

SUNFLOWER PRODUCTION, MARKETING AND OUTLOOK
IN CHILE

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First we thank Dr. Putt for the invitation to this conference. We are from Chile as you know and we are in the executive of a private company called "Comarsa". This private company was founded 10 or 14 years ago for the improvement of the oilseeds in Chile. The first crop we had in Chile was sunflower in 1938 when we grew 1050 hectares. The first promotion of the crop was by an oilseeds committee formed by private concerns and the government. We had a very good increase in the beginning because of good climate conditions in our central soil zone. As you know Chile is the most southerly country in the world; it is a very long country and very narrow. We have several climatic conditions. In the north, near Peru we have very dry conditions, one of the main deserts in the world, the Atacama desert.

The climate in the central soil zone varies and permits the production of several crops like sunflower plant, wheat, barley, corn, rice, beans and sugar beet. Among these several crops, sunflowers occupy less area than many others. In the central zone we had 800,000 hectares in wheat and 70,000 hectares in barley, 72,000 of corn, rice 31,000, beans 86,000 hectares, sunflowers 27,000 in 1964-65. (Table 1). The yields of sunflower has been similar over the last 10 years varying from 900 to 1170 kilograms per hectare (Table 2). Sclerotinia is the main problem we have in Chile. Sclerotinia caused damage of 10 to 20% in some years, and reduces the interest of the growers. In some years it is not common.

Besides sunflowers, rape is an important oilseed crop in Chile. Our harvest of rapeseed has risen from 90 tons in 1954/55 to 75,000 tons in 1964/65. With these two crops our imported oil has declined from 68.5 per cent in 1956 to 5.8 per cent in 1965, of the total requirement of the country. This has occurred in spite of an increase in consumption over the period. In 1966 we expect to import no edible oil. We export the oilcake or meal to Europe.

We need sunflowers in Chile because of the good oil and good meal we obtained from them but there is great competition for sunflowers. For instance, corn produces 2.2 tons per hectare. Price of corn is a little higher than sunflower seed. That is why we are trying to increase the yield of sunflowers. For this we have recently introduced two new varieties or hybrids; we say topcrosses or crosses with a line to a variety. Their yield is 10% better than Klein, the main variety of Chile. Klein came from Argentina. The Klein occupied 70% of the acreage and the hybrid 10% in 1964/65. The rest is occupied for earlier varieties. The main early variety is Saratov. In 1963 four varieties were introduced from Russia. Peredovik and Armavirski were the two best. Armavirski is a little earlier than Peredovik. Last year we seeded about 3000 hectares with these two varieties and the yield was 80% of the average. We have to study these varieties more because we don't know enough of the management of them. They have very high oil content, from 42 to 48%.

Marketing of the farmers' crop is done mainly through buyers of the sunflowers. The buyers agree beforehand to buy at a certain price. This price is related to a price fixed by the government, during the month of January. The price depends on the oil content and the varieties that are grown in the particular year. The company provides many advantages to growers selling to it, including loans and advances of money depending on the adaptation of the crop to the area, previous yields, solvency of the buyers or the producers and the present conditions of the crop. The company also provides to the producer certain fertilizers, mainly nitrogen and phosphate. Also they provide bags for shipping and assistance in harvesting and handling. It provides technical assistance by means of technicians, agriculturists and engineers, working in the farm areas. The program includes extension work and also the assessments for loans. The company has storage facilities and dryers because the farmers do not have these facilities for storage and drying of the seed. The company has activities in other lines of productions, primarily rapeseed.

Table 1 Seeded Area Agricultural Season, 1964-1965
Thousands of Hectares

Province	Sunflower	Wheat	Barley	Corn	Rice	Beans	Sugar Beets
Coquimbo	0.248	24.3	15.5	6.8	-	1.2	-
Aconcagua	0.098	22.4	2.3	2.3	-	1.2	-
Valparaiso	0.806	15.6	7.6	0.7	-	1.9	-
Santiago	1.077	55.2	10.6	18.8	0.3	5.7	-
O'Higgins	2.875	20.8	8.4	10.6	2.1	8.5	-
Colchagua	3.712	44.0	2.2	3.8	3.6	7.6	-
Curico	3.900	19.3	4.9	4.3	0.9	7.1	0.5
Talca	4.237	43.1	3.1	3.5	10.2	10.5	1.5
Maule	7.750	25.1	0.2	2.8	0.1	3.0	-
Linares	0.202	50.5	1.3	5.0	11.6	7.5	4.8
Nuble	1.941	93.0	1.0	7.6	2.2	14.3	3.2
Total in country including other provinces	27.528	849.6	71.6	72.9	31.0	86.8	18.2

Sunflowers, official figures of "Comarsa"
Other crops, official figures of the Ministerio
de Agricultura, Chile, Departamento de Economia
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Table 2

Statistics of Sunflowers

Area contracted and amount harvested
Period 1955/56-1964/65

Season	Area contracted (hectares)	Metric tons harvested	Mean yield in 100 kg per hectare*
1955/56	32.302.1	35.797	11.08
1956/57	43.474.1	44.610	10.26
1957/58	42.407.0	49.583	11.69
1958/59	52.019.8	54.890	10.55
1959/60	50.754.6	50.250	9.90
1960/61	29.894.3	31.729	10.61
1961/62	35.521.2	32.014	9.01
1962/63	23.527.9	21.895	9.31
1963/64	26.378.0	27.650	10.48
1964/65	27.574.6	31.553	11.44

* 1 kilogram per hectare = approximately 1 pound per acre

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