The Current Situation of Citrus in the World and Turkish Markets

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Abstract: Turkey is among the leading countries in the world in citrus production as far as its geographical position and its ecological properties are concerned. In 2008 data indicate a global world citrus production of 122.087.751 tonnes, 22.019.156 tonnes of which is produced by China, with Brasil second with a production of 20.774.752 tonnes, the USA third with 11.692.770 tonnes, Turkey ninth with 3.026.940 tonnes. About 47.2% of this production is represented by oranges, 25% mandarins, 22% lemons, 5.5% grapefruit. Citrus constitutes 23.6% of total fruit production and 35.4% of total exports of Turkey. Citrus is produced mainly in Mediterranean and Aegean regions and partially in East Black Sea region in Turkey. The study has evaluated the current situation of citrus in the World and Turkish markets, common varieties associated.

Keywords: Citrus, species, cultivar, import, export

Introduction

Citrus is produced in the tropical and subtropical climate zones between 40 $^{\circ}$ north and south latitudes. It is also possible to commercially produce citrus in more northerly or southerly suitable microclimate areas and locations where ocean winds soften the climate.

Citrus Production And Market In The World And In Turkey

Citrus is produced on 8.716.255 hectares in the world and 113.061 hectares in Turkey. World citrus production amounted to 122 million tonnes in 2008. Production in Turkey was recorded as 3.026.940 tonnes. World productivity average was calculated as 1401 kg/da, whereas the average in Turkey was above that of the world with 2677 kg/da. (FAO, 2008) (Table 1)

		World		Turkey				
Years	Production (ton)	Area (ha)	Yield(Kg/da)	Production (ton)	Area (ha)	Yield(Kg/da)		
2001	104 273 191	7 201 786	1 448	2 475 000	88 933	2 786		
2002	106 245 530	7 298 577	1 456	2 490 000	89 982	2 771		
2003	106 557 953	7 582 818	1 405	2 485 000	94 494	2 633		
2004	110 965 382	7 607 900	1 459	2 705 000	96 778	2 800		
2005	105 431 984	7 605 363	1 386	2 585 000	96 778	2 674		
2006	116 223 849	8 318 929	1397	3 220 435	97 173	3314		
2007	118 563 114	8 658 760	1369	2 988 664	98 300	3040		
2008	122 087 751	8 716 265	1401	3 026 940	113 061	2677		

Table 1. Citrus production figures, areas and productivity figures in the world and Turkey between 2001 and 2008.

As far as the production figures of countries are concerned, China leads with 22.019.156 tonnes, followed by Brasil with 20.774.752 tonnes, USA with 11.692.770 tonnes, India with 7.168.700 tonnes, Mexico with

7.502.917 tonnes, Spain with 5.911.600 tonnes, Iran Islamic Republic with 3.756.000 tonnes, Egypt with 3.230.986 tonnes. Turkey is the ninth with a production of 3.026.940 tonnes. Table 2. indicates production figures in Turkey, China and Brasil with respect to species.

Species	Production	Production	Production
	(tonnes)	(tonnes)	(tonnes)
	Turkey	China	Brasil
Grapefruit (inc. pomelos)	167.765	567.546	72.000
Lemons and limes	672.452	917.166	1.040.000
Oranges	1.427.160	3.454.125	18.389.752
Tangerines, mandarins	756.473	15.622.593	1.273.000
Citrus fruit, nes	3.090	1.457.726	-
Total	3.026.940	22.019.156	20.774.752

Table 2. Production figures in Turkey, China and Brasil with respect to species in 2008.

World citrus production is composed of oranges with 55%, mandarin with 23%, lemons with 11%, grapefruit with 4% and other citrus species with 6%. Our national production was made up of oranges with 47%, mandarin with 25%, lemons with 22% and grapefruit with 5,5%. Due to the properties of the varieties produced in Brasil and the market structure of the country, around 70% of the production is channelled to orange juice industry. Brasil is unique in concentrated juice export with this feature. While most of the production is kept for juice industry in the USA, mostly fresh consumption is preferred in the EU. Spain is the most important exporter of fresh orange varieties among EU countries and third countries. It is followed by South Africa Egypt and Morocco are important players on the Russian market. Recent production increase and accordingly the increasing export figures in Egypt draw attention (Anonymous, 2009a). 2,3 millions of tonnes of fresh fruit and vegetables were exported by Turkey in return for 1.759.114.179 USD Dollars in 2008 (Anonymous, 2009b). Citrus hold the greatest percentage as far as both amount and revenue are concerned in total fresh exports (Table 3). 826.385 tonnes were exported with a revenue of 587.420.060 USD Dollars (Table 3) (Anonymous, 2009b).

	2008		20	Increase/Decrease (%) 2008-2009		
Groups	Ouantity (tonnes)	Value(\$)	Ouantity (tonnes)	Value(\$)	Ouantity	Value
Citrus	826.385	587.420.060	1.184.608	801.829.022	43	37
Other fresh fruits	1.052.098	672.071.059	1.055.712	653.478.303	0	-3
Fresh vegetable	457.501	499.623.060	530.870	492.239.087	16	-1
Total	2.335.984	1.759.114.179	2.771.190	1.947.546.412	19	11

Table 3. Changes in Turkish fresh fruit and vegetable export figures between 2008 and 2009.

An increase of 19% was recorded in fresh fruit and vegetables in quantity and 11% in revenues. Citrus had an increase of 43% in quantity and 37% in revenues and topped the list in 2009 with 801.829.022 USD Dollars (Table 3). Lemon has increase by 82% in quantity and 37% in value among citrus, with a revenue of 282.140.639 USD Dollars (Table 4).

	20	08	200	9	Increase/Decrease (%) 2008-2009	
Стор	Ouantity (tonnes)	Value(\$)	Ouantity (tonnes)	Value(\$)	Ouantity	Value
Lemon	226.600	206.506.893	412.089	282.140.639	82	37
Mandarin	313.833	203.957.036	369.141	259.096.215	18	27
Orange	157.295	94.917.841	266.371	171.386.364	69	81
Grapefruit	128.615	82.006.525	136.904	89.089.742	6	9
Other citrus	42	31.765	104	116.062	147	265
Citrus total	826.385	587.420.060	1.184.608	801.829.022	43	37

Table 4. Changes in Turkish citrus exports between 2008 and 2009 won the basis of varieties.

Turkey exports citrus to around 55 countries with Russia being the first with 33% (Anonymous, 2009b). It is followed by Ukraine with 13%, Iraq with 11%, Saudi Arabia and Romania with 7% respectively. Table 5 shows the countries importing citrus from Turkey in the 2008-2009 period and the figures thereof.

Russian Federation is the most important importer of oranges after EU. There is a serious competition between Egypt and Turkey regarding orange exports to the Russian Federation. The most important supplier of this country in the summer period is South Africa (Anonymous, 2009a).

While Egypt is the most important exporter to Saudi Arabia, remarkable amounts are also exported by Turkey as well. Other important orange importing countries after Saudi Arabia are Canada, Hong Kong, Ukraine and UAE. The 2007/2008 season has been quite negative for the lemon sector. The drought in Spain in the summer of 2007, the very hot fronts and drought in the summer and the freezing winter in Turkey, USA and Argentina have impeded the global lemon production considerably. EU counties, the Russian Federation and East European countries constitute the major markets of fresh lemon consumption. Grapefruit production is not globally common as opposed to other varieties. The majority of global grapefruit production is China where internal consumption is remarkable. USA, however is the major exporter of grapefruit supplying Japan and EU, France in particular. Among the countries channelling most of the production to export are South Africa, Israel and Turkey. Israel and Turkey are competing on EU, Russia and Eastern European markets. Another major global exporter of grapefruit is Japan. China leads the mandarin production, followed by Spain, the producer and exporter among EU countries. Italy and Greece are the other mandarin producers in the EU. Although Japan is another major producer, the vast majority of the production is designated for internal consumption. If the Spanish exports of small citrus such as mandarin to other EU countries is ignored, the major exporter is Turkey. Morocco is also a leading small citrus variety producer and exporter (Anonymous, 2009a).

Country		01.01.2008 / 3	31.12.2008	01.01.2009 / 3	1.01.2009 / 31.12.2009		rease(%)
		Ouantity	Value	Ouantity	Value	Ouantity	Value
		(KG)	(\$)	(KG)	(\$)	(KG)	(\$)
	Russian						
1	Federation	263.366.301	197.610.561	366.137.606	262.427.176	39	33
2	Ukraine	120.662.795	84.176.607	148.366.169	101.834.292	23	21
3	Iraq	58.748.558	32.969.220	150.846.877	92.004.505	157	179
4	Saudi Arabia	49.422.158	38.143.132	83.807.482	56.128.526	70	47
5	Romania	77.329.888	50.067.286	83.413.875	53.143.402	8	6
6	Poland	20.293.208	17.481.198	31.359.147	22.676.299	55	30
7	Germany	17.897.675	16.113.335	24.202.830	18.670.197	35	16
8	Bulgaria	24.701.474	13.184.195	34.335.994	18.203.620	39	38
9	Iran Islamic	13.485.732	7.173.831	26.316.685	15.144.800	95	111

	Rep.						
10	Serbia	16.326.321	12.572.409	20.367.586	13.354.453	25	6
11	Holland	15.879.184	13.467.998	18.301.002	13.281.050	15	-1
	Czech						
12	Republic	13.141.721	9.855.083	16.948.416	12.657.647	29	28
13	Greece	11.649.969	9.581.353	18.838.523	12.382.527	62	29
	United						
14	Kingdom	6.079.733	5.205.389	16.204.217	12.211.823	167	135
	Mersin free						
15	zone	20.819.794	13.469.408	13.733.565	10.523.868	-34	-22
16	Macedonia	10.686.998	6.572.327	12.979.121	7.936.157	21	21
17	Georgia	10.710.643	5.953.686	12.235.071	7.750.935	14	30
	Azerbaijan-						
18	Naxcivan	8.821.234	5.281.276	10.402.230	7.082.757	18	34
19	Hungary	8.662.943	6.503.128	9.724.990	7.050.150	12	8
	Bosnia&						
20	Herzegovina	6.406.327	4.289.849	10.307.368	6.184.279	61	44

Table 5. Leading 20 countries in exports from Turkey in 2008-2009 January-December periods.

Table 6. indicates export figures with respect to species for the leading 5 countries citrus is exported from Turkey (in 2008 & 2009).

Counrty/ Species	2008 (Januar	y-December)	2009 (January-December)		Increase/Decrease (%)	
LEMON	Ouantity		Ouantity		Ouantity	
	(kg)	Value (\$)	(kg)	Value (\$)	(kg)	Value (\$)
Russian						
Federation	69.497.395	64.270.024	105.807.501	73.412.406	52	14
Saudi Arabia	26.448.779	23.047.550	59.882.035	39.208.246	126	70
Ukraine	28.846.246	25.021.890	43.061.854	29.003.885	49	16
Romania	13.178.895	11.172.656	24.521.321	16.607.912	86	49
Iraq	2.049.845	1.227.117	25.200.401	15.085.872	1.129	1.129
	Ouantity		Ouantity		Ouantity	
MANDARIN	(kg)	Value (\$)	(kg)	Value (\$)	(kg)	Value (\$)
Russian						
Federation	115.647.114	78.941.231	136.819.370	102.552.369	18	30
Ukraine	60.287.784	39.225.126	59.645.469	42.189.962	-1	8
Iraq	26.458.966	15.218.945	54.069.596	33.623.819	104	121
Romania	26.041.715	16.253.723	25.201.944	15.983.525	-3	-2
Saudi Arabia	15.382.207	10.346.869	17.456.666	12.476.592	13	21
	Ouantity		Ouantity		Ouantity	
ORANGE	(kg)	Value (\$)	(kg)	Value (\$)	(kg)	Value (\$)
Russian						
Federation	45.496.530	30.207.892	85.162.069	59.803.414	87	98
Iraq	29.474.842	16.128.749	69.005.202	41.736.700	134	159
Ukraine	21.447.552	13.388.450	34.139.195	22.851.972	59	71
Iran Islamic Rep.	10.369.580	5.436.229	14.541.426	8.099.085	40	49
Romania	13.618.365	8.060.034	12.439.311	7.540.283	-9	-6
	Ouantity		Ouantity		Ouantity	
GRAPEFRUIT	(kg)	Value (\$)	(kg)	Value (\$)	(kg)	Value (\$)
Russian	32.725.262	24.191.414	38.327.246	26.645.064	17	10
Romania	24.490.913	14.580.873	21.251.299	13.011.682	-13	-11
Ukraine	10.081.213	6.541.141	11.519.651	7.788.473	14	19

Poland	10.777.922	6.846.338	10.228.297	6.918.095	-5	1
Germany	6.422.274	4.295.899	6.246.179	4.439.746	-3	3

Table 6. Export figures with respect to species for the leading 5 countries citrus is exported from Turkey

Varieties Produced And Exported By Turkey

Varieties exported by Turkey are; in oranges; Washington Navel, blood orenges, Jaffa, Valencia, Thomson, Hamlin, Trablus, Navelina, in mandarin; Clemantin, Monreal, Satsuma, Wilking, Tanjerin, Fremont, Mineola Tanjelo, Nova, Marisol, Okitsu, in grapefruit; Marsh Seedless, Thompson, Red Blush, Star Ruby, Pink Ruby, Rio Red and in lemon; Interdonat, Lamas, Kütdiken, Yatak, Meyer, Tatlı limon (Anonymous, 2006; Dal &Gübbük 2007; Koç et al., 2009).

Conclusion

In order to increase export figures of Turkey, it is important to widen product diversity and lengthen the production season. Sustainability is also of high importance to endure on the market. It is necessary to plan product and production with a view to exporting. With the broadening of the diversity of varieties in citrus and thus filling in the gaps on global market, the sector will benefit considerably.

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