United States Department of Agriculture
Foreign Agricultural Service

Tree Nuts: World Markets & Trade

November 2008

Tree Nuts: 2008/09 Forecast Overview

Almond production for selected countries monitored by FAS is raised 6-percent due to increased production in the United States. Hazelnut production is up 40-percent driven by high yields. Pistachio production is down 34-percent due to Iran's reduced supply. Walnut production is raised 8-percent due to increased production in China and the United States. Macadamia nut production for Kenya and South Africa is up 8 and 23-percent, respectively, due to improved production conditions and an increase in the number of bearing trees. For pecans, U.S. production is lowered 47-percent from last season because of the off year in the alternate bearing pattern; Mexico's production is up 16-percent due to higher number of younger trees in the full bearing stage.

ALMONDS

Marketing year (MY) 2008/09 almond production is raised 6-percent from the previous year to 975,200 metric tons (tons) due to increased production in the United States.

United States: USDA/National Agricultural Statistics Service (NASS) estimated almond production up 8-percent over last season to a record 680,400 tons. The forecast is based on 267,100 bearing hectares and record high yield per hectare. Increasing bearing acreage and greater stocks are expected to raise the total U.S. supply by more than 10-percent. Exports are raised to 410,000 tons, 3-percent higher than last season's record exports. Spain, Greece, and the Netherlands continue to be major destinations for U.S. almonds, and exports to the Middle East and Africa are strengthening. August represented the fifteenth consecutive month of record exports.

Chile: Seventy percent of the planted area is in production and is not expected to exceed 15,000 hectares, as almonds compete with avocados and citrus for the best production areas. Due to favorable weather combined with producers expanding planted areas in response to good economic returns, production is raised 8-precent from last year's revised estimate to 9,500 tons. Imports are unchanged from last season at 1,500 tons. Exports are up 20-percent from the previous year to 7,800 tons, as industry contacts remain optimistic about the benefit of a Chile - India free trade agreement.

China: Almond area is forecast at 26,000 hectares, 73-percent larger than last season. Production at 400 tons plummeted 70-percent due to below freezing spring temperatures.

Imports are raised 39-percent from the previous year to 3,200 tons due to a larger U.S. crop and a comparatively lower price.

European Union (EU-27): Production is raised 6-percent to 89,100 tons due to excellent weather. The European Commission (EC) Regulation EC/1782/2003 establishes the over-arching rules for direct tree-nut production subsidies under the Common Agricultural Policy. Almond producers will receive a general Community aid of 241.50 Euro per hectare. In 2007, U.S. almond exports to the EU reached $980 million or 213,100 tons, 3-percent higher in volume from the previous year.

India: Almond yields are low and shelling rates vary from 20 to 30 percent for hard shell and 40 percent for thin-shelled varieties. Production is raised 20-percent to 1,200 tons assuming normal weather. Consumption is boosted 33-percent from the previous estimate to 42,500 tons due to the expected record-sized U.S. crop and consequent increase in supply.

Turkey: Production is up 3-percent to 15,000 tons as weather during the spring was favorable. Last year, the U.S. share of the market for both shelled and in-shell almonds was 100 percent. Almonds are generally consumed whole, as a snack food, and limited amounts are used in confectionary products.

HAZELNUTS

Total hazelnut production is up 40-percent over the previous year to 1 million tons. Turkey, the world's leading hazelnut producer, anticipates a record-breaking crop.

United States: The Oregon field office of USDA/National Agricultural Statistics Service (NASS) *Objective Yield Survey* reported an under developed crop, due to cooler than normal weather during the summer. The percentage of good nuts analyzed is higher than last year. However, the number of nuts picked per tree was low. The average dry weight per good nut sampled was 3.03 grams compared with 3.09 grams last year. Production is dropped 8-percent from last year to 30,800 tons due to adverse weather and cyclical production swings. Exports are unchanged from the previous year at 33,400 tons, with exports mainly going to Asia, the Middle East, and the EU. U.S. production makes up 3 to 4 percent of the total world hazelnut supply.

Turkey: Production is raised 42-percent from last year to a record 780,000 tons; however, a dry summer adversely affected nut quality. The total land area registered to the CKS system (farmer's registry system) is 522,000 hectares. The average size is 2 hectares. Traders reported 700-750 hazelnuts present in 1 kg, which signals a quality issue (small nut size). As of September 15, 2008, the Turkish Grain Board (TMO) procured 18,464 tons of hazelnuts. TMO had delayed releasing too many stocks for fear of driving down the market price and angering producers. For the first time, TMO is using a graduated price system for different months. Export estimates are boosted 22-percent from last year to 500,000 tons due to high yield and lower prices. The main export markets are Germany, Italy, France, Belgium, and Switzerland.

MACADAMIA NUTS

Macadamia nut production for Kenya and South Africa is up 8 and 23-percent, respectively due to improved production conditions and an increase in the number of bearing trees.

United States: According to FAS estimates, production is nearly unchanged from last year's estimate at 16,400 tons wet-in-shell (WIS). Last season's crop losses were estimated at 4,900 tons or 25-percent of the total crop. Wet conditions in some areas caused increased spoilage, while dry conditions in others lowered output.

Australia: Production is lowered 16-percent to 35,000 tons due to an early flowering combined with heavy frost and hail. Smaller crop size could drive prices up because of strong demand from the EU.

Kenya: Commercial macadamia nut processors maintain minimal ending stocks due to high production and storage costs. Beginning stocks are up 8-percent from the last year to 2,150 tons, and production is raised 8-percent to 13,500 tons. Commercial macadamia nut processors export almost all their production. Exports are up 9-percent from the previous year at 12,000 tons. Mounting research of the heart-health benefits of macadamia nut consumption may help boost market opportunities in the United States and Europe.

South Africa: Production is raised 23-percent to 24,600 tons WIS due to improved production conditions and an increase in the number of bearing trees. Farmers and traders expect prices to improve because of good quality kernels. Domestic consumption growth is relative to the annual increase in total production. Consumption is up 10-percent from the previous year to 1,440 tons due to increasing promotion campaigns. The macadamia industry is viewing local markets as important and viable sectors with sustainable growth. Over 80-percent of macadamia nut production is exported. The export estimate is boosted 23-percent to 23,300 tons due to increasing supply and continuing demand from overseas markets. North America and the EU are the top export markets.

PECANS

U.S. pecan production is lowered 47-percent from last season to 92,500 tons due to an off year in the alternate bearing pattern typical of pecans. Mexico's pecan production is up to 90,300 tons due to higher number of younger trees in the full bearing stage.

United States: According to USDA/NASS October 2008 *Crop Production Report*, improved varieties are expected to produce 84-percent of the total production, while native seedling varieties make up the remaining 16-percent. The crop is forecast smaller than last year's crop in most producing States due to an off year in the alternate bearing pattern typical of pecans. Production is lowered 47-percent from last season's crop to 92,530 tons. Imports are up, as shipments from Mexico continue to flourish. Mexico is traditionally the main export market. Since 2006, exports to Hong Kong have surged.

Mexico: Total crop area planted is estimated at 80,000 hectares, 4-percent higher than last year's estimate. Many farmers have successfully enhanced production yields and nut quality through improved cultural practices and increased input utilization. Production is raised 16-percent from the previous year to 90,300 tons, due to an increase in younger trees in the full bearing stage. Additionally, the increase is due to improved cultural practices, timely fertilizer applications, drip water irrigation systems, and pruning. The price that farmers receive directly correlates to the U.S. market conditions. Imports are forecast to rebound to 18,000 tons, which is 17-percent more than the previous year, due to higher demand in the confectionary, bakery, and pastry industries. Exports are up 35-percent from last season to 50,000 tons because of increased productivity and strong international market demand. Furthermore, there has been an increase in temporary imports of in-shelled pecans to the Mexican border for shelling, which are then re-exported to the United States.

PISTACHIOS

FAS monitored pistachio production is lowered 34-percent to 352,100 tons due to the reduced supply in Iran.

United States: According to industry sources, the California harvest peaked during late September. Production is lowered 38-percent from last year, but nearly 10-percent larger than 2006 at 117,900 tons. To date, exports to the EU, Hong Kong, and Russia have expanded by volume and value. Export estimates are slightly higher due Iran's reduced supply.

Iran: Following a severe drought, trade reports indicate production drastically reduced by as much as 75-percent from last season to 70,000 tons due to dryness during flowering in April. Iran is the world's largest pistachio producer and exporter.

Syria: Production is up 17-percent to 70,000 tons due to the maturing of planted trees. No major incidence of pests or diseases was reported, however, drought slightly affected the crop size. Imports are raised 40-percent over last year to 7,000 tons, since June 2008 in-shell imports were permitted for the first time in many years. Exports are raised 25-percent from last year to 25,000 tons. Primary markets are Lebanon and other Arab countries.

Turkey: Production is highly cyclical and yields vary between regions and orchards. This year is an 'on' year for pistachio production. Estimated at 85,000 tons, production is higher than last year's estimate. There are reports of an empty fruit problem due to the lack of rain during the winter and spring months and extremely hot temperatures in July and August. Consumers mostly eat pistachios as a snack food. Consumption is raised 1-percent from last year to 59,000 tons. The small portion of crop exported is mainly destined for the EU. The export estimate is revised up 20-percent from last year's estimate to 59,000 tons.

WALNUTS

Walnut production is raised 8-percent to 1.1 million tons due to increased production in China and the United States.

United States: USDA/NASS *Walnut Objective Measurement Report* indicated an average nut set of 1,416 per tree, up 4-percent from last year's average. Bearing area is estimated at 88,221 hectares, unchanged from the previous year. Production is boosted 15-percent from last year to 340,200 tons. The export estimate is raised 8-percent to 255,100 tons due to the anticipated record-breaking crop and increasing demand from international markets.

Chile: Production is raised 10-percent from last year to 25,500 tons due to adoption of improved technologies and larger planted area coming into production. Walnut consumption is a residual of the export market. If international prices are low, exports decrease and consumption increases as the larger supply drives domestic prices down. Consumption is unchanged from last year at 2,000 tons. Exports to the EU, Italy, Spain, and Turkey account more than 60 percent of total exports. Export estimates are raised 10-percent from last year to 23,500 tons due to larger planted area and orchards bearing fruit.

China: Farmers have been encouraged to plant more walnut trees by government support programs aimed at increasing production. Production is raised 7-percent higher than last season's estimate to 490,000 tons following a good harvest in northern China, as well as new bearings resulting from expanded acreage. Consumption is raised 7-percent from last year at 462,000 tons due to consumers desire to purchase products they perceive to be healthier. Exports are raised 10-percent over last year to 40,000 tons due to increased local production. Exporters prefer to ship to traditional markets such as Japan, the United Kingdom, Germany, and Vietnam because payments from overseas buyers clear the accounts more quickly than from domestic retailers. Imports are unchanged, given the larger domestic crop. The United States is China's largest walnut supplier, accounting for over 90 percent of total imports. Imports are expected to remain stable at 10,000 tons.

India: Walnut area and production have stagnated due to non-adoption of high yielding varieties and poor orchard management. The average shelling rate is 40 percent. Production is boosted 12-percent over the pervious year to 37,000 tons. The increase is supported by favorable weather, good flower setting, and no reports of major incidence of pest and disease. Consumption is up 5-percent from the previous year at 20,000 tons, largely due to improved supplies. Forty to forty-five percent of production is consumed domestically, of which half is consumed during the festive season (September-January). Consumption is boosted 5-percent to 20,000 tons. Export estimates are raised 19-percent to 17,500 tons due to improved domestic supplies and strong demand from the EU, Egypt, and Middle-Eastern countries.

Turkey: Almost all walnut trees are grown without the use of pesticides and chemical fertilizers, consequently, making organic walnut popular. Production is 6-percent larger than last season's crop at 85,000 tons.

For more information, please contact Lashonda McLeod at (202) 720-6086, lashonda.mcleod@usda.gov.

Note: The production, supply, and distribution (PS&D) database has been expanded to include more trading countries to reflect world trade.

Almonds (shelled basis): Production, Supply, and Distribution in Selected Countries

Metric Tons

Country Mktg Year	Production	Imports	Total Supply	Exports	Domestic Consumption	Total Distribution
Algeria						
2006/07	53,673	2,955	56,628	47	56,581	56,628
2007/08	41,000	4,879	45,879	4	45,875	45,879
2008/09	41,000	4,900	45,900	0	45,900	45,900
Australia						
2006/07	15,917	1,924	17,841	5,429	12,412	17,841
2007/08	25,899	1,726	27,625	11,975	15,650	27,625
2008/09	27,500	1,700	29,200	12,400	16,800	29,200
Canada						
2006/07	0	17,162	17,162	108	17,054	17,162
2007/08	0	20,474	20,474	70	20,404	20,474
2008/09	0	20,400	20,400	50	20,350	20,400
Chile						
2006/07	6,900	1,538	8,642	5,100	3,000	8,642
2007/08	8,800	1,500	10,842	6,500	3,500	10,842
2008/09	9,500	1,500	11,842	7,800	3,700	11,842
China, Peoples Republic of						
2006/07	200	1,354	1,554	0	1,554	1,554
2007/08	1,300	2,300	3,600	0	3,600	3,600
2008/09	400	3,200	3,600	0	3,600	3,600
EU-27						
2006/07	103,575	174,860	313,435	7,108	261,327	313,435
2007/08	83,666	185,000	313,666	7,000	271,666	313,666
2008/09	89,100	195,000	319,100	7,500	266,600	319,100
Hong Kong						
2006/07	0	11,267	11,267	6,347	4,920	11,267
2007/08	0	16,889	16,889	7,384	9,505	16,889
2008/09	0	16,800	16,800	7,400	9,400	16,800
India						
2006/07	1,200	33,560	41,440	0	32,500	41,440
2007/08	1,000	40,000	49,940	0	40,000	49,940
2008/09	1,200	41,500	52,640	0	42,500	52,640
Iran						
2006/07	110,000	1,509	111,509	570	110,939	111,509
2007/08	110,000	1,524	111,524	1,000	110,524	111,524
2008/09	110,000	1,500	111,500	1,000	110,500	111,500
Japan						
2006/07	0	23,048	23,048	60	22,988	23,048
2007/08	0	23,932	23,932	4	23,928	23,932
2008/09	0	25,000	25,000	0	25,000	25,000
Korea, Republic of						
2006/07	0	5,370	5,370	0	5,370	5,370
2007/08	0	7,263	7,263	0	7,263	7,263
2008/09	0	7,300	7,300	0	7,300	7,300
Malaysia						
2006/07	0	1,718	1,718	9	1,709	1,718
2007/08	0	2,309	2,309	19	2,290	2,309
2008/09	0	2,300	2,300	20	2,280	2,300
Mexico						
2006/07	60	5,464	5,524	58	5,466	5,524
2007/08	70	5,809	5,879	80	5,799	5,879
2008/09	100	5,800	5,900	0	5,900	5,900
Norway						
2006/07	0	2,373	2,373	5	2,368	2,373
2007/08	0	2,433	2,433	15	2,418	2,433
2008/09	0	2,400	2,400	20	2,380	2,400

Almonds (shelled basis): Production, Supply, and Distribution in Selected Countries (Continued)

Metric Tons

Country Mktg Year	Production	Imports	Total Supply	Exports	Domestic Consumption	Total Distribution
Russian Federation						
2006/07	0	9,822	9,822	13	9,809	9,822
2007/08	0	11,148	11,148	17	11,131	11,148
2008/09	0	11,200	11,200	20	11,180	11,200
Taiwan						
2006/07	0	3,270	3,270	5	3,265	3,270
2007/08	0	3,294	3,294	20	3,274	3,294
2008/09	0	3,300	3,300	20	3,280	3,300
Turkey						
2006/07	14,400	1,500	17,400	500	14,600	17,400
2007/08	15,500	1,200	19,000	700	16,000	19,000
2008/09	16,000	2,000	20,300	900	16,500	20,300
United States						
2006/07	508,020	2,577	561,490	341,585	159,146	561,490
2007/08	630,490	2,508	693,757	396,648	192,260	693,757
2008/09	680,400	2,400	787,649	410,000	229,649	787,649
Total Selected Countries						
2006/07	813,945	307,125	1,215,347	367,155	730,651	1,215,347
2007/08	917,725	343,303	1,378,569	431,529	794,109	1,378,569
2008/09	975,200	357,320	1,485,451	447,220	831,849	1,485,451

Note: The U.S. domestic shelling ratio for exports and imports originates from the National Agricultural Statistics Service (NASS).

Filberts/ Hazelnuts (in-shell basis): Production, Supply, and Distribution in Selected Countries

Metric Tons

Country Mktg Year	Production	Imports	Total Supply	Exports	Domestic Consumption	Total Distribution
Australia						
2006/07	0	6,007	6,007	243	5,764	6,007
2007/08	0	6,956	6,956	582	6,374	6,956
2008/09	0	7,000	7,000	600	6,400	7,000
Azerbaijan, Republic of						
2006/07	24,600	182	24,782	14,360	10,422	24,782
2007/08	30,800	90	30,890	24,155	6,735	30,890
2008/09	31,000	90	31,090	24,200	6,890	31,090
Brazil						
2006/07	0	8,797	8,797	0	8,797	8,797
2007/08	0	9,534	9,534	0	9,534	9,534
2008/09	0	9,500	9,500	0	9,500	9,500
Canada						
2006/07	0	16,494	16,494	541	15,953	16,494
2007/08	0	20,745	20,745	480	20,265	20,745
2008/09	0	20,800	20,800	500	20,300	20,800
Croatia						
2006/07	912	2,200	3,112	404	2,708	3,112
2007/08	600	2,520	3,120	599	2,521	3,120
2008/09	600	2,500	3,100	600	2,500	3,100
EU-27						
2006/07	144,810	230,167	394,977	10,132	334,845	394,977
2007/08	98,000	250,000	398,000	10,000	353,000	398,000
2008/09	158,500	240,000	433,500	10,000	383,500	433,500
Hong Kong						
2006/07	0	15,354	15,354	11,543	3,811	15,354
2007/08	0	8,257	8,257	5,474	2,783	8,257
2008/09	0	8,300	8,300	5,500	2,800	8,300
Japan						
2006/07	0	1,995	1,995	0	1,995	1,995
2007/08	0	1,639	1,639	0	1,639	1,639
2008/09	0	1,600	1,600	0	1,600	1,600
Korea, Republic of						
2006/07	0	470	470	0	470	470
2007/08	0	757	757	0	757	757
2008/09	0	800	800	0	800	800
Norway						
2006/07	0	3,323	3,323	133	3,190	3,323
2007/08	0	4,116	4,116	58	4,058	4,116
2008/09	0	4,100	4,100	60	4,040	4,100
Russian Federation						
2006/07	750	29,703	30,453	27	30,426	30,453
2007/08	800	36,427	37,227	50	37,177	37,227
2008/09	800	36,000	36,800	50	36,750	36,800
Serbia						
2006/07	0	2,443	2,443	13	2,430	2,443
2007/08	0	2,834	2,834	28	2,806	2,834
2008/09	0	2,840	2,840	30	2,810	2,840
South Africa, Republic of						
2006/07	0	1,692	1,692	1,079	613	1,692
2007/08	0	753	753	700	53	753
2008/09	0	800	800	700	100	800
Switzerland						
2006/07	0	31,670	31,670	226	31,444	31,670
2007/08	0	29,309	29,309	495	28,814	29,309
2008/09	0	29,300	29,300	500	28,800	29,300

Filberts/ Hazelnuts (in-shell basis): Production, Supply, and Distribution in Selected Countries

Metric Tons

Country Mktg Year	Production	Imports	Total Supply	Exports	Domestic Consumption	Total Distribution
Turkey						
2006/07	800,000	0	880,000	500,000	80,000	880,000
2007/08	550,000	0	850,000	450,000	80,000	850,000
2008/09	780,000	0	1,100,000	500,000	150,000	1,100,000
Ukraine						
2006/07	10	6,804	6,814	50	6,764	6,814
2007/08	10	6,206	6,216	55	6,161	6,216
2008/09	10	6,300	6,310	60	6,250	6,310
United States						
2006/07	39,010	14,126	53,676	26,500	24,916	53,676
2007/08	33,570	13,563	49,393	33,369	14,604	49,393
2008/09	30,800	13,000	45,220	33,400	10,820	45,220
Total Selected Countries						
2006/07	1,010,092	371,427	1,482,059	565,251	564,548	1,482,059
2007/08	713,780	393,706	1,459,746	526,045	577,281	1,459,746
2008/09	1,001,710	382,930	1,741,060	576,200	673,860	1,741,060

Note: The U.S. domestic shelling ratio for exports and imports orginates from USDA/National Agricultural Statistics Service (NASS).

Pistachios (in-shell basis): Production, Supply, and Distribution in Selected Countries

Metric Tons

Country Mktg Year	Production	Imports	Total Supply	Exports	Domestic Consumption	Total Distribution
China, Peoples Republic of						
2006/07	0	12,475	12,475	3,697	8,778	12,475
2007/08	0	32,000	32,000	5,828	26,172	32,000
2008/09	0	24,000	24,000	4,000	20,000	24,000
EU-27						
2006/07	9,200	118,194	147,899	1,866	131,033	147,899
2007/08	13,000	118,000	146,000	2,000	130,000	146,000
2008/09	9,200	125,000	148,200	2,000	132,200	148,200
Hong Kong						
2006/07	0	42,914	42,914	28,371	14,543	42,914
2007/08	0	59,822	59,822	32,144	27,678	59,822
2008/09	0	59,800	59,800	32,100	27,700	59,800
Iran						
2006/07	230,000	0	230,000	112,225	117,775	230,000
2007/08	230,000	0	230,000	131,130	98,870	230,000
2008/09	70,000	0	70,000	40,000	30,000	70,000
Syria						
2006/07	52,000	5,000	58,784	20,000	35,000	58,784
2007/08	60,000	5,000	68,784	20,000	45,000	68,784
2008/09	70,000	7,000	80,784	25,000	52,000	80,784
Turkey						
2006/07	100,000	0	118,000	5,000	50,000	118,000
2007/08	40,000	0	103,000	5,500	58,500	103,000
2008/09	85,000	0	124,000	6,000	59,000	124,000
United States						
2006/07	107,955	1,350	150,215	106,603	11,412	150,215
2007/08	188,694	850	221,744	161,825	6,919	221,744
2008/09	117,900	900	171,800	164,000	6,000	171,800
Total Pistachio Reporting Countries						
2006/07	499,155	179,933	760,287	277,762	368,541	760,287
2007/08	531,694	215,672	861,350	358,427	393,139	861,350
2008/09	352,100	216,700	678,584	273,100	326,900	678,584

Note: The U.S. domestic shelling ratio for exports and imports orginate from USDA/National Agricultural Statistics Service (NASS).