

Oilseeds Outlook

Outlook to 1995: World production, consumption

The following outlook to 1995 on world production and consumption of the 12 major oils and fats was prepared for JAOCS by Siegfried Mielke, editor of Oil World, Hamburg, West Germany. Mielke was one of the speakers featured at the oilseed session at the U.S. Department of Agriculture's Outlook '87 conference held in Washington, D.C., in December.

Ideally, the production of a commodity or group of commodities should be geared closely to demand. In reality, however, this is rarely the case. Usually, production fluctuates more sizeably than consumption.

In the field of agricultural commodities, the reasons for this are mainly government policies, the weather and technological progress. But there are a number of special additional reasons in the field of oils and fats. They are the following:

- Of the 12 oils and fats discussed here (soybean, cottonseed, groundnut, sunflowerseed, rapeseed, corn, coconut, palm kernel and palm oils, lard, fish oil and tallow), five are clearly by-products, namely cottonseed oil, corn oil, lard, tallow and fish oil. In addition, soybean oil is usually a by-product, as soy crush is geared mostly to meal demand. In 1985, these six oils accounted for 55% of the total production of the 12 oils.

- Palm, palm kernel and coconut oils are tree crops. Once the trees are planted, they will be there for about 25 years, in the case of oil palms, and even longer in the case of coconut palms. Moreover, production costs for palm and palm kernel oils are the lowest of all vegetable oils, so producers, especially in the high-yielding countries of Southeast Asia, can hope to gain market shares from more expensive vegetable oils derived from annual crops.

- Theoretically, sunflowerseed, rapeseed and groundnut (peanut) oils can be adjusted to demand as they

are vegetable oils derived from annual crops and not by-products. However, in major producing countries, the production of these seeds is highly subsidized, as governments are anxious to increase their production in order to reduce surpluses of other crops and/or reduce imports of vegetable oils and meals. This is true especially for the European Economic Community (EEC), the Soviet Union, East Europe and India, but to some extent, it also applies to China.

These factors mean that production of oils and fats will continue to be only imperfectly geared to demand. Only in years of extremely low prices, such as this year, will the producers of oil and coconut palms in Southeast Asia and those of rapeseed and sunflowerseed in certain countries such as Canada and Argentina slow down plantings, at least in the private sector.

On the other hand, the sharp price fluctuations resulting from the rather independent production developments are bringing about a certain adjustment of consumption to production.

The latter has resulted in a cyclical development of production surpluses and deficits. The last three deficit seasons (when production remained below disappearance) were 1976/77, 1980/81 and 1983/84. Between each of these deficit seasons were two to four surplus seasons. There are strong indications that the past two surplus seasons will be followed by two deficit seasons in a row, namely 1986/87 and 1987/88. Two consec-

utive deficit years are unusual. They are expected due to the coincidence of the following factors:

- Growth of meal demand is expected to be considerably smaller than that for oils and fats this season and, to a lesser extent, in 1987/88. This means that total production of the respective seed oils will increase less sharply than the demand for oils and fats. As a result, production of soybean and rapeseed oils will not increase as much as the large stocks of U.S. soybeans and Canadian rapeseed would permit.

- Cottonseed oil production will decline sharply because of the existing surplus of cotton, while coconut oil and fish oil production are likely to decline slightly because of yield cycles. At the same time, the increase in sunflowerseed oil production is likely to slow, mainly due to planting reductions in Argentina following a decline in profitability.

- Palm oil yields in Malaysia and Indonesia will decline considerably as the trees react to the very high yields achieved in the preceding season as well as to the cut of fertilizer usage since the autumn of 1985 and especially since early 1986. At least in Malaysia, the decline in yields is unlikely to be offset by the increase in the mature area in 1986/87 and possibly even in 1987/88.

As every deficit year means that the previously accumulated stocks are reduced, two deficit years in a row will result in a correspondingly sharper reduction of stocks. How sharp this reduction will be depends not only on the size of production but also on the strength of demand. Usually the prices for oils and fats are at or near the low of their cycle at the end of the surplus period.

Therefore, demand usually is high in the first half of the deficit period, resulting in a correspondingly larger reduction of stocks. This can be expected to be the case this season. But, in spite of a probable smaller increase in demand, the deficit may be considerable in 1987/88 because of the still relatively small increase in production.

After 1987/88, however, a new and probably longer surplus period is to be expected. It will be characterized by an unprecedented increase in world palm oil production, with a particularly sharp upturn in Indonesia. In that country, expansion of oil palm area will be unusually steep in the next three or four years due to an expected rise in palm oil prices in the next two years (caused by the reduction of stocks discussed above) and to the just-revised oil palm expansion plan, which includes government assistance. Originally, Plan IV targeted new plantings averaging 177,000 hectares annually from 1984 onward in order to reach 1.31 million hectares by the end of 1988. I estimate that in the first three

years (1984 through 1986), only about three-fifths of the plan was implemented, or an average of 100,000 hectares annually. Consequently, the total planted area would have reached about 0.94 million hectares by the end of 1988.

The revised plan calls for an increase in new plantings from about 0.74 million hectares at the end of 1986 to 1.7 million hectares in March 1989. If three-fifths of the revised plan is implemented, the total planted area would reach about 1.34 million hectares by March 1989, or about 400,000 hectares more than could be realistically expected so far. That would mean about 1.2 million metric tons (MT) more Indonesian palm oil production in 1992/93 than I had forecast before the upward revision of the plan.

Even if the Malaysian oil palm area expansion slows somewhat as a result of the accelerating expansion in Indonesia, world palm oil production is likely to reach 17.8 million MT by 1995 and thus will almost match the output of soybean oil.

This means that the quantitative increase in world production of the 12 major oils and fats will accelerate in the second half of this decade and even more in the first half of the 1990s. It will then reach 14.5 million MT, compared with 11.7 million MT in the second half of the 1980s and 9.2 million MT in the first half. Percentage-wise, the five-year increase is likely to be 21% in the first half of the 1990s, compared with 20% in the second half of the 1980s and 19% in the first half of this decade.

Figure 1 shows total production development of the 12 major oils and fats over the 35 years under review and the fight between palm oil and soybean oil in this period. Obviously, it was won by soybean oil in the 1960s and 1970s. But palm oil is about to win from this decade onward, increasing its share from only 9% in 1980 to probably 21% in 1995. Soybean oil already had a share of over 15% in 1960, which grew to over 27% in 1980. But it fell back to slightly less than 24% in 1985 and may be less than 22% in 1995.

Table 1 shows production figures for each of the 12 oils and fats. It also shows that palm oil is not the only competitor with soybean oil. Sunflowerseed, rapeseed and palm kernel oils, too, have limited the production growth of soybean oil and are now helping to reduce its share. Between 1960 and 1985, the share of rapeseed oil, the toughest competitor, has doubled from 5% to 10% and is likely to remain there in 1995. During the same period, sunflowerseed oil's share rose from 8% to 11% in 1985 and is likely to remain there by 1995. These two oils are not expected to lose market shares as a result of stiff palm oil competition during the years to come, chiefly because they will remain heavily subsidized in Europe, India, China and the Soviet Union. However, the extent of subsidization is likely to diminish as it is becoming too expensive.

Although palm kernel is a minor oil, it may be able to increase its share from 2% in 1960 to 2.7% in 1995. In fact, if we add it to palm oil, the combined share will be almost

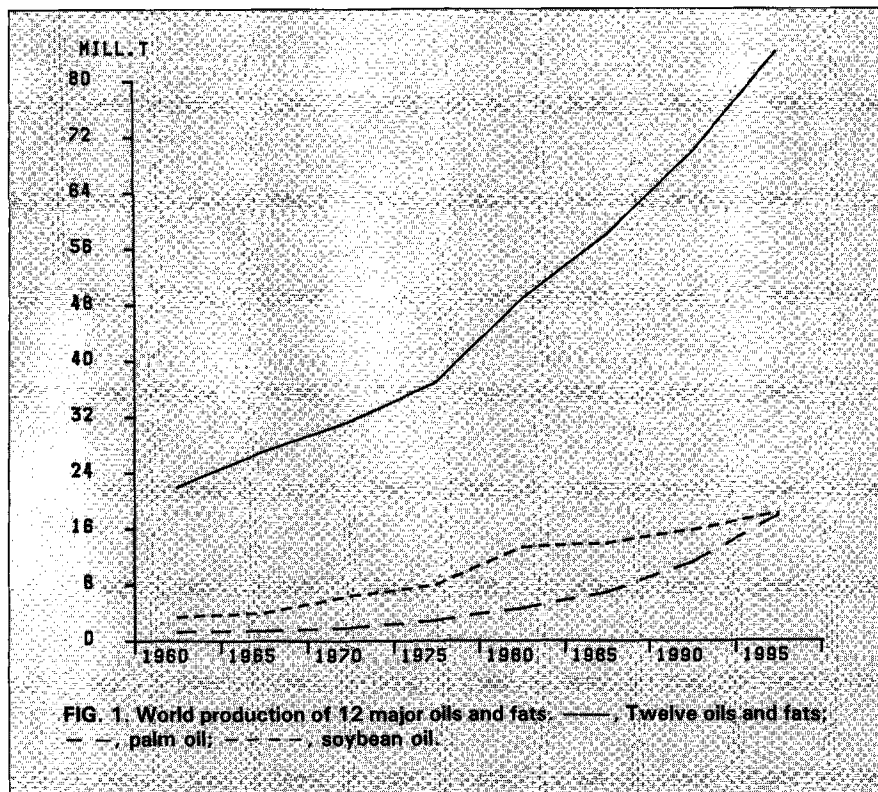


TABLE 1
Twelve Major Oils and Fats: World Production by Kind (1000 Tons)

	1995 ^a	1990 ^a	1985	1980	1975	1970	1965	1960
Soybean oil	18200	15800	13939	13358	8025	6381	3999	3355
Cottonseed oil	4100	3700	3807	3030	2929	2511	2733	2324
Groundnut oil	4100	3600	3144	2801	2672	2730	2806	2282
Sunflowerseed oil	9260	7950	6549	5044	3900	3491	3077	1788
Rapeseed oil	8550	7500	5988	3484	2392	1778	1500	1164
Corn oil	1470	1230	1036	765	580	475	436	370
Coconut oil	3800	3350	2630	2722	2693	2019	2032	1949
Palm kernel oil	2270	1520	935	633	474	393	412	432
Palm oil	17800	11210	6898	4621	2858	1796	1446	1306
Lard	6170	5700	5278	5025	4268	3901	3613	3142
Fish oil	1600	1540	1474	1211	1059	1078	783	470
Tallow	7080	6800	6558	6345	5270	4907	4238	3436
Total	84400	69900	58236	49039	37020	31460	27075	22018
% Increase from five years before	21	20	19	32	18	16	23	

^aForecast.

24% and thus will significantly exceed that of soybean oil in 1995.

Also, the shares of corn oil and fish oil rose substantially between 1960 and 1985. However, a further rise is not expected in the subsequent 10 years; instead, there may be a slight decline.

The shares of the remaining five oils and fats—cottonseed, groundnut and coconut oils as well as lard and tallow—are expected to continue to decline and to be much smaller than they were in 1960.

Whether and to what extent such production developments will result in stock-building will depend on demand. This, in turn, is determined mainly by population growth, disposable income, the prices for oils and fats and (in developing and the East Bloc countries) the availability of credit and foreign exchange.

Population growth is the most important and, fortunately, the most stable of all these factors. It is expected to slow fractionally to 1.6% annually between now and 1995, compared with 1.7% since 1978 and the peak of 2.1% in 1969 to

1972. In the 1960s and early 1970s, approximately two-thirds of the growth in demand for the 12 oils and fats discussed here (about 0.9 million MT, or a little over 3% annually) was due to this factor alone.

In the second half of the 1970s and the first half of this decade, consumption soared, chiefly as a result of the steeper income growth in the developing world, at first in the mineral oil-producing and exporting countries, and then in China, India and others. As a result, the average annual increase in world disappearance of the 12 oils and fats rose to 2 million MT, or about 4%, in the second half of the 1970s. It was over 1.8 million MT, or 3.5%, in the first half of this decade.

Since early 1986, extremely low prices for oils and fats have additionally stimulated demand. Although prices are likely to recover moderately this season and substantially next season, they probably will decline sharply thereafter. During the second half of the

1980s, they may average below the first half, and even lower prices may rule in the first half of the 1990s if the Indonesians implement only one-half of their revised oil palm expansion plan.

As a result, we can expect the disappearance of the 12 oils and fats to rise by an average 2.4 million MT, or about 4%, in the second half of the 1980s, and by as much as 2.8 million MT, or 4% annually, in the first half of the next decade.

This will allow the huge stocks that had accumulated at the end of the first half of this decade to be reduced somewhat in the second half. But a new sharp increase in stocks is the prospect for the first half of the 1990s, to depress prices once again.

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World view:

Feedstuff needs and resources

The following article on world feedstuff needs and resources was written by B. Rutherford, former chief buyer for BOCM-Silcock and current president of the Federation Européenne des Fabricants d'Aliments Composés (FEFAC), the European Association of Animal Feed Manufacturers. Sources for statistics used were the Food and Agricultural Organization (FAO), Oil World and the U.S. Department of Agriculture.

Compound feed production in the world continues to increase significantly. The average world production over the years 1974-76 was 290 million metric tons (MT). By 1981, this had risen to 377 MT, an annual growth rate of 4.5%. The increase per year was particularly significant in the developing countries, where it averaged 13.4%. This included a massive increase in China of 66%, from 0.07 MT to 1.5 MT; 32% in the Near East, to 4.2 MT; 21% in Africa, to 1.8 MT; 15% in the Far East, to 13 MT; and 5% in Latin America, to 23 MT.

The so-called developed countries had a below-average increase of 3.6%, of which growth in the United States rose 1.3%, to 114 MT in 1981 and 117 MT in 1984. Growth in the European Economic Community (EEC) was 4.7%, with 1986 estimated output totaling 96 MT for the 12 member-states. Production in the Soviet Union increased 6.4%, to 64 MT.

According to these FAO statistics, the real expansion in percent-

age terms between 1975 and 1981 was in the developing countries, where compound production more than doubled, from 20 MT to 43 MT, while the developed world managed a 25% increase, from 269 MT to 334 MT. It is my belief that in the coming years we can expect the rapid expansion in the developing countries to continue to accelerate, with little or no expansion in the EEC or the United States.

In the short term, the raw material market will continue to be dominated by consumption in the developed world, especially the EEC and the U.S.

Grain

The world grain situation is one of such plenty it must surely be called an oversupply, and the future prospect is for increased yields and thus increasing production. For this reason, both the U.S. and EEC are endeavoring to curtail production.

The statistical situation for

wheat and coarse grains in November 1986 is shown in Table 1. Production has been relatively static, but stocks will have risen 150 MT in two years due to static consumption, particularly in the EEC and U.S. World consumption is below 1,300 MT a year. Certainly we can expect a large crop in the EEC in 1987. The 1986 crop of 152 MT was 8 MT lower than the year before. With such an enormous world carry-over and with most importing countries striving for self-sufficiency, grain supplies will certainly be burdensome through 1987 and, I have little doubt, for much longer. Under these circumstances, world market prices should continue to be low. This will further encourage the EEC to continue its policy of endeavoring to align prices more closely with those of the world, although there is a long way to go.

Protein

World production of the 10 main oilseeds in 1986/87 is estimated at about 190 MT, about the same as the previous year. The dominant oilseed is soybean, with a market share of a little over 50%, followed by cottonseed (15%), sunflowerseed (10%), rapeseed (10%), and groundnut (8%), with the other oilseeds accounting for only 7% of production. These oilseeds, when crushed, yield vegetable protein meal for use in animal feed.

In 1985/86, a total of 109 MT of protein meal was used, including 5.5 MT of fish meal (see Table 2). Almost 50 MT, or 45% of the world's protein production, was used in either the EEC, the largest consumer of vegetable protein in the world, or in the U.S., so particular attention must be paid to developments in both demand and domestic regulations in these two significant consuming areas. Specific areas to watch include U.S. Food and Drug Administration regulations and EEC directives with respect to raw materials, compound

TABLE 1
World Grain Production, Stocks (Million Metric Tons)

	World total		
	1984/85	1985/86	1986/87
Production			
Wheat	516	499	513
Coarse grains	809	848	830
Total	1,325	1,347	1,343
Estimated carry-out (stocks)			
Wheat	116	137	143
Coarse grains	103	179	223
Total	219	316	366

TABLE 2

World Protein Usage (1985/86)

Country	MMT ^a
EEC (12 members)	28.6
United States	20.0
China	12.4
Eastern Europe	7.4
Soviet Union	6.6
Japan	5.4
India	5.0
Brazil	2.7
Mexico	2.5
Others	18.4
Total	109.0

^aMMT, Million metric tons.

TABLE 3

U.S. Soybean Stocks

Year's end	MMT ^a
1983/84	4.782
1984/85	8.602
1985/86	14.016
1986/87 ^b	16.748

^aMMT, Million metric tons.

^bEstimated.

feed, undesirable substances, additives and hormones, not only because the U.S. and the EEC are the two largest markets but because their regulations are likely to become the norm in other parts of the world.

Is there enough protein? The answer looks a little like that in the grain situation, especially when we recall that in 1973, the U.S. soybean carry-over was only 60 million bushels, one-tenth of that projected for autumn 1987. Very broadly, the carry-over of oilseeds other than soybeans from one year to another is constant and small, mainly because they are produced in less-developed parts of the world where either there is no storage or, as a matter of policy, stocks are not held.

We can thus look to the soybean and the U.S. situation to give us the feel for future supplies. These look plentiful (Table 3). Prices of meal will undoubtedly be low due to the low price of soybeans, but the meal price will vary—as always—under the influence of the vegetable oil supply and demand situation, especially that relating to palm.

By-products

Due to high cereal prices in the EEC and the particular levels of import duty, some of which are nil, almost 15 MT of raw materials, including manioc, corn gluten feed, citrus pellets, sweet potatoes and

wheat offals, are imported into the EEC annually. This is likely to continue, although it exacerbates the over-supply of cereal situation in the EEC. However, there is a distinct benefit to the livestock producer and, hence, the consumer.

Summary

My summary of feedstuff needs is that there will be no further expansion in the EEC, and I believe expansion in the U.S. is limited as illustrated. These are the major areas of consumption. Available raw material resources are so large, particularly in the U.S. and the EEC, that efforts are being made to bring a better balance to the supply side of the equation by reducing output. It is my hope that, paying due attention to the social problems, it will be accomplished through the price mechanism.

While soybeans account for 45% of world oilseed production, I am convinced that for reasons of diversification and support for the less-developed parts of the world, encouragement needs to be given to the production of the other oilseeds. However, the residues from those oilseeds do or can cause feeding problems, a fact which, in general, is not true with soybean meal.

Future problems for feed manufacturers seeking to produce good animal feed at competitive prices include gossypol and aflatoxin in cottonmeal; aflatoxin in groundnut meal, copra and palm kernels; high levels of fiber in sunflowerseed; and the possibility of reducing the level of glucosinolate and other "chemicals" in rapeseed and urease levels in soybean meal.

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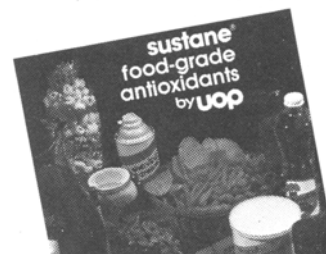
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Outlook '87: U.S. share to decline

World oilseed production will continue to increase in 1987, while U.S. production will decrease, speakers predicted at the U.S. Department of Agriculture's (USDA) Outlook '87 conference in Washington in December.

World production will reach 196.5 million metric tons (MT), but U.S. production will drop to 61 million MT from 65 million MT, according to Richard McDonnell, deputy director of the Foreign Agricultural Service's Oilseeds and Products Division (Fig. 1). McDonnell said global consumption of both meal and oil will rise, with most of the increase occurring outside the U.S. Oilseed stocks also are expected to increase, keeping prices depressed.

David M. Bell, executive vice-president of Sparks Commodities, noted that projected increases in world protein meal demand probably will not lead to larger U.S. exports. Instead, based on projections through 1995, growth in

South American production will be sufficient to meet demand, resulting in stagnant U.S. exports.

Siegfried Mielke of *Oil World*, meanwhile, predicted a revival for soybean oil in 1986/87 and 1987/88, with crushing up 4% and 5%, respectively. "This will be the first time since 1982 that growth will be better for soybeans than for other oilseeds," Mielke said. He added that vegetable oil demand will be up in 1987/88, resulting in a stock decrease, with declines in palm, palm kernel, cottonseed, coconut, and fish oil production, and a slowing in sunflowerseed production.

McDonnell noted that U.S. meal consumption has grown slowly, from 14 million metric tons (MT) in the early 1970s to about 20 million MT in 1985/86, with little change forecast for 1986/87; world consumption has grown more rapidly, from approximately 45 million MT in 1972/73 to over 85 million MT in 1985/86 (Fig. 2).

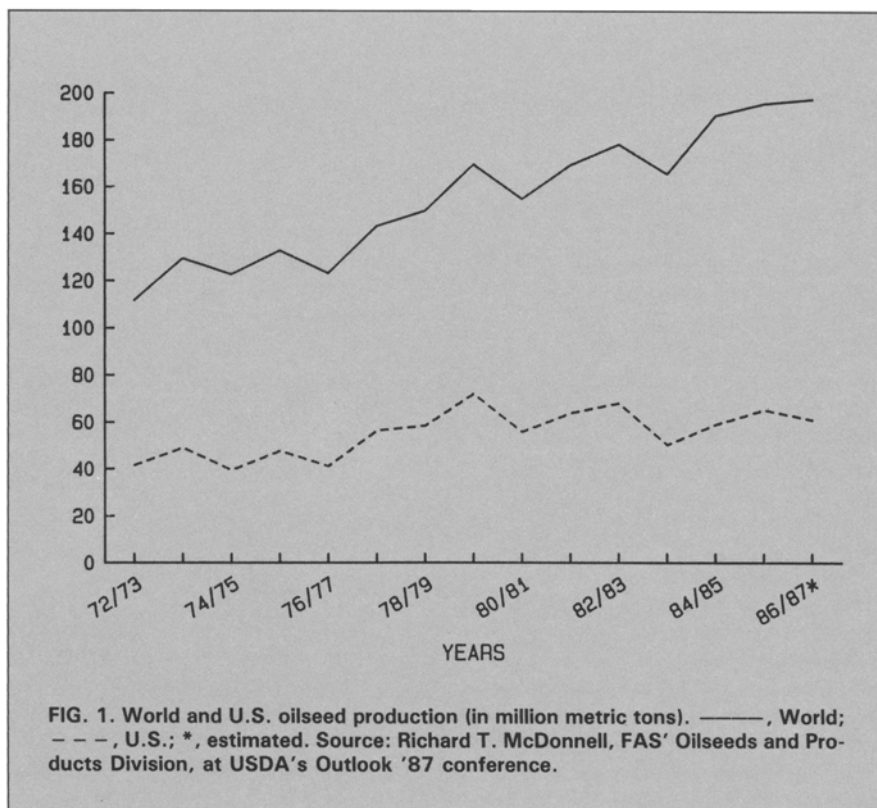
U.S. vegetable oil consumption, meanwhile, has grown from 4.4 million MT in 1972/73 to 6.1 million MT in 1985/86, with an increase to 6.3 million MT forecast for 1986/87. In the same period, foreign vegetable oil consumption grew by over 20 million MT, and is expected to increase another 1.1 million MT in 1986/87 (Fig. 3).

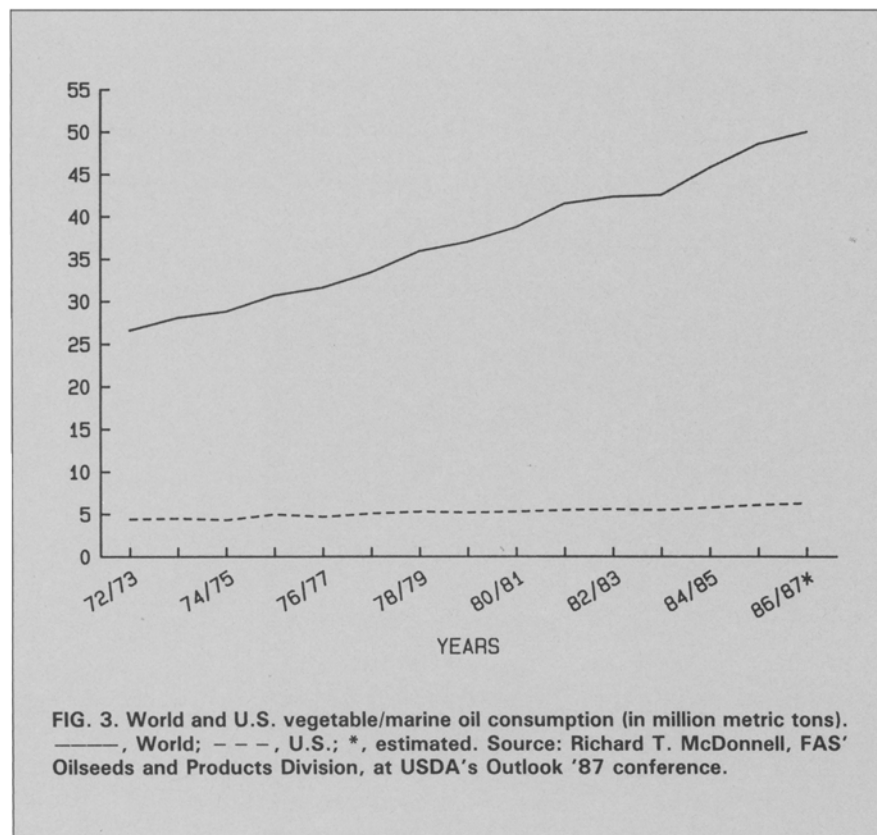
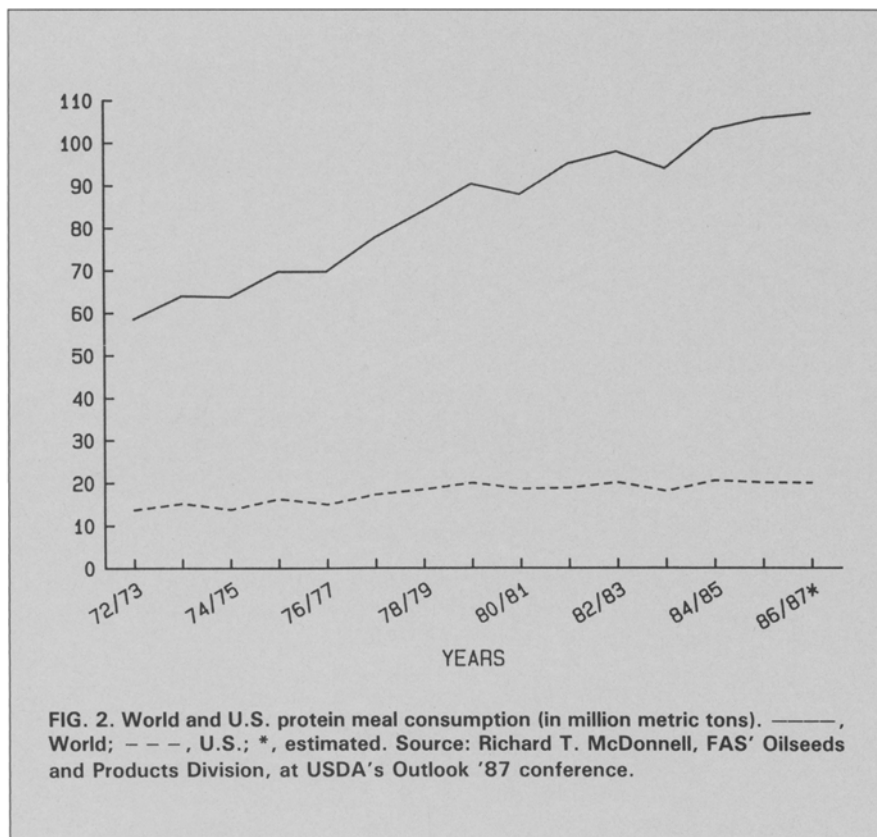
While world oilseed production has continued to grow, production in the U.S. appears to have begun to stabilize in the past few years, McDonnell said. "This means that the U.S. share of world production is beginning to decline," he said, linking this to recent drops in U.S. oilseed exports.

McDonnell noted that since 1979/80, all of the growth in world oilseed trade has been in the export of protein meals and vegetable oils. While world vegetable oil exports have grown steadily and rapidly throughout the world, McDonnell said, virtually all of this growth occurred outside the U.S. "U.S. oil exports peaked in 1979/80 and have declined since," he said (Fig. 4). He predicted world oilseed exports will increase slightly in 1986/87, but will still remain below levels attained in the early 1980s. U.S. oilseed exports, mostly soybeans, will increase slightly, he said, but U.S. meal and oil exports will continue to decline in 1986/87.

Bell predicted U.S. soybean meal consumption to increase 4% during 1986/87 due to expansion in broiler production and favorable livestock/feed price ratios. World import demand for soybeans and meal also will rise 4%. "Unfortunately, the projected increase in world protein meal demand does not lead to larger U.S. exports," Bell said, predicting U.S. soybean meal exports will have a difficult time equaling last year's level. He predicted that between February and August 1987, Brazilian soybean exports will total 271% of last year's drought-reduced level.

"The U.S. will increasingly find itself uncompetitive in the world oilseed market," he added, noting that eventually, the U.S. must





lower its soybean support price to be competitive. "It's only a matter of time," he said.

Bell noted that from 1973 through 1980, world protein meal consumption increased 6.2% per year, but only by 1.6% from 1980 through 1984. "From 1984 through 1995 we are projecting some recovery in the rate of expansion, to 3.1% annually. Since much of this growth can be met by production within the importing countries, we project world trade to increase by 1.7% from 1984 to 1990 and by 1.2% from 1990 to 1995."

Oil World editor Siegfried Mielke predicted record world oilseed production in 1986/87, followed by a 2.5% decline in 1987/88. He added that world demand for the 10 major fats and oils will increase by approximately 28 million MT, exceeding production growth to reduce stocks. He said meal demand will slow in 1986/87 but pick up in 1987/88. For 1986/87, production of the eight major meals will rise only by 1.6%.

Mielke noted that in 1987/88, oilseed demand will become stronger, vegetable oil supplies will become tighter and oilseed crushing, particularly for soybeans, will be geared primarily to oil demand. "Thus total world disappearance of oilseeds may exceed production by over 6 million MT and oilseed stocks be reduced by this amount. Thus, after three years of surpluses, the world oilseed cycle is again likely to turn into a deficit in 1987/88. The history of the world oilseed cycles since 1976/77 shows that the period of surplus never lasted more than three years," he said.

Mielke predicted Malaysian palm oil production will decline by 0.5% in 1986/87 and increase only by 4% in 1987/88, while world palm oil production will rise only by 2% in 1986/87 and by 6% in the following year. He added that the biggest increases will come from soybean (3%) and rapeseed (5%) oils. "As a consequence, the world soybean industry—a stepchild of our market during the past three seasons—will experience a revival this season and especially in 1987/88," Mielke predicted. He said oilseed sur-

Feature

pluses will develop again after 1987/88.

Mielke predicted oilseed prices to strengthen during 1986/77, followed by sharper price rises, under the lead of oils, during 1987/88. Mielke said prices in 1986 fell to the lowest level in 10 years, resulting in increased disappearance of world fats and oils.

USDA has forecast 1986/87 world oilseed production to reach 196.5 million MT, compared to 195.7 million MT in 1985/86. Other USDA world projections for various fats and oils and oilseeds for 1986/87 include the following:

Soybeans—98.78 million MT, up from 96.29 million MT for 1985/86. World soybean exports set at 27.33 million MT, 5% over the 1985/86 level of 26 million MT. Soybean crush set at 78.88 million MT, up from 76.43 in 1985/86. Combined soybean production in Brazil and Argentina, major exporters, is forecast at 25 million MT, 16% more than the previous season.

Cottonseed—27.36 million MT,

down from 30.39 million MT in 1985/86. World cottonseed exports set at .2 million MT, up from .18 million MT. Crush set at 21.55, down from 23.86 million MT, in 1985/86. Preliminary USDA figures predict cottonseed oil production will be down to 800 million lb of crude oil, from 1,067.2 million lb in 1985/86. Meal, meanwhile, is projected to decline to 1.15 million MT, from 1.52 million MT, in the same period.

Peanuts—20.65 million MT, up from 20.39 million MT in 1985/86. Peanut exports estimated at 1.12 million MT, down slightly from 1.16 million MT. Crushings estimated at 11.28 million MT, up from 11.12 million MT in 1985/86. U.S. peanut exports are expected to decline because of smaller U.S. supplies and competition from India, China, Brazil, Argentina and South Africa.

Sunflowerseed—18.81 million MT, down from 19.36 million MT in 1985/86. Sunflowerseed exports at 1.87 million MT, up from 1.79

million MT. Crushings at 16.49 million MT, up from 16.46 million MT. According to *Oil World*, low sunflowerseed prices encouraged farmers in important growing areas to switch to more profitable crops. Although U.S. sunflowerseed plantings fell sharply, much of this was offset by excellent yields, resulting in a crop of 1.2 million MT in the four major producing states. In the European Economic Community, meanwhile, a new record of 3 million MT was harvested. However, yield reductions were expected in the Soviet Union, China, India and Australia.

Rapeseed—20.08 million MT, up from 18.95 million MT in 1985/86. Rapeseed exports at 3.46 million MT, down from 3.54 million MT. Crush set at 17.76 million MT, up from 17.1 million MT.

Flaxseed—2.69 million MT, up from 2.44 million MT. Flaxseed exports at 0.72 million MT, compared to 0.68 million MT in 1985/86. Crush at 2.04 million MT, up from 2.02 million MT in 1985/86.



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Copra—5.32 million MT, up from 5.23 million MT in 1985/86. Copra exports at 0.41 million MT, up from 0.40 in 1985/86. Crushings at 5.07 million MT, down from 5.38 million MT in 1985/86.

Palm kernel—2.68 million MT, up from 2.6 million MT in 1985/86. Palm kernel exports forecast at 0.14 million MT, the same as 1985/86. Crushings at 2.6 million MT, up from 2.51 million MT.

World vegetable and marine oil production, meanwhile, is forecast to total 49.61 million MT in 1986/87, compared to 49.43 million MT for 1985/86. This includes (in million MT) 14.09 of soybean oil, 8.34 of palm oil, 6.52 of sunflowerseed oil, 6.45 of rapeseed oil, 3.16 of cottonseed oil, 3.21 of peanut oil, 3.17 of coconut oil, 1.51 of olive oil, 1.29 of fish oil, 1.16 of palm kernel oil and 0.69 of linseed oil. Palm oil exports, estimated at 5.61 million MT, are expected to outstrip soybean oil exports, set at 3.17 million MT, followed by 1.99 million MT of sunflowerseed oil, 1.34 million MT of rapeseed oil and 1.31 million MT of coconut oil.

Total U.S. domestic consump-

tion of vegetable oils is forecast at 6.3 million MT. U.S. palm oil imports for October 1986–September 1987 are forecast to decline, offset by higher domestic use of soybean oil.

According to *Oil World*, West European production of the four major oilseeds—rapeseed, sunflowerseed, soybeans and cottonseed—is predicted to reach a record 8.6 million MT for 1986/87, up 0.9 million MT from 1985/86, 1.7 million MT from two years before, and 3.5 million MT from three years ago. *Oil World* said most of the increase has occurred in soybeans this crop year. Despite this boost, Western Europe still remains the world's largest soybean importer.

Looking at prospects for oils, fats, meals and oilseeds in East Asia, USDA said the U.S. share of the oilseed and product market in this region has suffered because of increasing competition from China's exports of soybeans and soybean meal, and larger availabilities of palm and coconut oils. The U.S. is expected to remain a residual supplier, USDA predicts, with Indonesia, the Philippines and

Malaysia making attempts to develop domestic soybean crushing industries. The outlook for oilseed and products consumption in the region for 1986/87 is bright, with consumption of oilseeds, meal and oil forecast to expand.

USDA noted that in Indonesia, construction began in 1986 on a 1,000 to 1,500-metric-ton-per-day soybean facility, with operation set to begin in late 1987 or early 1988. Thus, the outlook for U.S. soybean exports to Indonesia is bright. However, in the Philippines, a soybean processing plant that opened in August 1983 closed in February 1984, and all soybean imports have virtually ended. The U.S., USDA noted, continues to import more than it exports in oilseed and product trade with the Philippines, with coconut oil the most important U.S. agricultural import from the Philippines.

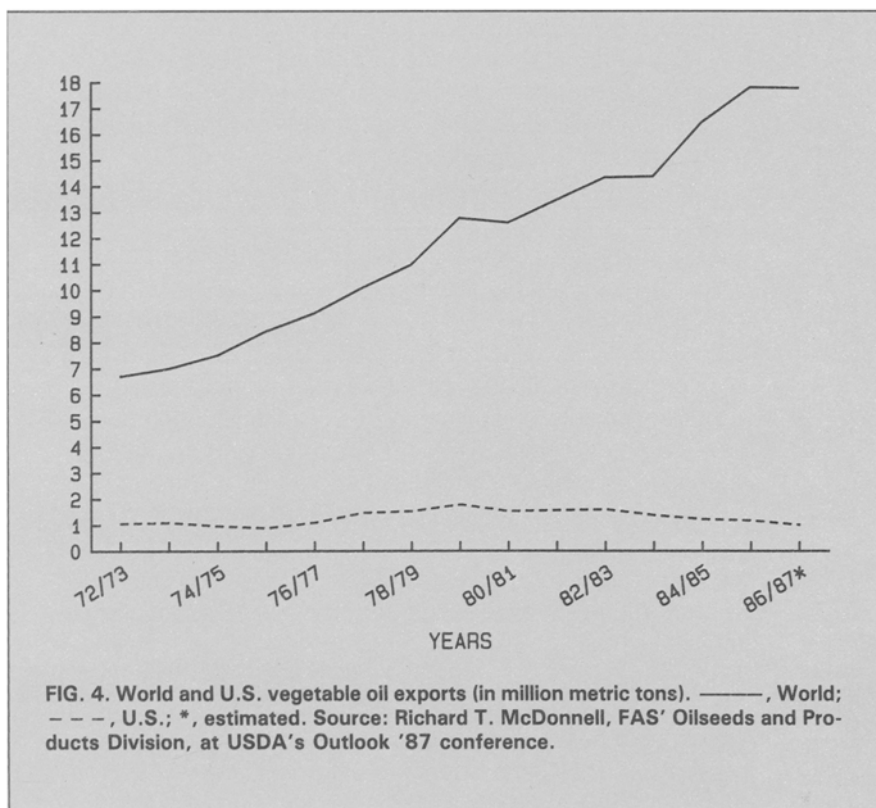
Malaysia, meanwhile, is forecast to import 250,000 of soybeans in 1986/87, up 5,000 MT from the previous year. China, however, has displaced the U.S. as the principal soybean supplier to Malaysia's expanding processing industry, with China's share growing from 7% of Malaysia's soybean meal market in 1980/81 to 73% in 1984/85; during the same period, the U.S. share dropped from 52% to zero. Soybean meal imports for 1986/87 are forecast at 150,000 MT, up 5,000 MT from the previous year.

January projections for Brazil's 1987 soybean crop forecast a 17-million-MT crop, equivalent to 625 million bushels, the American Soybean Association reported. Analysts said the weather has been perfect for a good crop.

Far East soy markets

The Far East continues to be a strong market for U.S. soybeans, Gunnar Lynum, director of the American Soybean Association's (ASA) office in Tokyo, Japan, told Illinois soybean farmers.

Lynum said Korea's market for soybeans is still developing, with a



Embargo views

A study conducted by the U.S. Department of Agriculture's Economic Research Service has raised the ire of agricultural folk, including the American Soybean Association (ASA).

The study, "Embargoes, Surplus Disposal and U.S. Agriculture: A Summary," concluded that the four government-imposed export embargoes on agricultural exports between 1973 and 1980 had little lasting effect on agricultural trade, prices or farm income.

According to ASA's *Soybean Update* newsletter, ASA president David Haggard has said the conclusions could only be reached by ivory-tower economists totally lacking familiarity with the real world of farm trade.

Soybean Update reported that Haggard said the report is full of fallacies and contradictions. For instance, the study summary states, "By stabilizing its domestic market with embargoes, the United States really stabilized the world market by restoring world confidence in the U.S. as a reliable supplier." Following that logic, Haggard said, the U.S. would develop ultimate customer confidence by cutting off exports totally.

15% increase in consumption. Taiwan, the top pork-producing country in the Far East, is also expanding soybean consumption.

Noting that China exported 280,000 metric tons (MT) of soybeans to Japan last year, Lynum explained, "China needs the foreign exchange." He said ASA's Beijing office hopes to develop Chinese usage of its own soybeans. Despite this competition from China, the U.S. can expect to continue as the primary soybean source for Japan, according to Lynum.

Lynum said U.S. soybeans cost approximately \$6.20 a bushel when they arrive at the Japanese crusher. The problem, he said, is not Japan's import tariffs. "They are some of the lowest tariffs in the world," Lynum said. However, he explained, "The mark-up within Japan is very high. Food costs are at least three times, and sometimes as much as seven times, higher than in the U.S."

Japan's goals of being 99% self-sufficient in egg production and 96% in broiler production by 1990 offer potential marketing opportunities for soybean meal, Lynum said. Noting that corn is very expensive in Japan, Lynum said the Japanese currently add fish meal to feed corn. "We are trying to get the Japanese government to allow the addition of

2% soy meal to the corn, rather than fish meal," he said. Specific ASA goals in Japan include increasing the crude protein level 1% in layer/broiler feed and replacing 1% of the fish meal with soy meal. Another is to increase dairy crude protein feed levels. Increasing crude protein by 1% in layer and broiler feed would use an additional 285,000 metric tons (MT) of soy meal a year, while replacing 1% fish meal would increase soy meal consumption by 160,000 MT. Raising the crude protein level in dairy feed would mean an additional 111,000 MT, for a total of 556,000 MT of additional soy meal usage. "This would equal an additional 24.5 million bushels of soybeans used a year," Lynum said.

Other ASA efforts have resulted in the marketing of clearly identified soy oil brands as well as an ASA trademark on soy products. "This is the only country where we have such a trademark. This adds value to the product," Lynum said, explaining the Japanese associate soybeans with good nutrition.

Another important factor in U.S. soybean marketing in the Far East has been concern over the quality of U.S. soybeans, he said. As a result, ASA invited soybean representatives from the U.S. and from the U.S. Federal Grain Inspection

Service (FGIS) to conduct seminars in Japan on soybean quality. This educational effort, plus the recent FGIS interpretive slide change to improve soybean quality, has restored Japanese confidence in the quality of U.S. soybeans, Lynum said, explaining, "The recent change in the interpretive slides has brought the fatty acid level to .8% to .9%, resulting in less refining loss. This is better than Brazilian beans sold to Japan. This means U.S. beans are more competitive."

Also speaking at the "Marketing to Win" seminar sponsored by the Land of Lincoln Soybean Association, Bruce McKenzie of the Illinois Department of Energy and Natural Resources agreed that soybean quality is an important area of concern. Reminding farmers that they are the ones "supplying the trash" that others in the system put in soybean shipments, McKenzie offered tips on how to better handle, dry and store soybeans. A key measure, he said, is to use shallower depths in bin driers and to routinely monitor the condition of stored beans.

Don Holt of the University of Illinois Experiment Station outlined research work and technology being developed that may open up new marketing opportunities for soybeans. Extrusion technology, for instance, he said, is developing nutritious snack and food products from soybeans, while new harvesting technology and breeding changes may result in the use of soybeans as a green vegetable. He also noted progress in genetic engineering to develop soybean lines without the trypsin inhibitor or the lipoxygenase enzyme.

Speaking on the marketing outlook for soybeans, Mike Hinebaugh of Blunt, Ellis & Loewi, noted that exports and government policies are the predominant price-setting factors. In recent years, he said, expanding foreign oilseed and oil production has hurt U.S. soybean exports. In addition, expanding U.S. corn processing has resulted in more corn protein meal exports to compete with soybean meal usage. U.S.-produced corn sweeteners also prevent developing countries from selling more sugar to the U.S., thus making them short of cur-

rency to spend on U.S. soybeans for feed protein.

He noted that world soybean production in 1986/87 is projected to total 98.8 million MT, compared to 96.3 in 1985/86. Of this, U.S. production is expected to total 54.6 million MT, compared to 57.1 million MT in 1985/86. Foreign production, meanwhile, will increase from 39.2 million MT in 1985/86 to 44.2 million MT in 1986/87.

Hinebaugh warned farmers not to be misled by the increase in U.S. soybean exports during 1986. "The entire change in U.S. soybean exports this past year was the increase to the European Economic Community [EEC]," he said, explaining that this was not indicative of increased EEC demand but rather the smaller, drought-stricken Brazilian crop. "The EEC had to

replenish its supplies last fall and we were the only store in town," he said, adding that the EEC generally imports about 80% of the Brazilian and Argentine soybean crops plus soybeans from China.

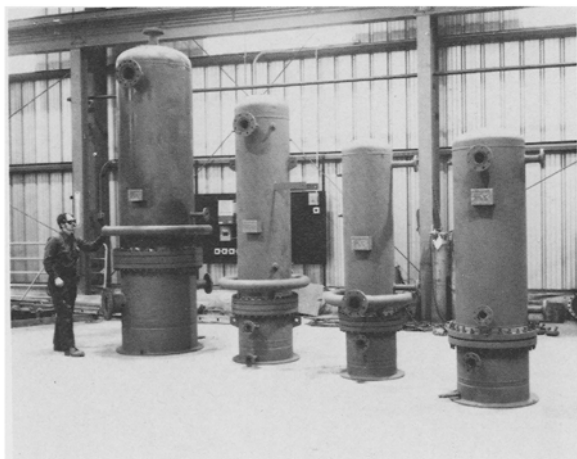
Hinebaugh predicted Brazilian soybean production to reach 15.3-17 million MT during 1986/87, while Argentina's could range from 7.5-8 million MT. "So we will have increased competition from South America for EEC and Eastern European markets, as well as for sales to the Soviet Union," he said. "It will be very easy for U.S. soybeans to be less than last year." He added that during 1986, the U.S. had sales to the Soviet Union due to Soviet fears over the Brazilian crop.

Noting that the U.S. soybean export share to the EEC averaged

approximately 85% during the 1970s, he said exports currently are 15% below that average. During the 1970s, the EEC increased protein in feed rations, helping to expand soybean meal use, but has since limited milk production and cut animal numbers. "This is reflected in a stabilizing to approximately 12.8 to 13 million MT of soybean imports a year," he said.

Meanwhile, U.S. domestic consumption is stable or increasing only slightly. "Our domestic consumption isn't enough to keep prices up," he said, explaining that soybean futures are around \$4.75 to \$5.10 a bushel. "If there is another Brazilian drought this year, you can add 15 cents, but you won't see futures above \$5.20 to \$5.25," he said.

For a perspective on trade barriers, see Viewpoint, page 331.



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