

ORGANIC AGRICULTURE IN TURKEY

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ABSTRACT: Depending on technological and scientific development, increase in use of agricultural inputs caused yield increase, but this affected adversely human health and environment. These issues were discussed first at Stockholm Conference held in 1972, later at Rio and Kyoto Conferences held in 1992. Organic agriculture movements gained speed with this activities. Today organic agriculture is a big sector covering more than one hundred countries in the world. Depending on the development in the world, organic farming sector developed in Turkey. Today this sector has more than 57 thousand hectare and 18 thousand farmers in Turkey.

Keywords: Organic agriculture, organic production, Turkey

TÜRKİYE'DE ORGANİK TARIM

ÖZET: Teknoloji ve bilimde yaşanan gelişmelere bağlı olarak tarımsal girdi kullanımındaki artış, verimde artışa neden olurken, insan ve çevre sağlığını olumsuz yönde etkileyecek gelişmelere de neden olmuştur. Bu olumsuzluklar ilk defa 1972 Stockholm Çevre Konferansı'nda, daha sonra Rio ve Kyoto Konferanslarında (1992) ele alınmıştır. Bu çalışmalar organik tarımın yaygınlaşmasına hız kazandırmış, bugün yüzden fazla ülkeyi içine alan büyük bir sektör konumuna gelmiştir. Türkiye'de de dünyadaki gelişmelere paralel olarak gelişme göstermiş olan organik tarım sektörü, bugün 57 bin hektarın üzerinde bir alanda 18 binden fazla üretici tarafından gerçekleştirilen bir tarımsal faaliyet konumundadır.

Anahtar Kelimeler: Organik tarım, organik üretim, Türkiye

1. INTRODUCTION

Today organic farming is a big and dynamic sector in the world covering over one hundred countries with 24 million hectares production areas and 23 billion USD market values. The area of certified wild harvested plants in the world is at least 10.7 million hectares (Willer and Yussefi, 2004). Organic agriculture developed in Turkey depending on development in the world. It was started in the mid-1980s due to demand from importing countries. According to the latest sources, in Turkey a land area of 57.001 ha is under organic management with 18.385 farmers (Willer and Yussefi, 2004). The number of organic products produced in Turkey has increased from 8 to over 300 presently. The major organic products exported are dried sultanas, dried apricots, figs and hazelnuts. Recently a wide range of products such as frozen vegetable and fruits, fruit juice and concentrates, rose and rose products included our export. In 1994 national regulation on organic agriculture was prepared and published in harmony with the European Union (EU) Regulations. The National Regulation of 1994 was revised according to the amendments of the EU regulation and new Turkish Regulation was published on 11 July 2002. The new law for Organic Agriculture was issued in 2005.

2. ORGANIC PRODUCTION

Due to its favourable climatic conditions, a wide range of crops are grown in Turkey. It has seven climatically different regions. In the south coast called

“Mediterranean Region” agricultural production occurs throughout the year in the field and under cover where citrus, banana, olive, tomatoes and cucumber are the main crops. In the west coast called “Aegean Region” the primary crops are grapes, figs and olive. In the Marmara Region cash crops are olive and fruits (especially peach). In the eastern region the province “Malatya” is famous for its apricot production amounting to over 50% of Turkey's apricot production. Hazelnuts and tea are grown in “The Black Sea Region” in the north. In the centre Anatolia many fruit crops and field crops are grown.

Organic area devoted to organic production increased from 1,037 in 1990 to 57.001 ha in 2004. The number of organic farm increased from 313 in 1990 to 18.385 in 2004 (Figure 1). In the Mediterranean Countries, Turkey ranks second after Italy in terms of the number of organic farms and area (Fersino, 2003). Organic farming was initiated by importing countries, demanding dried fruits as apricot, raisin and fig. Today the number of organic products is over 300 of which 100 are processed. Organically grown crops were given in Table 1. Data illustrate that tomatoes, apple, wheat, cotton, apricot, raisin, fig, olive and hazelnuts are the main products even though their production show differences year to year. Total production increased from 168.306 ton in 1999 to 291.876 ton in 2003. Distribution of organic crops is shown in Figure 2. Dry and dried fruits account for 61% of total organic production, followed by field crops with 21% and fresh fruits with 5%.

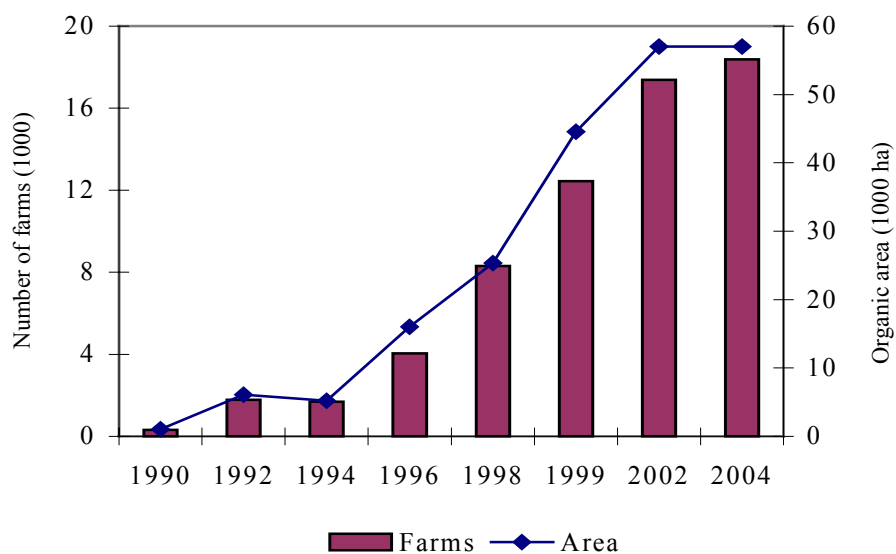


Figure 1. Organic land and farms in Turkey (source: MARA)

Table 1. Organic production in Turkey (tons)

Crops	1999	2000	2001	2002	2003
Tomatoes	7.095	15.532	90.472	82.809	26.493
Apple	24.038	50.136	45.04	69.187	71.928
Wheat	15.983	4.551	31.139	19.752	21.379
Cotton	23.52	23.091	19.511	21.793	34.877
Apricot	10.822	40.799	13.634	5.94	13.278
Grape	7.182	7.582	12.894	10.469	9.505
Fig	7.84	7.635	8.293	9.473	8.112
Olive	3.31	12.875	7.343	10.744	6.456
Hazelnut	5.411	4.114	6.965	7.667	5.994
Lentil	3.211	7.163	5.862	17.012	11.781
Morello cherry	744	2.143	3.769	6.58	5.994
Chickpea	1.35	1.885	3.691	7.667	5.662
Strawberry	2.28	2.677	3.353	3.293	3.497
Pepper	553	1.592	3.202	3.355	3.309
Onion	703	809	2.68	388	1.02
Olive oil	1.174	1.62	1.602	413	68
Cherry	366	496	1.375	1.335	1.83
Dry plum	1	1	1.033	295	295
Honey	1.128	2.582	557	923	1.1
Total (including others)	168.306	237.21	280.328	310.124	291.876

Source: Koç (2004)

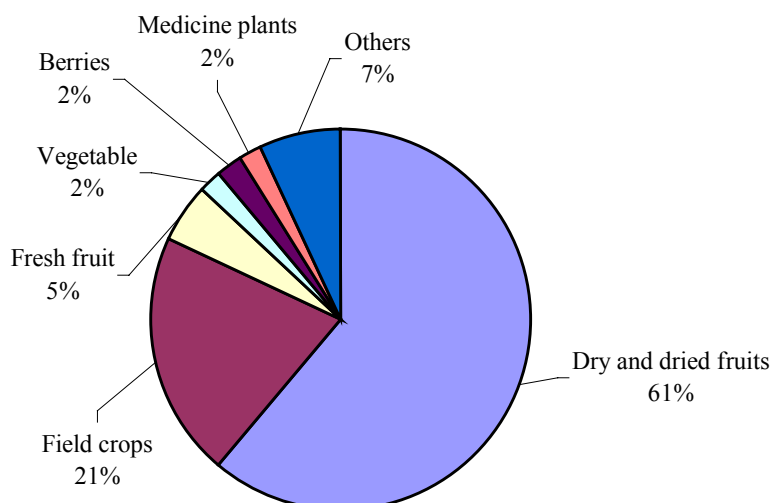


Figure 2. Distribution of organic crops in Turkey (source: MARA)

3. EXPORT

The market values of exported organic products show a continuously increasing trend. Export of organic products in Turkey between 2000 and 2003 years was presented in Table 2. The first four products exported are raisin, dried figs, hazelnuts and dried apricot. The amounts of organic dried raisin and figs, and hazelnuts exported accounted for 2.4, 5.7 and 1.0% of the country's total export of these products in 2001, respectively (S.I.S, 2003; Koç, 2004). The amount of exported products increased from 13.129 ton in 2000 to 21.083 ton in 2003, corresponding to 22.5 and 36.9 million USD respectively. This data obtained from The Aegean Exporters' Union (AEU), which co-ordinates the exportation of organic products in the country. Another source of data is The Ministry of Agriculture and Rural Affairs (MARA). Sometimes there is difference between figures obtained from these two sources. The reason for the low figure obtained from AEU is that some exporters were not registered to AEU.

Most of the organic products in Turkey go to foreign market. Today, Turkey exports its organic products to more than 37 countries among which the EU Countries take the first place (80%). Germany is the main market for Turkish organic products with 60% export share in the EU. Other EU Countries are: France, The Netherlands, Switzerland and The United Kingdom. The USA is also another importing country with 15% market share. The major products exported to the USA are dried figs and apricots, fruit juice and

concentrate, and olive oil. Canada, Japan and north European countries import organic food from Turkey.

The domestic organic market has only a small portion of the Turkish food market. The domestic market started to operate in 1999, mostly in the big cities. Marketing is generally confined to healthy food shops and supermarkets (Aksoy et al., 2001).

4. LEGISLATION

The first national regulation on production, processing and marketing of organic agricultural products was published on 18 December 1994 (Özkan, 2004). The amendment for this regulation was made on 29 June 1995. The National Regulation of 1994 was based on the EU regulation 2092/91. Since then, amendments to the EU's basic regulations have been adopted and a new regulation was prepared and published on 11 July 2002. The new law for Organic Agriculture was issued in 2005. With the publication of comprehensive national legislation, most of the issues from the field to the fork of the consumer are covered. The aim of the MARA is to build trust in the organic sector. The Organic Agriculture Committee (OAC) at MARA is the competent authority to prepare and implement the regulations on organic agriculture, to give permission to control and certification bodies, to inspect these organisations and co-ordinate all other activities to improve organic agriculture in Turkey. Prime Ministry Undersecretariat for Foreign Trade and MARA are the authorities for regulating imports and exports of organic products certified as "organic".

Table 2. Amount and value of exported organic products in Turkey (amount: tons, value: 1000 USD)

Crops	2000		2001		2002		2003	
	Amount	Value	Amount	Value	Amount	Value	Amount	Value
Raisin	4.252	4.836	5.412	4.885	6.115	5.718	5.677	7.056
Dry fig	2.103	4.074	2.227	4.764	2.228	5.537	2.027	5.166
Hazelnut	1.252	4.226	1.59	5.457	1.56	4.755	1.403	5.107
Dry apricot	1.268	2.741	1.934	2.805	1.835	4.044	1.688	4.734
Apple juice	315	424	142	138	468	456	2.528	3.055
Frozen fruit	185	252	1.163	1.368	892	1.106	1.212	1.983
Cotton fibres	175	299	92	184	411	623	865	1.376
Pine nut	52	787	54	726	96	4.534	70	1.212
Lentil	979	806	1.097	841	962	655	1.447	1.025
Chickpea	707	636	1.035	827	1.413	1.113	1.167	830
Frozen vegetable	352	184	575	355	666	391	841	573
Anise, fennel and coriander seeds	21	60	56	166	246	592	229	453
Honey	20	38	30	63	385	852	109	295
Pistachio	176	126	51	307	21	129	32	265
Olive oil	15	48	5	12	25	65	54	174
canned cherries	25	12	92	126	57	89	88	146
Tomatoes paste	1	1	13	11	116	86	134	142
Semolina and pounded wheat	25	12	79	37	85	48	116	64
Dry plum	275	321	351	460	139	236	6	24
Total	13.129	22.556	17.556	27.242	19.183	30.877	21.083	36.933

Source: Koç (2004)

In 1992 the Turkish Association of the Organic Agriculture Movement (ETO) was established to define the needs of the existing organic farms, set the standards for production, inspection, certification and export of organic products and stimulate the development of the sector. This Association, which covers researchers, farmers, distributors and consumer, provides training and counselling to farmers and serves as a link between dealers and institutions (Aksoy et al., 2001).

5. CONTROL AND CERTIFICATION BODIES

Currently, private control and certification bodies have carried out inspection of organic production. These bodies 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 activities. Currently two national and five foreign organisations work as inspection bodies (Özkan, 2004). These inspection bodies are as follows:

- Institute for Marketecology (IMO) (Swiss)
- ECOCERT (French)
- SKAL (Dutch)
- BCS EKO-Garantie GMBH (German)
- International Nutrition and Agriculture Consultancy (INAC) (German)

- ETKO Gözetim Hizmetleri Ltd.Şti. (Turkish)
- EKOTAR (Turkish)
- BIOAGRICOOP (Italian) (not active)

6. RESEARCH ON ORGANIC AGRICULTURE

In the Turkey research on organic agriculture have been conducted mainly by state-owned universities and research institutes. They have been mainly funded by the Government. A project named “Organic Research in Turkey” was prepared by The General Directorate for Agricultural Research at MARA and submitted to the The State Planning Organization in 2004 for funding. The aims of the projects are to determine the native materials to be used in organic farming and to submit these materials into the organic sector, to conduct basic and applied research throughout the country and to train the researchers working on organic agriculture.

7. CONCLUSION

Beginning in the mid-1980s, organic agricultural activities in Turkey has grown day to day. The share of organic products is now under 1%, but it is expected that it will reach to 30% in the next ten years. Turkish organic producers are mainly focused on export market. The national organic market has only a small percentage of the country's food market. Currently there is no governmental support to organic

production such as supporting farmers during conversion periods.

8. REFERENCES

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