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## **MARKET CREATION: ORGANIC AGRICULTURE IN TURKEY**

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## ABSTRACT

The end of Second World War fuelled world population dramatically by increasing tremendously the demand for agricultural food and other relevant nutrition. In order to keep food supplies and huge demand in balance the petrochemical resources, chemical fertilizer, growth regulator and preventive treatments for plants and animals, and the development of machinery, breeding, and genetic engineering have been applied in agricultural production process since that date. Also, farmers were encouraged to maximize yields through the use of increased artificial inputs and improved plant and animal genetics. Therefore, agricultural output has increased substantially, and has helped solve the problems of insufficiency of foodstuffs resulting from population growth. This achievement is known as *Green Revolution*. However, this revolution and development brought a number of ecological problems such as pollution of air, soil, and water, soil erosion, and food contamination. Thus, it is emerged that the current conventional agriculture fails to take into account adequately the costs of its negative environmental effects. Due to its wide range of ecological concerns, today, organic agricultural markets are emerging worldwide. This is also primarily in response to increasing consumer concerns about food health and safety, and a community desire for sustainable food production and farming systems.

Thus, organic agriculture is one of the most prominent forms of sustainable production. In the recent past, the scale of this type of agriculture was so small that its economic significance remained very limited. However, today, a change can be seen, propelled by organic agriculture, which has been on the rise for more than a decade. As a result of the rapid growth of the sector, it is expected that its economic significance will increase sharply (Bellegem and Eijs, 2002: 9).

This study describes the development of the sector in Europe and in Turkey. It looks at the reasons why this form of agriculture can be considered to be a desirable means of development on the basis of considerations of sustainability. It looks at organic agriculture in terms of sustainability in the social, ecological and economic fields. It then provides an analysis of the main problems and difficulties associated with the extension of the market for Turkish organic products. The discussion then turns to the measures and instruments that are deployed in order to improve the market for the products of Turkish organic agriculture. A number of the remaining difficulties are also discussed.

## INTRODUCTION

Although, there are many diverse definitions about what organic agriculture is and what it should be amongst the researchers, private certification organizations, and institutions; organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony (NOSB, 1995). Therefore the primary aim of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals, and people. As a result of this system, high production and healthy crops are ensured by crop rotations, intercropping, proper varieties, biological pest control, nutrient recycling and other measures. Today, many people are interested in organic produce and organic agriculture. Organic agriculture can be regarded as a new environmentally and socially sensitive agricultural approach, production and food supply system, and process, which promotes integrated, humane, environmentally and economically sustainable agricultural production systems to provide acceptable levels of crop, livestock and human nutrition, protection from pests and diseases, and an appropriate return to the human and other resources employed (Lampkin 1990). Accordingly, an organic product is grown, stored, and processed without the use of synthetically-produced chemicals or fertilizers, herbicides, insecticides, fungicides, or any other pesticides, growth hormones or growth regulators. After producing, the organic food contains label which indicates to the consumer that a product was produced using certain production methods.

The objective of organic agriculture is to produce nutritious food in an economically viable and environmentally beneficial way, which is designed to work constructively with natural biological cycles and to operate with minimal external inputs.

Organic agriculture, defined as agriculture that is ecologically sustainable, economically feasible and socially just, which includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibers. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, it aims to optimize quality in all aspects of agricultural and the environment. Organic agriculture dramatically reduces external inputs by refraining from the use of chemosynthetic fertilizers, pesticides, and pharmaceuticals. Instead it allows the powerful laws of nature to increase both agricultural yields and disease resistance (IFOAM, 2001). In many countries, including the US and in the EU, organic agriculture is also defined by law. In many European countries, organic agriculture is known as ecological agriculture, reflecting this reliance on ecosystem management rather than external inputs. The term *organic* is gaining a technical and legal meaning enabling producers and buyers to establish recognized standards for registration and certification, quality control, and marketing procedures. The International Federation for Organic Agricultural Movements (IFOAM), established in the early 1972 in France and has 600 organizational members from 120 countries. The main thrust of IFOAM (2000, 2001, 2004) was to define the concept of organic farming through their basic standards, defines the *organic* term as referring to the particular farming system described in its *Basic Standards*. The *Principle Aims of Organic Agriculture and Processing* are based on the following equally important principles and ideas:

- to produce food of high nutritional quality in sufficient quantity;
- to interact in a constructive and life enhancing way with all natural systems and cycles;
- to encourage and enhance biological cycles within the farming system, involving micro organisms, soil flora and fauna, plants and animals;
- to maintain and increase long-term fertility of soils;
- to promote the healthy use and proper care of water, water resources and all life therein;
- to help in the conservation of soil and water;
- to use, as far as is possible, renewable resources in locally organized agricultural systems;
- to work, as far as possible, within a closed system with regard to organic matter and nutrient elements;
- to work, as far as possible, with materials and substances which can be reused or recycled, either on the farm or elsewhere;
- to give all livestock conditions of life which allow them to perform the basic aspects of their innate behaviour;
- to minimize all forms of pollution that may result from agricultural practices;
- to maintain the genetic diversity of the agricultural system and its surroundings, including the protection of plant and wildlife habitats;
- to allow everyone involved in organic production and processing a quality of life conforming to the UN Human Rights Charter, to cover their basic needs and obtain an adequate return and satisfaction from their work, including a safe working environment;
- to consider the wider social and ecological impact of the farming system;
- to produce non-food products from renewable resources, which are fully biodegradable;
- to encourage organic agriculture associations to function along democratic lines and the principle of division of powers;
- to progress towards an entire organic production chain, which is both socially just and ecologically responsible.

IFOAM notes that genetic engineering focuses on the genetic makeup without taking into account the complete organism or system in which the organism functions. It is thus a contradiction to the above mentioned principle aims of organic agriculture. Another important task of IFOAM is to harmonize certification programmes through accreditation system.

## ORGANIC AGRICULTURE AND SUSTAINABILITY

In today's globalized world, consumers wishing to improve their intake of minerals while reducing their exposure to potentially harmful pesticide residues and food additives should choose organic food wherever possible. A number of scientific research evidences indicate that results of organic agriculture is safer and better for soil, water supply, animals and humans than conventional agriculture. Thus, the major benefits of organic agriculture can be summarized as *environmentally, socially, and economically* by refraining from use of synthetic fertilizers and chemicals, pesticides, pharmaceuticals, genetically modified organisms, and ionizing radiation (Briones, 2000; IFOAM, 2001; Leu, 2002; OECD, 2003).

Evidence for significant environmental amelioration via conversion to organic agriculture is overwhelming. For instance, pesticides are virtually eliminated and nutrient pollution substantially reduced. Loss of biodiversity, wind and water erosion, runoff, and fossil fuel use and greenhouse warming potential are all reduced in organic agriculture relative to comparable conventional agriculture systems (Lotter, 2003). Organic agriculture and integrated farming also represent real opportunities on several levels, contributing to vibrant rural economies through sustainable development. Indeed, new employment opportunities in farming, processing and related services are already evident in the growth of the organic sector. As well as the environmental advantages, these farming systems can bring significant benefits both to the economy and the social cohesion of rural areas. The availability of financial support and other incentives for farmers to convert to organic production is designed to help the sector grow still further and to support associated businesses throughout the food chain (EC, 2000). As a result of these fundamental advantages, the organic agriculture is rising dramatically, today more than 24 million hectares of farmland are under organic management worldwide (IFOAM, 2004). According to IFOAM, the growth in organic acreage is primarily due to an increased global demand for organic food and the expansion of markets for organic products. If current growth rates continue, organic agriculture may be seen less as a *niche* market and more as a primary option for farmers in both northern and southern countries (Willer and Minou, 2004). Accordingly, the organic agriculture has been regarded as a new emerging *sustainable agriculture method* since last decade.

## ORGANIC AGRICULTURE IN EUROPE

Europe is arguably the birthplace of modern organic agriculture. The emergence of strong environmental concerns and health issues related to agriculture in general and food production in particular have given rise to rapid growth in consumer demand for organic products in recent years. A number of European governments actively encourage conversion to organic agriculture by offering financial and other support for organic producers. The motivation for this support varies between countries and can include issues related to the environment and water quality, over production and food surplus, export opportunities, and food safety or quality. Europe is the second largest (after the United States) consumer and producer of organic foods in the world. Consumption in 1998 was US\$6.5 billion, raised to US\$9.0 billion in 2000 and, at an annual growth rate of 15-25%, is expected to exceed US\$22.5 billion in the year 2005 (Baccuss, 2001: 8).

Individual certification initiatives and government policy support for organic production in the European Union (EU) increased the area under organic cultivation and in-conversion area thirty times from approximately 100,000 hectares in 1983 to over 3.8 million hectares in 2000 (3% of the agricultural area). This growth coincided with the implementation in 1993 of EC Regulation 2092/91 and its subsequent amendments that define organic production, processing, handling and distribution. Additionally, the implementation of policies in support of conversion to organic farming, as part of the EU-sponsored agri-environment programme, also assisted in the growth of this system of food production. The EU have also developed and EU logo for organic farming to identify organic farm products of both plant and livestock origin.

## TURKEY IN BRIEF

Turkey is a middle-income country with a GNP per capita of \$3,383 and a population of 70 million (SIS, 2003). The Turkish Republic is a social, democratic and secular state, and is one of the most developed East European countries, and is industrializing at a rapid rate. Trade has been increasing by exporting 50 billion USD goods. Turkey is bordered by six countries and is at the crossroads between Asia and Europe, and serves as a link and a strategic barrier between the Southern Caucasus and the northern Middle East. Her area is 779,452 sq., and is surrounded by three different seas, the Black Sea to the north, the Mediterranean Sea to the south and the Aegean Sea to the west, which provide good sea transportation for international trade. Turkey's strategic position provides access not only to her traditional trade partners such as the Middle East countries, but also to the newly emerging countries of Eastern Europe and the Central Asian Republics.

**Figure 1. The Map of Turkey**



Source: CIA The World Factbook

## THE TURKISH CONVENTIONAL AGRICULTURE INDUSTRY

The agriculture industry underpins the history of Turkish traditional business and social life, and agricultural sector bears an important role in the Turkish economy. Turkey has more arable land than any West European country, and 36% of its 78 million hectares (26.7 million ha) are cultivated. Techniques adopted in the 1970s have drastically modernized the sector with an emphasis on utilization of land, irrigation capabilities and agricultural machinery. Today, despite rapid industrialization, the agricultural sector contributes to majority share of the population is engaged in agriculture and livestock production. Turkey is also one of the few countries in the world which has exceeded the food self-sufficiency threshold, a leading exporter of agricultural products in the Near East and North Africa, ranking among the top 10 main food exporters in the world. Since implementing its first structural adjustment program in 1980, Turkey has developed ongoing series of agricultural policy reforms designed to privatize markets, to reduce agricultural subsidies, to remove trade barriers and to integrate Turkey into the global economy. Measures adopted under the program included currency devaluation, price and trade liberalization and the opening of financial markets.

However, as the country has developed, agriculture has declined in importance relative to the rapidly growing industry and service sectors. Although agriculture has become a less significant sector in the Turkish economy over period of several decades, it still accounts for a relatively larger share of total output and employment than in many other countries, which covers 35% of total workforce, and the export of Turkish agricultural commodities (excluding agro-industry), valued at 5.2 billion USD in 2003 and accounted for 11.2 percent of Turkey's total export earnings (SIS, 2003; SPO, 2003; DTM, 2004; TIM, 2004). As a result, the Turkish governments have intervened and subsidized heavily in agricultural sector for a long time. These subsidies come in many forms, through price supports, direct payments, input subsidies, import protection, marketing monopolies and export subsidies, taxes, and indirect aid (such as for education, research, extension and marketing). All those aids aimed to increase food self-sufficiency and rural development, stabilize farmers' incomes, provide adequate nutrition and affordable food and promote exports. Unfortunately the gap amongst society has not been filled by typical conventional agricultural policies.

## **THE ORGANIC AGRICULTURE IN TURKEY**

Turkey has a tremendous fertile land for organic agriculture operations along with suitable circumstances both ecologically and climatologically. The dissemination of organic principles started in Turkey in the mid 1980s by adopting liberalization progress and export led growth strategy. First demand for organic products came from European countries, and continued with other countries such as the U.S., Canada and Japan. In the initial years, only a few food products made the list such as raisins, dried figs, and dried apricots. Today, there is a wide range of products such as hazelnuts, chick peas, lentil, dried plums, beans, pistachio nuts, chestnuts, oregano, cumin, sesame seeds, frozen fruits and vegetables, apples, strawberries, pears, garlic, and celery. Much of this production is in the Izmir region of Western Turkey. In 1992 the Turkish Association of the Organic Agriculture Movement (ETO) was established to cater for the needs of the existing organic farms, set the standards for production, inspection, certification and export of organic produce speed up the development of the organic agriculture. ETO is the major organic agriculture association of Turkey, having 200 members, which groups researchers, farmers, distributors and consumers, and provides training and counseling to farmers as well as serves as a link between dealers and institutions. The European Union places special emphasis on this subject and supports potential investors with various funds. Turkey-EU relations in the field of agriculture, from the point of view of ensuring the free circulation of agricultural products, are characterized by three processes; (1) harmonization of the Turkish agriculture with the Common Agricultural Policy (CAP), (2) implementation of a preferential regime (agricultural concessions) between the parties on trade in agricultural products, (3) and the system on processed agricultural products. Accordingly, a national regulation was also initiated in 1994 in keeping with the EC regulatory framework. The Ministry of Agriculture and Rural Affairs (MARA) has been entrusted to supervise the sector, and conducts extensive studies geared towards organic agriculture. The Organic Agriculture Committee (OAC) at MARA is the authority to prepare and implement the regulation on organic agriculture, to give permission to control and certification bodies, to inspect these organizations and coordinate all other activities to improve organic agriculture in Turkey. The Prime Ministry Undersecretariat for Foreign Trade and MARA are the authorities for regulation import and exports of the products certified as Organic.

For an organic agriculture product to be sold in either the domestic market or abroad, it must have an ecological product certificate. In Turkey, a control and certification body must be approved and authorized by MARA, to be able to operate. Inspections of organic production are carried out by private control and certification bodies. These organizations must receive a permit from OAC to perform activities related to control and certification. OAC supervises the activities of these inspection bodies. OAC members make both notified and random visits to these bodies and also to the organic farms to control their inspections. Currently, two national and five foreign organizations work as inspection bodies to control organic agricultural products in Turkey. IMO, BCS, ECO-CERT and, SKALL are active foreign bodies, and EKOTAR and ETKO are national bodies in this field. Another foreign control and certification body, BIOAGRICOP is not currently active (Ozkan, 2003: 292). Turkey's organic products market reached \$40 million in 2003, \$36.9 million of which was exported. In 2002, 19 thousand tons of organic food exports brought in \$30,877,140. In 2003, exports increased to 21,000 tons and revenues jumped to \$36,932,995.

Turkey is 9th in the world with 18,385 organic agriculture farms; and she is 29<sup>th</sup> with 57,001 hectares of organic agriculture area. The bulk of the domestic production is exported to the European Union (80%), especially to Germany (60%) and the USA (15%). The domestic market started to operate in 1999, mostly in the main towns. Marketing is generally confined to healthy food shops and supermarkets. In other words, Turkey's organic producers are mainly focused on export markets. The domestic organic market has only a small portion of the Turkish food market. The majority of consumers in Turkey are price-sensitive and because of the higher costs of organic foods, consumers prefer conventional food products. Currently there is no governmental support to organic production such as supporting farmers during conversion period. Besides its regulatory duties, OAC organizes (Ozkan, 2003: 294).

## **METHODOLOGY OF RESEARCH**

This empirical research utilized by qualitative method including a document review, semi-structured telephone survey, site visiting, and semi-structured interviews. The research was conducted in South East Anatolia, called as *GAP (the South-eastern Anatolian Project)* area. GAP is a multi-sector and integrated regional development effort approached in the context of sustainable development. Its basic objectives include the improvement of living standards and income levels of people so as to eliminate regional development disparities and contributing to such national goals as social stability and economic growth by enhancing productivity and employment opportunities in the rural area. The GAP consists of the construction of 22 dams, 19 hydroelectric power plants and irrigation mechanisms over the Euphrates and Tigris basins and Upper Mesopotamia plains, which is operated a vast area of the region (75.358 km<sup>2</sup>) covering 9 cities (Adiyaman, Batman, Diyarbakir, Gaziantep, Kilis, Mardin, Siirt, Sanliurfa and Sirnak), Sanliurfa, Gaziantep, and Diyarbakir are the major cities having more than 4 million population (please see Map).

The site visiting and interview lasted three months. The interviews were lasted three months. The interviews were conducted to farmers, civil societies, department of agriculture (Harran University), and other governmental institutions such as GAP-GIDEM. A thorough documentation for organic agriculture, which is related for Turkey, was also investigated and compiled for the research purpose.

## **STRATEGIC REASONS FOR ORGANIC AGRICULTURE IN TURKEY**

Sustainable organic agricultural strategies can be regarded as a life primary agriculture technique for Turkey due to its sustainability regarding economic, social, and environmental aspects. Despite its fertile soils, suitable climate including water resources and sun-shine, ecological variation, geo-strategically advantages, and geographical opportunities, the capacities of the Turkish conventional agriculture is obvious, which covers 5 billion USD exports only within total Turkish export rate. Also, the ratio of organic agriculture fields to the total agriculture area is only 0.14%. Accordingly, Turkish government should support and somehow shift its agricultural strategies from conventional to organic agriculture policy to compete and survive in global arena. There are a number of reasons why Turkish government should take this crucial policy.

From the *economic point of view*, majority of Turkish labor force works in agriculture industry as well as in rural areas, which accounts substantial share of Turkish population, in other words, Turkey has a very young population and 35% of labor forces directly work in agriculture sector. Organic agriculture requires less qualified labor intensive work, and labor costs are an important input in the production process; Turkey can compensate this requirement very easily with very young and cheap labor force, which give a very substantial competitive advantage comparing European countries regarding labor input. Moreover, the consumption of organic agriculture productions are still increasing, and is expected to experience a market boom in the next years. As mentioned, the organic productions are value added production, and sold more expensive than conventional productions. This means that if Turkey enhances its substance by converting productions from conventional to organic, Turkey will increase its export rate considerably.

As for *the social dimension* of organic agriculture, not only this systemic agricultural technique embraces consists of economic impacts but also embraces the social life of people including changing life style, and enhancing welfare. Because, organic agriculture is a philosophy and comprehensive approach to life, that looks at the people as an entrepreneur, and a professional farmer not village dweller. Thus, the introduction of organic principles in agricultural management brings social benefits as farmers adopt a logic close to their traditions and values. It also stimulates the rural development and employment of the region(s) by prioritizing human life.

The *environmental characteristic of the organic agriculture* is also very important for Turkey. As mentioned, Turkey has a vast agricultural resource base with significant potential to expand output, particularly through increased crop yields. Especially, the South-eastern Anatolian has a vast area which suitable for many agricultural products. However, the result of research showed that conventional agriculture methods contaminate the water, weather, and soil, and causes soil erosion and pollution; thus, the Turkish lands have been polluted for a long time as a result of conventional methods. Moreover, the Turkish farmers are subjected to chemicals during the conventional agriculture process, and majority of Turkish people consume unhealthy agriculture productions. From this point of view, organic agriculture can be seen as a prevention mechanism for these kinds of negative environmental effects, not only preventing but also remedying the problems that occurred throughout time. Also, many Turkish governments have rectified problems associated with certain resource-destruction production practices for a long time, but certainly, it is cheaper to support organic agriculture than to rectify problems.

## **DIFFICULTIES ASSOCIATED WITH MARKET CREATION**

The research concludes that marketing of Turkish organic agriculture production should be considered as a whole, thinking the sole marketing is not enough for compete globally. For this reason, the production process should be regarded as value chain, and each ring of chain should be evaluated in detail to overcome difficulties associated with market creation.

The *production process of organic farming* has been marked by a number of fundamental and delicate steps such as selection of seeds (must be organic), land preparation, cultivation, soil management, crop rotation, mulching, using beneficial insects and other organisms, pesticide, harvesting, and storing in the approved manner. For Turkey, the worldwide application of unified and/or harmonized production standards for organically produced foodstuffs is extremely important for a greater development of organically grown land and of markets of organic products. Although, most of Turkish farmers are aware of the significance and techniques of organic agriculture, *the farmer and labor force should be trained and qualified by giving intensive programme* throughout the country.

*Certification* is an essential element of organic agriculture method. As organically produced products are only distinguishable from their non-organic counterparts due to their certification, establishing and maintaining the integrity of a certification system is essential if goods are to sell a premium. The selection of appropriate certifying agencies and implementation of mechanisms to certify producers must be addressed. Especially, the certificate organizations should promote to set up in South- east Anatolian region and underdeveloped region of country.

As for the marketing, the domestic demand for organic foods is sleeping giant. Turkey's growing incomes and population, who allocates 30% of her disposable income for food purchases, signifies a greater demand for high quality food. Along with hypermarket system, which has flourished all around the country since 1990s, Turkish consumers have an interest in organic agriculture that means organic agriculture will be subjected to a great demand and local market boom. This is a good potential opportunities for organic agriculture producers to sell the production for local market. In addition to supplying local demands, niche markets overseas would have to be sought. A thorough investigation of local and international market potential would have to be carried out, taking into account possible locations for production, transportation and packaging costs, cost of compliance with certification requirements, etc. In addition, the need for interim marketing strategies will have to be addressed to cover the period of conversion to organic

production. Moreover, much of Turkey's non-traditional production can be considered 'organic' because of the non-use of artificial inputs; many examples can be found in South-eastern Anatolia, especially in *Karacadağ* region. Although this in itself does not qualify them for the organic market, such systems can more easily be made to conform to the requirements of organic certifying bodies, once farmers become knowledgeable of organic systems and practices and the social acceptance of such management practices.

## **CONCLUSION and RECOMMENDATIONS**

This article has summarized some of the key results of a three months empirical study of how Turkish agriculture can retain and/or increase its competitiveness in the domestic and world markets. Turkey needs to frame supportive policies for encouraging such agriculture method. Thus, the Turkish government should actively support and bolster organic productions systems as a role model for agricultural sustainability. For instance, a similar attempt can be initiated in GAP region under the governance of GAP-GIDEM.

Organic agriculture must be discussed with an open mind, with the advantages and disadvantages being clearly considered. Only then can developing regions of Turkey fully determine the potential of organic agriculture under various conditions. Of course, Turkish government can play a key role in promoting a more objective debate on the potential role of organic agriculture, and identifying the circumstances where organic agriculture can be applied most beneficially.

The organic agriculture requires long and deep breath. So, the Turkish organic farmers must use long-term strategies and preventive measures, and balance their approaches carefully. The agricultural sector in Turkey continues to face new challenges. Thus, Turkey has to adopt and implement sustainable production methods and high-quality value added organic products, as well as the urgent need to improve competitiveness and extend participation in global markets.

Demonstration farms would have to be established in different locations of Turkey to illustrate various organic practices. An initial demonstration farm to be utilized for organic vegetable production can be established by department of agriculture, in various Turkish universities. This will serve as the basis for information dissemination and training in all aspects of organic production.

Another reason is Turkey has a fertile soil this means Turkey can produce large amount of organic agriculture. By applying this methods Turkey can get a sustainable strategic advantage, and its agricultural export rate can be soared in short.

The Turkish government can play a role in encouraging the adoption of organic agriculture in developing areas of Turkey. Especially, the farmers are collected to set up a company and trained regarding produce organic products. Otherwise, the competitive advantage can be lost, in other words, the power must be combined.

Moreover, as mentioned, there is a strong synergic interaction between organic agriculture and organic husbandry. This means the organic agriculture system directly stimulates and requires animal husbandry. So, at the same time this sector also is developing within organic agriculture system. Especially, the GAP region must be evaluated regarding organic agriculture in which there is a vast intact area, which has not been contaminated since existence. Also, a research and development, analysis, and information center should be established to investigate all steps of organic agriculture including production, certification, and marketing processes.

Finally, the organic agriculture area is quite suitable for organic honey. While making organic agriculture organic honey can be produce very easily. This is very important for GAP area, because of its land suitability and unemployment.

## REFERENCES

- Baccuss, E.C., (2001), Market Survey for Organic Foods from Caricom Countries in Selected European Countries, *Emerging Market Economics Ltd.*, May.
- Bellegem, T.M.V., and Eijs, A., (2002), Market Creation: Organic Agriculture in the Netherlands, Ministry of Housing, Spatial Planning and the Environment, Working Party on Global and Structural Policies, Working Group on Economic Aspects of Biodiversity, The Netherlands.
- Briones, A., (200), Organic Agriculture in Asia: Implications to Development, Environment and Trade in Developing Countries, *The Third Regional Workshop on Strengthening Research and Policy-Making Capability on Trade and Environment in Developing Countries*, May 26, Havana, Cuba.
- Foreign Economic Relations Board (DEIK) (2002). The Turkish Economy by Sectors.
- International Federation of Organic Agriculture Movements (IFOAM) (2000), Environment Report, Basic Standards.
- International Federation of Organic Agriculture Movements (IFOAM) (2001). Organic Agriculture Worldwide: Directory of Member Organizations and Associates 2002. IFOAM Head Office, Tholey-Theley, Germany.
- International Federation of Organic Agriculture Movements (IFOAM) (2004). The World of Organic Agriculture: Statistics and Emerging Trends, 6<sup>th</sup> Edition, February.
- Lampkin, N., (1990). Organic Farming, *Farming Press Books*, Ipswich, UK.
- Leu, A., (2002). Organic Agriculture as a Model for Sustainable Agriculture, The Second International Conference on Sustainable for Food, Energy and Industry, Beijing, China, September, pp.1465-1471.
- Lotter, D.W., (2003). Organic Agriculture, *Journal of Sustainable Agriculture*, Vol.21, No.4.
- Organization for Economic Cooperation and Development (OECD), (2003). *Organic Agriculture: Sustainability, Markets and Policies*, CABI Publishing.
- Ozkan, M., (2003). Organic Agriculture and National Legislation in Turkey, Organic Agriculture: Sustainability, Markets and Policies, OECD, CABI Publishing.
- State Institute of Statistics (SIS), (2003). Statistical Reports. Retrieved from: <http://www.die.gov.tr>
- State Planning Organization (SPO). (2003). Annual Sector Reports. Retrieved from: <http://www.dpt.gov.tr>
- The National Organic Standards Board (NOSB), (1995). Retrieved from: <http://www.northcoast.com>
- Turkish Exporters Assembly (TIM), (2004). Bulletin.
- Undersecretariat of the Prime Ministry for Foreign Trade (DTM) (2004). Statistical Annual Bulletin, Retrieved from: <http://www.foreigntrade.gov.tr/ihr/english/trade/listofsds.htm>
- Willer, H., and Minou, Y., (2004). The World of Organic Agriculture: Statistics and Emerging Trends 2004. International Federation of Organic Agriculture Movements (IFOAM), Bonn.