

TRENDS IN WORLD SOUR CHERRY PRODUCTION AND STATE OF SECTOR IN BULGARIA AFTER TRANSITION PERIOD (1997-2006)

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ABSTRACT

In this study a comparison and evolutionary overview of the world-wide and Bulgarian sour cherry industry for the period 1997-2006 was made. Sour cherry production area in the world increased during the period 1997-2004 and major part of this area was concentrated in many major sour cherry producing countries. Russia ranked first with 24.2 % of the world area, followed by Poland (15.7 %). These two countries were also on top in the world in terms of production and together with Ukraine, Turkey and USA. These countries contributed 64.7 percent share to world sour cherry production during 1997 – 2006.

The period of deep structural changes in Bulgaria after 1989 was characterized by a tendency for decrease in the area occupied by fruit trees and also fruit production. This trend affected sour cherry area and production and in 2006 the production level was 71.2 percent less in comparison with 1999. The development of Bulgarian land market and opportunities for the establishment of large-scale and competitive fruit production through larger investments after accession to European Union, could prove to be a factor for sour cherry production enhancement.

KEYWORDS: Cherries; production factors; harvested area; Bulgaria.

INTRODUCTION

The market demand for sour cherry fruits, mainly processed, is due to their curative, dietetic and gustatory characteristics. There was a general tendency for increase of sour cherry cultivation area in the world, especially during the period 1997-2004, larger part being concentrated in Russia, Poland, Serbia, Ukraine, USA, Turkey and Hungary. The average world sour cherry production for the period 1997-2006 exceeded 1.1 million tons and was produced mainly in the Northern hemisphere. Russia and Poland remained the largest sour cherry producers in the world (1).

The deep changes after 1989 had a significant negative effect on Bulgarian agriculture and there was a drastic decline in agricultural land share, yields and production. These trends affected dramatically the state of Bulgarian production of fruits, including that of sour cherries (4, 7, 9, 10).

Sour cherry production in the world

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During greater part of the last decade there was an increasing trend of world sour cherry production area from 234,422 hectares (1997) to 267,482 hectares (2004) (Table 1). The area decreased by 1.54 percent in 2006 and 18.64 percent in 2006 reaching to 214,287 hectare. Major part of this area was concentrated in Russia i.e. 58,700 hectare (24.2 % of the world area), followed by Poland (38,113 ha) (15.7 %), Serbia (29,022 ha) (12 %), Ukraine (19,930 ha) (8.2%), USA (15,592 ha) (6.4 %), Turkey (14,735 ha) (6.1%) and Hungary (14,170 ha) (5.9 %).

Average world sour cherry production for the period 1997-2006 remained relatively stable and exceeded 1.1 million tons with its greater portion produced in Northern hemisphere. According to FAO report (1), major sour cherry producing countries include Russian Federation (177,600 t), Poland (165,691 t), Ukraine (139,860 t), Turkey (121,050 t) and USA (114, 599 t) (Table 2).

The production in Russia in 1997-2001 ranged from 130,000 to 200,000 tons, afterwards there was increasing trend upto 2005 (230,000 t). In 2006 a drastic decrease was observed estimated at 51.7 percent less than that in 2005.

Sour cherry production in Poland increased with minor fluctuations over years. For the period 1997-2006, Poland was the world's second largest producer of sour cherries with an average production of 165,691 tons, after Russian Federation (Table 2). However, for different years it was the leading producer (1999 and 2001) and its sour cherry production level was 43 percent higher than Russia in 2006 (1).

In 1990 Poland had only less than 10 percent share of world production but there was a considerable rise over the years. Due to weather events influencing yields from year-to-year, the average annual growth rate of output between 1990 and 2004 was 8.5 percent. Both yield and acreage harvested in sour cherries increased. The average annual growth rate of yield between 1990 and 2004 was 4.4 percent. Over the same period average annual

growth rate in acreage harvested was 3.5 percent. After a considerable drop in production in 2005, the share of Polish in world sour cherry production was 17.3 percent in 2006 (11).

Ukraine was world's third largest producer of sour cherries after Russia and Poland in 1997-2006 with an average production of 139,860 tons (Table 2). In 1997-1999 a considerable decline in sour cherry production was observed from 166,700 to 79,400 tons, followed by a period of variations in production volume. In the years 2000 and 2005 Ukraine replacing Poland, was the second largest sour cherry producer in the world with 155,300 and 181,800

tons, respectively. According to recent data (1), varying over years, Turkey had a relatively stable sour cherry production for the observed period, ranging from 95,000 (1998) to 145,000 tons (2003).

USA ranked fifth in sour cherry production with an average production of 114,599 tons in 1997-2006. However, it topped the world in 1998 with 157,895 tons production followed by Poland (156,258 t) and Russia (130,000 t). In 2006 it was the second largest sour cherry producer in the world with 121,744 tons (Table 2).

In the European Union, the sour cherry sector was dominated by three countries in 1997-2006 i.e. Poland (165,691 t), Germany (61,556 t) and Hungary (55,872 t). These three countries together accounted for over 85 percent of total EU production (Table 2). There was a trend for stable growth rates in EU production of sour cherries during the period 1997–2001, followed by fluctuations during 2002-2005 to reach 361,757 tons in 2006. Major part of the growth was achieved in Poland. On average basis, Poland represented 54 percent of EU sour cherry production during 1997-2006.

In Germany, sour cherry production started to decline since 1990s, under the pressure of increased competition of imports from Central and Eastern Europe. For the period 1997-2000 there was a significant increase in production reaching 106,900 tons in 2000. However, in following years production decreased reaching to 37,143 tons in 2006, almost 65 percent less than the year 2000 (1).

Sour cherry production has been the most successful and profitable branch of Hungarian fruit growing during the last 20 years and a significant production growth was witnessed in early 80s (1, 6). However, during 1997-2006 significant fluctuations were observed from 38,50 tons in 2002 to 83,324 tons in 2006 (1).

Sour cherry production in State of Bulgaria

The soil and climatic conditions in Bulgaria are favourable for sour cherry growing. In 1970, area occupied by this crop was 3,586 hectares (2.38 percent of total fruit growing area) (4). In 1989, the area reached to 4,600 hectare with 42,207 tons total fruit production (1).

The deep structural changes in Bulgaria after 1989 connected with land reforms, slow rates of legislation establishment and development of producers` associations proved considerably unfavourable for the development of fruit growing. Foreign and national long term investments in

this sector were discouraged. Due to poor structure and improper management, area of fruit tree plantations diminished, while the newly established orchards were not capable of restoring production capacity. The destructive processes led to significant decrease in yields and fruit production (4, 7, 11).

The period after 1989 was characterized by the decrease in sour cherry area and in 2006 it was 2,300 hectares (Table 1). For the period 1997-2006, harvested area ranged 2,300-4,579 hectares. Maximum sour cherry were produced in 1999 (11,000 t), whereas a sharp decline was observed in 2002, followed by the lowest in 2003 (Table 2). In 2006, 71.2 percent less sour cherries were produced in comparison with 1999.

The unfavourable conditions for sour cherry production in Bulgaria were connected with the prolonged property rights reforms, land abandonment, lack of proper cultivation practices and spreading of viruses among others. The reasons for decreased production could also be found in slow rate of establishment of new orchards and insignificant changes in areas with fruiting trees (4, 7, 11).

Insufficient sour cherry production in the country led to shortage of raw material for processing industry. The export of fresh sour cherries from Bulgaria remained limited.

During the period 2001-2005 a rise in export of frozen and processed sour cherries was observed, except for the year 2004, when the import declined by 75 percent as compared to preceding year, mainly due to insufficient quantities of sour cherries for the processing industry. Traditional trade partners of Bulgaria on the international market were EU countries (Germany, Greece, Austria, Belgium, Italy), as well as Russia, USA and Canada (3, 8). The import of frozen and processed sour cherry fruits was relatively limited and varied over years depending on production rate in country and demands of processing industry. The main countries exporting sour cherry to Bulgaria include Greece, Serbia, FYR Macedonia and Canada. In the last few years there is a trend for increase in import of fresh sour cherries from Serbia and FYR Macedonia (3, 8).

The climatic and soil conditions in Bulgaria are favourable for growing sour cherry, but for recovery of sector, improved conditions for investments are necessary. The increasing interest of processing industry and opportunities available could stimulate sour cherry production in the country. The development of Bulgarian land market and technological modernization as

well as opportunities for establishment of large-scale and competitive fruit production should be increased (9).

The more favourable recent market conjuncture reflects positively on farm enlargement. However, a critical point for sour cherry production, extension and enhancement of its economic efficiency, is the development of stock market for direct purchase and realization of fruit production.

After transition period and accession of Bulgaria to European Union, participation in a market with greater absorbing capacity and enhanced opportunities for foreign investments are expected to become a powerful factor for fruit production increase and export stimulation. Positive economic impact is also anticipated due to trend for improved fruit quality after the adoption of European fruit quality standards (9).

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Table 1. Harvested sour cherry area in the major countries during 1997-2006.

Harvested area, ha	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Avarage
World +	234,422	232,563	223,322	241,474	249,949	246,486	250,823	267,482	263,367	214,287	242,418
Russian Federation	55,500	56,500	57,000	58,000	59,000	62,000	62,000	60,000	59,000	58,000	58,700
Poland	38,000	38,000	38,930	39,316	39,966	39,002	37,776	39,095	34,433	36,608	38,113
Serbia and Montenegro	21,200	21,200	21,200	21,200	21,200	21,200	34,000	50,000	50,000		29,022
Ukraine	25,000	15,000	12,000	22,100	22,200	21,500	20,900	20,800	20,600	19,200	19,930
United States of America	16,320	16,317	16,148	16,139	15,839	15,257	14,961	14,953	14,994	14,994	15,592
Turkey	12,300	12,604	13,187	13,853	14,652	15,485	16,317	16,317	16,317	16,317	14,735
Hungary	12,900	17,400	8,400	10,100	17,500	10,603	15,930	15,936	16,692	16,236	14,170
Iran, Islamic Rep. of	7,672	7,833	7,916	7,872	8,728	8,800	9,000	10,836	11,557	11,557	9,177
Germany	6,000	9,000	12,100	13,400	13,400	13,400	4,197	4,231	4,226	4,202	8,416
Belarus	10,000	7,300	6,500	6,300	6,500	6,500	4,500	5,600	5,928	6,056	6,518
Georgia	4,000	3,000	3,000	4,000	4,500	4,500	4,500	4,000	4,500	5,000	4,100
Moldova, Republic of	4,564	4,481	4,000	3,889	3,826	3,770	3,083	3,041	3,043	2,992	3,669
Bulgaria	2,500	3,518	2,500	4,579	3,409	3,173	3,221	2,527	2,303	2,300	3,003

FAO 2007

Table 2. Sour cherry production (tons) in the major countries during 1997- 2006.

Countries	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Avarage
World +	1,081,450	1,013,090	1,007,120	1,143,375	1,135,235	1,003,454	1,163,081	1,262,505	1,179,965	1,127,491	1,111,677
Russian Federation	200,000	130,000	140,000	200,000	165,000	175,000	200,000	225,000	230,000	111,000	177,600
Poland	136,012	156,258	144,539	139,595	179,709	173,154	191,127	201,734	139,851	194,928	165,691
Ukraine	166,700	113,000	79,400	155,300	111,400	146,300	146,200	178,500	181,800	120,000	139,860
Turkey	120,000	95,000	125,000	106,000	120,000	100,000	145,000	138,000	140,000	121,499	121,050
United States of America	133,350	157,895	116,211	127,640	139,700	28,395	102,693	96,615	121,744	121,744	114,599
Serbia, Republic of										80,510	80,510
Serbia and Montenegro	62,512	68,816	71,759	58,782	64,012	49,810	86,932	113,118	63,870		71,068
Germany	47,500	69,100	97,500	106,900	98,700	65,000	33,694	35,450	24,571	37,143	61,556
Hungary	64,513	49,228	44,701	48,894	56,016	38,150	48,654	77,153	48,082	83,324	55,872
Iran, Islamic Rep of	45,422	42,274	42,055	48,859	50,522	50,600	50,800	35,928	48,670	48,670	46,380
Belarus	7,400	11,900	8,900	15,000	18,400	27,800	14,700	22,700	27,616	46,889	20,131
Georgia	16,500	22,912	24,295	20,520	16,416	20,000	21,320	12,409	20,027	22,000	19,640
Azerbaijan, Republic of		11,000	12,000	13,000	14,000	16,000	17,866	12,896	21,316	18,029	15,123
Moldova, Republic of	10,838	14,340	7,170	8,376	17,502	14,180	13,300	11,259	13,786	15,141	12,589
Albania	8,000	8,000	8,300	8,300	8,300	13,200	15,400	14,400	19,000	19,000	12,190
Czech Republic	6,646	8,108	9,158	9,928	9,623	18,194	14,853	19,877	12,955	12,433	12,178
Uzbekistan	3,500	3,500	3,000	4,000	4,000	9,500	12,000	14,000	16,500	21,382	9,138
Denmark	5,756	2,700					6,976	13,588	9,300	14,000	8,720
Italy	6,000	6,200	8,870	10,000	7,862	8,789	7,090	6,200	7,000	7,000	7,501
Croatia	6,032	8,265	8,453	7,566	8,169	6,542	6,947		3,851	4,514	6,704

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Bulgaria	10,000	9,394	11,000	10,000	5,844	7,529	3,108	3,325	3,168	3,168	6,654
FAO 2007 (1)											