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Chile

Oilseeds and Products

Annual

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Approved by:

Lewis J. Stockard, Agricultural Attache

U.S. Embassy

Prepared by:

Luis Hennicke, Agricultural Specialist

Report Highlights:

Chile's fishmeal and oil production and exports are expected to fall for the next two years.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
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Executive Summary

Chile's fish meal production fell again in CY2000 as a result of a significant reduction in fish landings. Increased fishing restrictions and probably some lingering effects of the La Nina phenomenon which has an effect on fish size will constrain the expansion of fish landings again during this year. Fish oil production will follow the same trend in line with a smaller catch.

Fishmeal and fish oil exports fell as a result of a smaller output. Even smaller shipments are forecast in 2001, based on an expected smaller catch.

MEAL, FISH

Production

Total fish landings for reduction fell significantly again in 2000 as a result of the Government imposed fishing bans most of last year, mainly for Jack mackerel species. Another reduction is expected during this year as fishing bans are still in effect in most fishing areas. The Government is imposing fishing bans in an effort to preserve the fish biomass.

PSD Table						
Country	Chile					
Commodity	Meal, Fish			(1000 MT)(PERCENT)		
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		01/2000		01/2001		01/2002
Catch For Reduction	5200	3700	5300	3145	0	3500
Extr. Rate, 999.9999	0.211538	0.224865	0.215094	0.222576	ERR	0.222857
Beginning Stocks	339	339	269	271	209	186
Production	1100	832	1140	700	0	780
MY Imports	250	1	250	5	0	10
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	0	0	0	0	0	0
TOTAL SUPPLY	1689	1172	1659	976	209	976
MY Exports	800	531	800	450	0	500
MY Exp. to the EC	90	70	100	50	0	0
Industrial Dom. Consum	0	0	0	0	0	0
Food Use Dom. Consump.	0	0	0	0	0	0
Feed Waste Dom. Consum	620	370	650	340	0	350
TOTAL Dom. Consumption	620	370	650	340	0	350
Ending Stocks	269	271	209	186	0	126
TOTAL DISTRIBUTION	1689	1172	1659	976	0	976
Calendar Year Imports	0	1	0	5	0	10
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	0	531	0	450	0	500
Calndr Yr Exp. to U.S.	0	2	0	2	0	2

Changing climatic conditions, which influence the rate of recovery of the fish biomass, make it difficult to make an accurate forecast of the fish catch. However, we expect another fall in landings for CY2001 because Jack

mackerels, which represent over 60 percent of the fishing resource, are still below the minimum fishing size.

There are approximately 250 different fish species in Chilean waters. Fishmeal production accounts for over 95 percent of the total oilmeal output in Chile and is manufactured mostly from sardines, anchovies and Jack mackerel, all pelagic species. These three species account for over 90 percent of the total national fish catch.

Pelagic fishing activities in Chile can be divided into two major areas; the northern desert area from Arica to Antofagasta (Regions I and II), the central fishing areas, San Antonio (Region V) and the south central area which includes the area around Concepcion in Region VIII, and the area around Valdivia in Region X.

Over 350 commercial fishing vessels operate in Chilean waters. Some industry sources estimate that around 150 fishing vessels operate in the northern fishing area. The remaining 200 vessels operate in the south central area. The Chilean fishing fleet has demonstrated great mobility in moving south to better fishing conditions. In addition, the fleet has attempted to utilize more specialized fishing techniques designed for the type of fish it is seeking, which has contributed to greater fishing efficiency.

Table 1 - Monthly Fishmeal Production

Month	1998	1999	2000
January	78,655	81,929	144,452
February	95,634	110,588	95,759
March	58,521	147,882	99,366
April	44,436	121,995	64,157
May	52,526	109,897	64,380
June	56,337	72,538	41,431
July	54,848	36,029	84,015
August	44,272	50,482	25,209
September	27,327	17,608	40,528
October	34,702	48,092	50,519
November	29,511	74,182	57,605
December	35,501	108,964	64,351
Total	612,000	980,186	831,772

Consumption

In Chile there are no statistics kept on domestic fishmeal consumption. Domestic consumption and final stocks are derived from the known production and export figure. Domestic consumption of fishmeal has increased in the last few years in line with the expansion of the salmon industry. High fishmeal prices during the last two years have encouraged the animal feed industry (other than salmon) to increase the usage of alternative sources of protein, like soybean meal (see table below) and feather meal. The fishmeal industry is attempting to produce increasing amounts of high-quality meal to supply the expanding salmon feeding industry.

Table 2 - Soybean Meal Imports
(January - December, metric tons)

	1999		2000
U.S.	7,514	U.S.	0
Others:		Others:	
Argentina	163,270	Brazil	2,323,708
Brazil	276,495	Argentina	311,411
Bolivia	307,141	Paraguay	35,131
Paraguay	52,841	Bolivia	3,219
Total for Others	799,747	Total for Others	2,673,469
Others not Listed	0	Others not Listed	0
Grand Total	807,261	Grand Total	2,673,469

Source: Central Bank

Trade

Fishmeal export levels are dependent upon the year's pelagic fish catch, which determines production and availability for export.

Japan is Chile's largest export market for fish meal, followed by Taiwan. According to industry sources, Japan and Taiwan prefer higher quality "prime" fishmeal and pay higher prices. Countries like China, on the other hand, normally take lower quality meal. Presently, an estimated 60 percent of Chile's fishmeal production is of the higher quality, or so-called prime fishmeal. The increased production of prime fishmeal has allowed Chile to expand exports to the Far East at a faster rate than Peru, Chile's main competitor.

Export Trade Matrix			
Country	Chile		
Commodity	Meal, Fish		
Time period	Jan-Dec	Units:	M.T.
Exports for:	1999		2000
U.S.	373	U.S.	1839
Others		Others	
Japan	187130	Japan	149551
Taiwan	127502	Taiwan	117279
China	49214	China	50344
Indonesia	40276	Germany	20395
Germany	38991	Indonesia	20104
Thailand	25367	So.Korea	18516
Canada	19208	Spain	18240
Spain	16288	Mexico	16311
India	12918	Italy	15917
Mexico	11547	Denmark	14847
Total for Others	528441		441504
Others not Listed	60419		87780
Grand Total	589233		531123

Import Trade Matrix			
Country	Chile		
Commodity	Meal, Fish		
Time period	Jan-Dec	Units:	M.T.
Imports for:	1999		2000
U.S.	0	U.S.	0
Others		Others	
Peru	269472	Ecuador	660
Japan	269		
Total for Others	269741		660
Others not Listed	0		0
Grand Total	269741		660

Table 3 - Monthly Fishmeal Export Prices
(FOB, US\$ per MT)

Month	1998	1999	2000
January	688	638	489
February	677	599	482
March	680	536	467
April	690	421	453
May	712	462	413
June	718	451	418
July	717	456	413
August	733	442	418
September	698	462	443
October	709	472	443
November	706	476	441
December	669	477	433
Average	696	475	437

Source: Central Bank.

Policy

Private businessmen conduct all the fish meal trade. The government is an active administrator of the country's fisheries resources. Principal control is exercised through the basic Fishing Law, which authorizes fishing bans, imposes minimum fish size, and controls the number and permitted size of fishing vessels. Fishing bans have been established to ensure that pelagic species are not over-fished. In addition, existing legislation sets a minimum length for Jack mackerels of 26 cms.; sardines must be at least 20 cms. long.

OIL, FISH**Production**

In line with the significant fall in landings, total fish oil output in CY2000 fell below last years production and our previous estimate. Fish oil extraction in 2001 is expected to fall again.

PSD Table						
Country	Chile					
Commodity	Oil, Fish					(1000 MT)(PERC ENT)
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		01/2000		01/2001		01/2002
Catch For Reduction	5200	3700	5300	3145	0	3500
Extr. Rate, 999.9999	0.040385	0.03973	0.040566	0.039746	ERR	0.04
Beginning Stocks	53	53	43	49	33	30
Production	210	147	215	125	0	140
MY Imports	60	95	60	100	0	110
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	0	0	0	0	0	0
TOTAL SUPPLY	323	295	318	274	33	280
MY Exports	60	16	55	14	0	16
MY Exp. to the EC	50	10	50	8	0	8
Industrial Dom. Consum	15	15	15	15	0	15
Food Use Dom. Consump.	75	75	75	75	0	75
Feed Waste Dom. Consum	130	140	140	140	0	145
TOTAL Dom. Consumption	220	230	230	230	0	235
Ending Stocks	43	49	33	30	0	29
TOTAL DISTRIBUTION	323	295	318	274	0	280
Calendar Year Imports	60	95	60	100	0	110
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	60	16	55	14	0	16
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Table 4 - Monthly Production of Fishoil
(In MT)

Month	1999	1999
January	19,104	24,331
February	27,361	22,052
March	37,729	16,903
April	27,461	14,272
May	25,404	14,530
June	12,747	9,064
July	6,500	13,097
August	3,770	5,373
September	1,073	4,885
October	2,727	8,413
November	5,649	8,403
December	13,850	13,850
Total	189,375	147,346

Source: Central Bank.

Consumption

Traditionally, fish oil has been used in Chile by the food industry as an ingredient in margarine and low-grade cooking oil and by manufacturers of paint and putty. During the last few years, however, the use by feedmills producing rations for salmon farms has increased dramatically. The feed industry is using fish oil to manufacture pellets by extrusion that are lighter and therefore do not sink as fast as normal pellets when fed to fish (salmon) in cages. This has increased the efficiency of the fish feeding industry. The use of fish oil also improves the flavor of the fish. In the coming years domestic consumption of fish oil will reflect growth in the fish farming sector.

In Chile there are no official statistics on consumption. These are estimated from the known figure of production and exports together with stocks.

Trade

Fish oil exports fell significantly in CY2000 when compared to a year earlier due to a smaller supply. Imports increased significantly reflecting the strong demand by the feed industry, mainly for salmon production.

Export Trade Matrix			
Country	Chile		
Commodity	Oil, Fish		
Time period	Jan-Dec	Units:	M.T.
Exports for:	1999		2000
U.S.	20	U.S.	20
Others		Others	
Norway	42235	Norway	10088
Mexico	12540	Mexico	4580
Netherlands	8100	Taiwan	352
New Zealand	783	New Zealand	294
Honduras	305	Argentina	214
Vietnam	205	Brazil	175
Ecuador	167	Indonesia	97
Israel	42	Thailand	84
Uruguay	27	Ecuador	60
Philippines	24	Hong Kong	49
Total for Others	64428		15993
Others not Listed	38		76
Grand Total	64486		16089

Import Trade Matrix			
Country	Chile		
Commodity	Oil, Fish		
Time period	Jan-Dec	Units:	M.T.
Imports for:	1999		2000
U.S.	0	U.S.	
Others		Others	
Peru	60293	Peru	94631
Total for Others	60293		94631
Others not Listed	0		0
Grand Total	60293		94631

Table 5 - Monthly Fishoil Export Prices
(FOB, US\$ per MT)

Month	1998	1999	2000
January	NQ	894	243
February	692	284	508
March	987	209	440
April	819	205	182
May	862	224	453
June	950	195	170
July	871	182	378
August	986	415	359
September	972	391	NQ
October	902	229	484
November	691	400	418
December	909	NQ	547
Average	735	208	194

Source: Central Bank.