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Chile

# **Tree Nuts Annual**

# **Almond and Walnut Annual**

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# **Report Highlights:**

Almond production and exports are expected to fall this year mainly due to unfavorable weather conditions. Meanwhile walnut production will increase in MY2010/2011 compared to the previous year due to a significant increase in planted area over the last few years.

#### **Executive Summary:**

Chile's walnut production and exports in MY2010/11 are expected to increase over the last year because planted area has expanded significantly in the last few years and new orchards are coming into production. For the outer years, output should continue to expand as a result of improved technologies, replacement of uprooted orchards with improved varieties and a significant increase in planted area.

#### **Commodities:**

Walnuts, Inshell Basis

#### **Production:**

Walnut production has expanded over 15 percent during the last 3 years as a result of a significant expansion in planted area with newly developed varieties coupled with the replacement of old, low production orchards that originated with trees from seeds. Also, an increasing number of producers are adopting improved technologies like pruning and drip irrigation. Additionally, the use of a chemical called "retain" which prevents the blooms from aborting due to an excess of pollen, has eliminated the alternate bearing effect in walnut production. As a result, walnut output will continue to increase, with minor dips and peaks, due to an expansion of the new planted area which is coming into production. In 2012, the industry expects output to be at the level of 44,000 metric tons and over 60,000 MT in 2015.

Walnuts are planted from the Third Region (Copiapo) down to the Ninth Region (Temuco), with over 90 percent of the crop planted in the central areas, specifically Region Five (San Felipe-Los Andes), the Metropolitan Region (Santiago) and Region Six (Rancagua). Region IV (Ovalle area) has seen the biggest expansions in area planted during the last 2 to 3 years. The two main factors for an overall increase in planted area during the last 3 to 5 years are a continuous deterioration in the profitability of alternative fruit crops and the relatively good prices and economic returns obtained by walnut producers. An industry source indicated that total planted area of walnuts will keep increasing in the coming years mainly due to the labor shortage which is affecting the whole fruit production sector in Chile, walnut production can be mechanized and a large number of producers are reportedly switching to walnuts after their table grape orchards are finishing their production cycle and need to be replanted.

#### Inputs

All commercial walnut orchards are planted on irrigated land. However, until now only an estimated 60 percent of the planted area has modern irrigation systems. As a result, when there is not enough water supplied from wells, rivers and streams flowing from the Andes Mountains, water availability becomes an important factor limiting production, mainly in Regions V and VI. The average orchard size is 10 to 15 hectares, which is double the size of orchards in France and half the size of orchards in the U.S.

Although a large percentage of Chilean walnut trees in production originate from seeds, budding and grafting of new and improved varieties like Serr and Chandler has increased in recent years. Industry

sources report that there is still an estimated 30 percent of the total planted area that originated from seeds, but declining fast as producers have been replacing these orchards during the last few years.

Increasing labor costs are an important factor affecting walnut production and processing. Chile has a competitive quality advantage in shelled walnuts, since almost all shelled walnuts are hand-cracked. Although the premium Chile obtains from this quality advantage has thus far continued to encourage hand-shelling; increased labor costs may mean that Chile could lose this advantage in coming years. In the case of walnut production, labor represents 70 % of total costs. As reported by some producers, production costs for walnuts are estimated to be between US\$2,300 and US\$2,500.

# **Consumption:**

As with most other Chilean fruits, domestic walnut consumption is a residual of the export market. If international prices are low, exports fall off and domestic consumption increases as the larger supply drives domestic prices down. However, domestic demand does not drive consumption or determine market prices.

# Trade:

The EU countries lead by Italy, Spain and Turkey are Chile's main export market for walnuts, they accounts for more than 60% of total exports. Post predicts that as production continues to expand in the coming years total exports will expand as well.

Varying amounts of mostly shelled walnuts are being imported by the Chilean confectionary industry.

#### Stocks:

There is no trade or official statistics available on Chile's average stocks. However, exporters normally try not to carry over-stocks.

# **Policy:**

There are no specific Government policies regulating or benefiting tree nut production in Chile. The general import duty on walnuts is 6 percent except for countries with which Chile has signed trade agreements. As a result of the US-Chile Free Trade Agreement trade of walnuts between both countries face a zero duty.

Walnuts, Inshell Basis Chile	2009/2010 Market Year Begin: Mar 2010		2010/2011 Market Year Begin: Mar 2011		2011/2012 Market Year Begin: Mar 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	23,000	0	25,000		28,000
Area Harvested	0	15,000	0	18,750		21,000
Bearing Trees	0	3,000	0	3,750		4,200
Non-Bearing Trees	0	1,600	0	1,250		1,400
Total Trees	0	4,600	0	5,000		5,600
Beginning Stocks	1,521	1,521	2,121	1,151		1,171
Production	32,500	32,500	35,000	38,200		44,200
Imports	700	560	0	200		200
Total Supply	34,721	34,581	37,121	39,551		45,571
Exports	28,900	29,600	32,000	34,380		39,800
Domestic Consumption	3,700	3,830	3,500	4,000		4,300
Ending Stocks	2,121	1,151	1,621	1,171		1,471
Total Distribution	34,721	34,581	37,121	39,551		45,571
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# **Production, Supply and Demand Data Statistics:**

Country	Chile						
Commodity	Walnuts, In shell Basis						
Exports for:	2010		2011				
Time Period	Jan-Dec	Units:	M.T.				
Units:	Volume	Value		Volume	Value		
U.S.	95	280	U.S.	24	77		
Others			Others				
Turkey	7,370	33,751	Turkey	9,687	41,636		
Brazil	7,190	37,466	UAEmirates	3,080	15,922		
Italy	3,843	19,801	Italy	2,262	12,651		
Germany	2,525	15,212	Brazil	1,459	8,503		
Spain	1,491	8,697	Germany	1,382	8,914		
Netherlands	1,061	6,081	Spain	1,050	6,040		
Portugal	1,025	6,329	Russia	479	3,281		
Switzerland	895	5,902	Switzerland	339	2,480		
Argentina	783	3,764	Netherlands	316	2,023		
UA Emirates	523	3,084	Austria	272	1,678		
Total for Others	26,704			20,326			
Others not Listed	2,792			1,405			
Grand Total	29,591	159,701		21,755	111,222		

#### **Commodities:**

Almonds, Shelled Basis

# **Production:**

Unfavorable weather conditions during the winter of CY2010 combined with lower temperatures than normal prevented bees from working efficiently during pollination, all resulted in a lower than previously estimated production of almonds in MY2010/2011. For next year industry sources have indicated that production could result even lower as weather during the last few months in all production areas has again not been favorable for almond production.

# **Crop Area**

Although almond trees are planted from Region IV (Ovalle) down to Region VIII (Chillan), over 80 percent of the total planted area is in the central regions, specifically Region VI (Rancagua) and the Metropolitan Region (Santiago). The largest increases during recent years of new planted orchards are in Region IV (Ovalle) area, as was indicated by industry officials. Almonds are planted on irrigated land and average yields are estimated to be between 800 Kg to slightly over one metric ton per hectare. An estimated 60 percent of the production comes from medium size producers who have from 6 to 25 hectares planted with average production of 2 to 3 thousand Kilos per hectare, although there are also some with less than 1,000 Kg. per hectare. Industry sources report that although many producers are increasing their plantings, total planted area in Chile will most probably not exceed 15,000 hectares, as almonds compete with avocados and citrus for the best production areas. These crops have the same constraints: soil and weather (rainfall and frost). New avocado and citrus (mainly tangerines) plantings have exploded during the last few years as a result of excellent economic returns. Although Chile has no special advantages in almond production, industry sources indicate that in the next 5 to 7 years an estimated 500 hectares will be planted every year. Out of this total approximately 100 hectares will replace old aging orchards and 400 hectares will correspond to new-planted area.

# **Inputs:**

Nonpareil is the main variety planted, accounting for 48 percent of the total planted area. Other varieties like Carmel, Merced, Solano and Price are used mainly for pollination. Industry sources have indicated that an increasing number of producers are planting new varieties developed from varieties coming from Spain like Madera and Allinone. All commercial almond orchards are planted on irrigated land. However, only an estimated 40 percent of the planted area has modern irrigation systems (drip irrigation).

# Trade:

Most almonds exported are shelled and sent to markets where Chile has tariff preferences like Mexico, Argentina, Brazil, Colombia, Venezuela and the European Union (Spain, Italy and the Netherlands). Chile also imports almonds, mainly from the United States. Industry sources indicated that imports are mainly used by the confectionery industry and are of a smaller size than the ones produced in Chile.

# **Policy:**

There are no specific Government policies regulating or benefiting almond production in Chile. The general import duty on almonds is 6 percent. However, as a result of the US-Chile Free Trade Agreement, U.S. almonds enter Chile duty free.

Market Year Begin JSDA Official 0 0 0 0 0	Dec 2009           New Post           8,400           6,250           2,223           677	Market Year Begi USDA Official 0 0 0	n: Dec 2010 New Post 8,900 6,590 2,344	Market Year Beg USDA Official	in: Dec 2011 New Post 9,200 6,624
0 0 0 0	8,400 6,250 2,223	0 0	8,900 6,590	USDA Official	9,200
0 0 0	6,250 2,223	0	6,590		,
0	2,223	-			6,624
0	,	0	2 344		
	677		2,544		2,356
0	077	0	729		821
0	2,900	0	3,073		3,177
1,950	1,950	450	1,164		264
6,500	6,000	10,000	8,000		7,000
2,900	3,752	3,500	1,300		2,500
11,350	11,702	13,950	10,464		9,764
7,500	6,538	8,000	7,000		6,400
3,400	4,000	5,000	3,200		3,100
450	1,164	950	264		264
11,350	11,702	13,950	10,464		9,764
	6,500 2,900 11,350 7,500 3,400 450	6,500         6,000           2,900         3,752           11,350         11,702           7,500         6,538           3,400         4,000           450         1,164	6,500         6,000         10,000           2,900         3,752         3,500           11,350         11,702         13,950           7,500         6,538         8,000           3,400         4,000         5,000           450         1,164         950	6,500         6,000         10,000         8,000           2,900         3,752         3,500         1,300           11,350         11,702         13,950         10,464           7,500         6,538         8,000         7,000           3,400         4,000         5,000         3,200           450         1,164         950         264	6,500         6,000         10,000         8,000           2,900         3,752         3,500         1,300           11,350         11,702         13,950         10,464           7,500         6,538         8,000         7,000           3,400         4,000         5,000         3,200           450         1,164         950         264

**Production, Supply and Demand Data Statistics:** 

Country	Chile					
Commodity		1	Almonds, Shelled Basis			
Exports for:	2010		2011			
Time Period	Jan-Dec	Units:	M.T.			
Units:	Volume	Value		Volume	Value	
U.S.	25	132	U.S.	-	-	
Others			Others			
Brazil	1,428	5,914	Mexico	958	6,045	
Mexico	1,381	6,049	Brazil	800	4,849	
Argentina	977	3,845	Argentina	492	2,851	
Italy	950	4,360	Spain	399	1,873	
Spain	642	2,445	Venezuela	254	1,654	
Venezuela	540	3,715	Colombia	179	1,201	
J.Arab E.	357	1,453	Italy	113	729	
Colombia	261	1,148	Netherlands	69	386	
Furkey	243	1,024	Turkey	61	392	
U.K.	174	757	Ecuador	60	411	
Total for Others	6,953			3,385		
Others not Listed	1,209			308		
Grand Total	8,187	36,425		3,693	22,247	