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Chile

Dairy

Dairy Annual

1998

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Annual Report
Santiago [CI8032], Chile

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Executive Summary

Chile's milk production is expected to increase around 3 percent in 1998 to 2.19 million tons. Output will probably continue to grow in 1999, but at a slower pace due to dry conditions that are affecting most milk producing areas. The dairy industry has grown due to relatively good prices paid to producers for milk in recent years, compared to other farming alternatives.

The outlook for the next three-to-five years is for continued growth in milk production, but at a significantly slower rate, based on firm demand and continued improvements in technology and animal genetics. Although domestic consumption will continue to rise, the rate of increase will also decline from the strong pace of the past years.

Fluid Milk

PS & D Table

PSD Table						
Country:	Chile					
Commodity:	Dairy, Milk, Fluid					
		1997		1998		1999
	Old	New	Old	New	Old	New
Calendar Year Begin		01/1997		01/1998		01/1999
Cows In Milk	725	725	730	615	0	615
Cows Milk Production	2140	2112	2270	2185	0	2230
Other Milk Production	0	0	0	0	0	0
TOTAL Production	2140	2112	2270	2185	0	2230
Intra EC Imports	0	0	0	0	0	0
Other Imports	0	0	0	0	0	0
TOTAL Imports	0	0	0	0	0	0
TOTAL SUPPLY	2140	2112	2270	2185	0	2230
Intra EC Exports	0	0	0	0	0	0
Other Exports	0	0	0	0	0	0
TOTAL Exports	0	0	0	0	0	0
Fluid Use Dom. Consum.	420	446	428	455	0	465
Factory Use Consum.	1542	1483	1658	1540	0	1575
Feed Use Dom. Consum.	178	183	184	190	0	190
TOTAL Dom. Consumption	2140	2112	2270	2185	0	2230
TOTAL DISTRIBUTION	2140	2112	2270	2185	0	2230
Calendar Yr. Imp. from U.S.	0	0	0	0	0	0
Calendar Yr. Exp. to U.S.	0	0	0	0	0	0

Production

Production General

In spite of an another 7 percent fall in real milk prices paid to producers, total production reached a new record level of 2.05 billion liters in 1997 (note: PS&D are in tons). Slower expansion in production is expected in 1998. This expansion is due to increases in productivity as a result of genetic improvements carried out by most progressive producers during the last few years. Only a small expansion of production is expected in 1999 because of drought, which is affecting the main milk producing areas, and declining real milk prices. Depending on how long the dry conditions prevail, some analysts in the milk industry are concerned that production could even fall in 1999.

Our PS&D shows a significant fall in the number of cows in milk in 1998. This is an adjustment reflecting the last agricultural census from 1997. Analysts have indicated that the number of cows in milk is not expected to grow significantly in the coming years. Nevertheless, production will expand as a larger number of producers improve the genetics of their herds.

Dairy Production

Year	Total Rec'd by Ind.	Fluid Milk	Dry Milk	Butter	Cheese	Farmers Cheese	Yoghurt	Conden. Milk
	(Mill.Liters)		(------------------Thousand Kilograms---------------------------)					
1980	592	127	32566	4016	13902	3868	15054	7835
1985	598	120	32470	4999	13673	2217	30257	9067
1987	667	110	33544	4986	16334	6031	45647	9061
1988	681	125	32375	4899	18812	6002	46188	8016
1989	771	134	36868	5412	21791	5546	51799	9205
1990	890	138	45126	6448	24513	5422	50939	8325
1991	948	135	44307	7279	27178	5342	54379	8803
1992	1019	155	46700	7305	32193	5568	62640	10179
1993	1121	178	51404	7728	36405	6627	66036	9413
1994	1236	189	53594	6995	38569	6941	66607	10560
1995	1358	225	61418	6651	40816	5873	67663	8674
1996	1406	235	63344	6452	42177	6292	73744	8937
1997	1526	271	65726	9582	43712	7106	79423	10219

Source: Ministry of Agriculture.

Production Factors

Relatively good milk prices compared to other production alternatives for farmers in southern Chile, have been a key element in the growth of the dairy industry. Increases in productivity are the result of the continued utilization of improved genetics (Holstein-Friesian), modern technology, improved feeding and better pasture management.

Domestic Milk Production and Distribution
(In Million Liters)

Year	Total Prod.	Milk Price Received Per Liter 1/	By Industry	Direct Sales Consump. and Utilization on Farms	On Farm Losses	Feed Use
1987	1,093	114.5	666	314	21	92
1988	1,120	128.9	681	322	21	96
1989	1,270	145.2	850	326	23	110
1990	1,380	122.6	890	340	26	123
1991	1,450	115.3	948	345	27	130
1992	1,540	122.5	1,019	354	29	138
1993	1,650	121.2	1,121	360	29	140
1994	1,750	119.4	1,236	325	33	156
1995	1,850	112.2	1,358	292	35	165
1996	1,924	110.3	1,406	309	36	173
1997	2,050	102.1	1,526	305	39	180

1/ Average milk prices per liter paid to producer in September 1998 Chilean Pesos.

Source: Ministry of Agriculture.

Production Mix

Milk delivered to milk processing plants during 1997 reached an all-time record level of 1,526 million liters. Processing plant reception for 1998 is expected to increase, but at a rate considerably less than the last few years.

Milk production delivered to commercial dairy plants for processing has been increasing year after year. Over 74 percent of the milk was delivered for processing in 1997, a percentage which has been increasing slowly every year; this is the result of relatively good prices paid by the industry. The remainder of the fluid milk is utilized on farms for human consumption as fluid milk, for processing into butter and cheese, and for calf feeding.

Production Technology

The heart of Chile's dairy industry is located in the 10th Region, some 500 miles south of Santiago, the major market. As a result, Chile's dairy industry is oriented toward the sale of processed products and UHT milk. Milk plants in Chile utilize the most advanced processing technology available. The six largest companies manufacture nearly 87 percent of all milk for processing. These firms are Nestle, Soprole, Colun, Loncoleche, Dos Alamos and Parmalat. Nestle is the largest processing company and produces over 55 percent of total domestic dry milk. The fluid milk and yoghurt market is dominated by Soprole, which is majority-owned by the New Zealand Dairy Board (50.5%). Colun, the biggest and only successful dairy farmer cooperative in Chile, is also the largest producer of cheese.

Fluid Milk Reception at Processing Plants
by Region in Million Liters

	Metro Santiago	Region VIII (Los Angeles)	Region IX (Temuco)	Region X (Osorno)	Total Receptions
CY1993	141.0	107.4	135.0	737.7	1,121.1
CY1994	168.5	117.3	165.2	760.5	1,211.4
CY1995	192.0	126.0	183.6	856.2	1,357.9
CY1996	192.1	135.2	185.4	893.8	1,406.4
CY1997	188.2	136.7	186.6	1,014.1	1,525.7

Milking cows in Chile have traditionally been dual purpose breeds, mainly black and white, or red and white Dutch Friesians. Increased crossbreeding with Holstein-Friesian semen has been a key factor in the expansion in milk production. Most of the larger, progressive dairy farms possess from 50 to 85 percent Holstein-Friesian blood in their herds.

In seeking the most efficient methods of production, dairy farmers are weighing the benefits of confined feeding versus grazing systems. The result may well be a mixture of the two systems depending on local pasture conditions and farm size. Some analysts believe that as a result of the continuous decrease in real milk prices, commercial dairy farms will most probably expand the size of their herds and increase their usage of Holstein-Friesian genetics to raise productivity. This may take many years to accomplish because it will require a restructuring of the entire industry.

Production Policy

In Chile, there are no domestic price supports or subsidies for milk or dairy products. Government protection for milk and dairy products consists of an 11-percent import tax which is paid by all imported goods. This duty will be reduced to 10 percent as of January 1, 1999.

Consumption

Utilization Patterns

Chile's fast-developing dairy processing technology has permitted a wide product diversification. All supermarket dairy sections offer UHT milk, and a wide variety of yoghurt, cheeses, powdered, and condensed milk, as well as caramelized milk ("manjar" or "dulce de leche"), in large quantities. The UHT milk market is segmented by fat content from skim milk to full fat, including various levels in between. This together with improved economic conditions, low unemployment and increased real income in Chile, has resulted in a significant increase in demand for dairy products. The one product that is sold in limited quantity is pasturized fresh milk. It is usually offered in plastic bags of one liter.

Prices

Experts in the industry indicate that prices paid to farmers have fallen for a number of reasons. Increased competition has reduced prices for milk products, and processing costs have risen due to constant technological improvements that have been necessary at the industrial level to stay competitive. As a result, in order to maintain profit margins, the industry has had to reduce the price of their principal input. Additionally, milk prices paid to farmers in Chile are normally linked to international CIF prices for dry milk. During 1997 domestic prices for fresh milk paid to farmers fell over 7 percent, and the prices paid for imports fell over 14 percent.

Fluid Milk Prices Paid to Farmers
(In Aug. 1997 CH Pesos)

	1997	1998
January	98.96	90.98
February	100.97	96.10
March	103.01	98.06
April	105.84	99.98
May	109.49	103.54
June	109.99	103.55
July	108.76	103.97
August	107.97	102.87
September	101.65	
October	95.13	
November	92.19	
December	90.94	
Yearly average	102.07	
Average Jan.-Sep.	105.62	99.88

Source: Ministry of Agriculture.

Trade

Dairy products are normally imported by private traders and dairy processors who make purchasing decisions principally based on price. During 1996 as a result of an expected increase of the international milk price, traders imported larger than necessary volumes of dry milk. This created larger than normal carry-over stocks at the end of 1996 and lowered imports during 1997. Low international milk prices during 1998 have tempted the industry to increase their stocks again and as a result, imports are expected to be significantly larger than last year. The industry expects that imports will exceed exports for at least the next few years.

Milk Product Imports (MT)

Year	Whole Dry Milk	NFDM	Dry Cheese	Whey	Butter	Butter Oil
1985	1284	1990	211	1544	452	-
1990	4285	7617	96	2384	438	836
1991	6624	8380	117	2040	529	1441
1992	12921	10195	248	3215	1544	2373
1993	16912	10055	2891	3108	401	2798
1994	10362	6958	4544	2069	512	2186
1995	9845	8419	5394	2758	248	2001
1996	12934	10304	5901	3309	716	1383
1997	4484	5976	6700	1713	1603	22

Source: Central Bank.

Trade Policy

Chile’s flat import tariff of 11 percent on nearly all products, including all dairy products, will be reduced to 10 percent January 1, 1999. Additionally, a value-added tax of 18 per cent is charged at the consumer level on all goods. When prices fall below a certain level the Government imposes a minimum customs value for dry milk imports in an effort to protect local milk production from subsidized exports. Presently there is no minimum customs value in effect for any dairy products .

Dry Milk

PS&D Table

PSD Table						
Country:	Chile					
Commodity:	Dairy, Dry Whole Milk Powder					
		1997		1998		1999
	Old	New	Old	New	Old	New
Calendar Year Begin		01/1997		01/1998		01/1999
Beginning Stocks	27	27	25	23	20	25
Production	63	66	63	72	0	74
Intra EC Imports	0	0	0	0	0	0
Other Imports	10	13	15	15	0	12
TOTAL Imports	10	13	15	15	0	12
TOTAL SUPPLY	100	106	103	110	20	111
Intra EC Exports	0	0	0	0	0	0
Other Exports	0	8	7	9	0	8
TOTAL Exports	0	8	7	9	0	8
Human Dom. Consumption	75	75	76	76	0	77
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	75	75	76	76	0	77
TOTAL Use	75	83	83	85	0	85
Ending Stocks	25	23	20	25	0	26
TOTAL DISTRIBUTION	100	106	103	110	0	111
Calendar Yr. Imp. from U.S.	0	1	0	3	0	3
Calendar Yr. Exp. to U.S.	0	0	0	0	0	0

Export Trade Matrix 97

Export Trade Matrix			
Country:		Units:	Metric Tons
Commodity:			
Time period:	Jan-Dec		
Exports for	1997		1998
U.S.		U.S.	
Others		Others	
Brazil	3830	Venezuela	1850
Bolivia	971	Brazil	1115
Ecuador	711	Ecuador	622
Dominican Rep.	690	Colombia	529
Thailand	400	Bolivia	340
Colombia	372	Argentina	250
Venezuela	198	Paraguay	120
Argentina	175	Peru	118
South Africa	168	Dominican Rep.	13
El Salvador	150		
Total for Others	7665		4957
Others not listed	118		0
Grand Total	7783		4957

Import Trade Matrix 97

Import Trade Matrix			
Country:		Units:	Metric Tons
Commodity:			
Time period:	Jan-Dec		
Imports for	1997		1998
U.S.	655	U.S.	1702
Others		Others	
New Zealand	5544	Germany	2078
Poland	902	Ireland	1762
U.K.	844	Belgium	1480
Ireland	735	U.K.	1291
Belgium	630	Australia	1197
Denmark	267	Argentina	924
Germany	244	Poland	619
Czech Republic	184	New Zealand	587
Uruguay	150	Uruguay	475
Argentina	100	Czech Republic	256
Total for Others	9600		10669
Others not listed	205		545
Grand Total	10460		12916

Production

Dry milk production in 1997 continued to expanded as a result of the overall increase in fluid milk production. Dry milk is produced from excess supplies of milk that would not otherwise be consumed as fresh fluid milk or used to produce other dairy products. For 1998 another expansion in dry milk production is expected as fluid milk production increases.

Dry milk production capacity has been expanded by some industries during the last few years. Dry milk production expansion in the coming years will depend on the increase in total milk production, government feeding programs, and on the price of dry milk imports. If the cost of dry milk imports rises, the industry will move more production to substitute for imports because processed products, though generally more profitable, are highly perishable and therefore more risky to produce than dry milk.

Total Dry Milk Supply (MT)

Year	Domestic Production	Imports	Donations	Total Supply
1980	32,566	16,318	4,267	53,151
1985	32,470	3,278	19,708	55,456
1990	45,126	11,902	801	57,829
1991	44,307	15,004	1,335	60,646
1992	46,700	23,116	N/A	69,816
1993	51,404	26,931	N/A	78,335
1994	53,594	17,320	N/A	70,914
1995	61,418	18,153	N/A	79,571
1996	63,344	23,189	N/A	86,533
1997	65,726	12,916	N/A	78,642

Source: Ministry of Agriculture.

Dry milk production occurs primarily in the summer months when domestic fluid milk production is at its peak. November, December and January are historically the months with the highest dried milk production.

Consumption

Dry milk is available for sale in most stores. Some families lacking refrigeration facilities or who do not consume large quantities of milk prefer to purchase dry rather than fluid milk. Nevertheless, Government food programs account for an important proportion of the dry milk consumption in Chile.

Trade

Due to smaller imports of dry milk in 1997 which resulted in a fall of carry over stocks, imports in 1998 are expected to be considerably larger. Additionally, as a result of low international milk prices the the industry will increase stocks to face expected larger future demands.

1997 Dry Milk Imports

	Metric Tons	$1000	US$/MT**
New Zealand	5,544	10,486	1,891
Poland	902	1,671	1,853
United Kingdom	884	1,508	1,706
Ireland	735	1,375	1,871
United States	655	1,184	1,808
Belgium	630	1,167	1,852
Denmark	267	527	1,974
Germany	244	478	1,959
Czech Rep.	184	377	2,049
Uruguay	150	271	1,807
Argentina	100	181	1,810
Finland	70	148	2,114
France	32	95	2,969
Canada	32	58	1,813
Netherlands	31	74	2,387
TOTAL	10,460	19,600	1,874

Note: ** CIF values.
Source: Central Bank.

Milk and Milk Product Exports
(In Metric Tons)

Year	Milk Powder	Fluid Milk	Cream	Butter	Cheese	Whey	Other	Total
1990	1884.1	25.7	535.6	2.1	31.2	168.8	247.7	2895.2
1991	1264.1	75.2	707.2	3.2	94.0	251.2	1669.7	4064.6
1992	709.8	78.5	2041.4	5.7	159.7	247.5	1284.5	4527.1
1993	2647.0	128.6	1994.4	11.1	269.5	448.5	1453.4	6952.5
1994	5371.2	25.2	3249.1	41.4	424.8	775.3	2496.9	12383.9
1995	7749.0	31.3	2001.0	20.6	268.6	305.6	2671.3	13035.7
1996	6840.5	148.9	1605.8	13.0	383.5	257.7	2234.6	11484.0
1997	7782.9	138.6	3253.4	564.8	506.0	373.0	2557.7	15176.4

Source: Central Bank.

Chile's export market is mainly concentrated in neighboring Latin American countries. Increased production will likely mean expanded milk and dairy exports from Chile in the coming years. Fluid and other milk is mainly exported to Peru, Bolivia and Argentina.

In the longterm, Chile's success in the dairy export market will depend upon its ability to compete with other countries that benefit from substantial subsidy programs.

Non-Fat Dry Milk

PS&D Table

PSD Table						
Country:	Chile					
Commodity:	Dairy, Milk, Nonfat Dry					
		1997		1998		1999
	Old	New	Old	New	Old	New
Calendar Year Begin		01/1997		01/1998		01/1999
Beginning Stocks	2	2	2	1	3	1
Production	6	8	6	6	0	6
Intra EC Imports	0	0	0	0	0	0
Other Imports	9	6	10	10	0	11
TOTAL Imports	9	6	10	10	0	11
TOTAL SUPPLY	17	16	18	17	3	18
Intra EC Exports	0	0	0	0	0	0
Other Exports	0	0	0	0	0	0
TOTAL Exports	0	0	0	0	0	0
Human Dom. Consumption	15	15	15	16	0	16
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	15	15	15	16	0	16
TOTAL Use	15	15	15	16	0	16
Ending Stocks	2	1	3	1	0	2
TOTAL DISTRIBUTION	17	16	18	17	0	18
Calendar Yr. Imp. from U.S.	0	1	0	1	0	1
Calendar Yr. Exp. to U.S.	0	0	0	0	0	0

Import Trade 97

Import Trade Matrix			
Country:		Units:	Metric Tons
Commodity:			
Time period:	Jan-Dec		
Imports for	1997		1998
U.S.	655	U.S.	1702
Others		Others	
New Zealand	2499	Germany	1950
Poland	902	U.K.	928
U.K.	804	Poland	619
Ireland	419	Uruguay	375
Czech Republic	184	Ireland	322
Uruguay	150	Czech Republic	240
Denmark	126	Canada	192
Germany	100	Belgium	130
Belgium	73	France	96
France	32	New Zealand	82
Total for Others	5289		4934
Others not listed	32		72
Grand Total	5976		6708

Production

Chile's NFDM production amounts to around 10 percent of total dry milk output. It has been stable during the last few years, with variations in production depending upon expected prices in the international markets or specific strategies from individual industries.

Consumption

Chile's food industry determines to a great degree the consumption level of NFDM in Chile. The chocolate and ice cream industries utilize NFDM in addition to the dairy industry itself for yoghurt. Consumption increased during the last few years in line with booming economic growth. In the coming years utilization is expected to increase slightly.