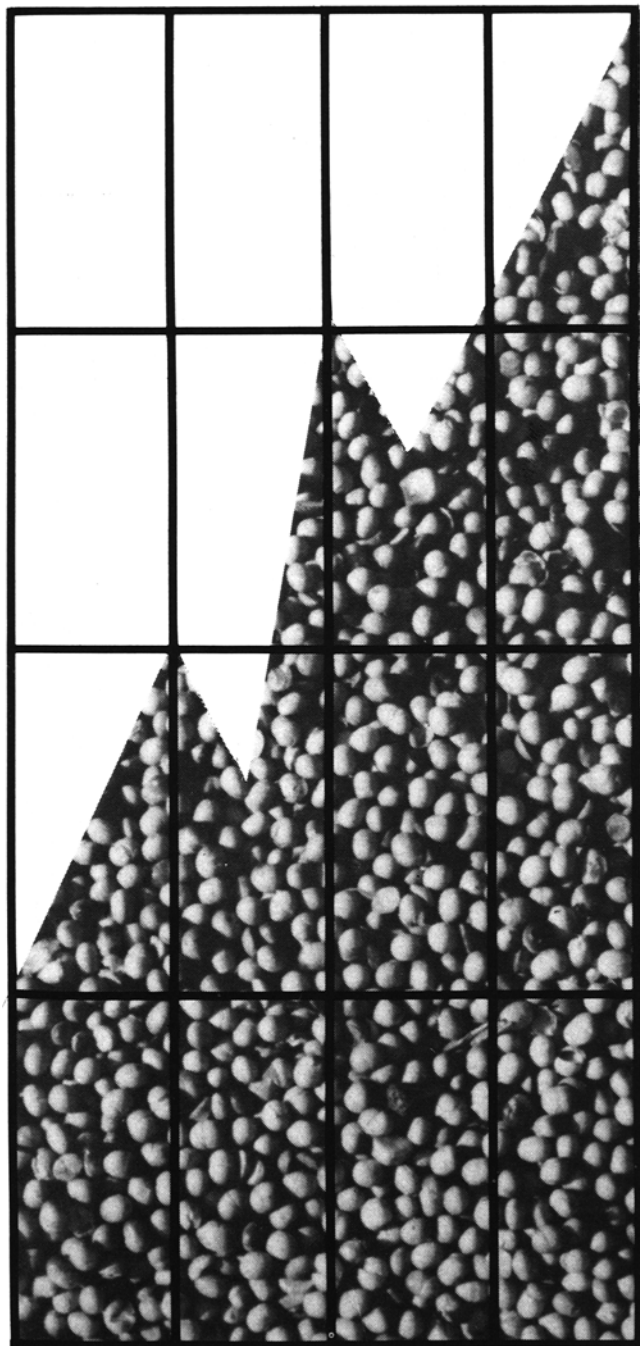


1980s

OUTLOOK FOR SOY



While 1979's record U.S. soybean harvest may lead to a large carryover next season, three speakers at the American Soybean Association's annual convention gave some optimistic predictions for the mid-1980s to the nation's soybean growers.

Siegfried Mielke, editor of *Oil World Weekly* of Hamburg, Germany, forecast average annual oilseed production for the three-year period ending 1986 will be approximately 200 million metric tons, with soybeans remaining the dominant world oilseed.

USDA economist Alan Holz forecast that worldwide demand for high protein meals will grow about 4% a year from the 1976-78 average of 73 million metric tons to total around 100 million tons in 1985, with soymeal accounting for 85% of the gain. Edible oil demand will rise about 3% a year from 50 million metric tons to 64 million tons, Holz forecast, with soy oil supplying one-fourth the world demand.

T.E. Nichols Jr. of North Carolina State University said that U.S. soybean growers will need to plant 75 million to 82 million acres of soybeans with a harvest of 2.4 to 2.6 billion bushels to meet 1985 world demand. The 1979 crop is expected to total about 2.1 billion bushels.

The soybean growers were most interested, however, in predictions for the coming year. Mielke said improved 1980 South American soybean yields will help create a Sept. 1, 1980, carryover of 400 million bushels in the U.S. Other observers at the conference thought this was too high, with 250 million bushels being mentioned by one European attendee. The USDA estimate is 290 million bushels. Everyone said prices would soften next spring when South American soybeans and soybean products move into the market, with USDA expecting prices about 50 cents a bushel below the previous year.

During a four-continent television hookup, the attendees heard comments on the soy market situation from Europe, Japan and Brazil. Johannes Randag, president of the International Association of Seed Crushers, told the group from London that the European Economic Community will import about 14 million tons of soybeans during 1979, an amount equivalent to the combined crop of Illinois, Indiana and Kentucky. While soymeal appears secure in the European market, soy oil faces increasing competition from palm oil, coconut oil, olive oil, peanut oil, fish oil, sunflower oil and European-grown rapeseed oil, Randag said.

From Japan, Dr. Hiroshi Nakamura of Hohnen Oil Co. said Japan relies on the U.S. for 97% of its soybean imports, about 4.1 million tons during 1979. Canadian rapeseed is becoming increasingly popular in Japan, Dr. Nakamura said. "Canadian rapeseed oil is preferred to soybean oil in the consumer foods market because rapeseed oil is

more stable than soybean oil in terms of color and flavor reversion," he said. Rapeseed imports may total about one million tons in 1979, up 20% from 1978, Dr. Nakamura said.

From Rio De Janiero, Paulo Vianna estimated next year's Brazilian soybean harvest at 14.8 million metric tons, reflecting improved yields of 26 bushels an acre and an increase of 4 to 6% in acreage. Vianna, executive director of the Commission of Financing Production, said Brazil's crushing industry is operating about 50% of capacity. He said 1979 imports of Canadian rapeseed were intended entirely for re-export. Other observers have said the rapeseed oil could be blended with Brazilian soy oil to avoid certain Brazilian regulations affecting marketing of soy oil. Attendees noted that Brazilian production never seems to match forecasts, but even a crop of 13 to 14 million tons would be considerably above this year's drought-damaged 10 million ton harvest.

In his address, Mielke noted four factors that tend to stiffen competition for U.S. soybeans. First, research has improved yields and quality of competing oilseeds such as oil, palm, coconut, sunflower and rapeseed. Second, oilseeds have been providing better returns than other crops overseas, spurring increased plantings. Third, consumers' preference for high polyunsaturated fats can aid marketing of such oils as sunflowerseed. Fourth, government policies have encouraged oilseed production in Malaysia, Argentina and Brazil. Mielke noted currency devaluations in Brazil and Argentina appear to have been designed specifically to help exporters remain competitive.

Mielke said the first two seasons of the 1980s are likely to be dominated by the 1980 soybean carryover, which he estimates at a record 400 million bushels. Factors slowing liquidations could be: (1) increased demand for vegetable oils and oilmeals may be declining, owing to effects of increased energy costs on consumer income; (2) more lauric oils will be in the world market and palm oil will continue as a strong competitor to soy, and (3) the European Econ-

omic Community may limit tapioca imports to 5 to 6 million tons, causing a slower increase in use of soy meal to provide protein in feed rations.

Factors favoring liquidation listed by Mielke: (1) grain/oilseed price ratios will be less favorable to oilseeds worldwide, slowing expansion in plantings of sunflowerseed, rapeseed and soybeans; and (2) the market potential for sunflower and rape oils may peak next season with European crushers approaching sunflowerseed capacity. Mielke predicted sunflowerseed expansion of 2.5% annually for the next few years and rapeseed expansion at 1.7% or a little higher.

Permitting soybean prices to fall in accordance with supply-and-demand, Mielke said, will speed liquidation of the surplus, curb production of competing crops and stimulate demand.

He forecast a 10 to 15% drop in U.S. soybean acreage next season, or 7 to 10 million fewer acres in soybeans. American soybean output should then increase about 2.5% annually for the three years ending 1982/83, he said, while South American production will rise at 4.4% annually. U.S. output for the three years ending this fall has been 19%.

Mielke expects the second three-year period of the 1980s to be "more promising" for U.S. soybean growers because: (1) by 1983, all U.S. soybean surpluses will have been liquidated; (2) general world economic conditions will improve, reviving growth rates in demand for fats and oils; (3) increased petroleum prices will divert some potential Malaysian palm oil acreage into natural rubber, slowing the rates of increase in palm oil production for the three years ending 1985/86; (4) growth rates for sunflowerseed and rapeseed should remain below those for soybeans; (5) further acreage expansion in Brazil will be in northern and central states where rainfall is less reliable than the southern states that have been drought-plagued these past two years.

Nichols said European and Food and Agriculture Organization specialists expect consumption of fats and oils to increase at 3% a year and oil cakes and meal at 3.3% a year

TABLE I
World Production of 10 Major Oilseeds (3-year averages, million metric tons)

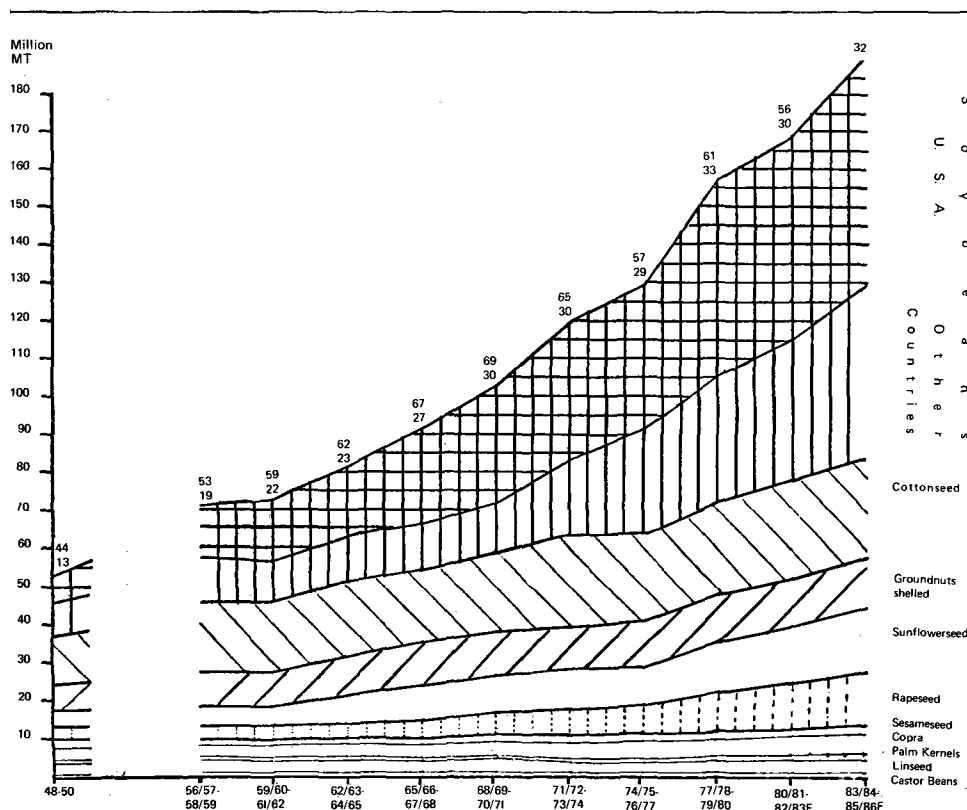


TABLE II

Twelve Major Oils: Potential World Production (a), Three-year Averages (Million Metric Tons)

	1948-1950	1956-1959	1965-1968	1974-1977	1977-1980*	1980-1983 ^F	1983-1986 ^F
Soybean oil	2.25	3.68	5.33	9.28	12.13	12.94	15.16
(USA) (b)	1.05	2.19	3.98	6.38	8.52	8.90	9.90
(USA % of total soybean oil)	46	59	75	69	70	68	65
Cottonseed oil	1.52	2.15	2.29	2.74	2.93	3.04	3.25
Groundnut oil	1.64	2.15	2.64	2.85	2.87	2.97	3.05
Sunflowerseed oil	1.18	1.69	2.96	3.55	4.64	5.38	5.90
Rapeseed oil	1.66	1.20	1.74	2.63	3.57	4.15	4.76
Sesame oil	0.61	0.50	0.54	0.63	0.64	0.68	0.68
Coconut oil	1.49	1.78	2.07	2.78	2.77	2.99	3.34
Palm kernel oil	0.39	0.45	0.35	0.51	0.56	0.63	0.68
Linseed oil	0.93	0.98	0.85	0.69	0.84	0.82	0.96
Castor oil	0.17	0.20	0.33	0.34	0.33	0.39	0.43
Total (d)	11.84	14.78	19.10	26.00	31.28	33.99	38.21
Palm oil (c,d)	0.55*	0.70	0.90	2.67	3.46	4.45	5.08
Grand total	12.39	15.48	20.00	28.67	34.74	38.44	43.29
±% vs. previous period			+12.4	+9.5	+21.2	+10.7	+12.6
Soybean oil, % of total	18	24	27	32	35	34	34
Soybean oil, from U.S. beans, total	8	14	20	22	25	23	23

*) Estimate. F) Forecast (a) Oil equivalent of the respective oilseed production after deducting estimated amounts used for seed, food and feed. (b) US soybean oil production plus soybean oil equivalent of US soybean exports includes any production from soybean stock reduction but excludes any production from soybean stock increase. (c) Actual output. (d) Commercial output.

through the mid-1980s, which should about equal production.

Soybeans' share of the world oilseed market will rise to 55% from 53%, he forecast, with other major oilseeds being cottonseed, sunflower, peanut and rapeseed, respectively. South American soybean production should be 25 to 27 million tons by 1985, compared to 1979's 15 million tons, he said. Only about one-sixth of Brazil's arable land is presently under cultivation, but as soybean acreage expands to the north there, so will costs, Nichols said. Lack of a cold climate means some diseases, weeds and insect larvae will not be killed by winter frosts as they are in the U.S., Nichols said, and longer daylight hours mean slower yields. Most of Argentina's fertile land is cultivated, he said, with increased soybean acreage having to come at the expense of corn, an important Argentine crop. Soybean production could total 7.5 million tons by 1985, he said, depending on price ratios. Paraguay's 450,000-ton soybean crop in 1979 could drop to 5 to 10 million tons by 1985, but much land remains to be cleared. Transportation, credit and agronomy all need to be improved.

Non-American producer nations are unlikely to be

soybean exporters by 1985, Nichols said. Chinese production has stagnated at 11 to 12 million tons a year recently with no indications of expansion in the 1980s. The USSR production of 400,000 to 800,000 tons in recent years is needed domestically.

Holz said he was "cautiously optimistic" for soy's growth potential during the 1980s, based principally on continued world population growth triggering increased demand.

Increased petroleum costs, he said, may mean more soybean oil will be used for industrial fatty acids, encourage growth of natural rubber in Malaysia, lead to a reduction in use of inorganic nitrogen (urea) in feeding, and raise nitrogen fertilizer costs to where more soybeans would be planted.

Holz and Nichols both said increased yields and good marketing will be required of U.S. soy growers during the 1980s.

The ASA meeting attracted approximately 1,500 registrants. The voting delegates approved several resolutions, including one calling for the government to require specific labeling of sources of fats and oils in consumer goods.

TABLE III

Ten Major Oilmeals: Potential World Production (a), Three-year Averages (Million Metric Tons)

	1948-1950	1956-1959	1965-1968	1974-1977	1977-1980*	1980-1983 ^F	1983-1986 ^F
Soybean meal	9.88	16.20	23.44	40.82	53.34	56.93	66.67
(USA) (b)	4.97	9.65	17.73	28.02	37.20	39.00	44.00
(USA % of total soyameal)	50	60	76	69	70	68.5	66
Cotton meal	5.03	7.12	7.58	9.09	9.72	10.07	10.75
Groundnut meal	2.27	2.98	3.67	3.95	3.98	4.13	4.23
Sunflower meal	1.72	2.36	3.81	4.32	5.69	6.56	7.19
Rapeseed meal	2.62	1.90	2.76	4.15	5.65	6.56	7.53
Sesame meal	0.72	0.60	0.64	0.75	0.77	0.81	0.81
Copra meal	0.88	1.05	1.22	1.63	1.63	1.76	1.97
Palm kernel meal	0.45	0.52	0.41	0.59	0.66	0.74	0.79
Linseed meal	1.79	1.90	1.65	1.34	1.63	1.58	1.85
Fish meal (c)	0.57(d)	1.67(e)	4.53	4.48	4.40	4.50	4.60
Total (e)	25.93	36.30	49.71	71.12	87.47	93.64	106.39
±% vs. previous period			+15.2	+8.4	+23.0	+7.1	+13.6
Soybean meal, % of total	38	45	47	57	61	61	63
Soybean meal, from U.S. beans, % of total	19	27	36	39	43	42	41

*) Estimate. F) Forecast. (a) Meal equivalent of the respective oilseed production, after deducting estimated amounts used for seed, food and feed. (b) U.S. soybean meal production plus meal equivalent of U.S. soybean exports includes any production from soybean stock reduction but excludes any production from soybean stock increase. (c) Actual output. (d) 1948. (e) 1958-59 average.

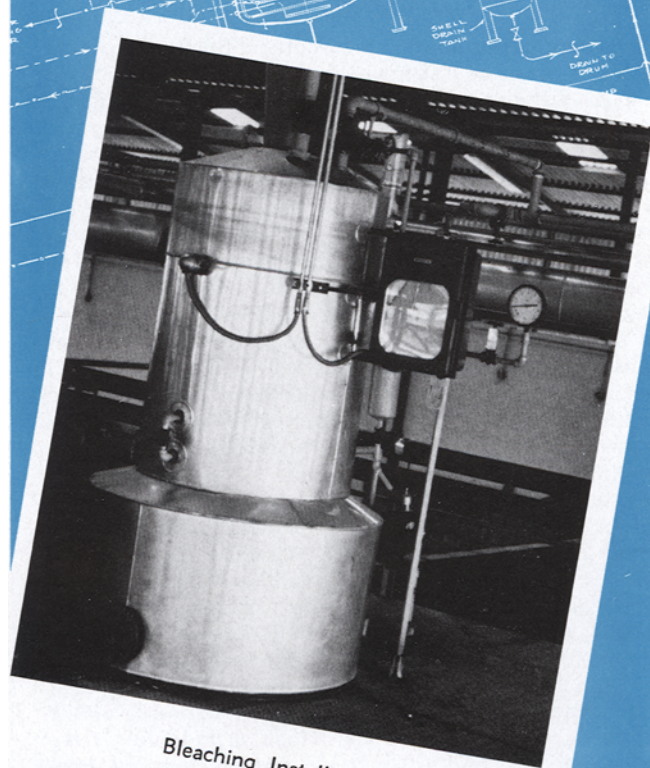
Oilseeds Production: World and Selected Countries, Regions, and Commodities

Commodity	Major regions and countries													Total for major oilseeds and countries	Other countries and regions	World	World less United States	Major foreign competitors			
	North America		Western Europe		Eastern Europe		USSR		Centrally planned Asia		South Asia		Middle East and Africa						Latin America and Caribbean		
	Canada	United States	Western Europe	Eastern Europe	USSR	PRC	India	Pakistan	Egypt	Senegal	Sudan	Argentina	Brazil						Paraguay	Other countries and regions	
Cottonseed	...	5.01	.39	.42	5.14	4.10	4.10	2.54	1.12	.89	...	.36	.47	.93	.18	21.55	4.94	26.49	21.48	4.30
1977-78	...	3.80	.36	.40	4.93	4.26	4.26	2.80	.96	.84	...	.34	.41	1.03	.19	20.32	4.72	25.04	21.24	4.58
1978-79	...	4.19-4.95	.31	.40	5.17	4.34	4.34	2.75	1.28	.84	...	.34	.41	1.03	.19	21.62	4.82	26.44	21.89	4.53
July est.	...	1.69	.02	...	...	2.55	2.55	6.07	.07	.03	.68	1.02	.37	.32	.02	12.84	4.35	17.19	15.50	8.46
1978-79	...	1.80	.02	...	...	2.55	2.55	6.20	.07	.03	1.10	.83	.57	.43	.02	13.62	4.39	18.01	16.21	9.13
1979-80 ^b	...	1.74-1.93	.02	...	...	2.55	2.55	6.00	0.06	0.03	1.20	1.10	.58	.45	.02	13.84	4.78	18.62	16.79	9.33
July est.	...	1.33 ^c	.52	1.93	5.90	.07	.07	...	...	.01	...	...	1.60	...	...	11.44	1.28	12.72	11.39	3.53
Sunflowerseed	.08	1.84 ^c	.59	1.98	5.31	.07	.07	...	...	.01	...	...	1.30	...	...	11.21	1.09	12.30	10.46	3.28
1977-78	...	3.14-3.47	.72	2.10	5.50	.07	.07	...	...	.01	...	...	1.50	...	...	13.37	1.23	14.60	11.30	3.60
1978-79	...	1.94	1.27	1.30	.02	1.38	1.38	1.62	.24	...	...	...	...	...	...	7.77	.26	8.03	8.03	1.94
1978-79	...	3.41	1.59	1.38	.02	2.03	2.03	2.00	.26	...	...	...	...	...	...	10.69	.30	10.99	10.99	3.41
1979-80 ^b	...	4.46	1.45	1.08	.02	2.00	2.00	2.00	.26	...	...	...	...	...	...	11.27	.31	11.58	11.58	4.46
July est.	...	0.53	...	.40	.54	9.50	9.50	.15	...	...	...	...	2.70	9.95	.28	72.00	2.30	74.30	26.35	12.93
Soybean	0.53	47.95	...	.40	.54	9.50	9.50	.15	...	...	...	...	...	...	...	72.00	2.30	74.30	26.35	12.93
1977-78	0.48	50.15	...	.51	.64	10.50	10.50	.20	...	...	...	...	3.80	11.00	.38	77.66	2.41	80.07	29.92	16.18
1978-79	0.52	52.66	...	.53	.60	10.50	10.50	.25	...	...	...	...	4.50	13.50	.55	86.33	2.69	89.02	33.64	18.55
1979-80 ^b	0.52	52.66	...	.53	.60	10.50	10.50	.25	...	...	...	...	4.50	13.50	.55	86.33	2.69	89.02	33.64	18.55
July est.	...	57.97

^aEstimated and preliminary.
^bProjected based on trends and judgement. For the United States, relatively favorable and unfavorable production conditions are alternatively assumed, not U.S. Crop Reporting Board Forecasts.
^cAssumes reported production for four States representing 94 percent of U.S. total in 1977-78 and 95 percent in 1978-79.
^dCountries included: India, Sudan, Argentina, and Brazil for cottonseed; Eastern Europe and Argentina, sunflowerseed; and Canada, rapeseed; India, Senegal, Sudan, Argentina, Brazil and Paraguay, Soybean.
^eNo production reported or less than 5,000 tons.

Call NEUMUNZ for oil mills & refineries designed engineered installed

Over 50 years experience throughout the world in supplying vegetable oil processing equipment from seed storage to finished edible products.



Bleaching Installation



NEUMUNZ, INC.

OIL MILL & REFINERY ENGINEERS

117 Fort Lee Road, Leonia, N. J. 07063 U.S.A.

Telephone: (201) 592-0980 • Cable: NEUMUNZ

Telex: 135170 NEUMUNZ, N.J.