domestic organic market, Turkey must take all the necessary measures to develop its domestic organic market which will naturally bring the improvement of organic agriculture in Turkey.

In this regard, the aim of this thesis is to put forward the situation of Turkish domestic organic market along with the development of Turkish organic agriculture and examine the European experience of the domestic organic market developments in order to draw conclusions for Turkey. Therefore, the thesis includes a brief comparison of the development of organic agriculture between the European Union and Turkey.

The thesis is mainly composed of three parts.

The first part gives general information about some definitions and the history of organic agriculture. Moreover, this introductory part explains the worldwide development of organic agriculture by citing examples from the leading countries and continents in organic production.

The second part which is totally about the European Union investigates the development of organic agriculture from the legal and economic perspectives. In addition to summarizing the policy developments and institutional support related to organic agriculture, this part also clarifies the different stages of domestic organic market development in specific EU members.

The final part completely focuses on Turkey by examining the development of organic agriculture in addition to the current situation of domestic organic market. Therefore, this part not only includes detailed information about the initiation of organic agriculture in Turkey, but also points out the development of Turkish domestic organic market by illustrating the production volumes, the institutional support and the findings of a field study which is designed to reveal the organic production and consumption constraints in Turkey.

Since this part comprehends a field study which includes a number of interviews conducted by both the control and certification bodies in Turkey and some of the Turkish organic firms, this part can be considered as a brief examination of the Turkish domestic organic market.

I. ORGANIC FARMING: A TYPE OF SUSTAINABLE FARMING SYSTEM

Organic farming is a health and environment friendly farming system which is mainly based on the non-use of:

- “Chemical fertilizers and pesticides (herbicides, fungicides, insecticides) in crop and fodder production;
- Chemical health care products, growth promoters and hormones in livestock production;
- Synthetic preservatives and irradiation in post-harvest handling;
- GMOs in all stages in the food chain”⁴

The aims of organic farming can be listed as:

- “To produce food of high nutritional quality in sufficient quantity;
- To maintain and increase the long term soil fertility
- To avoid all forms of pollution that may result from agricultural techniques;
- To work with natural systems rather than seeking to dominate them;
- To use as far as possible renewable resources in locally organised agricultural systems;
- To maintain the genetic diversity of the agricultural system and its surroundings; including the protection of plant and wildlife habitats;
- To allow agricultural producers an adequate return and satisfaction from their work including a safe working environment;
- To encourage and enhance biological cycles within the farming systems, involving micro-organisms, soil flora and fauna, plants and animals;
- To consider the wider social and ecological impact of the farming system;

⁴Nadia El-Hage, Scialabba & Caroline, Hattam (2002). Organic Agriculture, Environment and Food Security. FAO. December 25, 2004
http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/y4137e/Y4137E00.htm

-To give all livestock conditions of life that allow them to perform all aspects of their innate behaviour”⁵

Organic farming should never be thought as a primitive kind of agriculture which uses low or old technology.⁶ Instead, it uses high technology and intensive research together. All types of farmers can apply it in all farm types because it is “a highly adaptive set of principles applied to each situation.”⁷

In organic farming, the emphasis is always on the production stages, but not on the final product. Apart from other food products all organic products are controlled in all stages of production. Besides, all organic products are certified and certification provides a guarantee for the consumers.

Organic farming has a number of advantages. It protects the biodiversity because the application of chemicals is not allowed. All types of organic farming practices such as crop rotations, cover cropping, minimum tillage, polycultures and use of adapted genetic resources are designed to keep and increase the soil’s fertility.⁸ The increased soil activity also reduces the risk of erosion. The surveys showed that organic fields above 15 hectares had flora as six times more than conventional fields, including some endangered species.⁹

⁵ Raffaele, Zanolì (2004). Can the Organic Standards Continue to Meet Societal Demands? Presentation at the Organic Action Plan Hearing, Brussels. January 2, 2005, http://europa.eu.int/comm/agriculture/events/organic/index_en.htm

⁶ Peter Mann & Christian Castellanet (2000, April). Knowledge for a Sustainable Food System: Identifying and Providing for Education, Training, Knowledge- Sharing and Information Needs. Agriculture Dialogue Paper 4. January 18, 2005 http://csdngo.igc.org/agriculture/agr_dia_Paper_4.htm

⁷ Christoffel Den Biggelaar & Murari, Suvadi (2000). Farmers’ Definitions, Goals and Bottlenecks of Sustainable Agriculture in the North Central Region. Agriculture and Human Values 17, 347-358. May 26, 2005, Kluwer Academic Publishers. <http://www.springerlink.com>

⁸ Nadia, El-Hage, Scialabba & Douglas, Williamson (2004). The Scope of Organic Agriculture, Sustainable Forest Management and Ecoforestry in Protected Area Management. FAO. November 23, 2004 <http://www.fao.org/docrep/007/y5558e/y5558e00.htm>

⁹ Organic Agriculture: The Challenge of Sustaining Food Production While Enhancing Biodiversity. United Nations Thematic Group, Sub-Group Meeting on Wildlife, Bio-Diversity and Organic Agriculture (15-16 April 2003). July 27, 2004 http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/AD09E00.htm.

The non-application of pesticides is crucial for human health because pesticides get accumulated in the soil and in the water. “It is estimated that 70-90 per cent of ground applied pesticides and 25-50 per cent of aerially applied pesticides reach their target.”¹⁰ According to different surveys many pesticides lead to reproductive failure, sexual abnormalities and increase in birth defects, accompanied by nasty diseases; cancer, Alzheimer and Parkinson.¹¹

The non use of GMOs in organic farming is another advantage. GMOs also accumulate in the soil and water and there is not enough information on their long term effects.¹²

1.1. What is A Sustainable Farming System?

When a farming system is defined as sustainable, there needs to be the accumulation of five different capitals. “These are natural capital, social capital, human capital, physical capital and financial capital.”¹³

Natural capital is the goods that humans receive from the nature such as, wood, soil, wildlife, air, water etc. Social capital is the relationships between humans together with reciprocity. Human capital is people and their accumulation of health, education, nutrition, skills and knowledge. Physical capital is the infrastructure in a region. For

⁹ Nadia El-Hage, Scialabba & Douglas Williamson (Rome 2004). The Scope of Organic Agriculture, Sustainable Forest Management and Ecoforestry in Protected Area Management.FAO. November 23, 2004

<http://www.fao.org/docrep/007/y5558e/y5558e00.htm>

¹¹ Gwynne, Lyons (2000). Mixed Messages: Pesticides that Confuse Hormones. Pesticide Action Network UK. January 15, 2005

<http://www.pan-uk.org/briefing/mixedmes.pdf>

¹² Miguel, Altieri (2001,February) The Ecological Impacts of Agricultural Biotechnology. October 26, 2004

<http://www.actionbioscience.org/biotechnology>

¹³ Jules, Pretty (November 2000), Food Security Through Sustainable Agriculture .Paper for Novartis Foundation for Sustainable Development Symposium “Nutrition and Development”. January 7, 2005 http://www.novartisfoundation.com/pdf/Jules_pretty.pdf.

instance, houses, supplies of energy, different ways of transportation are its examples. Financial capital is credits, grants, subsidies etc.

In this connection, a farming system is sustainable when it especially increases the natural, human and social capitals, rather than consuming them.¹⁴

Sustainability is the distinct property between conventional and organic farming. The conventional food production is accepted as efficient and it is able to produce greater quantities of food with cheap prices. However, it has serious costs (externalities). It depletes natural capital by polluting waters and soils, also damaging the wildlife. Moreover, as the natural capital is harmed, the rural communities lose their farming jobs, cannot earn their living and need to migrate to big cities. This situation is known as the destruction of social capital.¹⁵

1.2. The Overview of the Development of Organic Agriculture

Organic agriculture was born in the 1920s in Germany by an anthropologist Rudolf Steiner. The theory developed by Steiner accepted human beings as part of a system and humans had to learn the ways of living with the environment in harmony.¹⁶ This theory was applied into agriculture by H.Pfeiffer and “biodynamic agriculture” came out.

In 1930s a politician named H.Muller in Switzerland initiated the organic movement.¹⁷

¹⁴ *ibid.*

¹⁵ *ibid.*

¹⁶ History of Organic Farming. (1999). July 2, 2005
<http://www.mhr-viandes.com/en/docu/docu/d000153.htm>

¹⁷ Sevgi Gencay Ineci (2002).Ekolojik Tarım, Turkiye ve Dnyadaki Durumu. TUBITAK Vizyon 2023: Bilim ve Teknoloji Stratejileri -Teknoloji Ongoru Projesi. Cevre ve Surdurulebilir Kalkınma Paneli
<http://vizyon2023.tubitak.gov.tr/teknolojiongorusu/paneller/cevresurdurulebilirkalkinma/raporlar/son/EK-2.pdf>

In 1940s in England Sir Albert Howard, also well known as the father of organic agriculture wrote his book, “An Agricultural Testament”. Sir Howard summarised his research on the traditional Indian farming practices in his book.¹⁸

Later there were the effects of the Second World War reflected on agriculture. Agriculture became more industrialized and large scale. The “Green Revolution”¹⁹ was initiated in 1944, in Mexico.

In 1950s organic agriculture was also noticed in France and started to be supported by doctors and consumers.

It was 1970s that organic agriculture started to spread worldwide. IFOAM was established in this period. As the negative effects of conventional agriculture were felt, the slogan became widespread. “Know your food, know your farmer.”²⁰

Both the 1980s and 1990s saw the rapid development of organic farming in line with the establishment of legislation and certification standards. Besides, the existence of genetically modified organisms and certain food scandals like the BSE and foot& mouth disease made consumers question the safety of food and initiated the rise of organic farming.

By the end of 2003, more than 26 million hectares of land is under organic management and organic products have a growing market.²¹

¹⁸ Organic Farming (n.a.).July 2, 2005

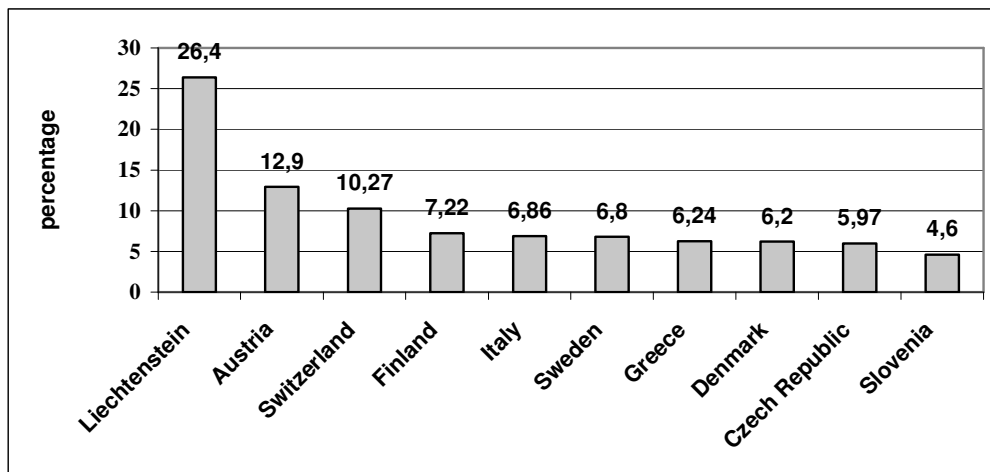
http://www.absoluteastronomy.com/encylopedia/o/or/organic_farming.htm

¹⁹ The Green Revolution is the introduction of fertilizers, pesticides and heavy mechanization in agriculture.

²⁰ Organic Farming .July 2, 2005

http://www.absoluteastronomy.com/encylopedia/o/or/organic_farming.htm

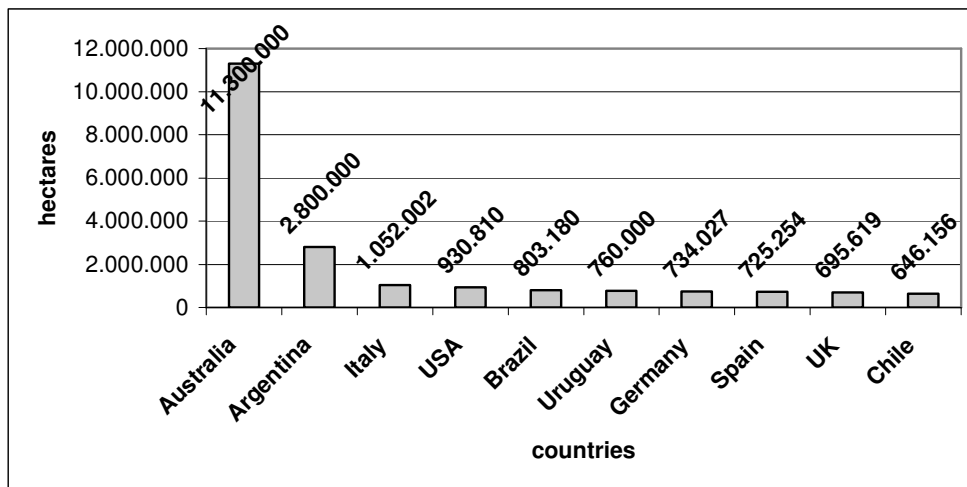
²¹ Helga, Willer & Youssefi Minou. The World of Organic Agriculture: Statistics and Emerging Trends 2005. IFOAM. July 2, 2005. <http://www.orgprints.org/429>



Source: SOEL Survey 2005

Figure 1.1. Percentage of Land under Organic Management “Top 10 Countries Worldwide” (By the End of 2003)

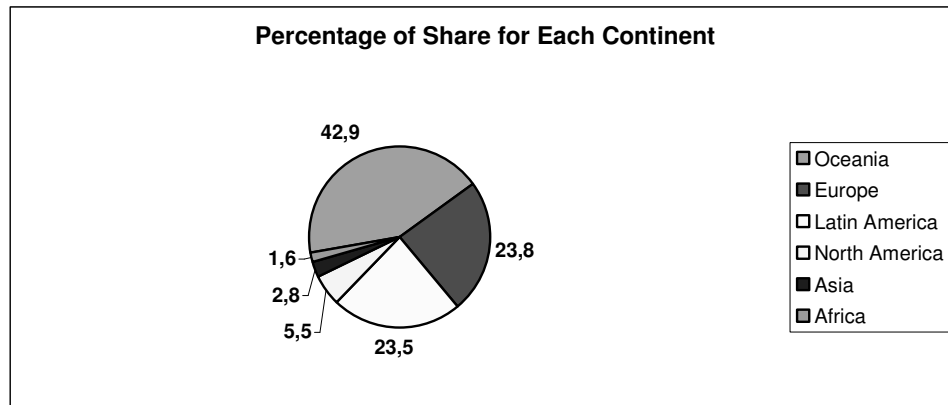
Looking at the proportion of organic land to total agricultural area, Liechtenstein is the leader of “top ten” with 26,40 % and is followed by Austria with 12,90 %. The difference between Liechtenstein and Austria is two fold. After Austria comes Switzerland with 10,27 %. The country that has the final place in this ranking is Slovenia with 4,60 %.



Source: SOEL Survey 2005

Figure 1.2. Land Area under Organic Management “Top 10 Countries Worldwide”
(By the End of 2003)

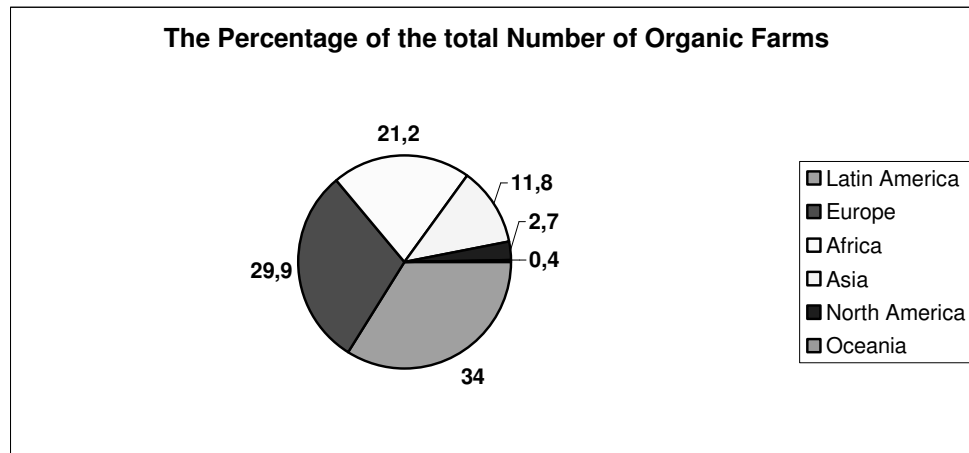
In terms of organically managed land area, Australia is clearly ahead of other countries with 11.300.000 hectares. The second country in the ranking is Argentina with 2.800.000 hectares. The difference in hectares of organic land area between Australia and Argentina is worth to notice because it is nearly four fold. However, most of this land in these countries is grazing land. The third place belongs to Italy. Italy is the country that has the greatest amount of organically managed land area in the EU. All the other countries in this ranking are either countries from the America continent, such as Brazil and Chile or other EU members, like Germany and Spain.



Source: SOEL Survey 2005

Figure 1.3. Total Area under Organic Management: Share for Each Continent
(By the End of 2003)

The leading continent under organically managed area is Oceania by 42,9 %, followed by Europe 23,8 % and then by Latin America, 23,5 %. The share of North America is 5,5 % while the shares of Asia and Africa are 2,8 % and 1,6 % respectively. The shares of North America, Asia and Africa are quite small when compared to the shares of the three leading continents.



Source: SOEL Survey 2005

Figure 1.4. Total Number of Organic Farms: Share for Each Continent
(By the End 2003)

Latin America has the highest share for the total number of organic farms in terms of percentage by 34 %. The second continent is Europe by 29,9 %, followed by Africa 21,2 % and Asia 11,8 %. North America has a share of 2,7 % and the share of Oceania is only 0,4 %.

II. ORGANIC AGRICULTURE IN THE EUROPEAN UNION

It is possible to mention that Europe has always had an important place in the history of organic agriculture. Not only the birth, but also the initiation and development of organic agriculture all came out in various European countries at different times.

However, the real climb of organic agriculture in the EU was in the 1990s. The 1990s was a period of serious food scandals, like the BSE disease, which certainly contributed to the wider recognition and development of organic agriculture in the EU.

In today's European Union, uniformity in production and consumption rates does not exist. Despite this, Europe is the second continent in percentage of share (according to data by the end of 2003). In addition, Italy, Germany, Spain and UK are four EU members, which are in the ranking of "Top Ten" countries having the greatest land area under organic management. In other words, the EU continues to be an important actor in organic agriculture.

2.1. Policy Developments for Organic Agriculture in the EU

Organic agriculture was defined as a target of the CAP for the first time in 1999. One year later, Agenda 2000 announced a change in the point of view for the future of European Union's agriculture. The EU agriculture had to be sustainable and competitive at the same time, guaranteeing a stable income for the farmers.

In 2001, during the Goteborg European Council it was decided that the CAP should have focused on “quality, rather than quantity by encouraging organic farming and other environmentally friendly farming methods”.²²

In the year 2003, there was another reform of the CAP which is known as the Mid-Term Review of CAP. Food quality and safety, animal welfare, the competitiveness of the European Union’s agriculture together with the protection of environment were the main priorities of Mid-Term Review.²³ To achieve the protection of the environment, the European Commission proposed different methods, such as the cross compliance and dynamic modulation.

In the former method, compliance with environmental standards is a must of receiving direct payments or financial aid.²⁴ By this method, the farms under the direct payments will be penalized if they do not consider environmental standards important.

The dynamic modulation method is the reduction of a certain percentage of direct payments (up to 20%)²⁵. These revenues can be used for the rural development.

Finally the European Action Plan for Organic Farming was accepted in 2004. In fact, this action plan did neither announce targets, nor new resources’ allocation for organic farming. However, it emphasized the organic farming, health, quality, safety relationships and the public benefits brought by the management of land organically.²⁶

²² Commission of the European Communities. European Action Plan for Organic Food and Farming. Commission Staff Working Document.Brussels, 2004. December 16, 2004
http://europa.eu.int/comm/agriculture/qual/organic/plan/workdoc_en.pdf

²³ Mid-Term Review of the Common Agricultural Policy (n.a.). December 11, 2004
<http://europa.eu.int/scadplus/leg/en/lvb/11062.htm>

²⁴ Verschuur, G.W.& E.A.P. Van Well (2001).Stimulating Organic Farming in the EU with Economic and Fiscal Instruments. Centre for Agriculture and Environment. June 19, 2004
<http://www.eeb.org/publication/2002/study-organic-farming-503.pdf>

²⁵ *ibid.*

²⁶ Matthias, Stolze (2005). The Current Agri- Policy Context: The European Action Plan for Organic Farming and the Current CAP Reform, Organic Farming in Europe 2005: Market, Production, Policy & Research. July 17, 2005
<http://www.fibl.org>English>news>

2.1.1. The European Union Regulations of Organic Agriculture

The basic legal framework in the EU is the Council Regulation No 2092/91 in 1991. This regulation brings the standards of organic production; such as the products which can be used for fertilization and for fighting with diseases. It also introduces a system guaranteeing the organic products imported from third countries are produced and inspected according to the rules which are equivalent to the rules of the EU. In addition, this system also establishes the inspection and supervision systems. The operators producing, preparing or importing organic products must inform the responsible authorities that are chosen by the member states about their activities.²⁷

However, Council Regulation No 2092/91 included only plant production. Therefore, in 1999 Council Regulation No 1804/99 entered into force. This new regulation brought the standards for the production and labelling of livestock. The use of GMOs and products containing GMOs in organic production was prohibited by Regulation No 1804/99.²⁸

These regulations were followed by the introduction of the EU logo in 2000. Nonetheless, the use of this logo is not prevalent because each member state used to apply its own organic standards before EU regulations were introduced. There were variations among national organic standards.

Many member states still prefer to use their private or national logos because of the variations in standards. Besides, it is difficult to market an organic product in a different member state if it only carries the national logo of where it is produced, but not where it will be sold.²⁹

²⁷ Organically Grown Agricultural Products and Foodstuffs (2003). December 11, 2004
<http://europa.eu.int/scadplus/leg/en/lvb/2118.htm>

²⁸ *ibid*

²⁹ Commission of the European Communities. European Action Plan for Organic Food and Farming. Commission Staff Working Document.Brussels, 2004. December 16, 2004
http://europa.eu.int/comm/agriculture/qual/organic/plan/workdoc_en.pdf

a. Imports of Organic Products into the EU³⁰

The imports of organic products from third countries can be realized by three different methods. The first method is the “third country” list which means the countries in this list can export their organic products without any further requirements. This list includes eight³¹ countries at the moment and nine³² more countries have applied to appear on it.

The second method will expire on 31 December 2005. In this method it is the importer who has to supply the necessary documentation showing that the production and certification of these products are consistent with the rules in the EU.

The third method is “certification of import”. This certification must be provided by an inspection body in the exporting country which is approved by the EU.

2.1.2. The Institutional Support for Organic Agriculture

Organic agriculture is emphasized and supported mainly under the rural development. The Council Regulation No 1257/99 in 1999 fulfils support for rural development. This regulation has new measures like agri- environment, food quality, less favoured areas, in addition to measures to modernize agricultural holdings.

Farmers using environmentally-friendly agricultural production methods or methods to protect animal welfare for at least five years are subject to support under agri-environment measures. The aid is calculated by the additional costs of these

³⁰ Els, Wynen.(2002).What are the Key Issues Faced by Organic Producers? In: Organic Agriculture-Sustainability, Markets and Policies. Proceedings of an OECD Workshop, 23-26 September 2002. November 24, 2004

<http://orgprints.org/3116>

³¹ Argentina, Australia, Costa Rica, Czech Republic, Hungary, Israel, New Zealand, Switzerland

³² Chile, Dominican Republic, Guatemala, India, Japan, Tunisia, Turkey, the USA

farmers, the income that is lost and the necessary amount to encourage farmers to use environmentally-friendly farming techniques.³³

Moreover, farmers who contribute to food quality can also receive financial aid. However, this type of support cannot be more than 3000 Euros per farm annually and cannot be given for more than five years. The support is decided by the amount of fixed costs. The producer groups which have activities and campaigns to promote food quality and inform consumers can also receive support.

Besides, farmers living in environmentally sensitive areas and applying environmentally-friendly farming techniques can be supported up to 250 Euros per hectare of farm.³⁴

All these measures are financed by EAGGF Guarantee or Guidance Section.

Table 2.1
Allocation of Funds between CAP Expenditures and Rural Development Measures
For The Period 2000 and 2006

Years	(Euro Million- 1999 Prices)	CAP Expenditure (excluding rural development and accompanying measures)	Rural Development and Accompanying Measures
2000	40 920	36 620	4300
2001	42 800	38 480	4320
2002	43 900	39 570	4330
2003	43 770	39 430	4340
2004	42 760	39 430	4350
2005	41 930	38 410	4360
2006	41 660	37 570	4370

Source: Reform of the CAP, <http://europa.eu.int/scadplus/leg/en/lvb/60002.htm>

³³ Support for Rural Development (2004).December 11, 2004 ; <http://europa.eu.int/scadplus/leg/en/lvb/60026.htm>

³⁴ *ibid.*

As table 2.1. shows, the total amount of money that will be spent for rural development and accompanying measures increases from 4300 million Euros to 4370 million Euros between the years 2000 and 2006.

On the other hand, the amount financial aid paid to organic agriculture in the EU differs among the member states and the product groups as illustrated in the following tables.

Table 2.2 reveals the financial support paid per hectare to the organic arable land and grassland in 2001. The table examines the payments in two categories, the payments given for the conversion to and the maintenance of organic agriculture.

Table 2.2
The Financial Support Paid to Organic Arable Land and Grassland in 2001

Crop Area	Arable Farmland		Grassland	
Country	Support for Conversion to Organic Farming in €/ha	Support for Maintenance of Organic Farming in €/ha	Support for Conversion to Organic Farming in €/ha	Support for Maintenance of Organic Farming in €/ha
EU				
Austria	327	327	251	251
Belgium	301	223	297	174
Germany	185	160	177	153
Denmark	60	81	81	81
Spain	92 ¹	55 ¹	128	77
Finland	147	103	147	103
France	244 ²	-	107 ²	-
Greece	183	183	135	135
Ireland	181	91	181	91
Italy	170	150	170	150
Luxembourg	200 ³	150 ⁴	200 ³	150 ⁴
Netherlands	147	136	136	136
Portugal	135	135	135	135
Sweden	140	140	54 ⁵	54
UK	143	-	117	-
EU	177	129	154	113

Table 2.2 Continues

Accession Countries				
Czech Republic	59	59	29	29
Slovenia	370	370	138	138
¹ Without irrigation ² This is an average of the support paid during the first five years of conversion. After that no support has been paid for maintenance of organic farming. ³ This is paid up to 70 hectares. Over 70 hectares only 150 €/ha are paid ⁴ This is paid up to 70 hectares. Over 70 hectares only 75 €/ha are paid ⁵ Additional payments for animals per hectare				

Source: The European Market for Organic Food: Revised and Updated Analysis, Omiard Volume 5

According to the table, the difference in the financial support paid to arable farmland and grassland is seen. In general, the payments for the conversion to organic arable land are higher than the ones for the conversion to organic grassland because the conversion to organic arable land is much more difficult.

Comparing the organic cultivation of arable land with that of conventional, more information is needed to improve the soil fertility in organic cultivation of arable land and there is usually a decline around 30% in the total yields on organic arable land.³⁵

Continuing with the table, most of the European countries paid higher support to the conversion of arable land, with the exception of Denmark and Spain. In both of these countries, the payments for the conversion of grassland were higher.

Being the country with the least payments for the arable farmland conversion, Denmark had a similar situation also in the conversion of grassland. Following Sweden which made the lowest financial contribution to the conversion of grassland, Denmark was the second country in this category.

In this connection, the different Danish organic agricultural policy was the underlying reason of the low support for organic agriculture in Denmark. The organic subsidies were not totally paid only to organic production. Instead, the total amount of

³⁵Ulrich, Hamm& Friederike, Gronefeld(2004).The European Market for Organic Food: Revised and Updated Analysis, OMIARD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business

subsidies was divided into three parts and each part was paid to the production, advice-research and the marketing areas of organic agriculture.³⁶

In the meantime, there were even countries which did not give any financial support after the first five years. These countries were France and the UK.

With respect to the accession countries, the situation in the Czech Republic was totally different than the situation in Slovenia. While the comparatively low subsidies given both to arable farmland and grassland in the Czech Republic were a result of the willingness to keep the supply and demand of organic products in balance, the comparatively high subsidies given in Slovenia were an outcome of the willingness to increase organic production.³⁷

The following table of 2.3 demonstrates the subsidies which were paid to support the production of organic vegetables and fruit in 2001 in the EU countries.

³⁶Ulrich, Hamm& Friederike, Gronefeld(2004).The European Market for Organic Food: Revised and Updated Analysis, OMIaRD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business

³⁷ *ibid.*

Table 2.3
The Financial Support Paid to Organic Vegetable and Fruit Production in 2001

Crop Area	Vegetable Area		Fruit Area	
	Support for Conversion to Organic Farming in €/ha	Support for Maintenance of Organic Farming in €/ha	Support for Conversion to Organic Farming in €/ha	Support for Maintenance of Organic Farming in €/ha
EU				
Austria	509	509	363	363
Belgium	930	744	842	744
Germany	414	331	655	586
Denmark	-	-	-	-
Spain	258 ¹	155 ¹	233 ²	145 ²
Finland	-	-	-	-
France	305 ³	-	665 ³	-
Greece	302	302	691	691
Ireland	242 ⁴	121 ⁴	242 ⁴	121 ⁴
Italy	600	540	780	690
Luxembourg	400	300	550	450
Netherlands	737	136	885	136
Portugal	294	294	287	287
Sweden	540	540	811	811
UK	-	-	-	-
EU	369	265	467	335
Accession Countries				
Czech Republic	103	103	103	103
Slovenia	515	515	392	392
¹ Outdoor vegetables ² Without irrigation ³ This is an average of the support paid during the first five years of conversion. After that no support has been paid for maintenance of organic farming ⁴ only up to 3 hectares				

Source: The European Market for Organic Food: Revised and Updated Analysis, Omiard Volume 5

Regarding the financial support paid for organic vegetable production, it was Belgium that provided the highest support and it was followed by Netherlands, Italy and

Sweden respectively. On the other hand, the least contribution in this category was supplied by Ireland.

It was also interesting to notice that the financial support paid for the production of vegetables was lower than the EU average in Spain, Greece and Portugal although these countries all have favourable climates to grow many products.

Continuing with the financial support given to organic fruit production, the highest level of subsidies was paid by the Netherlands while the lowest level was paid by Spain. Besides, Belgium, Sweden and Italy were the other countries providing the highest support in this category after the Netherlands.

Moreover, the examination of the support given organic vegetable and fruit production together, gives some interesting information. For instance, Denmark, Finland and the UK paid no subsidies for the conversion of neither vegetable nor fruit production. In addition, France was the unique country which did not give any subsidies for the maintenance of organic vegetable and fruit production.

Meanwhile, the table also puts forward the difference in payment rates between the organic cultivations of vegetable-fruit and arable land-grassland. Since the organic production of vegetables and fruit requires more labour and capital than the cultivation of grassland and arable land, more subsidies per hectare were paid for organic vegetable and fruit cultivation in the EU.³⁸

³⁸ Ulrich, Hamm & Friederike, Gronefeld (2004). The European Market for Organic Food: Revised and Updated Analysis, OMIARD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business

2.2. Economic Situation of Organic Agriculture in the EU

Table 2.4

Total Hectares of Organically Managed Land in the European Union 25

Year End	EU 15	New Members	EU 25
1990	292.599	19.170	311.769
1991	412.630	36.520	449.150
1992	553.473	41.301	594.774
1993	835.338	43.429	878.767
1994	1.065.981	47.477	1.113.458
1995¹	1.318.476	57.049	1.375.525
1996¹	1.593.178	67.601	1.660.779
1997¹	2.036.311	81.103	2.117.414
1998	2.287.639 ³	163.360	2.450.999
1999	3.302.811 ³	216.927	3.519.738
2000	3.823.306 ³	320.264	4.143.570
2001¹	4.239.318	445.882	4.685.200
2002	4.886.979 ³	510.034	5.397.013
2003	5.094.674 ³	608.846 ²	5.703.520

¹The data of EU 15 and EU 25 for the years 1995, 1996, 1997 and 2001 does not include the data of Sweden.
²The data of new members for 2003 is taken from The World of Organic Agriculture: Statistics and Emerging Trends 2005, IFOAM
³The data of EU 15 for 1998, 1999, 2000, 2002 and 2003 is taken from Eurostat, Agriculture and Fisheries, Statistics in Focus 31/2005

Source: Certified and Policy Supported Organic and In-Conversion Land in Europe.
<http://www.organic.aber.ac.uk/statistics/euroarea03.htm>

Examining the total organic land area in the EU 25, the continuous increase is seen. 311.769 hectares of organic land in 1990 has reached 5.703.520 hectares by the end of 2003. Considering this increase, it is possible to divide the EU into two groups of members, the former group of 15, older member states and the latter group of 10, new members.³⁹

³⁹ See Appendix Tables 1.4 and 1.5 for details.

Dealing with the former group, Germany was the leading country in terms of organically managed land between 1990 and 1996. However, by the beginning of 1997 Germany lost its leadership and Italy took over it.

A similar situation occurred in France, too. Having been the second country after Germany during the period of 1990 and 1992, France could not keep this place and had to leave it respectively to Austria and Italy.

On the other hand, countries like Italy, Austria and Spain began to experience a boost in organically managed area. The boost in Austria was in 1993 when the total hectares of organic land increased 55 fold, from 2464 to 135.982 hectares. This boost helped Austria to be the second country with the highest number of organic hectares until 1996. However after this year, Austria slowly started to move towards the lower steps of the ranking.

Meanwhile, the total organic land in Italy also continued to increase although this increase was not as sharp as the one in Austria. The increase in Italy has always been smaller but steady. The total hectares of organic land in Italy increased 2,9 fold in 1993. Since 1997, Italy continues to be the country with the highest number of organically managed land in the EU. However, the total hectares of organic land in Italy have started to decrease after 2001.

Spain was also one of the countries experiencing a boost. The total hectares of organically managed land increased 4,3 fold in 1996 and carried Spain to the fifth place in the ranking. After 1996, Spain continued to go up and became the third country in ranking by 2003.

On the other hand, the UK is a country example of moving up and down in the ranking. The biggest increase in this country occurred in 1999 and it was 5,4 fold. This increase made the UK climb to the second place in the ranking until 2003. However by this year, the UK has returned to the fourth place of the ranking.

Continuing with the latter group of new members of the EU, the competition for leadership was between Slovakia and the Czech Republic.

Having been the leading country with 15.140 hectares of organic land in 1990, Slovakia left its place to the Czech Republic one year later, until 1995. During the

period of 1995-1997, Slovakia was once more the leading country of ten, new members. However, this situation did not continue more and the Czech Republic became the country with the highest number of organic hectares among ten, new members.

The change in this ranking among new members appeared not only in Slovakia and the Czech Republic, but also in Hungary. In 2001, Hungary ascended one step further in ranking and since that year, it has the highest number of organically managed land after the Czech Republic.

In addition to these, each new member of the EU has shown various rates of development at different times. The biggest increase in Estonia which occurred in 1992 was only 4,7 fold while the biggest increase in Slovenia was 6 fold and it occurred in 1999.

By 2003, the leading country among this group is the Czech Republic and Hungary, Slovakia, Poland, Estonia, Latvia, Lithuania and Slovenia respectively follow it.

Table 2.5
The Total Number of Organic Producers in the European Union 15

	1998	2003	The Rate of Change as Percentage (%)
Italy	38.616	44.039	14
Austria	20.316	19.056	-6
Spain	7392	17.028	131
Germany	9194	16.476	79
France	6233	12.202	96
Greece	4183	5964 ¹	43
Finland	4984	5074	2
UK	1462	4017	175
Sweden	3027	3562	18
Denmark	2228	3510	58
Netherlands	835	1448	73
Ireland	762	889	17
Portugal	542	1145	111
Belgium	480	722 ¹	50
Luxembourg	26	59	127
SUM	100.280	135.191	
¹ The data of 2002			

Source: Organic Farming in Europe. Eurostat, Statistics in Focus, 31/2005

Table 2.5 demonstrates the development in the number of organic producers at EU 15 level between 1998 and 2003. With respect to the table, the total number of organic producers has increased from 100.280 in 1998 to 135.191 in 2003. Besides, this increase was not only limited to the EU level, but also occurred at the country level. However, the only exception of this situation was Austria where the number of organic producers has decreased 6 %.

According to 2003 data, the country which has the highest number of organic producers is Italy. The share of Italy in the total organic producers of the EU is 33 %. Other countries following Italy are Austria, Spain, Germany and France with each country having a share of 14 %, 13 %, 12 % and 9% respectively.

While Italy is on one side of the picture with the highest organic producer number, Luxembourg is on the reverse side with the smallest number of organic

producers. The share of Luxembourg in the total number of organic producers is only 0,04 %.

On the other hand, Luxembourg is one of the four countries that have made a boost in the number of organic producers. The leader of this four- country group is the UK with 175% and its followers are Spain with 131%, Luxembourg with 127% and Portugal with 111 %.

The country with the lowest increase is Finland with only 2 %.

Table 2.6
Total Organic Land as a Percentage of the Total Utilised Agricultural Area in 2003

Countries	The Total Organic Land in 2003 (in hectares)	The Total U.A.A in 2003 (in hectares)¹	The Proportion of Total Organic Land in the Total U.A.A (%)³
Austria²	326.703	2.888.035	11,31
Italy	1.052.002	13.115.810	8,02
Sweden	225.785	3.126.910	7,22
Finland	159.987	2.244.700	7,13
Greece²	(244.455) ⁴	3.583.190	6,82
Denmark	161.381	2.658.210	6,07
Germany	(734.027) ⁴	16.981.750	4,32
The UK	695.619	16.105.810	4,32
Portugal²	120.926	3.863.090	3,13
Spain	725.254	25.175.260	2,88
Luxembourg	(3002) ⁴	128.160	2,34
Netherlands	41.866	2.007.250	2,09
France	550.990	27.795.240	1,98
Belgium	(24.163) ⁴	1.394.400	1,73
Ireland	28.514	4.371.710	0,65

¹The Utilised Agricultural Area is the total area taken up by arable land, permanent grassland, permanent crops and kitchen gardens.
²The data of Austria, Greece and Portugal for the total U.A.A belongs to the year 2000.
³Own calculations
⁴Numbers in parentheses are estimations.

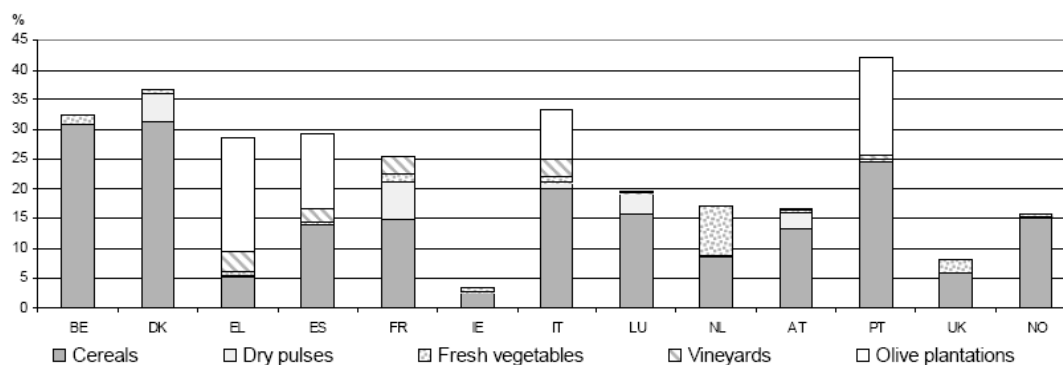
Source: Organic Farming in Europe. Eurostat, Statistics in Focus, 31/2005

By bringing the total organic land and the total utilised agricultural area together, Table 2.6 gives information about the development of organic agriculture. The data included in the table belongs to the year 2003, one year before the eastern enlargement of the EU. Therefore, the table only covers the data of EU 15.

According to the table, the two countries with the highest contribution to the total utilised agricultural area are France with 27.795.240 hectares and Spain with 25.175.260 hectares. However, their shares of total organic land in the total U.A.A are small.

On the other hand, the situation in Austria is totally vice versa since Austria is the country having the highest share of 11,31% with a small contribution in the total U.A.A. The country following Austria, whose situation is an exception, is Italy. Italy not only has the highest hectares of organic land in the whole EU, but also is one of the countries with a high contribution to the total U.A.A.

The table also points out to the countries with a small share of the total organic land inside the total U.A.A. The country which has the smallest percentage is Ireland.



*: The data for Austria, Belgium, Greece and Luxembourg belong to 2002.

** : The sum of percentages does not reach 100 because fodder grass and other irrelevant crops are not shown in the table.

Source: Organic Farming in Europe. Eurostat, Statistics in Focus, 31/2005

Figure 2.1. The Shares of Main Organic Food Crops Other Than Fodder Grass inside the Total Organic Area in 2003

Figure 2.1 summarizes the shares of main organic food crops inside the total organic area in five different categories which are cereals, dry pulses, fresh vegetables, vineyards and olive plantations.

With respect to the table, cereals are the most dominant organic product group which are grown in many of the member states. However, the most productive countries in this category are Belgium, Denmark, Portugal and Italy.

The situation of dry pulses and fresh vegetables categories is also similar. Dry pulses are mainly grown in France, Denmark, Luxembourg and Austria, while the main producer of fresh vegetables is the Netherlands.

Further examining the table, there are the categories of vineyards and olive plantations. The countries having vineyards are Greece, France, Italy and Spain. In the meantime, the same countries, only except for France also have olive groves. However, the leadership of this category belongs to another country. It is Portugal that has the highest number of olive plantations.

Therefore, there are two findings to figure out from the table, the first of which is the difference between the southern and northern members of the EU. While the northern countries are dominated by the growth of cereals, fresh vegetables and pulses, the southern members have the highest number of vineyards and olive plantations.

Besides, the shares of main organic crops inside the total organic area for four member states exceed 30%. These countries are Portugal with main food crops referring to 42 % of its organic area, Denmark with 37 %, Italy with 33 % and Belgium with 33 %.⁴⁰

⁴⁰Elisabeth, Rohner- Thielen. (2005). Organic Farming in Europe. Eurostat, Statistics in Focus, Agriculture and Fisheries, 31/2005. November 27, 2005.
http://epp.eurostat.cec.eu.int/cache/ITY_OFFPUB/KS-NN-05-031/EN/KS-NN-05-031-EN.PDF

Table 2.7
The Shares of Organic Land inside the Total Land for Selected Crops and Countries in 2003

		DK	EL	ES	FR	IT	LU	NL	AT	PT	UK
Cereals	Total Crop Area(ha)	1.484.585	1.302.560	6.626.875	8.949.510	4.146.964	29.368	225.720	814.098	450.968	3.058.741
	Organic Area(ha)	50.432	4.043	100.860	82.087	209.376	449	3.636	39.590	29.864	42.095
	Share of Organic Area %	3,4	0,3	1,5	0,9	5,0	1,5	1,6	4,9	6,6	1,4
Dry Pulses	Total Crop Area(ha)	31.397	25.550	568.404	468.357	70.528	668	5.737	46.087	22.963	235.051
	Organic Area(ha)	7.447	276	-	34.802	11.662	92	43	7.896	-	-
	Share of Organic Area %	23,7	1,1	-	7,4	16,5	13,8	0,7	17,1	-	-
Fresh Vegetables	Total Crop Area(ha)	7.638	129.955	410.904 ¹	285.765	495.102	93	82.027	14.321	45.741	115.595
	Organic Area(ha)	1.059	514	3.802	7.180	11.354	10	3.481	892	469	14.326
	Share of Organic Area %	13,9	0,4	0,9	2,5	2,3	10,8	4,2	6,2	1,0	12,4

Note: AT, EL, LU 2002; ¹ 2002; Dry pulses include beans, peas, lentils, vetches and lupines.

Source: Organic Farming in Europe. Eurostat, Statistics in Focus, 31/2005

Table 2.7 demonstrates the shares of organic land for the production of cereals, dry pulses and fresh vegetables inside the total land. Regarding the cereals group, the highest shares are found in Portugal, Italy and Austria with 6,6 %, 5 %, 4,9 % respectively.

Going through the dry pulses, the highest share belongs to Denmark with 23,7% of total crop area dedicated to organic dry pulses. According to available data, Denmark is accompanied by Austria with 17,1 %, Italy with 16,5% and Luxembourg with 13,8 %.

As regards the fresh vegetables, Denmark has once more the highest share with 13,9 % and is closely followed by the UK with 12,4 % and Luxembourg with 10,8%. On the other hand, Greece and Spain have the smallest shares in this category which are all less than 1 %.

Table 2.8
The Volume of Organic Animal Production in the European Union by 2001

Country	Milk ¹	Beef (including veal) ¹	Sheep and Goat Meat ¹	Pork ¹	Poultry ¹	Eggs ²
EU						
Austria	417.773	21.753	2.000	2.550	500	48
Belgium	30.000	3.000	73	1.090	790	17
Germany	410.000	45.000	3.000	17.000	7.000	230
Denmark	474.737	7.500	120	4.800	3.382	106
Spain	3.125	14.000	6.000	n.a.	189	2
Finland	24.889	714	110	920	50	25
France	218.000	32.500	1.900	5.300	8.288	354
Greece	9.300	649	1.352	169	67	1
Ireland	3.196	5.088	305	18	n.a	2
Italy	190.000	13.640	0	2.652	895	84
Luxembourg	1.425	71	9	67	21	1
Netherlands	108.500	975	280	2.125	1.000	40
Portugal	1.500	300	44	199	9	0
Sweden	130.526	3.912	183	1.646	138	47
UK	218.000	4.660	2.000	3.500	3.000	150
Sum EU	2.240.981	153.762	17.376	42.036	25.329	1.107
Accession Countries						
Czech Republic	1.296	1.066	20	1.150	50	0
Slovenia	6.000	1.525	27	22	1	1

¹Milk, beef, sheep& goat meat, pork and poultry are in tonnes.

²Eggs are in millions'

Source: The European Market for Organic Food: Revised and Updated Analysis,
Omiard Volume 5

Table 2.8 illustrates the volume of organic animal production in the EU in 2001. According to the table, there are six main categories of animal products which are milk, beef, sheep and goat meat, pork, poultry and eggs.

With respect to milk production, Denmark was the leading country and its followers were Austria and Germany. The smallest production of milk in 2001 belonged to the Czech Republic.

Continuing with beef production, Germany produced the highest volume and it was followed by France. The lowest production of beef in 2001 belonged to Luxembourg.

In the meantime, the main producer of sheep and goat meat was Spain.

Evaluating the categories of milk, beef, sheep and goat meat together, there is an important point to notice. The high production volumes of these products are connected to the existence of organic grasslands⁴¹. Therefore, the countries which have a higher percentage of organic grassland are usually able to produce higher volumes of these products.

On the other hand, the highest volume of pork was produced by Germany with 17.000 tonnes. The other two countries accompanying Germany in this category were France and Denmark, with a 3,2 fold difference existing between Germany and France.

The final two categories whose dominant producers were France and Germany are poultry and eggs. While these two countries provided the highest volume in both categories, Slovenia provide the lowest production of poultry and the production of eggs did not even exist in Portugal and the Czech Republic.

⁴¹ Ulrich, Hamm& Friederike, Gronefeld(2004).The European Market for Organic Food: Revised and Updated Analysis, OMIaRD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business.

Table 2.9
The Overview of Some European Markets for Organic Food and Beverages

Markets	Retail Sales 2003 (million Euros)	% of Total Food Sales 2003	Annual Growth % 2003-2005
Germany	2800-3100	1,7-2,2	5-10
U.K	1550-1750	1,5-2,0	10-15
Italy	1250-1400	1,0-1,5	5-15
France	1200-1300	1,0-1,5	5-10
Switzerland	725-775	3,2-3,7	5-15
Netherlands	425-475	1,0-1,5	5-10
Sweden	350-400	1,5-2,0	10-15
Denmark	325-375	2,2-2,7	0-5
Austria	325-375	2,0-2,5	5-10
Belgium	200-250	1,0-1,5	5-10
Ireland	40-50	<0,5	10-20
Other Europe¹	750-800	-	-
Total Europe	10.000-11.000	-	-

¹ Finland, Greece, Portugal, Spain, Norway, Poland, Hungary, the Czech Republic, Estonia, Latvia, Lithuania

Source: International Trade Centre. Overview World Markets for Organic Food and Beverages

Among the European organic markets Germany has the highest retail sales approximately around three million Euros. In the category of retail sales, only Ireland has the smallest number between 40 and 50 million Euros.

In terms of the share of organic food in total food sales, Switzerland and Denmark are ahead of others, although Switzerland is not in the European Union. Ireland has once again the lowest share in this group.

Looking at the expected annual growth rates between 2003 and 2005, the rates are between 0-20 %. The lowest growth is expected in Denmark, while the highest is expected in Ireland.

Table 2.10
Market Stage Characteristics

	Emergence	Growth	Maturity	Decline
Characteristics				
Sales	Low sales	Rapidly Rising sales	Peak Sales	Declining Sales
Costs	High Cost per consumer	Average Cost per Consumer	Low cost per Consumer	Low cost per consumer
Profits	Negative	Rising Profits	High Profits	Declining Profits
Customers	Innovators ¹	Early adopters ²	Middle Majority	Laggards ³
Competitors	Few	Growing Number	Stable Number beginning to decline	Declining Number
¹ Innovators are consumers who first adopt a new product. ² Early adopters are consumers who select new products carefully. ³ Laggards are consumers who adopt new products after a long time				

Source: Marketing Management, Philip Kotler

Also including the organic market, markets generally follow four stages of development. These are emergence, growth, maturity and decline.⁴²

The former stage is the emergence where a new product enters the market. The main marketing objective of firms at this stage is to make their products known. Therefore, firms need to heavily advertise their products. The high costs of production are reflected in the high consumer prices. Sales are low and profits are low or negative. There are few competitors in the market.

The second stage is the growth. The sales increase fast at this level and firms can choose to continue the same level of advertising or enhance its level to “educate the market.” The profits start to rise and new competitors enter the market. Prices can stay the same or go down.

⁴² Philip, Kotler (2003). Marketing Management. 11th Edition. London: Prentice Hall

The following stage is the maturity where the sales and profits reach their highest levels. The competition between firms is the most and firms spend more on advertising. The number of competitors is small. There are a few grand firms. Prices can remain the same or increase a bit.

The final stage is the decline which is characterized by the decline in sales and profits. The number of competitors also decreases. It is this stage where promotion totally loses its importance and is reduced.

Each market stage has distinct marketing objectives and requires different marketing strategies as summarised in Table 2.11.

Table 2.11
Summary of Marketing Objectives and Strategies for Each Stage

	Emergence	Growth	Maturity	Decline
Marketing Objectives	Create product awareness and trial	Maximize market share	Maximize profit while defending market share	Reduce expenditure
Strategies				
1-Product	Basic	Improved (Product extensions, service etc.)	Diversify brands, items and models	Weak products are eliminated.
2-Price	High	Lower price	Prices may remain the same or increase if the costs increase, too.	Cut price
3-Distribution	Selective Distribution	Intensive Distribution	More intensive distribution	Maintain profitable outlets/ close unprofitable ones ¹
4-Advertising	Build product awareness among early adopters and dealers	Build awareness and interest in the mass-market	Stress brand differences and benefits	Reduce to necessary level to keep loyal consumers
5-Sales Promotion	Heavy sales promotion	Reduce to take advantage of heavy consumer demand	Spend heavily to maintain market share ¹	Reduce to minimal level
¹ Taken from Marketing by Steven J. Skinner (Second Edition, 1994)				

Source: Marketing Management, Philip Kotler

Concerning the countries in the EU, all countries are at different market stages.

Table 2.12
Some European Countries by Stage of Market Development in 2001

Mature Market Countries	Growth Market Countries	Emerging Market Countries
Austria	Belgium	Czech Republic
Denmark	Finland	Greece
Germany	France	Ireland
Sweden	Italy	Norway
Switzerland	Luxembourg	Portugal
	Netherlands	Slovenia
	United Kingdom	Spain

Source: The European Market for Organic Food: Revised and Updated Analysis, OMIaRD Volume 5

Another useful method of understanding the market stage in a country is by looking at the share of organic products consumption inside total consumption.

Table 2.13
Comparison between the Organic Shares of Total Food Sales for Some
European Countries in 2001

Countries	Organic Market Share of Total Food Sales (%)	Gross Domestic Product per Inhabitant in PPS ² (US dollars)
Switzerland	3,7	n.d.
Denmark	3,5	26.930
Austria	2,4	26.140
Germany	2,1	23.460
Sweden	1,7	24.790
Holland	1,2	26.460
Belgium	1,0	24.970
Finland	1,0	24.320
Luxembourg	1,0	45.330
The UK	0,9	24.540
France	0,7	24.460
Italy	0,7	23.370 ¹
Ireland	0,5	27.480
Norway	0,2	33.700
Spain	0,2	19.670
Greece	0,2	15.680 ¹
Portugal	0,1	16.480
Czech Republic	0,1	14.100
Slovenia	n.a	15.920
EU Average	1,0	-

¹Estimations

² PPS are the purchasing power standards. The GDP per inhabitant in PPS are taken from Eurostat Yearbook 2004, Theme 1 General Statistics, European Commission

Source: The European Market for Organic Food: Revised and Updated Analysis, Omiard Volume 5

The table showing the organic share of total food sales gives information about the volume of organic food consumption. All the countries listed in the table are divided into three categories by the percentage of their organic food purchases. These are:⁴³

⁴³ Ulrich, Hamm& Friederike, Gronefeld (2004).The European Market for Organic Food: Revised and Updated Analysis, OMIARD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business.

- ✓ The countries whose organic share of total food sales are greater than 1,5%
- ✓ The countries with an organic share of total food sales equal to 1,5 % or between 0,5 % and 1,5 %
- ✓ The countries with an organic share of total food sales equal to 0,5 % or less than 0,5 %

Switzerland, Denmark, Austria, Germany and Sweden form the first group of countries by their organic share of total food sales. These countries are followed by the Netherlands, Belgium, Finland, Luxembourg, the UK, France and Italy, making up “growth market countries” of the EU. The final group of countries consists of Ireland, Norway, Spain, Greece, Portugal, Czech Republic and Slovenia that are “emerging market countries”.

This table also illustrates the relationship between the gross domestic product per inhabitant and the organic market share of total food sales. The interesting outcome to be concluded from the table is that the consumption of organic products is not solely connected to the level of income. If it were so, Luxembourg would have a percentage higher than “one” with the highest level of income in the EU. In addition to this fact, Denmark is the country having the highest percentage in the EU with a level of income smaller than that of Luxembourg.

In the meantime, the condition of Norway, which is a member of EFTA, is similar to that of Luxembourg. Although the level of income in Norway is greater than the level in most of the EU members, the organic share of total food sales is equal to the shares of Spain and Greece, which are two of the countries at the emerging stage of organic market development.

Table 2.14
Expected Market Growth Rates Between 2002 and 2007 for the Total Organic
Market and For Specific Product Categories in Selected
European Countries

	Denmark	Austria	Switzerland	UK	Germany	France
Total Organic Market	1,5	4,6	4,5	11,0	4,8	6,1
Convenience Products*	3,3	8,4	7,0	8,8	7,3	10,0
Meat Products	1,7	3,2	8,0	12,3	3,1	10,0
Dairy Products	1,0	3,4	1,5	8,8	6,7	6,5
Fruit & Vegetables	4,0	5,7	5,0	8,3	7,1	5,0
Cereals Products	2,5	5,3	2,0	6,0	4,6	5,3

* "A convenience product is a consumer good and/or service (such as soap, candy bar, and shoe shine) that is bought frequently, often on impulse, with little time and effort spent on the buying process. A convenience product usually is low-priced and is widely available." The definition is taken from www.marketingpower.com

Source: Organic Agriculture Worldwide 2004, 2005: Statistics and Future Prospects, IFOAM

Examining the expected growth rates between 2002 and 2007 for organic product groups in selected European countries, these outcomes can be figured out:

The growth rate of organic market varies between 1,5% to 11%. The lowest growth is expected in Denmark because the organic market in Denmark is at the maturity stage. The highest growth rate is expected in the UK.

Secondly, different growth rates exist for different product groups among the mentioned countries. For instance, the highest growth rate in Denmark is expected in organic fruit and vegetables group with 4% and the lowest in dairy products with 1%. However in the UK, the range of the growth of organic product groups is totally diverse. It will be the meat products group that will have the fastest growth rate and it will be

followed by convenience and dairy product groups, fruit and vegetables group respectively.

Finally, the growth rates among product groups vary. The cereals group is expected to have the lowest growth rate inside all groups. Meanwhile, convenience products and meat products are thought to have higher growth rates.

Table 2.15
The Share of Total Organic food Sales by Sales Channels in 2001

Country	General Food Shops ¹	Bakers /Butchers	Organic Food Shops	Whole Food Shops	Direct Sales of Farmers ²	Restaurants /canteens	Others
EU							
Austria	63	3	13	1	13	7	-
Belgium	50	-	30	10	10	-	-
Germany	35	7	27	9	17	2	3
Denmark	80	1	5	-	8	6	-
Spain	10	1	19	61	5	2	2 ³
Finland	80	-	-	10	5	5	-
France	55	2	30	-	10	3	-
Greece	17	1	70	-	10	2	-
Ireland	60	16	14	-	8	-	2
Italy	55	2	31	-	9	3	-
Luxembourg	50	3	40	3	3	1	-
Holland	42	10	41	-	7	-	-
Portugal	20	-	30	20	30	-	-
Sweden	90	-	1	1	5	3	-
UK	82	-	8	2	8	-	-
Accession Countries							
Czech Republic	55	-	25	-	20	-	-
Slovenia	5	-	5	-	90	-	-
<p>1 Small retailer shops(under 400 m²), supermarkets (400-800 m²), hypermarkets (over 800 m²) and discounters</p> <p>2 Including weekly markets and delivery services of farmers</p> <p>3 Consumer associations and cooperatives</p>							

Source: The European Market for Organic Food: Revised and Updated Analysis, Omiard Volume 5

The convenient sales channel is surely an important determinant that affects the development of organic market. From the consumer's point of view, the availability of certain types of organic products in a single location and the "easy-reach" of organic food shops are effective on buying motives.

The table showing the share of total organic food sales by sales channels confirms this effect of convenient sales place. The table has seven categories of sales channels; including general food shops, bakers & butchers, organic food shops, whole food shops, direct sales, restaurants & canteens and others.

Among all these sales channels in the EU, it is the general food shops⁴⁴ that have the highest share in organic food sales. The share of this sales channel which is at least 50 % in most of the EU countries is at its highest levels in Denmark, Finland, Sweden and UK.

On the other hand, there are also countries which are exceptions of this situation. Spain, Greece, Portugal and Slovenia are the four countries where different sales channels are more important than the general food shops in organic food sales.

In Greece, the highest share belongs to the organic food shops. In Slovenia, direct sales of farmers have 90% of all organic food sales.

In Spain, whole food shops have the percentage of 61, followed by organic food shops with 19%. The case of Portugal is a little bit different because organic food shops and direct sales of farmers share the same percentage of 30%. To sum up, it could be mentioned that all these four countries are in the "emerging market" category.

Moreover, there are other sales channels such as, restaurants & canteens⁴⁵, bakers & butchers and others whose shares are of minor importance. For instance, the shares of restaurants & canteens are the highest with 7% in Austria, 6% in Denmark and 5% in Finland.

⁴⁴ General food shops are shops which have a small variety of organic products in addition to the sales of conventional products. This definition is taken from Omiard Volume 5: The European Market for Organic Food: Revised and Updated Analysis

⁴⁵ The canteens refer to the canteens of schools, hospitals and universities

Table 2.16
Rating of Buying Motives for Organic Products in 2001
(1=Low Importance, 7=High Importance)

Country	Nature Conservation And Environment Protection	Food Safety and Health	Animal Welfare	Taste	Regional Origin	Non GMO	Others
EU							
Austria	4	6	3	2	3	1	3 Beauty and Wellness
Belgium	6	7	4	5	3	1	2 Fair Trade
Germany	3	7	5	4	2	2	-
Denmark	6	6	4	4	1	3	5 Cautiousness
Spain	5	3	5	2	1	-	6 Positive Image
Finland	5	7	4	6	3	7	-
France	6	7	4	6	4	-	-
Greece	5	7	2	6	1	3	4 Curiosity
Ireland	6	5	4	4	-	2	-
Italy	3	6	1	5	2	4	-
Luxembourg	4	7	4	5	6	4	Prestige
Holland	5	7	2	5	-	-	-
Portugal	7	6	3	5	4	2	1 Fair Trade
Sweden	5	6	3	2	1	2	-
UK	4	6	3	3	2	3	-
EU Average	4,9	6,2	3,4	4,3	2,5	2,8	-
Accession Countries							
Czech Republic	4	7	2	6	2	1	-
Slovenia	3	5	2	6	4	2	-

Source: The European Market for Organic Food: Revised and Updated Analysis, Omiard Volume 5

Consumers' reasons to prefer organic products are also crucial in the development of organic market. The most dominant purchasing motives are always good indicators expressing which characteristics of organic products must be stressed.

If the main purchasing reason of consumers is “health”, these consumers will not be interested in the “protection of animal welfare”. Therefore, the development of organic market also depends on the correct promotions targeted at the correct purchasing reasons of organic products.⁴⁶

The illustration in the table shows the main buying reasons for organic products. There are seven buying motives. The numbers from one to seven are used to indicate the degree of importance given to these purchasing reasons.

The basic purchasing reason in the EU is the food safety and health. This buying motive was rated the highest in Belgium, Germany, Finland, France, Greece, Luxembourg, Holland and the Czech Republic. However, this reason was less important in Spain, Ireland and Slovenia.

The second purchasing motive is “nature conservation and environment protection”. This motive was rated the lowest in Germany, Italy and Slovenia.

“Taste” is the third buying motive, followed respectively by “animal welfare”, “non GMO” and “regional origin”. Among these buying motives, “non GMO” was rated the most important only in Finland.

The participating countries also mentioned “other purchasing reasons”, such as the prestige, beauty& wellness and curiosity. The “beauty& wellness” was stated by Austria, pointing the “feel good factor”⁴⁷ attached to organic products. The “curiosity” factor was expressed by Greece and the “prestige” factor was defined by Luxembourg. In Luxembourg, organic products are preferred by rich consumers because they want to feel themselves “exclusive” by choosing organic products.⁴⁸

⁴⁶ Ulrich, Hamm& Friederike, Gronefeld(2004).The European Market for Organic Food: Revised and Updated Analysis, OMIaRD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business.

⁴⁷ *ibid.*

⁴⁸ *ibid.*

III. ORGANIC AGRICULTURE IN TURKEY

The initiation of organic agriculture in Turkey goes back to 1980s. Turkey started to produce organic products for the first time as a result of demand coming from the European importers. The first organic products Turkey exported were traditional Turkish products, which were dried figs and raisins.⁴⁹

In time, Turkish organic agriculture started to display a fast development. It was especially the 1990s when both the numbers of producers and products increased. However, this development was export-based and it caused the variety and volume of organic agricultural production to be determined by foreign demand. In other words, it contributed to the development of organic exports rather than the development of a domestic organic market in Turkey.

For this purpose, the real development in Turkish domestic organic market could not occur until the 2000s and since that time, the domestic organic market in Turkey continues to develop gradually.

On the other hand, it is a fact that the export-based organic agricultural production in Turkey is a serious obstacle which prevents the further development of the domestic organic market. Therefore, Turkey must overcome this constraint if it aims at fully developing its domestic organic market and without doubt, the further development will require a long time.

⁴⁹ Fatma, Baydır.(2004).Bakanlığımızda Dünden Bugüne Organik Tarım. Turktarım 156 (March-April),26-29.

3.1. Turkish Organic Agriculture from the Legal Perspective

Before the existence of Council Regulation 2092/91, Turkey had to export organic products in accordance with the regulation of the importer country. Following this regulation, the Turkish Ministry of Agriculture published the first regulation concerning the organic production of plant and animal products in 1994. This regulation, which came into force in 1994, drew the basic framework for Turkish organic farming.

This regulation also established two committees; the Committee of Organic Agriculture and the National Orientation Committee of Organic Agriculture.

The Committee of Organic Agriculture is responsible for the activities to develop organic agriculture and the controlling of certification and control bodies, entrepreneurs, etc.⁵⁰

The National Orientation Committee of Organic Agriculture determines the necessary strategies for the trade, recognition and research of organic products.

According to this regulation, all private and corporate bodies that will produce, process, market, export or import all types of organic products must make a contract with one of the control and certification bodies which is accredited by the Turkish Ministry of Agriculture and Rural Affairs.

The products which are produced by unregistered entrepreneurs or by entrepreneurs not having a contract with a control and certification body can never be sold and certificated as organic products. Moreover, they cannot carry the national organic logo.⁵¹

⁵⁰ Namık, Kirazlar.(2001) Ekolojik Tarım Mevzuatı. Türkiye İkinci Ekolojik Tarım Sempozyumu . July 5, 2004

http://www.tarim.gov.tr/arayuz/9/icerik.asp?efl=uretim/organiktarim/organic_tarim.htm&curdir=/uretim/organiktarim&fl=EkTarSmpKi

⁵¹ Fatma, Baydır.(2004).Bakanlığımızda Dünden Bugüne Organik Tarım. Turktarım 156 (March-April),26-29.

The colours of the national organic logo can be green, blue, white or black. The national organic logo has a map of Turkey with six daphne leaves on it.⁵²

The Turkish organic law came into force on the December 3rd, 2004. The law regulates the activities of the Committee of Organic Agriculture, the National Orientation Committee of Organic Agriculture, the control and certification bodies, the entrepreneurs, the export of organic products and inputs, the import of organic products and inputs, the advertisements of organic products and inputs, the supervision of responsible authorities (enterprises, control bodies, entrepreneurs, etc.) and the penalties.⁵³

3.1.1. The Export of Turkish Organic Products

The next table illustrates both the quantity and value of Turkish organic product exports. Examining table 3.1, the share of total organic exports inside total agricultural exports is a good indicator showing the development of Turkish organic exports. Until 2004, the obviously small share of 0,8 % in 1998 was accompanied by a continuous climb and it has reached 1,8%. However, the decline in both the quantity and amount, which appeared in 2004, decreased this share to 1,3 %.

⁵² Namık, Kirazlar.(2001) Ekolojik Tarım Mevzuatı. Türkiye İkinci Ekolojik Tarım Sempozyumu. July 5,2004

⁵³ Organik Tarımın Kanunu Var.(2004). December 12, 2004.
<http://www.bugday.org>

Table 3.1
The Quantity and Value of Turkish Organic Products' Export

Years	The Quantity of Organic Exports (kilograms)	The Value of Organic Exports (US Dollars)¹	The Value of Total Agricultural Exports of Turkey² (US Dollars)	Ratio of the Value of Total Organic Exports to the Value of Total Agricultural Exports³ (%)
1998	8.616.687	19.371.000	2.350.866.000	0,8
1999	12.049.949	24.564.000	2.049.297.000	1,2
2000	13.128.934	22.756.000	1.651.912.000	1,4
2001	17.556.280	27.242.000	1.967.606.000	1,4
2002	19.182.859	30.877.000	1.743.890.000	1,8
2003	21.083.351	36.933.000	2.104.662.000	1,8
2004	16.093.189	33.086.000	2.525.828.000	1,3

¹The numbers showing the value of organic exports (in US dollars) are rounded for calculation.
²The data are taken from DIE Haber Bulteni 157(2005, September 30).
³Own calculation

Source: Turkish Ministry of Agriculture and Rural Affairs

Table 3.2
The Products Subject to Turkish Organic Exports between 1998 and 2004

Products	1998			1999		
	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to the Total Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹
Raisins	2.838.618	3.855.281	19,9	3.267.591	4.116.716	16,8
Dried Figs	1.569.535	3.717.798	19,2	1.697.568	3.787.806	15,4
Dried Apricots	1.124.698	3.149.963	16,3	1.493.566	4.257.725	17,3
Hazelnut Kernels	825.993	4.341.085	22,4	870.459	3.983.546	16,2
Lentils	506.029	466.840	2,4	666.286	622.684	2,5
Chick Peas	567.553	501.513	2,6	943.505	827.096	3,4
Frozen fruit	143.532	282.075	1,5	461.960	679.465	2,8
Others²	1.040.729	3.056.044	15,8	2.649.013	6.288.853	25,6

Source: Ege Ihracatçı Birlikleri

Table 3.2 Continues

Products	2000			2001		
	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹
Raisins	4.252.116	4.836.163	21,3	5.411.535	4.887.076	17,9
Dried Figs	2.193.471	4.074.085	17,9	2.226.684	4.763.202	17,5
Dried Apricots	1.268.022	2.740.698	12,0	1.933.560	2.804.585	10,3
Hazelnut Kernels	1.102.173	4.197.767	18,4	1.446.587	4.903.803	18
Lentils	979.194	806.893	3,5	1.097.288	841.354	3,1
Chick Peas	707.376	636.108	2,8	1.034.647	827.165	3,0
Frozen fruit	184.970	251.785	1,1	1.163.083	1.367.499	5,0
Others²	2.441.613	5.212.799	22,9	3.242.896	6.847.723	25,1

¹Own calculations. All calculations are based on the values of exports in US dollars.

²Other organic products which are subject to exports are frozen vegetables, fruit juices, olive oil, pistachio, etc.

Table 3.2 Continues

Products	2002			2003			2004		
	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Organic Product Group Exports to Total Organic Exports (%) ¹
Raisins	6.114.915	5.718.089	18,5	5.667.383	7.055.595	19,1	3.316.441	4.939.390	14,9
Dried Figs	2.227.858	5.537.144	17,9	2.026.502	5.166.126	14,0	1.862.568	4.396.377	13,3
Dried Apricots	1.834.965	4.044.063	13,2	1.687.710	4.734.221	12,8	1.646.004	5.380.864	16,3
Hazelnut Kernels	1.333.537	3.990.869	12,9	1.246.359	4.508.479	12,2	770.306	4.709.630	14,2
Lentils	961.655	655.361	2,1	1.446.926	1.024.975	2,8	1.508.053	1.365.867	4,1
Chick Peas	1.413.147	1.112.729	3,6	1.166.903	829.597	2,2	871.407	673.134	2,0
Frozen fruit	891.779	1.105.784	3,6	1.211.510	1.982.685	5,4	930.398	1.381.830	4,2
Others²	4.405.002	8.713.101	28,2	6.620.058	11.631.317	31,5	5.188.012	10.229.227	30,9

Table 3.2 illustrates the organic product groups that Turkey has been exporting. Turkey's organic product exports consist of raisins, dried figs, dried apricots, hazelnut kernels, lentils, chick peas, frozen fruits and other products. Other products include frozen vegetables, fruit juices, olive oil, pistachio, etc. Organic raisins, dried figs, dried apricots and hazelnut kernels are the traditional export products of Turkey.

Making a detailed examination of the table, the ratio of each organic product export to total exports gives a clarifying idea about the mostly exported organic products. When the averages of these ratios are calculated, it is seen that raisins, dried figs, hazelnut kernels and dried apricots are the first four products. From this fact it can also be concluded that the mostly exported organic products are the traditional Turkish products. Then the ranking continues with frozen fruits, lentils and chick peas respectively.

Another point to notice is the variety in Turkish organic product exports. Turkey now exports many organic products such as dried vegetables and herbs, and more importantly, other products which require a longer and differentiated treatment like olive oil, fruit juices, canned and frozen foods.

Table 3.3
The Countries Subject to Turkish Organic Product Exports between 1998 and 2004

Years	Germany			Switzerland			United Kingdom		
	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports to Germany to Total Turkish Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports to Switzerland to Total Turkish Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports to UK to Total Turkish Organic Exports (%) ¹
1998	3.610.124	9.312.662	48,1	1.400.375	3.209.590	16,6	593.396	1.031.549	5,3
1999	3.841.307	7.684.824	31,3	1.354.173	3.001.319	12,2	1.447.317	2.164.731	8,8
2000	4.022.428	6.402.920	28,1	1.257.773	2.678.813	11,8	1.469.172	1.878.700	8,3
2001	6.212.651	8.345.807	30,6	1.310.944	2.684.206	9,9	1.716.182	1.843.258	6,8
2002	7.629.086	11.438.851	37,0	1.223.378	3.108.771	10,1	2.023.022	2.584.639	8,4
2003	7.530.773	14.259.671	38,6	1.154.821	3.029.847	8,2	1.867.270	3.121.595	8,5
2004	5.238.061	12.348.226	37,3	822.415	2.456.479	7,4	1.710.242	3.123.607	9,4

Source: Ege Ihracatçı Birlikleri

Table 3.3 Continues

Years	The Netherlands			Italy		
	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports To the Netherlands to Total Turkish Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports To Italy to Total Turkish Organic Exports (%) ¹
1998	1.221.594	2.026.191	10,5	28.505	77.446	0,4
1999	1.958.963	2.676.340	10,9	182.610	231.087	0,9
2000	1.811.179	2.222.274	9,8	399.486	574.074	2,5
2001	1.669.606	1.640.017	6	904.705	979.841	3,6
2002	1.516.712	1.471.676	4,8	940.735	1.251.174	4,1
2003	3.598.333	4.538.611	12,3	1.710.054	2.613.554	7,1
2004	1.668.824	2.555.794	7,7	1.386.055	1.798.780	5,4

Table 3.3 Continues

Years	France			Other Countries		
	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports To France to Total Turkish Organic Exports (%) ¹	Quantity (kg)	Value (\$)	The Ratio of Turkish Organic Exports To Other Countries to Total Turkish Organic Exports (%) ¹
1998	644.645	1.558.517	8	1.118.047	2.154.644	11,1
1999	799.954	1.609.033	6,6	2.465.625	7.196.557	29,3
2000	801.890	1.125.954	4,9	3.367.006	7.873.563	34,6
2001	974.317	1.373.816	5	4.767.875	10.375.462	38,1
2002	974.716	1.809.678	5,9	4.875.211	9.212.352	29,8
2003	887.225	2.095.401	5,7	4.334.876	7.274.316	19,7
2004	831.945	2.254.524	6,8	4.435.648	8.548.767	25,8

¹ Own calculations. All calculations of ratios are based on the export values in US dollars.

Table 3.3 Continues

	The Average of Ratios for Each Country Between 1998-2004 (%)¹
Germany	35,9
Switzerland	10,9
The Netherlands	8,9
The UK	7,9
France	6,1
Italy	3,4
Other Countries	26,9
¹ Own Calculations	

The calculation of the average of ratios for the 1998-2004 period with respect to each country, expresses the weight of each country in the organic product exports of Turkey. As the table above shows, Germany is the leader country with an average of 35,9 %. Switzerland, the Netherlands, the UK, France and Italy follow Germany.

In addition, the average of 26,9 % belonging to other countries is also to be taken into consideration. Actually, the “other countries” define a large group of countries, including not only the USA, Australia, Canada, New Zealand, Japan, but also other European countries, such as Denmark, Norway, Spain, Sweden.

3.1.2. The Certification Firms in Turkey

The total number of control and certification bodies in Turkey is nine. There are three interesting points to notice about these firms. Firstly, as it is the prevalent case in all countries at the emerging stage of market development, nearly all of them, except for EKOTAR, ETKO and OR-SER, are branches of foreign, international control and certification bodies in Turkey.

Secondly, nearly all of these control and certification bodies in Turkey have to send the samples abroad for analysis, which is an additional factor doubling the costs of control and certification.

Finally, seven of these firms are located in Izmir because most of the organic products are exported from the port of Izmir. From this point of view, the collection of nearly all control and certification bodies in a specific place can be a disadvantage for farmers by increasing the costs of control and certification.⁵⁴

Table 3.4
The Control and Certification Bodies in Turkey

Name of Control and Certification Firm	Origin Of Firm	Location of Firm
IMO GmbH	Switzerland	Izmir
ECOCERT	France	Izmir
ETKO ¹	Turkey	Izmir
SKAL	Holland	Izmir
BCS	Germany	Izmir
EKOTAR ²	Turkey	Mersin
ICEA	Italy	Izmir
CERES GmbH	Germany	Izmir
OR-SER	Turkey	Ankara
¹ ETKO works together with a German partner, Lacon.		
² EKOTAR works together with their Italian partner, Bioagricert.		

Source: The Turkish Ministry of Agriculture and Rural Affairs

⁵⁴ The costs of certification depend on a number of factors. These are the width of land, the number of farmers in a project, the distance between the location of land and the city of control and certification body, the controls of office and enterprise, the accommodation expenses of controller and the costs of analysis.

“For instance, if the project is in Bursa and location of the control and certification body is Izmir, the calculations are as follows:

Going to Bursa and returning from there, lasts eight hours. The interviews with farmers last two hours and the control of office and whole enterprise lasts four hours. The sum is fourteen hours. This number must be multiplied at least by two because in general, there are two controls. Altogether, there are twenty eight hours. Twenty eight is divided into eight because a working day is eight hours long. The result, three and a half days are multiplied by the daily cost of controls.

If the controller stays in Bursa, the accommodation expenses must be added to the final result. In addition, the costs of analysis are added also added to the result.” This definition is taken from Husamettin Isikli who is a controller in SKAL, a Dutch control and certification body in Izmir.

3.1.3. The Institutional Support in Turkey

The only institutional support that exists in Turkey is the discount on loans that will be used by the organic producers. This practice came into force in 2004. According to this support, all the entrepreneurs doing the production of organic agricultural products and inputs, collecting them, packaging them, making their trade or who will do these activities can use enterprise and investment loans with a 60% discount from the Turkish Agricultural Bank.⁵⁵

The basic principle to benefit from this support is to be registered by a control and certification body in Turkey.

3.1.4. The Data Collection in Turkey

Without doubt, the data collection for organic agriculture is crucial and necessary, especially to follow the development of organic market and make the right policies to solve the problems of the organic sector.

In Turkey, the producer and processor level data are collected by the control and certification bodies. The producer level data mainly consists of the number of producers, the type of crops which are grown, the area, the quantities and the geographical distribution of producers and products.⁵⁶

The processor level data includes the types and quantities of processed organic foods, like frozen, canned, concentrated, etc.

Besides, there is the data of organic trade. The data belonging to the exports of organic products is kept by the Aegean Exporters' Union.

⁵⁵ Ekolojik Tarıma Devletin Büyük Destek. (2004). December 10, 2004. <http://www.bugday.org>

⁵⁶ Erdal,Sungu.(2004). Data Collecting and Evaluation of The Organic Agriculture System in Turkey. Proceedings of the 1st EISfOM European Seminar, (87-90). February 10, 2005 <http://orgprints.org /2935/01/ recke-et-al-2004.eisfom-oe.pdf>

However, the data of consumers and retailers, which is a good indicator of the domestic market development, are not collected.

Therefore, there are efforts to establish a database and the data of consumers and retailers will be collected by organic agriculture units, which will be established in the provincial agriculture directorates of the Turkish Ministry of Agriculture and Rural Affairs.⁵⁷

⁵⁷ *ibid.*

3.2. Turkish Organic Agriculture from the Economic Perspective

Table 3.5
The Development of Organic Agriculture in Turkey

Year End	The Total Organic Land Area (in hectares)	The Number of Organic Producers	Number of Organic Product Varieties ³
1990	1037	313	8
1991	3000 ²	-	-
1992	6077	1780	23
1993	5216 ²	-	-
1994	5196	1600	20
1996	15.250	4035	37
1997	15.906	7417	53
1998	24.042	8199	67
1999	46.523	12.275	92
2000	59.649	13.187	95
2001	111.324	15.795	124
2002	89.827	12.428 ¹	n.d
2003	103.190	13.044 ¹	n.d
2004	162.193	9314 ¹	n.d

¹The number of organic producers in 2002, 2003 and 2004 does not include organic livestock farmers.
²These numbers are taken from www.organic.aber.ac.uk/statistics/euroarea03.htm
³The numbers are taken from www.organic-europe.net, Turkey Country Report

Source: The data for 1990-2000 is taken from the Second Symposium on Organic Agriculture in Turkey (14-16 November, 2001) and the data between 2000-2004 is taken from the Turkish Ministry of Agriculture and Rural Affairs

Examining the table, the real boost in total organic land appeared after 1994. 1037 hectares of organic land in 1990 has reached 15.250 hectares in 1996. From this perspective, 1994 was a prominent year because the first regulation of organic farming was adopted this year by the Turkish Ministry of Agriculture and Rural Affairs.

Besides, the effects of this adoption were not only limited to total organic land. The numbers of both organic producers and product varieties started to increase. The period of 1990-2004 has been a period of growth in the variety of Turkish organic

products. Eight types of organic products in 1990 have reached 124 types of products in 2001.

Continuing with the number of Turkish organic farmers and comparing 13.044 organic farmers of Turkey with the number of organic farmers of EU 15 for 1998 and 2003 period, Turkey's place would be between Germany with 16.476 organic farmers and France with 12.202 organic farmers. In other words, Turkey would be the fifth country among the EU 15 countries.

In addition, Turkey shows a similar increase in the number of organic producers between 1998 and 2003. Turkey's 59 % increase places Turkey inside the group of France, Germany, the Netherlands, Denmark and Belgium whose rates of increase are between 50 and 100 %.

On the other hand, the time period of 1990 and 2003, was also a period of increase in the total land area dedicated to organic farming in the European Union.

Table 3.6
The Total Organic Land of Turkey as a Percentage of Total Utilisable Agricultural Area in 2003

Country	Total Organic Land in 2003	The Total Utilisable Agricultural Area in 2003 ¹	The Proportion of Total Organic Land in the Total Utilisable Agricultural Area (%)
Turkey	103.190	26.027.240	0,4

¹The Total Utilisable Agricultural Area defines the sum of cultivated field area, vegetable gardens, area of fruit and olive trees, vineyards and area reserved for tea plantation.

Source: The Total utilisable agriculture area is taken from the Statistical Yearbook of Turkey 2004, while the total organic land is taken from the Turkish Ministry of Agriculture and Rural Affairs

Evaluating the total organic land with the total utilisable agricultural area together, the proportion of organic land inside the total utilisable agricultural area is a good indicator pointing out to the development of organic agriculture.

According to 2003 data, Turkey does organic production only on 0,4 % of its total utilisable agricultural area. In comparison with the EU 15, this proportion is really small. Although Turkey's 26.027.240 hectares of total utilisable agricultural area places Turkey to a place between France and Spain, which are the two EU 15 countries with the highest contribution to the total utilisable agricultural area, Turkey's 0,4% share is even smaller than the 0,65 % share of Ireland, the country having the smallest share of the EU 15 in 2003.

Table 3.7
The Allocation of Organic Land and Organic Producers among the Geographical Regions of Turkey in 2004

Geographical Regions	Organic Land (in hectares)	Organic Producers
The Aegean	45.509	3849
The Black Sea	8294	1925
The Eastern Anatolia	5249	908
The Central Anatolia	5908	1501
The Marmara	2265	619
The Mediterranean	75.139	320
The South eastern Anatolia	19.830	192
*The ranking is made according to the alphabetical order.		

Source: The Turkish Ministry of Agriculture and Rural Affairs

Going a little bit into the details of total organic land area and the organic producers, Table 3.7 displays their allocations among the seven geographical regions of Turkey in 2004.

Referring to the allocation of total organic land area, the Mediterranean region is the leader and it is followed by the Aegean. The smallest area of land dedicated to organic agriculture is in the Marmara region.

On the other hand, the allocation of Turkish organic producers is totally different. The Aegean is the region that has the highest number of organic producers.

The second place in this ranking belongs to the Black Sea region. It is the Eastern Anatolia that has the smallest number of organic producers in this group.

Table 3.8
The Organic Production of Animal Products in Turkey between 2002 and 2004

Products	2002	2003	2004
Cow Milk*	40	48	137,5
Veal*	8	8	100
Sheep Meat*	5	4	300
Goat Meat*	0	0	50
Poultry Meat*	0	0,52	-
Eggs**	25.000	34.500	92.500
*Milk, veal, sheep, goat and poultry meat are all expressed in tonnes. **Eggs are expressed in numbers.			

Source: Turkish Ministry of Agriculture and Rural Affairs

Table 3.8 displays the volume of organic animal products in Turkey for the time period of 2002-2004.

As illustrated in the table, the production of organic animal products is examined in six categories which are cow milk, veal, sheep meat, goat meat, poultry meat and eggs. Beginning with the primary category, the increase in the production of organic milk is clearly seen. 40 tonnes of organic milk production in 2002 has reached 137,5 tonnes in 2004.

The situation for organic veal production in Turkey is not different. There was also a change in the volume of organic veal production which resulted in the increase of 8 tonnes in 2002 to 100 tonnes of organic veal in 2004.

In the meantime, the sheep meat, goat meat and eggs were other categories where increases were observed. Zero tonnes of organic meat production in 2002 have reached fifty tonnes in 2004, while 25.000 organic eggs in 2002 have become 92.500 eggs in 2004. In addition, the amount of organic sheep meat production also increased

from 5 tonnes in 2002 to 300 tonnes in 2004 despite a small decrease which occurred in 2003.

The only decrease among all these categories appeared in poultry meat. 0,52 tonnes of organic poultry meat production in 2003 returned back to the non- production level in 2004.

To sum up, it can be stated that Turkey has been experiencing increasing production volumes of organic animal products since 2002. However, the volume of organic animal products in Turkey is still low in comparison with that of the EU.

3.2.1. The Characteristics of the Organic Market and the Main Obstacles to Consumption

One of the characteristics of organic markets is the types of consumers. It is possible to divide these consumers into two groups; “regular organic consumers” and “the occasional organic consumers”⁵⁸.

“Regular organic consumers” buy organic products and do not care about the prices of organic products. There can be two reasons for this kind of purchasing behaviour. These consumers either are strongly committed to organic food and ideals of organic agriculture, or have high incomes that the high organic product prices do not have an effect on their buying attitude.⁵⁹ Human health, environment and the use of pesticides in conventional agriculture are important topics of attention for the strongly committed organic consumers inside this group.

“Occasional organic consumers” do not have enough information about what organic production is. Therefore, they buy an organic product rarely or buy only a

⁵⁸ Toralf, Richter.(2004) Are The Organic Consumer Labels Conveying The Right Message? Taken From “European Hearing on Organic Food and Farming- Towards a European Action Plan”. January 2, 2005 http://orgprints.org/00002657/01/richter-2004-action-plan-publikationen_powerpoint.pdf

⁵⁹Andrew, Barkley (2002).Organic Food Growth: Producer Profits and Corporate Farming. Presentation at the 2002 Risk and Profit Conference. March 1, 2005 http://www.agmanager.info/events/risk_profit/2002/Barkley.pdf

specific product or accidentally buy an organic product. In general, this group of consumers is not informed about the difference between “organic” and “natural”.⁶⁰

The organic markets are also characterised by the demand for organic products. The demand for organic products (organic food) can be expressed by the “law of demand.”

$$Q_D = f(P, M, P_R, T) \quad (1)^{61}$$

Q_D = the quantity demanded of organic food (kg)

P = Price of organic food (unit of currency/ kg)

M = Per Capita income (unit of currency/ year)

P_R = Price of Related Goods (unit of currency/ kg)

T = Tastes and Preferences of Consumers

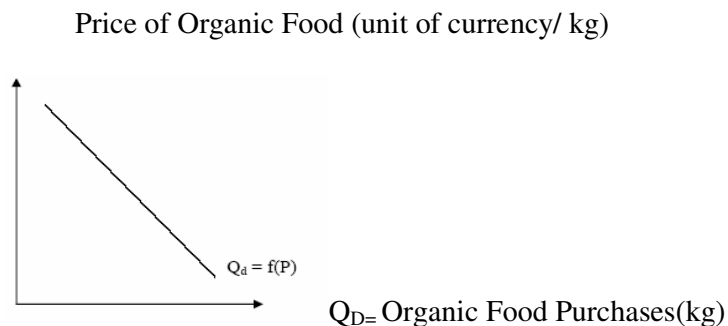
This basic equation of demand summarizes that the quantity demanded of organic food is related to the price of organic food, per capita income, the price of related goods and tastes and preferences of consumers.

a) Price of Organic Food

According to law of demand, any increase in price will be reflected in the decreases of the quantity demanded, which is also the case for organic food.

⁶⁰ Toralf, Richter.(2004) Are The Organic Consumer Labels Conveying The Right Message?

⁶¹Andrew, Barkley (2002).Organic Food Growth: Producer Profits and Corporate Farming.



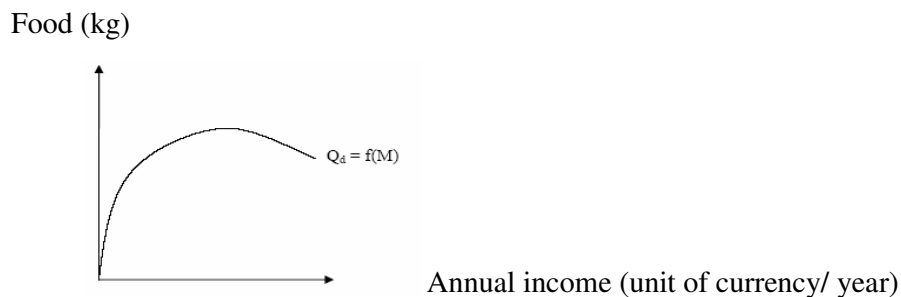
Source: Andrew, Barkley(2002).Organic Food Growth: Producer Profits and Corporate Farming

Figure 3.1. The Price and Demand Relationship for Organic Food

From this point of view it can be concluded that the retail price of organic food affects the amount of organic food sold. In other words, if the production, marketing or certification costs of organic food can be lowered, the retail prices of organic food will also go down. More consumers will be able to buy organic products at affordable prices.

b) Income

Another determinant of the quantity demanded of organic food is the income.

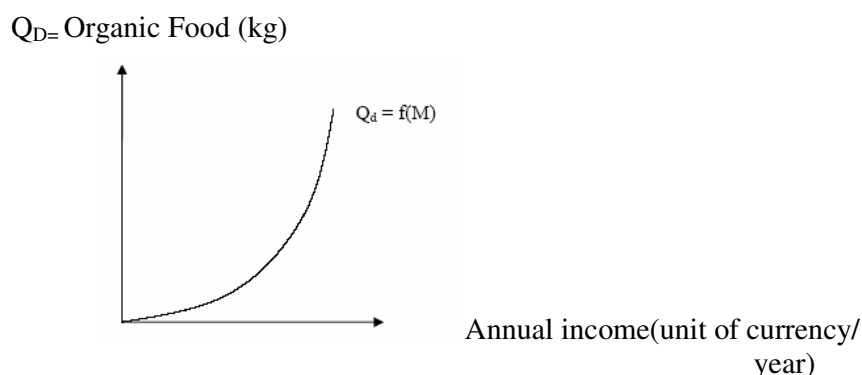


Source: Andrew, Barkley(2002).Organic Food Growth: Producer Profits and Corporate Farming

Figure 3.2. The Income and Food Demand Relationship

Considering the demand for food, the increases in annual income will bring food purchases to the peak level. After this level, food purchases will go down as the annual income continues to rise.

However, the situation for organic food is totally different than conventional food. Since organic food is a “speciality food”⁶², the increase in income makes consumers change their purchasing attitudes by spending more on organic food.



Source: Andrew, Barkley(2002).Organic Food Growth: Producer Profits and Corporate Farming

Figure 3.3. The Income and Demand Relationship for Organic Food

c) Price of Related Goods

The related goods are goods which can be used as substitutes of each other. In case of organic products, conventional products can be seen as substitutes, since they meet the same necessity.

⁶² “Speciality food is defined as a product differentiated from industrial or mass produced products by one or more of the following factors: raw material, process, know-how, availability and consumer perception.”

This definition is taken from: Seamus, O’Reilly& Michael, Haines.(2004). Marketing Quality Food Products- A Comparison of Two SME Marketing Networks. Acta Agric. Scand., Sect. C, Food Economics (1), 137-150. March 1, 2005, Taylor& Francis
<http://journalsonline.tandf.co.uk>

Therefore, as long as the prices of organic products are higher than the prices of conventional ones, some consumers will not choose to buy organic products.

d) Tastes and Preferences of Consumers

The tastes and preferences differ among consumers. Consumers of organic products prefer them for a number of reasons, such as the non-application of pesticides, human health and positive effects on environment.

Therefore, the benefits of organic agriculture must be stressed to promote it and increase the sales of these products.

3.2.2. The Producer Types and Their Constraints

Before examining the constraints of organic producers, it is possible to divide farmers into specific groups. In a survey⁶³ realized with the participation of sixty five farmers, five different farmer types were identified. These farmer types are “committed conventional”, “pragmatic conventional”, “environment-conscious but not organic”, “pragmatic organic” and “committed organic”.

The “committed conventional” farmers have never thought about the application of organic agriculture. This group of farmers does not believe in the health and environmental benefits of organic agriculture.

The “pragmatic conventional” group has a different point of view than the “committed conventional” farmers. These farmers think that the conversion to organic agriculture is possible, but also risky in terms of price and market development uncertainties and production constraints. Meanwhile, this group of farmers can convert to organic agriculture as soon as these problems are solved.

⁶³ Ika Darnhofer, Walter Schneeberger & Bernhard Freyer (2005) Converting Or Not Converting To Organic Farming in Austria: Farmer Types and Their Rationale. *Agriculture and Human Values* 22, 39-52. April 22, 2005
<http://www.springerlink.com>

The “environment conscious but not organic” group apply “environmentally friendly” farming techniques but they are not organic producers.

The “pragmatic organic” farmers prefer organic agriculture with the motivation of “income security”. Health or environment issues are not the primary reasons for converting to organic agriculture. However, these farmers do not have the goal of “income maximisation” as the conventional farmers.

The final group “committed organic farmers” are deeply involved in organic agriculture. Organic agriculture is beyond a set of principles; but is a life style for this group of farmers.

This type of classification for organic farmers is crucial to be better able to understand their constraints and choose the necessary policy types which must be oriented towards each group.

Organic producers face a lot of difficulties worldwide. These difficulties range from economic and political constraints to social constraints.

a) Economic constraints

Economic constraints include marketing problems and several costs related to organic agriculture. Lack of organic markets is one of the major constraints of economic nature. When organic production is small and the consumers are not well informed about organic production, the organic producers have to market their organic products as conventional products.⁶⁴

Another factor affecting organic producers’ decisions is the net farm returns. The net farm returns are calculated by subtracting the input costs from the gross returns. The retail prices of organic and conventional products, the total production and the economic support given by the government altogether are determinants of the gross returns.⁶⁵

⁶⁴ Leslie, Duram. (2000). Agents’ Perceptions of Structure: How Illinois Organic Farmers View Political, Economic, Social and Ecological Factors. *Agriculture and Human Values* 17, 35-48. May 28, 2005, Kluwer Academic Publishers
<http://www.springerlink.com>

⁶⁵ Els, Wynen. (2002). What Are The Key Issues Faced By Organic Producers? In *Organic Agriculture- Sustainability, Markets and Policies*. Proceedings of an OECD Workshop held in Washington DC. November 24, 2004; <http://orgprints.org/3116>

Many consumers base their purchasing decisions on the comparison between the retail prices of conventional and organic products.⁶⁶ The conventional agricultural production has negative effects on human health; environment, etc. which are not reflected in the prices of conventional products, making them sold for cheaper prices.

However, the organic production can be costly because organic farmers are not allowed to use agricultural chemicals. Therefore, the total yield can decrease. Moreover, the other costs of organic agriculture like transportation, distribution and storage increase the retail prices of organic products.⁶⁷

The lack of economic support for organic farmers is another problem. The organic producers must be supported especially during the conversion period by subsidies when the decline in quantity of yield and income is visible.

The ownership of the organic land can also pose problems in developing countries. If the organic farmer does not have a land but has rented it, the owner of the land may not allow the farmer to do organic agriculture.⁶⁸ There is also a second possibility that the land owner withdraws the organic land from the farmer after years of serious improvement in the soil.⁶⁹

b) Political Constraints

The main political constraint is the agricultural policies of governments.⁷⁰ If the agricultural policy only subsidizes conventional agriculture, conventional products will become cheaper leading to a greater price difference between organic and conventional products. Therefore, organic producers will be negatively affected.

⁶⁶ Els, Wynen.(2002). What Are The Key Issues Faced By Organic Producers? In Organic Agriculture-Sustainability, Markets and Policies. Proceedings of an OECD Workshop held in Washington DC. November 24, 2004; [http:// orgprints.org/3116](http://orgprints.org/3116)

⁶⁷ *ibid.*

⁶⁸Leslie, Duram.(2000). Agents' Perceptions of Structure: How Illinois Organic Farmers View Political, Economic, Social and Ecological Factors. *Agriculture and Human Values* 17, 35-48. May 28, 2005, Kluwer Academic Publishers
[http:// www.springerlink.com](http://www.springerlink.com)

⁶⁹ Els, Wynen (2002). What Are The Key Issues Faced By Organic Producers? In Organic Agriculture-Sustainability, Markets and Policies. Proceedings of an OECD Workshop held in Washington DC. November 24, 2004
[http:// orgprints.org/3116](http://orgprints.org/3116)

⁷⁰ *ibid.*

The lack of information sources is also a political problem. Since the level of research and advice on organic agriculture is generally insufficient, farmers have to educate themselves by communicating with other organic farmers and using their personal experiences, reading books and magazines or trying their own experiments.⁷¹

The bureaucracy and paperwork necessary to apply for certification or grants, also slows down the development and dissemination of organic agriculture.⁷²

c) Social Constraints

The main social problem is the opinions of society about organic agriculture. When there is lack of support from the society, difficulties start to appear. In cases where most of the farmers deal with conventional agriculture and they are not informed about the benefits of organic agriculture and its methods, there can be serious opposition against organic farmers. The following are the statements of three different organic farmers:⁷³

“Most of dad’s problems with organic agriculture is that if he admits it is good, he admits that what he has been doing is detrimental to someone’s health. Me and my dad have arguments all the time.”

“My cousin (who farms with me) didn’t want to do organic. I had to convince him.”

“It’s a small business. You have to wear a multitude of hats. Sometimes you are a marketer, sometimes a salesman, a weed puller, a producer, a bookkeeper.”

⁷¹Leslie, Duram.(2000). Agents’ Perceptions of Structure: How Illinois Organic Farmers View Political, Economic, Social and Ecological Factors. *Agriculture and Human Values* 17, 35-48. May 28, 2005, Kluwer Academic Publishers
[http:// www.springerlink.com](http://www.springerlink.com)

⁷²Christoffel Den Biggelaar& Murari, Suvedi(2000). Farmers’s Definitions, Goals and Bottlenecks of Sustainable Agriculture in The North Central Region. *Agriculture And Human Values* 17,347-358. May 26, 2005, Kluwer Academic Publishers
<http://www.springerlink.com>

⁷³Leslie, Duram(2000). Agents’ Perceptions of Structure: How Illinois Organic Farmers View Political, Economic, Social and Ecological Factors. *Agriculture and Human Values* 17, 35-48. May 28, 2005, Kluwer Academic Publishers
<http:// www.springerlink.com>

3.2.3. The Necessity of Research and Advice

Organic agriculture is a type of agriculture where research is the most crucial issue. As long as the basic principle is the non application of agricultural chemicals, the emphasis is always on the use of local resources which are resistant to pests, climate and soil conditions. Therefore, “direct technology transfer”⁷⁴ can be impossible for organic agriculture.

⁷⁴ Els, Wynen & David, Vanzetti(2000). Research in Organic Agriculture: Assessment and Future Directions. December 22, 2004
<http://www.elspl.com.au/Abstracts/abstract-g4.htm>

Table 3.9
Research Areas to Enhance the Development of Organic Agriculture

Objectives	Research Areas
<p>Improve organic prices relative to conventional</p> <ul style="list-style-type: none"> ✓ Increase organic on-farm productivity ✓ Subsidise organic farming ✓ Increase environmental charges, payable mainly by conventional farming ✓ Improve value of higher quality organic produce 	<p>Agronomic and Economic Research</p> <ul style="list-style-type: none"> ✓ Technical on-farm research ✓ Effects on farm production, consumer prices and demand for product ✓ Quantify environmental costs and impacts of environmental charges on conventional prices ✓ Market research and quality control
<p>Improve Marketing</p> <ul style="list-style-type: none"> ✓ Quality control ✓ Transport ✓ Processing ✓ Insurance ✓ Distribution 	<p>Responsiveness of demand and supply of main products to price changes</p> <ul style="list-style-type: none"> ✓ Improve marketing infrastructure and market productivity, especially product segregation, handling and distribution. This is largely a function of throughput.
<p>Increase demand</p> <ul style="list-style-type: none"> ✓ Stimulate interest of consumers with information campaigns ✓ Government procurement ✓ Encourage corporate purchases 	<p>Promotion and Demand Analysis</p> <ul style="list-style-type: none"> ✓ Effectiveness of promotion ✓ Costs and Benefits to local, regional and national governments ✓ Costs and benefits to corporate bodies
<p>Policy Analysis</p> <ul style="list-style-type: none"> ✓ Demonstrate need for change in policy 	<p>Economic, social, environmental and political impacts</p>

Source: Els Wynen & David Vanzetti, Research in Organic Agriculture: Assessment and Future Directions

Examining the table, the improvement of organic product prices relative to the prices of conventional products, the improvement in the marketing of organic products, the increase in demand and policy analysis are the objectives. Agronomic and economic research, responsiveness of demand and supply of products to price changes,

promotion and demand analysis and the impacts of an organic agriculture policy are the main research areas corresponding to these goals.

The improvement of organic product prices relative to the prices of conventional products is directly oriented towards the consumers of organic products. In most cases, organic products are sold for higher prices. This situation has a number of reasons.⁷⁵

Firstly, organic production is generally more costly especially when a conventional producer has been heavily applying agricultural chemicals but later decides to become an organic farmer. In this situation, the decrease in the total farm productivity is obvious during the conversion period. Secondly, the low amounts of organic production will result in higher costs of transport, insurance and distribution, not benefiting from the economies of scale. For these reasons, the impacts of organic agriculture subsidies and the effects of an environmental tax on conventional agriculture can be worked on to decrease the retail price difference between organic and conventional products.

Moreover, more research on the profitability of organic agriculture and the possible, profitable crop rotations is necessary to increase the total farm productivity.

The improvement of the marketing infrastructure of organic products is one of the research areas. Methods to decrease the costs of transport, processing, distribution and insurance must be examined under this heading.

The analysis of demand and promotion is another research area for increasing the demand of organic products. Promotion and information campaigns are vital to create awareness for organic products and to well inform the potential organic consumers.

The certain impacts of a policy for organic agriculture are also topics of research. Organic agriculture must have its own policy to stimulate it. This policy must be well informing the potential organic farmers along with other farmers who have not

⁷⁵ Els, Wynen & David, Vanzetti(2000). Research in Organic Agriculture: Assessment and Future Directions. December 22, 2004
<http://www.elspl.com.au/Abstracts/abstract-g4.htm>

thought about organic agriculture. In addition, this policy must always promote research for the technical side of organic agriculture.⁷⁶

Besides the position of research, advice is also of key importance in organic agriculture. Organic agriculture is always subject to “applied research” where the scientists, extension agents and farmers work together and apply new techniques. Even if the results from this kind of an application are technically or economically negative as it is sometimes possible, these results are published in books, journals, expressed in meetings and are communicated by the extension agents to organic farmers.⁷⁷

3.2.4. The Overview of Turkish Domestic Market of Organic Products

a. Methodology

Having summarised a general panorama of organic agriculture, all the theoretical explanations were supported and the situation of Turkish domestic organic market was examined by the use of qualitative research.

The qualitative research which is based on small, non-representative samples and non-statistical data analysis is an unstructured, exploratory research methodology to provide a further understanding of the underlying reasons of a situation.⁷⁸

Although the type of data collection in qualitative research is unstructured where the respondents are let to talk freely on a specific subject, this approach was quitted in

⁷⁶ John R. Fairweather (1999) Understanding How Farmers Choose Between Organic and Conventional Production: Results From New Zealand and Policy Implications. *Agriculture and Human Values* 16, 51-63. April 22, 2005

<http://www.springerlink.com>

⁷⁷ Fabio Mario Santucci (1999). The Changing Role Of the Researcher ,Adviser in Agriculture: Implication for Organic Farming .REU Technical Series Number 63. February 9, 2005.
<http://www.fao.org/world/regional/reu/Repository/Technical/RTS63.pdf>

⁷⁸ Naresh, Malhotra K.(2002). *Basic Marketing Research (Applications to Contemporary Issues)*. Upper Saddle River, NJ: Prentice Hall

this study. Instead, the respondents were implemented questionnaires to receive clear answers and to prevent the loss of time.

In addition, all the respondents were informed about the purpose of this study. A face to face interview which was formed by the probing of a single respondent was conducted with all the participants. Therefore, the depth interview type of direct approach was implemented in this study.

Moreover, the analysis of all the interviews, which gave illustrating information, was made by the use of a qualitative data analysis programme, namely Ethnograph Version 5.

b. Main Findings from the Situation of Turkish Domestic Organic Market

On the basis of information described above, two groups, one group which consists of the control and certification bodies in Turkey and another group which is composed of a small number of Turkish organic firms were selected as samples.

The research with control and certification bodies was conducted with seven firms, whose total number in Turkey is nine. The control and certification bodies were asked a total of nine questions, which were mainly designed to reveal the current situation in this sector.

Beginning with the first question, nearly all interviewed control and certification bodies mentioned that they were opened in the 1990s and especially by the 2000s. This is an interesting finding because this fact can be interpreted as an indicator expressing the stage of development of the Turkish domestic market.

The second question was about the origin of these firms. All the interviewed control and certification bodies, except for two of them, stated that they were the Turkish branches of foreign bodies as this is the general case for most of the countries

being at the emerging stage of organic market development. Even these two Turkish control and certification bodies are working with foreign partners.⁷⁹

The next question was asked to find out the regulations which are subject to controls. The controls are made according to the Turkish and EC regulations in the first place. Afterwards, there are controls made according to the USA and Japanese regulations. In the third place come the Canada regulations and they are followed by the Swiss and IFOAM regulations. This information is surely crucial because it gives an idea about the ranking of countries to which Turkey has been exporting its organic products.

The following question was about the costs of control and certification. The responses given to this question were different because the cost of a project depends on the size and inclusion of that project. However in general, the daily costs of controls are between 250 and 500 Euro. Besides, firms may also have a total, annual price between 1000 and 15000 Euro. In addition, there is also the cost of analysis which starts from 100 Euro.

When the control and certification bodies were asked the number of controls, they responded that there is at least one control. But in general, the number of controls varies between two to four and these are informed visits. However, in case of a suspicious situation, there are also on site visits without warnings.

The control and certification bodies were also asked if they could give advisory services to farmers. The responses to this question were “no” because it is strictly forbidden by law. The control and certification bodies can guide farmers with small problems, only when there is a necessity.

The next question was orientated to identify the level of information of Turkish organic farmers. Five of the control and certification defined their level as insufficient. Only one firm committed their level of information as “medium” and another firm expressed that farmers are more informed at the moment.

⁷⁹ These Turkish control and certification bodies are ETKO and EKOTAR. ETKO has a German partner, while EKOTAR works with an Italian partner.

The complementary question following these answers was about the methods to increase the level of information of Turkish organic farmers. The necessity of education was the most stressed response. Moreover, the broadcastings on television and the distribution of small, illustrated brochures with simple explanations to organic farmers were proposed as two methods of education.

The final questions were about the problems met during the production and processing stages. The heavily mentioned producer problem is the contamination in an organic field. Contamination can be caused by the application of agricultural chemicals either in a neighbouring field, or in another part of the organic field by the farmer himself. Other production problems are the lack of support during the conversion period and the heavy regulation. The Turkish regulation was defined as “heavy” because the necessary conditions to start organic farming require a lot of bureaucracy.

From the perspective of processing problems, the lack of organic additives was emphasised the most because these additives must be imported and it has a serious effect on increasing the total costs. A secondary possible problem is the necessity of separate processing of organic and conventional products. Finally, the packaging of organic products can also make up a problem if the information over the package is incomplete.

The interviews with organic firms were conducted with a small group of eight firms. The interviewed firms were mainly chosen from the participant firms of the organic fair in Istanbul in March 2005. The majority of these firms were from Istanbul since Istanbul continues to be an important market of organic products. However, there were also firms from other regions of Turkey, with two firms from Izmir and one firm from Samsun.

The firms were required to answer a total of eighteen questions which were designed to put forward the development of the domestic organic market.

The first two questions were about the number and types of organic products which are produced and sold. The responses showed that the number of organic products marketed by most of these firms varies between twenty five and fifty, with this number rarely reaching to one thousand.

On the other hand, the responses to organic product types illustrated that the mostly produced Turkish organic products are dried fruits, snacks with pulses following them. However, the variety of Turkish organic production is not limited to the products mentioned above. These firms also produce dried vegetables, honey, organic tea and secondary organic products, such as pastries, olive oil, grape molasses, pasta, fruit concentrates, cheese and canned food like the tomato puree.

The following question went into the details of organic products by asking the processing of secondary products. Three firms mentioned that they did not produce and process secondary products, but buy them from other firms, while only two firms expressed that the secondary products were produced and processed by themselves. Besides, there were three firms which both produced and processed secondary products and also bought other secondary products from other firms.

Then firms were asked about their type of production and all of them stated that they had production with contract.

The following questions were about the trade of organic products. Firms were asked if they exported and imported them and also the product groups subject to export and import. Only four of eight firms responded that they exported. Two of them stated that they only exported, while the other two also imported. As stated by these firms, the organic export products of Turkey consist of dried fruits (figs, raisins, apricots) , snacks, pistachio, walnut and olive oil.

Three of the remaining four firms which did not export, had no imports either. There was only one firm inside this group that did not export, but only imported organic products.

To sum up, it can be said that only a small number of interviewed organic firms prefers to import organic products and the main reasons of import are not only to introduce unknown organic products into the domestic market, but also to provide a variety of organic products. Therefore, it is possible to conclude that imported organic products are not produced in Turkey. Organic chocolate, fruit bars, fruit compote, dried pineapple, rice milk and soymilk are all examples of them.

The next question was asked to find out the mostly preferred control and certification bodies in Turkey. Four organic firms committed that their control and certification was made by IMO. The replies of the remaining three firms were no different. The control and certification of one of them is made by ECOCERT, the other by SKAL with the third firm having certified by IMO and ECOCERT together. Only one firm stated that their certification was done by ETKO.

These replies were not so interesting since foreign control and certification bodies make their choice towards the opening of new branches in countries at the emerging stage of organic market development.

Starting from the eighth question, the inclusion changes and the questions focus on the consumers, the main problems during production, sales and the opinions of organic firms.

The eighth question was about the characteristics of organic consumers and their main buying motives. Beginning the first part of this question, education was the mostly emphasised property. In general, the consumers of these products were defined as people who are university graduates or who are open to learning. Besides this characteristic, people whose ages are 40 or over and families with children or women with children were also among the organic consumers. In addition, having a certain level of income is also a property of organic consumers. However, the level of income was the least emphasised property.

Continuing with the second part of this question, the main buying motives of Turkish organic consumers were listed as health & food safety, taste, children and the non-inclusion of genetically modified organisms. Among all these buying motives health & food safety was the heavily mentioned reasons of organic product purchases.

The ninth question continues with Turkish organic consumers and examines their level of recognition of organic products. Three firms responded that there was an improvement in the level of recognition of organic products since 2004. However, the majority of Turkish organic firms, also including these three clarified that the level of recognition was still insufficient and it had to be increased.

Following these replies, firms were expected to propose methods for increasing this recognition. Broadcastings were mentioned the most. Five of eight firms mentioned them as a method. In particular, the broadcastings on television were expressed as a more effective method than the broadcastings on radio and in newspapers. A secondary proposed method was promotion campaigns and it was followed by teaching organic agriculture in schools. Giving lectures open to the public in a manner that the listeners can understand easily, promoting organic products at sale points and organizing organic fairs where the producers and consumers meet were all among proposed methods.

The following question tried to figure out the number of competitors of each firm. Five firms responded to this question by stating that their number of competitors varied between one and six. On the other hand, the replies of two firms were totally different as they both explained that other organic firms could only be their partners, but not their competitors.

It was interesting to hear this result because it brought a new point of view. As figured out by these firms, the problems could be solved easily with co-operation and all firms working in the organic sector would certainly benefit from a developed organic market.

The replies to this question were important since the number of competitors of a firm gives an idea about the stage of organic market development. Therefore, the small number of competitors of Turkish organic firms also indicates that the Turkish organic market is at emerging stage of market development.

The eleventh question was about the sales channels of organic products in Turkey. The most prevalent sales channel is conventional market chains and then own stores of interviewed firms. Besides, these products are also sold in organic food stores, in charcuteries and more importantly, through the internet.

The preference of market chains is an important choice because the easy-reach of organic products is a must of developing organic demand.⁸⁰ What's more, the use of internet as a sales channel can also contribute to the development organic demand.

The twelfth and thirteenth questions were prepared to reveal the problems which occur during the production and sales of organic products.

Beginning the production problems, the most common problem is the lack of financial support in Turkey for the producers and exporters because the costs of organic production are high. Decreases in productivity when beginning organic agriculture, other problems that appear as an outcome of the non-use of pesticides, the lack of necessary inputs to be used against pests, the current law and regulation of organic agriculture and the small number of organic producers are all mentioned by the interviewed firms.

The current regulation and the law of organic agriculture establish the basic principles of the enforcement of organic agricultural activities and they draw the legal framework.

The law of organic agriculture in Turkey came into force on December 3rd, 2004. After this date, the regulation of organic agriculture had to be revised and the final regulation came into force on June 10th, 2005. The regulation of organic agriculture is certainly important because all organic agriculture activities are organized according to it. However, the current regulation also sustains too much bureaucracy inside, such as the necessity to indicate the documents showing the ownership or the right of use of the land and the necessity to present the title deed or the area plot if there is not a cadastral process in that area.⁸¹

In addition to the regulation, the law of organic agriculture is also a source of constraint. The law which is designed especially for the control and certification bodies

⁸⁰ Ulrich, Hamm& Friederike, Gronefeld (2004).The European Market for Organic Food: Revised and Updated Analysis, OMIARD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business.

⁸¹ The Turkish Ministry of Agriculture and Rural Affairs. The Regulation of Organic Agriculture(2005). December 28, 2005
http://www.tarim.gov.tr/arayuz/9/icerik.asp?efl=uretim/organiktarim/organic_tarim.htm&curdir=/uretim/organiktarim&fl=organik.zi

in Turkey holds them responsible for the application of organic agriculture. In other words, the control and certification bodies will be penalized in case of a problem.⁸²

In fact, this point of view is not correct because the responsibility of organic agriculture applications always belongs to the entrepreneurs. In this case, any entrepreneur with ulterior motives may cause the control and certification body to be penalized easily and such a situation may lead to a decrease in the quality of inspections.

Moreover, the small number of organic producers is another serious constraint. When organic production is small, collection costs are high⁸³ and they are reflected as “high prices” to organic products. Furthermore, market chains tend to buy greater quantities and therefore, small amount of organic production can prevent the development of domestic organic market.

In connection with the production problems, the biggest sale problems are the insufficient recognition of organic products and their high prices. As mentioned by one of the organic firms, most of the Turkish organic consumers do not know what organic products are. As a result, they think that natural products are always superior to organic products and they tend to prefer natural products. Besides, many Turkish consumers have a “complexity of concept” between the term organic and ecological. They unfortunately think that organic and ecological terms refer to two separate concepts.

In addition to all these, the uninformed sales people are another problem in Turkey.

The following question of number 14 was prepared to reveal the consumer price premiums in Turkey. The definition consumer price premiums refer to the “additional cost of the organic prices as a percentage of the conventional price.”⁸⁴

⁸² Personal communication with Aynisa Yorgancı from Taris

⁸³ Ulrich, Hamm & Friederike Gronefeld (2004). The European Market for Organic Food: Revised and Updated Analysis, OMIaRD Volume Five. Wales: The University of Wales Aberystwyth, School of Management and Business

⁸⁴ Ulrich Hamm & Friederike Gronefeld & Darren Halpin (2002). Analysis of the European Market for Organic Food. OMIaRD Volume One. Wales: The University of Wales Aberystwyth, School of Management and Business

From this point of view, the Turkish consumer price premiums vary between 10 to 100%. However, it is possible to mention the existence of two sub-groups of price intervals. These are 15-25% and 40-70%.

The consumer price premiums in organic products are certainly important since they affect the purchasing decisions of consumers. Consumers seriously lacking recognition of the term “organic” can easily prefer conventional products because these products are seen as “substitutes” which are sold for lower prices.

For this reason, the consumer price premiums of organic products should always be between 10-25 % since the consumer price premiums exceeding 25% can easily lead to a passage to conventional products.⁸⁵

Continuing with question 15, firms stated their opinions about the state support for organic agriculture. All the interviewed firms admitted that the financial support in Turkey was insufficient. They expressed that the organic producers must be supported especially during the conversion period when there are yield decreases and the state can financially support organic producers by giving certification and advisory credits.

In addition to the organic producers, the Turkish organic exporters also need to be financially supported because the costs of planning a project, control and certification and sending final products by cargo are all the burdens carried by Turkish exporting firms.

Furthermore, the promotion of organic products and the development of their sales channels are also a necessity that entails the financial support of state.

The aims of questions 16 and 17 are to discover if Turkish organic firms are members of any producer, processor or trade unions and they are officially represented at the state level.

The responses put forward the fact that only the exporting organic firms inside the interviewed firms are registered in the Aegean Exporters' Union. In addition, one firm is a member of ETO and two firms are members of ORGUDER.

⁸⁵ Nadia El-Hage, Scialabba & Caroline, Hattam (2002). Organic Agriculture, Environment and Food Security. FAO. December 25, 2004
http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/y4137e/Y4137E00.htm

ETO is the abbreviation of the Association of Organic Agriculture Organisation. Having been established in 1992, ETO is an umbrella organisation whose members are the producers, consumers, exporters, traders, researchers and the technical staff working in organic agriculture. The promotion of organic agriculture, giving assistance to the vocational development of people and firms working in the organic sector and helping to solve the problems that occur during the production, processing and marketing stages of organic agriculture are all among the main targets of this association.⁸⁶

As it is clear, ETO is a comprehensive association aiming to fulfil the responsibility of developing organic agriculture in Turkey with members who come from various sections of the society. Besides, ETO is represented at the state level.

On the other hand, there is another single association which represents the organic producers and industrialists in Turkey. The name of this association is ORGUDER, the Association of Organic Product Producers and Industrialists. The main targets of ORGUDER can be summarised as; determining the sectoral problems and working to get them solved, collecting economical, technical and statistical information to form an organic information data bank, determining the necessary precautions for the development of organic product industry and following their applications, representing Turkey in the international organic agriculture unions and contributing to the promotion of organic agriculture in Turkey.⁸⁷

However, ORGUDER was established in March 2004 and they only have a limited number of members.

Therefore, none of the interviewed firms, except for three, are represented at the state level.

The final question focused on the ideas of organic firms about the future of domestic organic market in Turkey. Seven of the interviewed firms explained they were expecting a more developed domestic market which includes a greater variety of organic products at affordable prices with consumers who are really conscious of

⁸⁶ Ekolojik Tarım Organizasyonu Derneği. December 22, 2005
<http://www.eto.org.tr>

⁸⁷ Organik Urun Üreticileri ve Sanayicileri Derneği. December 22, 2005
<http://www.orguder.org.tr>

organic products. There was only one firm which expressed negative ideas on the development of domestic market because of the constraints in the current regulation and law of organic agriculture.

In the meantime, the participant firms contributed to this question by also specifying a time period for the development of domestic organic market. According to many of them, such a development in Turkey may take at least five and at most ten years to occur.

IV. CONCLUSION and SUGGESTIONS

CONCLUSION

Despite the fact that Turkey has a high potential in organic agriculture in terms of high agricultural production capacity, great utilisable agricultural area, its favourable climate which facilitates the cultivation of a variety of crops and the soils which are not polluted by the use of agricultural chemicals, Turkey is unable to benefit from this potential. The total organic agricultural production of Turkey is low and the Turkish domestic organic market is at the emerging stage of market development.

On the other hand, the situation in the EU is completely diverse. Although the level of progress in both organic agriculture and the domestic organic market varies among the member states, it can be stated that many of the EU member states have a further developed organic agriculture and domestic organic market. However, this situation is not a coincidence, but rather an accumulated result of the official interest shown to organic agriculture.

From this perspective, it will not be wrong to mention that Turkey has serious lessons to take from the EU. First of all, Turkey must eliminate the problem of export-based organic agricultural production. Due to the fact that foreign demand always initiates organic agriculture in developing countries and Turkey is one of them, the organic agricultural production in Turkey began with the only aim of exports. However, this type of organic agricultural production is based on the shaping of all organic products and their quantities totally according to foreign demand.⁸⁸ Therefore,

⁸⁸F., Akkaya & H., Tokgoz & B. Sayın., & B. Ozkan (2001). Turkiye'de Ekolojik Urun Uretimi ve Pazarlaması. Turkiye Ikinci Ekolojik Tarim Sempozyumu. July 7, 2004
http://www.tarim.gov.tr/arayuz/9/icerik.asp?efl=uretim/organiktarim/organic_tarim.htm&curdir=/uretim/organiktarim&fl=EkTarSmpKi

this type of organic production is not only unsustainable, but also seriously prevents the development of domestic organic market. For this purpose, Turkey should convert the type of organic agricultural production from export based to domestic market based.

Moreover, the Turkish state should fulfil the responsibility of intensively supporting organic agriculture, having regard to the emerging stage of domestic organic market in Turkey. However, this support should cover not only the financial side, but also the advice, research and knowledge side. In addition, the state must take all the necessary measures to stimulate both the supply and demand sides of Turkish organic agriculture at the same time.

SUGGESTIONS

Products

Regarding the fact that the preferences of consumers are effective on the further development of a domestic organic market, it will be correct to take the purchasing habits of Turkish consumers into account when planning the domestic organic production.

Since the majority of ordinary Turkish consumers prefer to buy fresh vegetables and fruit⁸⁹, the priority of domestic organic production in Turkey should be given to fresh vegetables and fruit.

⁸⁹ H. Serpil Kayahan(2001). Ekolojik Tarımda İc Pazarın Gelişimi. Türkiye İkinci Ekolojik Tarım Sempozyumu. July 7, 2004
http://www.tarim.gov.tr/arayuz/9/icerik.asp?efl=uretim/organiktarim/organic_tarim.htm&curdir=/uretim/organiktarim&fl=EkTarSmpKi

Prices

Price is another determinant which seriously affects the sales of organic products. For this purpose, the price differences between the conventional and organic products should not be high.

However in Turkey, most of the organic products are sold with high retail prices due to a number of reasons such as, the expensive costs of controls & certification, the low volume of organic production and the lack of necessary organic inputs and additives.

With respect to the first reason, the necessity of sending the samples of analysis abroad and the uneven geographical distribution of the control and certification bodies are the two important factors which increase the costs of controls and certification. Dealing with the former factor, TURKAK must sign the “Mutual Recognition Agreement”⁹⁰ and remove this necessity since the responsibility of the accreditation of the organic laboratories in Turkey belongs to it. After this, the samples will be analysed in Turkey and a decrease in the costs of controls will be possible.

Continuing with the latter factor, Turkey should provide a balanced geographical distribution of the control & certification bodies, having regard to the fact that the location of a control and certification body is effective on increasing the total costs of controls and seven of the nine control & certification bodies in Turkey are all gathered in the same region. Therefore, the Turkish state should either permit the opening of new control and certification bodies only in regions without such bodies or encourage the existing control and certification bodies to open branches in regions where such bodies do not exist.

Furthermore, Turkey should increase the total amount of its organic production because any increase in the volume of organic production will contribute to the development of domestic organic market by bringing down the costs of transportation,

⁹⁰ Personal Communication with Nurper Mortaş from OR-SER

processing & distribution, decreasing the high consumer price premiums in Turkey and supplying market chains with regular and large quantities of organic products.

Finally, Turkey must also find a solution to organic inputs and additives whose imports increase the costs of production and processing to a great extent.

Distribution

The sales channels play an important role in the development of a domestic organic market because they can directly affect the demand for organic products. From this point of view, the prevalence of available sales channels is another determinant of increasing the sales of organic products.

Regarding Turkey, organic products are generally marketed through the conventional market chains and the own stores of the organic producer firms. However, both of these sales channels are limited in number and this situation prevents many Turkish consumers from reaching organic products. For this purpose, the sales channels of organic products in Turkey must be further developed.

In this respect, alternative sales channels, such as the organic producer cooperatives and the organic farming networks⁹¹ should be established in Turkey. While the former will provide organic farmers with the opportunity of marketing all their production directly to a wide range of consumers, the latter will also provide the research and exchange of information among the member organic farmers.

Furthermore, the weekly markets can also be evaluated as another sales channel in Turkey since most of the Turkish consumers have the habit of food shopping from the weekly markets.⁹²

⁹¹Seamus O'Reilly & Michael Haines. Marketing Quality Food Products - A Comparison of Two SME Marketing Networks. *Acta Agriculturae Scandinavica, Section C, Food Economics*(1), 137-150. Taylor & Francis

⁹² H. Serpil Kayahan(2001). Ekolojik Tarımda İc Pazarın Gelişimi. Türkiye İkinci Ekolojik Tarım Sempozyumu. July 7, 2004

http://www.tarim.gov.tr/arayuz/9/icerik.asp?efl=uretim/organiktarim/organic_tarim.htm&curdir=/uretim/organiktarim&fl=EkTarSmpKi

Promotion

It is fact that promotion is a leading factor in the creation of demand towards organic products and therefore, must be utilised intensively, especially in countries where the domestic organic markets are at the emerging or growth stages.

Having regard to Turkey, the domestic organic market is yet at the emerging stage and the recognition of organic products is still insufficient. There are many Turkish consumers who tend to prefer natural products instead of organic just because they are uninformed about the characteristics of organic products. In this respect, there is certainly need to create awareness for organic products in Turkey and the best method of achieving it, is the launch of a nation-wide campaign especially through the media. However, such a campaign must be initiated by the Turkish state and must also include schools.

Moreover, the Turkish associations of organic agriculture should also participate in the promotion of organic products. For instance, these associations can set up special units to inform the potential consumers about organic agriculture through the telephone and internet, by answering all their questions. On the other hand, it should always be remembered to clearly underline the differences between the terms “organic” and “natural” in all types of promotions, whether done by the state or by the associations.

In the meantime, the target mass of such a promotion and their purchasing reasons should also be taken into account. Respecting the fact that the Turkish consumers of organic products are the middle-aged people and the families with small children whose main purchasing motives are health & food safety, taste and children, these people must be at the centre of all promotions and the increase in the sales of organic products must be realized by the emphasis of these motives.

The Agricultural Policy

The agricultural policy is always a good indicator pointing out the level of official recognition for organic agriculture by a state.

In this respect, the Turkish agricultural policy is unfavourable to fully develop organic agriculture. The financial aid paid for organic agriculture which is a crucial component of the agricultural policy is totally insufficient in Turkey since the only financial support is the 60 % discount on loans and only the registered organic farmers can benefit from it.

Considering the fact that the financial aid given to organic agriculture is a serious factor affecting the number of farms which convert to organic agriculture or continue to farm organically, the Turkish state must financially support the organic farmers. In this connection, the Turkish state can provide the converting and certified organic farms with financial support, give financial support for the advice in organic agriculture and levy high taxes⁹³ on the use of synthetic pesticides & fertilizers in conventional agriculture and use this revenue to further develop and disseminate the organic agriculture in Turkey.

Moreover, the Turkish state should deal with organic agriculture under a special heading in the agricultural policy, as well as defining a national target like “X % of total utilisable agricultural area to be organic by the year Y”. In addition, the Turkish state should also decrease the heavy bureaucracy included in the Turkish regulation of organic agriculture.

Data Collection

The collection of statistics is crucial in the preparation of the right agricultural policy to support organic agriculture.

Despite this fact, the only statistics collected in Turkey by the state are limited to organic production, processing and exports and do not cover the data of consumers and retailers. As a result, it becomes really difficult to observe the development of the domestic organic market and bring a solution to the existing problems of this sector.

⁹³ David S. Conner (2004). Expressing Values in Agricultural Markets: An Economic Policy Perspective. *Agriculture and Human Values* (21).27-35. Kluwer Academic Publishers

For this purpose, the Turkish state must also collect and publish the official statistics of organic consumption & prices and establish a databank where all the necessary data to prepare the favourable organic agricultural policy will be kept, in the shortest time.

Research and Advice

Considering the fact that organic agriculture is an applied branch of science and is based on intensive research, the necessity of research and advice is better understood.

From the perspective of Turkey, the research is totally inadequate. There is certainly the need for more research on the profitability and accordance of organic agriculture in Turkey, along with a special budget and research programme totally reserved for it.

Besides, the establishment of research institutes where organic agriculture is the unique research area is another necessity of Turkey. Turkish organic agriculture must be taught and examined in these institutes, rather than being examined under the different divisions of universities' agricultural faculties.

Today the agricultural faculties of some Turkish universities⁹⁴ give organic agriculture lessons and there is only one school⁹⁵ where university students can study organic agriculture as a profession. However, this school is a profession high school and therefore, not only the training period lasts for two years, but also the students are trained for other professions as well. As a consequence, the effect of this school remains limited. In this respect, the establishment of a "university of agricultural sciences"⁹⁶ which will produce projects to examine organic agriculture along with other agricultural topics will be appropriate for Turkey, as in the Swedish example.

⁹⁴Izmir, Ege Universitesi ;Bursa, Uludag Universitesi; Ankara, Ankara Universitesi ;Adana, Cukurova Universitesi ;Samsun, Ondokuz Mayıs Universitesi ; Van, Yuzuncu Yil Universitesi, Edirne, Trakya Universitesi; Isparta, Suleyman Demirel Universitesi

⁹⁵ Erzurum Ataturk Universitesi, Kelkit Aydın Dogan Meslek Yuksek Okulu
<http://www.atauni.edu.tr/myo.htm>

⁹⁶ Inger, Kallender (2002). Sweden Country Report
http://www.organic-europe.net/country_reports/sweden/default.asp

On the other hand, the advice in organic agriculture is another lacking issue in Turkey. Although the advice is vital especially during the conversion period, the Turkish organic farmers cannot make use of it because there are not any state advisors to guide them. The Turkish organic farmers can only be helped by the provincial agricultural head offices in case of a necessity.⁹⁷

In addition, the private agricultural advisors in Turkey share a similar situation. They probably exist but even the Turkish Ministry of Agriculture and Rural Affairs is uninformed about them.

Moreover, there are the control and certification bodies but they are all prohibited to give advice by the law. Due to all these reasons, only the Turkish organic farmers working with contract can receive advice because most of the organic producer firms in Turkey hire their own advisors.

As a result, the Turkish organic farmers who just begin farming organically but do not have a contract, are unfamiliar to organic production techniques and the lack of advice to guide these farmers brings out frequently met problems in Turkey. For instance, a Turkish organic producer who organically grows figs or apricots thinks that he will sell only these products as organic and can easily apply synthetic pesticides to other products which he grows in the same plot with the organic products.⁹⁸

Therefore, the elimination of these problems will be possible when the Turkish state establishes a national advisory system for organic agriculture.

Farmer Education

Due to the fact that organic production is more costly and requires intensive knowledge about the production techniques, any kind of misapplications in organic agriculture cause organic products to be removed from the organic category and result in their sales as conventional products. In this regard, the education of organic farmers forms the basis of organic agriculture.

⁹⁷ Personal Communication with Nurper Mortaş from OR-SER

⁹⁸ Vahap Eryılmaz, *Ekolojik Tarım. Kırsal Kalkınmaya Çağrı (2)*, Düzce Kalkınma Derneği S.S. Arabacı Köyü Tarımsal Kalkınma Kooperatifi, 2004

However, the level of knowledge of Turkish organic farmers is totally insufficient and must certainly be improved by the use of various educational methods. The preparation of special programmes and their broadcastings on television, the supply of organic farmers with different organic information resources, such as agricultural journals, books and magazines which give information about the results of organic agricultural practices, and the preparation of special courses by the Turkish associations of organic agriculture or the agricultural faculties of Turkish universities are all effective ways of educating Turkish organic farmers.

Furthermore, the establishment of organic demonstration farms⁹⁹ and gardens where different organic agricultural practices are applied can be another useful method to educate Turkish organic farmers. For instance, the “Bahce Project” executed by Bugday¹⁰⁰ in Istanbul serves as a good example. Being initiated in 2005, this project not only provides its participants with regular, fresh organic food, but also exemplifies the successful implementation of an organic demonstration garden where anyone interested in organic agriculture can visit and be informed about it.¹⁰¹

Finally, Turkish organic farmers can also be educated by benefiting from the agricultural advisors or the experiences of other organic farmers. In this connection, a project such as “1000 Agricultural Engineers to 1000 Villages”¹⁰² can be implemented also for the Turkish organic agriculture.

Official Representation of the Organic Market Actors

The organic market actors who consist of consumers, producers, retailers, exporters, researches and the technical staff all have an important role in defining the

⁹⁹ Frances, Blake (2004) What do Organic Farmers Expect From Policy Makers? Presentation at the Organic Action Plan Hearing, Brussels. January 2, 2005
http://europa.eu.int/comm/agriculture/events/organic/index_en.htm

¹⁰⁰ The Association for Supporting Ecological Living

¹⁰¹ For further information, see “Bahce Project”

<http://www.bugday.org>

¹⁰² This project was initiated in 2003. According to it, 1000 young agricultural engineers were employed by the state and sent to 1000 villages to give agricultural advice there.

problems of the organic sector and forcing the state to solve them. In this respect, the official representation of these actors is essential.

However in Turkey, the official representation of most of these actors is either at a low level or does not even exist, leading to a situation where many problems remain unsolved. Therefore, the Turkish organic market actors must increasingly and officially come together to form pressure groups and insist on the elimination of their constraints.

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Questionnaire for the Turkish Organic Firms

- 1-Which organic product groups do you produce?
- 2-How many products do you have? How many organic products are there inside them?
- 3- What is your way of organic production? (Signing contracts with organic producers or selling organic products that have been produced for you by other organic firms?)
- 4- Are there processed and secondary products inside organic products? (For example, tomato paste is a secondary product, while a packaged product is a processed product) If the answer is yes, who makes the packaging of organic products? Who prepares the secondary products?
- 5- Do you export organic products? Which organic products do you export?
- 6- Do you import organic products? If the answer is yes, what are the reasons for importing them? Which products or product groups do you import?
- 7- Who does the certification of your products?
- 8- Can you give information about your consumer profile? What can be the reasons for these people to prefer organic products?
- 9- Do you think that the recognition of organic products by Turkish consumers is enough? If it is insufficient, what are the ways of increasing this recognition?
- 10- How many competitors do you have in the organic market?
- 11- Where are these organic products sold?
- 12-Do you have any problems during the production of organic products? If the answer is positive, what are these?
- 13-Are there any problems during the sales of these products?
- 14- How much are the consumer price premiums between your organic products and conventional ones?
- 15- Is the level of support for organic farming in Turkey is sufficient? If not, how can the government help organic producers and firms?
- 16-Are you a member of a producer, processor or organic farming trade group as an organic firm from the sector?

17-Are the producers, processors and traders in this sector represented in the government? (Can you express the problems that you have and have solutions found to your problems easily?)

18- In your point of view, how will be the future of domestic organic market in Turkey?

Questionnaire for the Control & Certification Bodies

1-When did your control and certification body start its activities in Turkey?

2-What is the origin of your control and certification body?

3-Which regulations are subject to your inspections?

4-What are the costs of analysis and inspections?

5-How many controls are there during a year?

6- Do you think that the level of information of Turkish organic farmers is sufficient? If the answer is no, how can this level be increased?

7- Do you give advisory services to Turkish organic farmers?

8-Are there any problems during the production of organic products? If there are, what are they?

9-Do you control the processing of organic products? Do you meet any problems during the processing stage?

Table 1.1.
Land Area under Organic Management (By the End of 2003)

Organic Hectares		Organic Hectares		Organic Hectares	
Australia	11.300.000	Ukraine	240.000	Poland	49.928
Argentina	2.800.000	Sweden	207.488	Latvia	48.000
Italy	1.052.002	Bangladesh	177.700	South Africa	45.000
USA	930.810	Denmark	165.146	Netherlands	41.865
Brazil	803.180	Finland	159.987	Estonia	40.890
Uruguay	760.000	Peru	150.000	Indonesia	40.000
Germany	734.027	Uganda	122.000	New Zealand	40.000
Spain	725.254	Portugal	120.729	Norway	38.176
UK	695.619	Hungary	113.816	Kazakhstan	36.882
Chile	646.150	Switzerland	110.000	Tunisia	33.500
France	550.000	Turkey	103.190	Colombia	33.000
Canada	516.111	Paraguay	91.414	Japan	29.151
Mexico	400.000	Kenya	90.000	Ireland	28.514
Bolivia	364.100	India	76.326	Belgium	24.163
Austria	328.803	Romania	75.500	Lithuania	23.289
China	298.990	Ecuador	60.000	Slovenia	23.280
Czech Republic	254.995	Tanzania	55.867	Dominican Republic	22.151
Greece	244.455	Slovakia	54.478	Morocco	20.040

Source: SOEL Survey 2005

Table 1.1 Continues

Organic Hectares		Organic Hectares		Organic Hectares	
Zambia	20.000	Papua New Guinea	4.265	Suriname	250
Ghana	19.460	Croatia	3.530	Iran	200
Rep. of Korea	18.936	Philippines	3.500	Fiji	200
Egypt	17.000	Luxembourg	3.002	Benin	197
Venezuela	16.000	Azerbaijan	2.770	Albania	192
Sri Lanka	15.215	Senegal	2.500	Mauritius	175
Serbia/Montenegro	15.200	Pakistan	2.009	Cyprus	166
Guatemala	14.746	Belize	1.810	Madagascar	130
Costa Rica	13.967	Honduras	1.769	Guyana	109
Thailand	13.900	Algeria	1.400	Togo	90
Nicaragua	10.750	Jamaica	1.332	Nepal	45
Cuba	10.445	Bosnia Herzegovina	1.113	Zimbabwe	40
Cameroon	7.000	Liechtenstein	984	Laos	35
Russia	6.900	Lebanon	758	Malta	14
Vietnam	6.475	Malaysia	600	Bhutan	13
Iceland	6.000	Bulgaria	437	Jordan	7
Israel	5.640	Sudan	430		
Panama	5.111	Malawi	325		
El Salvador	4.900	Syria	260	SUM	26.458.268

Table 1.2
Land Area under Organic Management in Per cent of Total Agricultural Area (By the End of 2003)

% of Agricultural Area		% of Agricultural Area		% of Agricultural Area	
Liechtenstein	26,40	Uruguay	4,00	Argentina	1,70
Austria	12,90	Norway	3,68	Chile	1,50
Switzerland	10,27	Portugal	3,17	Uganda	1,39
Finland	7,22	Costa Rica	3,11	Belize	1,30
Italy	6,86	Spain	2,84	Canada	1,30
Sweden	6,80	Australia	2,48	Bolivia	1,04
Greece	6,24	Slovakia	2,43	Rep. of Korea	1,03
Denmark	6,20	Netherlands	2,17	Ukraine	0,78
Czech Rep.	5,97	Luxembourg	2,00	Ecuador	0,74
Slovenia	4,60	Hungary	1,94	Iceland	0,70
Estonia	4,59	Latvia	1,92	Japan	0,66
UK	4,42	France	1,86	Sri Lanka	0,65
Germany	4,30	Belgium	1,73	Ireland	0,65

Source: SOEL Survey 2005

Table 1.2 Continues

% of Agricultural Area		% of Agricultural Area		% of Agricultural Area	
Lithuania	0,60	Panama	0,24	Cameroon	0,09
Dominican Rep.	0,60	New Zealand	0,24	Indonesia	0,09
Romania	0,51	Brazil	0,23	Pakistan	0,08
Peru	0,48	Azerbaijan	0,22	Vietnam	0,08
Papua New Guinea	0,41	USA	0,22	Thailand	0,07
Paraguay	0,38	Lebanon	0,20	Zambia	0,06
Mexico	0,37	Egypt	0,19	China	0,06
Kenya	0,35	Ghana	0,16	Honduras	0,06
Guatemala	0,33	Cuba	0,16	India	0,05
El Salvador	0,31	Mauritius	0,15	South Africa	0,05
Poland	0,30	Tanzania	0,14	Fiji	0,04
Serbia/Montenegro	0,30	Nicaragua	0,14	Philippines	0,03
Suriname	0,28	Cyprus	0,12	Guyana	0,01
Jamaica	0,26	Croatia	0,11	Bulgaria	0,01
Colombia	0,24	Senegal	0,10	Malawi	0,01

Table 1.3
The Distribution of Organic Farms Worldwide(By the End of 2003)

Organic Farms		Organic Farms		Organic Farms	
Mexico	120.000	Switzerland	6.445	Guatemala	2.830
Indonesia	45.000	Greece	6.028	Paraguay	2.827
Italy	44.043	Cuba	5.222	Ecuador	2.500
Uganda	33.900	India	5.147	Thailand	2.498
Kenya	30.000	Mozambique	5.000	Norway	2.466
Tanzania	30.000	Finland	4.983	Zambia	2.425
Peru	20.000	Japan	4.539	Poland	2.304
Austria	19.056	Colombia	4.500	Argentina	1.781
Spain	17.028	UK	4.017	Netherlands	1.522
Germany	16.476	Costa Rica	3.987	Portugal	1.455
Brazil	14.003	Denmark	3.510	Rep. of Korea	1.451
Turkey	13.044	Sweden	3.363	Slovenia	1.429
Morocco	12.051	Canada	3.317	Australia	1.380
USA	11.998	Sri Lanka	3.301	Hungary	1.255
France	11.377	Senegal	3.000	Latvia	1.200
Bolivia	6.500	Honduras	3.000	Romania	1.200

Source: SOEL Survey 2005

Table 1.3 Continues

Organic Farms		Organic Farms		Organic Farms	
China	1.050	Madagascar	300	Malta	20
Vietnam	1.022	Chile	300	Iceland	20
El Salvador	1.000	South Africa	250	Russia	15
Ireland	889	Lebanon	164	Malawi	13
Dominican Republic	819	Croatia	130	Jamaica	12
Czech Republic	810	Bangladesh	100	Zimbabwe	10
New Zealand	780	Slovakia	100	Fiji	10
Estonia	746	Bosnia Herzegovina	92	Jordan	4
Lithuania	700	Ukraine	70	Venezuela	4
Belgium	688	Albania	60	Mauritius	3
Tunisia	580	Luxembourg	59	Syria	2
Egypt	500	Bulgaria	58	Sudan	1
Philippines	500	Laos	55	Togo	1
Uruguay	500	Cyprus	45	Iran	1
Pakistan	405	Liechtenstein	43	Kazakhstan	1
Israel	400	Ethiopia	35	Kyrgyzstan	1
Benin	359	Guyana	28		
Azerbaijan	310	Nepal	26	SUM	558.449

Table 1.4
The Allocation of Total Hectares of Organic Land among the EU 15 Countries during 1990-2003

	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland
1990	2,240	1,300	11,035	6,726	72,000	105,021	150	3,800
1991	2,380	1,400	17,155	13,281	81,225	188,477	200	3,823
1992	2,464	1,700	18,138	15,859	85,000	299,121	250	5,101
1993	135,982	2,179	19,761	20,340	87,829	372,843	591	5,460
1994	192,337	2,683	20,688	25,822	94,806	445,267	1,188	5,390
1995	335,865	3,385	38,334	44,695	118,393	461,549	2,401	12,634
1996	309,089	4,261	44,991	84,556	137,084	475,746	5,269	20,496
1997	345,375	6,818	59,963	102,342	165,406	450,000	10,025	18,687
1998	287,899	11,744	93,201	116,206	218,775	414,293	15,402	24,411
1999	272,635	18,515	137,294	136,662	315,771	452,327	21,451	29,360
2000	272,000	20,667	157,676	147,268	369,933	546,023	26,707	27,231
2001	276,410	22,452	168,377	147,943	419,750	632,165	31,118	30,017
2002	299,454	29,118	164,519	156,692	517,965	696,978	77,120	29,754
2003	326,703	(24,163)	161,381	159,987	550,990	(734,027)	(244,455)	28,514

Note: Numbers in bold show data supplied direct or published up to 1/7/2004 and numbers in parentheses are estimations.

*The data for the years 1998,1999,2000,2002 and 2003 are taken from Eurostat, Statistics in Focus 31/2005

Source: Certified and Policy Supported Organic and In-Conversion Land in Europe

<http://www.organic.aber.ac.uk/statistics/euroarea03.htm>

Table 1.4 Continues

	Italy	Luxembourg	Netherlands	Portugal	Spain	UK	Sweden
1990	13,218	600	7,469	1,000	3,650	31,000	33,390
1991	16,850	634	9,227	2,000	4,235	34,000	37,743
1992	30,000	500	10,053	2,000	7,859	35,000	40,428
1993	88,437	497	11,150	3,060	11,674	30,992	44,543
1994	154,120	538	11,340	7,267	17,208	32,476	54,851
1995	204,494	571	12,909	10,719	24,079	48,448	-
1996	334,175	594	14,456	9,191	103,735	49,535	-
1997	641,149	618	16,960	12,193	152,105	54,670	-
1998	577,475	744	22,268	29,533	269,465	78,833	127,390
1999	911,068	888	26,350	46,918	352,164	425,945	155,463
2000	1,040,377	1,074	32,334	48,066	380,920	578,803	174,227
2001	1,237,640	2,003	35,876	70,857	485,079	679,631	-
2002	1,168,212	2,852	42,610	81,356	665,055	741,174	214,120
2003	1,052,002	(3,002)	41,866	120,926	725,254	695,619	225,785
Note: Numbers in bold show data supplied direct or published up to 1/7/2004 and numbers in parentheses are estimations.							
*The data for the years 1998,1999,2000,2002 and 2003 are taken from Eurostat, Statistics in Focus 31/2005							

Table 1.5
The Allocation of Total Hectares of Organic Land among the New Members of EU during 1990-2003

	Cyprus	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Malta	Poland	Slovakia	Slovenia
1990	-	3,480	-	-	-	-	-	550	15,140	
1991	-	17,507	500	2,500	-	-	-	1,240	14,773	
1992	-	15,371	2,350	5,400	1,240	-	-	2,170	14,700	70
1993	-	15,667	1,600	6,400	1,250	148	-	3,540	14,724	<i>100</i>
1994	-	15,818	1,600	8,630	1,250	267	-	<i>5000</i>	14,762	<i>150</i>
1995	-	14,127	3,000	12,325	1,147	582	-	6,855	18,813	<i>200</i>
1996	-	17,022	<i>3,000</i>	9,300	1,200	1,118	-	<i>8000</i>	27,661	<i>300</i>
1997	-	20,239	3,000	16,687	<i>1500</i>	2,468	-	<i>9000</i>	27,809	<i>400</i>
1998	-	71,620	3,080	21,565	<i>2000</i>	<i>4000</i>	-	10,000	50,695	400
1999	30	110,756	4,000	32,609	<i>3000</i>	6,746	-	11,000	46,386	2400
2000	52	165,699	9,872	47,221	4,353	7,176	-	22,000	58,466	5425
2001	<i>100</i>	218,114	20,141	79,177	10,549	10,363	-	38,732	58,706	10,000
2002	166	235,136	30,623	103,671	16,935	14,272	-	43,828	49,999	15,404
2003	<i>170</i>	254,995	40,890	113,816	24,480	23,289	-	49,928	<i>50,000</i>	21,017

Note: Numbers in bold show data supplied direct or published up to 1/7/2004 while numbers in italics show estimations.

Source: Certified and Policy Supported Organic and In-Conversion Land in Europe

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