

Organic Agriculture in Turkey

Ali Irfan ILBAS, Mustafa PAKSOY, Mira CUNUSOVA, Aybek KARABAYEV

*Department of Agronomy, Faculty of Agriculture,
Kyrgyzstan-Turkey Manas University,
Bishkek-Kyrgyzstan*

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iilbas@gmail.com

Turkey is one of the most suitable countries for organic farming due to:

- The presence of wide range of crop variety
- Suitable climatic conditions,
- Rich biodiversity,
- Highly experienced in farming practices,
- High rate of labor force population,
- Less polluted areas of Turkey's geography.

Table 1. Data of total agricultural area and organic farming area in Turkey

	2002	2014
Total agricultural area (ha)	26 579 000	23 939 000
Organic farming arable area (ha)	57 365	491 977
Share of organic arable area	0.2%	2.0%
Organic natural picking area (ha)	32 462	350 292
Total Organic farming area (ha)	89 827	842 216
Share of natural picking area	36%	42%

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

In The Ninth Development Plan of Turkey (2007-2013), it was aimed to be raise as high as 3% share in the total agricultural field, but this target was not achieved.

Since 2002 there is a strong increase in organic agriculture in Turkey. Number of producers reached 71 472 and they produced 208 different kinds of products.

And, total organic production was 1.642.235 metric tons in 2014. While the number of producers increased 1.4 times, the total organic production raised 5.3 times between 2002 and 2014. Expansion rate of the organic farming area and the natural picking area were approximately parallel, although those of the natural picking area was a little more.

Table 2. Organic plant production data in Turkey (including conversion period).

Year	Number of products	Number of operators	Raising area (ha)	Natural picking area (ha)	Total area (ha)	Production (MT)
2002	150	12 428	57 365	32 462	89 827	310 125
2014	208	71 472	491 977	350 239	842 216	1 642 235
Change (x fold)	1.4	5.8	8.6	10.8	9.4	5.3

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

In Turkey, organic farming are generally centered on plant production, however, there are significant developments in organic animal husbandry and beekeeping in recent years. Numbers of operators increased 545 times from 2005 to 2013. Number bovines and ovine increased 51 and 17 times in the same periods. The most increase was in the number of poultries, it raised 1000 times between 2005 and 2013.

Table 3. Organic animal husbandry between 2004-2014 in Turkey.

Years	Number of Operators	Number of Bovines	Number of Ovine	Number of Poultries
2005	6	1 953	10 060	890
2013	3 270	100 207	174 737	893 864
Change (x fold)	545	51.31	17.37	1004.34

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

Increasing in the organic animal production was not steady from year to year.

As seen Table 4., maximum increase of organic productions of meat and milk were in 2013.

In 2014, productions of organic meat, milk, cheese and butter were 1.406, 15.509, 11 and 1 metric tons respectively (Table 4).

And number of operators were 216.

The weakest area in the organic animal productions in Turkey is the organic aquatic production

Table 4. Organic animal husbandry production in Turkey.

Year	Number of operators	Number of animals	Meat (MT)	Milk (MT)	Eggs (units)	Cheese (MT)	Butter (MT)
2005	4	11 671	0	1 350	270 000	5	0
2010	105	387 984	6 803	11 604	17 889 808	-	-
2013	1 632	1 021 382	4 970	54 780	48 040 778	0	0
2014	216	774.870	1.406	15.509	64 898 912	11	1

It was seen that the number of organic honey producers and their organic farming area products has dramatically decreased, compared data of 2005 with those of 2014.

Producers those had 36 391 beehives produced 280 metric tons honey (Table 5.)

Table 5. Data of Organic beekeeping between 2005 and 2014 in Turkey.

Year	Number of operators	Number of Beehive	Production (MT)
2005	370	50 486	572
2014	321	36 391	280

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

It was seen in Table 6, organic fruits such as olives, apple, apricot, grape, fig, hazelnut, pistachio nut, walnut, almond and pine nut are mainly produced organic fruits in Turkey.

Share of organic fruits in total organic products was 10% in 2013.

Table 6. Organic fruits production data in Turkey (2013).

Fruits	Number of farms	Area (ha)	Production (MT)
Olives	3 348	17 738	39 661
Apple	1 567	1 824	37 291
Apricot	682	2 857	32 598
Grape (including dry sultanas)	1 274	3 851	24 355
Fig (including dry fig)	2 064	5 753	22 477
Hazelnut	2 007	5 901	9 865
Pistachio nut	69	1 260	1 658
Walnut	438	605	1 182
Almond	136	572	649
Pine nut	149	1 551	627
Total	11 734	41 905	165 358
Share in total organic (%)	19	9	10

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

According to data of 2013, organic vegetables such as tomatoes, carrot, pepper, potatoes, beans, spinach, eggplant, cabbage and squash are mainly produced organic vegetables in Turkey. Share of organic fruits in total organic products was 1.45% in 2013.

Table 7. Organic vegetables production data in Turkey (2013).

Crops	Number of farms	Area (ha)	Production (MT)
Tomatoes	223	262	9 003
Carrot	30	119	6 804
Pepper	164	187	3 141
Potatoes	96	54	968
Beans (including dry beans)	231	211	671
Spinach	43	36	665
Eggplant	92	52	378
Cabbage	55	44	208
Squash	63	23	192
Total	997	988	22 030
Share in total organic (%)	1.6	0.2	1.4

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

The most produced organic filed crops are cover, wheat, trefoil, vetch, grass, corn, barley, cotton lentil, chickpea, sunflower, potatoes and soybean in Turkey in 2013 (Table 8).

Share of organic field crops in total organic products is 50% in 2013.

Table 8. Organic field crops production data in Turkey (2013).

Crops	Number of farms	Area (ha)	Production (MT)
Clover	6 775	42 456	196 031
Wheat	9 150	80 643	169 287
Trefoil	3 898	21 788	81 944
Vetch	2 111	13 030	47 175
Grass	31 914	8 351	30 657
Corn	338	3 086	28 818
Barley	3 266	13 676	27 626
Cotton	220	4 435	20 602
Lentil	410	3 204	5 867
Chickpea	495	3 008	4 640
Sunflower	113	915	1 487
Soybean	5	151	665
Total	28 818	229 517	815 079
Share in total organic (%)	47	50	50

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

The most export market for Turkish organic products were Germany, United States, France, Holland, Switzerland, United Kingdom and Sweden, respectively in 2014.

Italy, Japan, Denmark, Australia, Belgium, Canada and North Korea are remarkable in view of the potential export market (Table 9).

Table 9. Main countries to which organic products exported from Turkey (2014).

Country	Quantity (kg)	Value (\$)	% Value
Germany	3.335.466	19.248.646	24,4
United States	3.782.712	19.053.760	24,2
France	1.488.675	8.507.402	10,8
Holland	1.254.091	7.075.308	9,0
Switzerland	1.190.599	6.217.360	7,9
United Kingdom	998.137	4.446.227	5,6
Sweden	808.811	4.360.203	5,5
Italy	389.770	2.775.607	3,5
Japan	296.571	1.910.147	2,4
Denmark	250.452	1.201.498	1,5
Australia	211.130	1.038.758	1,3
Belgium	136.720	471.784	0,6
Grand Total (including others)	15.552.638	78.779.537	100

Top-selling organic products in export market were figs and fig products, Nuts and nut products, Raisin, Apricot and apricot products, other Fruit and fruit products, Cotton and textile products, Pistachio, Lentils and varieties, Caper berries, Wheat and wheat products, Vegetables and vegetable products, Walnut in 2014 (Table 10)

Table 10. The Most Exported Organic Agricultural Products from Turkey (2014).

Products	Quantity (kg)	Value (\$)	% kg	% \$
Figs and fig products	4.523.936	21.626.691	29,09	27,5
Nuts and nut products	1.642.488	17.046.378	10,56	21,6
Raisin	4.118.835	13.557.823	26,48	17,2
Apricot and apricot products	1.975.009	11.102.466	12,70	14,1
Other fruits and fruit products	1.292.370	8.595.480	8,31	10,9
Cotton and textile products	132.447	1.814.432	0,85	2,3
Pistachio	21.807	854.089	0,14	1,1
Lentils and varieties	365.123	709.020	2,35	0,9
Caper berries	76.125	604.698	0,49	0,8
Wheat and wheat products	845.340	364.871	5,44	0,5
Vegetables and products	56.256	347.835	0,36	0,4
Walnut	22.258	343.069	0,14	0,4
Total	15.071.994	76.966.852	96,9	97,7
Grand Total (Including others)	15.552.638	78.779.537	100	100

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

Import

Major import products for Turkey are processed organic foods from Europe

For example, Turkey imported total 591.757 kg organic products such as baby food, macaroni, bread, chocolate, some canned foods, jams, specific teas and specific livestock products for example Roquefort cheese from Czech Republic, Poland, Germany, Belgium and Sweden in 2007.

Turkey also imported organic agricultural products such as jams, marmalade, sunflower oil, wax, chocolate, coffee, soy flour and ginger cookies and some specific products from 18 countries in 2011.

For getting started with organic agriculture in Turkey, producers willing to implement organic farming should first apply to the inspection and certification institutions authorized by the Ministry of Agriculture. Within this scope, the producer and the authorized control and certification body make a contract. The enterprise and production process of the producer are inspected by this authorized body. At the moment, there are 30 authorized control and certification bodies in Turkey (Table 11).

Table 11. Authorized Bodies of Control and Certification on Organic Agriculture in Turkey (2014).

KİWA BCS ÖKO- GARANTİE	IMC	LIKYA
IMO Control	EGETAR	EKOİNSPEKT
ECOCERT	BİO İNSPECTA	TMENA
ETKO	CONTROL UNION	NAVİGA
EKOTAR	ECAS	CERES
ICEA I. PER LA C. E. A.	BİOBEL	ORFARM
ORSER	Mehmet BIYIK-TUSCERT	De Control
ANADOLU	KAYOS	MAGENTA
TURKGAP	BAŞAK	CASCERT
NİSSERT	CTR	ORTA ASYA KONT. VE SERT.

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

Turkish government started to actively support organic farming by means of direct or indirect ways. Organic agriculture support policies focus on specific areas such as area payment, subsidized credit, and environmental reservation areas, biological and biotechnological control in greenhouses, agricultural advisory service support and partly export supports.

While some countries support both conversion period and continuation of organic farming, but, in Turkey, there is no support for producers for conversion period.

Table 12. Organic Agriculture Supports in Turkey (2015).

Product	Subsidy
Fruit, Vegetables	700 TL/ha
Field Crops	100 TL/ha
Full-grown Cattle, Buffalo	150 TL/ per animal
Calf	50 TL/ per animal
Full-grown Sheep, Goat	10 TL/per animal
Beehive	5 TL/per beehive
Trout	0,35 TL/kg
Sea Bream, Sea Bass	0,45 TL/kg

Source: Ministry of Food, Agriculture and Livestock of Turkey (www.tarim.gov.tr)

For further development of organic farming in Turkey

- Decreasing of inspections and certifications costs
- Supporting of highly expensive cost of converting period
- Supplying adequately organic inputs and additives
- Expanding the limited domestic organic market
- Improving of data collection infrastructure and traceability
- Developing of training and extension services
- Harmonization of national standards with others, besides EU's, (Soil Association, Demeter, Bio Suisse, RVA, USDA NOP, JAS, NPOP, MAFRA)
- Focusing on new organic production areas (such as agro-ecotourism, ecological district markets, production of organic furniture, personal care products, toys and cleaning products)

