

Viewpoint

Sunflower update

The introduction in the U.S. of new sunflower hybrids in the late 1970s set off a boom in U.S. sunflower production. But the sunflower industry has not had continued expansion since then. In late 1984, JAOCS posed some questions concerning the sunflower industry to Larry Kleingartner, executive director of the National Sunflower Association. The NSA is an industrywide organization composed primarily of growers. The NSA offices recently were moved to 4023 N. State St. in Bismarck, North Dakota, but the mailing address remains the same: Box 2533, Bismarck, ND 58502 USA.



In 1979, U.S. farmers produced a record 3.3 million metric tons of sunflower. Since then harvests have varied from 1.4 million metric tons to 2.4 million metric tons in 1982 and a 1984 crop estimated at 1.7 million metric tons. Why are these rather large shifts occurring? Are other crops becoming more profitable for farmers? What's likely to happen to acreage in 1985?

First of all, I wish to point out that in the late 1970s we had a very brisk world economy including a number of third world countries that were experiencing tremendous growth in petroleum income. These countries were importing large amounts of feed grains, wheat, oilseeds and oilseed products. World petroleum prices fell in the early 1980s, and the world economy went into a tailspin. We saw a drop in world oilseed consumption, or at least we weren't experiencing the previous 8% to 15% annual growth in world demand. During the period of accelerated demand from 1975 until 1980, when oilseed production increased dramatically, the U.S. sunflower industry really grew into its own—as did Canadian rapeseed, Brazilian soybean and Argentine soybean and sunflower production. The Europeans started to gear up their own production of rapeseed and sunflower and, of course, palm oil production in Malaysia also was expanding during this period. When world consumption sagged, this production continued to come onto the market, and we had very depressed oilseed prices during 1982.

The 1980s have been a period of production adjustment and, as usual, most of the world adjustment has taken place in the United States. The year 1983 was most critical with USDA's PIK program that indirectly affected planting of oilseed crops. Production and export incentives in other countries actually kept increasing despite world market signals.

We saw a dramatic increase in the U.S. farm programs for wheat, barley and corn. As you recall, we had an export embargo to the U.S.S.R. Congress and the Administration went into an all-out effort to appease the farm sector for this embargo. One of the ways was to increase loan prices and target prices. For example, loan rates in 1977 for wheat were \$2.20/bushel; corn, \$1.92/bushel, and barley, \$1.45/bushel; but by 1983 loan rates for those crops had increased by 64% for wheat; 37% for barley, and 33% for corn; target

price increases during this same period of time were 52% for corn; 51% for wheat and 21% for barley. As you know, oilseed crops in this country generally operate without any federal farm program. Soybean does have a loan program; cotton operates under a fiber program, while sunflower does not have any kind of farm program at all.

So what we saw here was intense competition coming from our good friends in Washington D.C., accelerating price relationships for the program crops and really forcing the farmers into producing these crops for the farm program. It really became more profitable in the past four years to farm the farm program than to farm the land. A nonprogram crop really became more of a catch crop in this scenario. A market oriented 1985 farm bill would put the farm program prices and world prices back into a more realistic balance, which would be advantageous for the production of sunflower.

Are there any prospective developments in new varieties that will increase yield or oil content of the U.S. sunflower crop, or perhaps change the fatty acid profile of sunflower oil?

I think the initial focus of most sunflower oil research back in the 1970s was for high oil and high yield varieties of sunflowerseed. Because we got into a very close production rotation, especially in the Red River Valley area of Minnesota and North Dakota, a lot of research has now gone into handling some insects and diseases and finding resistance to those within the hybrid. However, there still is a lot of effort going on into higher oil types and higher per acre yielding varieties. We've seen some success, particularly in the higher oils, but a lot of that is dependent on normal weather. We've had some very abnormal weather in the 80's.

The hybrid sunflower really is only 10 years old. I think we've just seen the tip of the iceberg in terms of potential oil and yield demand as well as insect and disease resistance in sunflower. Another change that has come on is the development of the high oleic sunflower, an oleic variety of 80% plus. Quite a bit of work is being done in that area, and we probably would see some commercial production soon, and then as we get into the late 1980s this product should be available in larger quantities.

TABLE I

Production Cost and Expected Revenue Per Hectare of Sunflowers and Major Competing Crops (East Central North and South Dakota, 1983)

	Wheat	Durum	Barley	Oats	Corn	Sunflowers
Harvest yield (MT)	2.7	2.7	3.2	2.5	4.4	1.6
Production cost	347	352	314	291	433	382
Expected revenue						
March 1984	341	351	245	234	403	392
November 1984	348	360	267	269	381	386
Net income based on prices as of						
March 1984	-6	-1	-69	-57	-30	-10
November 1984	1	8	-47	-22	-52	4

Traditionally, the U.S. exports most of its sunflower harvest. Has that been true in recent years? Which export markets are expanding? Which markets are decreasing? Why?

On the average, for the past six years we have exported roughly 90% of the U.S. sunflower crop in the form of whole seed or oil. That trend has not been changing much in the last three years. We have witnessed a small, gradual growth, and we see that trend continuing but still fairly slowly. Most of the rest of the world continues to have a preference for sunflower oil, and in many cases they're willing to pay a slight premium.

I think we are finding that because of the difficult economic times that many countries have become "least-cost" buyers. And so the premium has declined from what it was in the 1970s. Europe used to be a very large market for U.S. sunflower, but that market has declined dramatically because of indigenous production, particularly in France, of sunflower and of rapeseed. We anticipate that Europe will continue to be a smaller market for us than it has been in the past. Mexico has picked up much of the slack of the European lack of demand and has been the largest market for U.S. sunflowerseed for the past several years. We don't see much expansion of additional markets—whole seed markets—around the world, but we do see expanding markets for sunflower oil. We have a large crushing capacity in this country. Much of the expanding markets around the world obviously include the third world countries. The biggest problem there obviously is the ability to pay for the product. We see continuing demand from the traditional sunflower consuming countries as well as new markets in Africa, the Middle East and Central America.

Domestic sunflower crushing capacity expanded rapidly following the record 1979 harvest. Now some of those plants have closed for varying periods of time. What happened? Is there sufficient crop to meet domestic crush capacity and satisfy the export market? Are any of the processing mills likely to close permanently in the near future?

That's the \$1,000 question of the day. There is no question we have overcapacity. For the 1983 crop—PIK reduced crop—we actually had more domestic crushing capacity than we had crop, and the export market generally takes at least 60% of the crop in the form of whole seed. So the

crushers went through a very dismal year in 1983. In 1983-84 the sunflower crushing plants were operating at a combined capacity of 35%. Given that statistic, one can appreciate the problems. We really don't expect any of those mills to close in the near future for good. In other words, I think the demand for vegetable oil is strong enough around the world to support the kind of crushing capacity that we have. Obviously some major changes are going to have to take place—we need a much more robust economy and a change in the U.S. farm program which, as I mentioned earlier, has been a nemesis to nonprogram crops such as sunflower.

With the very large crushing capacity, the economic problems around the world and the high dollar, we obviously recognize that our heavy dependence on the export market just gives us too much instability. We need to have a larger domestic market.

The National Sunflower Association has started a new program to promote sunflower oil use in domestic markets. Would you describe that program? Have you seen any positive results yet? Are there any plans for consumer awareness campaigns?

Basically the NSA information program is an industrywide one in terms of funding, and it has wide support, it's one of the areas which all of us can agree needs some real attention. Initially, the NSA began a fairly low level program of attending several national professional conventions and some basic literature on the oil was put together. About three years ago we asked a firm to do a feasibility study for us and to outline how to go after the domestic market in a more aggressive fashion. The feasibility study basically said that there are many inconsistencies about sunflower oil within the U.S. food industry. The consultant's suggestion was to hire technical expertise and begin to visit with U.S. food companies about sunflower oil and its broad utilization. Last February we hired Dr. Ahmad Mustafa. He has 25 years experience in the domestic food industry and is well respected. We're in the process of presenting information seminars with food companies. The NSA also is looking at the health and nutrition angle and consumer preference. You know, the majority of French households prefer sunflower oil, and they can't be all wrong.

Semi-annual Harvest pressure

By David Bartholomew, Senior Soybean Specialist
Merrill Lynch Futures Inc., Chicago, Illinois

Merrill Lynch Futures Inc. soybean specialist David Bartholomew examines the semi-annual price weakness that occurs on the Chicago Board of Trade in September/October and February/March of each marketing year. This column was prepared at the end of February, when U.S. farmers' planting intention reports had been released, but before the planting season had begun.

For the past 10 to 12 years, during development of South American soybean production, there has crept into seasonal price trends the phenomenon of two periods of traditional weakness, one as harvest begins in the United States and the other as it begins in Brazil and Argentina. Preceding these periods may have been price strength due to uncertainty about crop development.

Thus, there is the price weakness phenomenon of September/October, and again about February/March. It is not required that there actually be heavy selling by farmers for this to be experienced. It usually happens because speculators sell in anticipation of new crop supply becoming available, while at the same time consuming industries refrain from buying while awaiting the new supply coming to market. Simultaneously there may be increased selling of inventories in South America just before the U.S. harvest commences, and six months later farmers in the U.S. may increase liquidation just prior to the South American harvest.

The harvest in Brazil began in February. During the following 8 to 10 weeks it should be completed there and nearly so in Argentina. Mostly this season's crop was never in trouble, though there were some nervous weeks in January in southern Brazil and there are still some problem areas in Argentina. Probably new records will be realized with about 16 million metric tons (MT) in Brazil and 7 million MT in Argentina.

Meanwhile, supplies in the U.S. are relatively large and not declining quite as rapidly as had been hoped. The rate of domestic crush has improved, but not enough to offset the disappointment in exports. Thus, the present USDA projection for total consumption this season is 2% lower than last August, and only 2% above last season. Probably it will be somewhat better than that, but not dramatically. It is normal, under the circumstances that have prevailed, to be too pessimistic at mid-season just before things start to get better.

USDA has released results of the planting intentions survey. Even though it was lower than most guesses at 64.4 million acres (vs 67.6 last year), that kind of drop was understandable. Farmers will plant all they can of feed grain crops for a simple reason: new farm legislation is being considered by Congress to take effect with 1986 crops. Benefits will accrue to those who agree to reduce acreage of those crops. So they want to demonstrate as large a historical base of past performance as possible. (No such program exists or is being considered for soybeans.) Therefore even some of the land in central and southern areas that could not be planted to wheat (to be followed by soybeans) due



to a wet autumn will go to feed grains instead of single crop soybeans as some analysts had expected.

Farmers' plans can change after the planting intentions survey. They learn from that report what other farmers plan to do. They watch the market reaction to the report. That is why the survey is made so far in advance of actual planting dates.

Soybean prices weakened following the report. There were reasons for that other than the report, but the fact is they did weaken. Even though the report was lower than traders' guesses, it really was not bullish.

It suggests that harvested acreage would be 63.2 million. If yields are good, at 31 bushels per acre, then a crop 1,959 million bushels would be realized, and that exceeds projections for this season's consumption by more than 100 million bushels. Thus there could be a considerable addition to carryover supply at the end of next season.

It should be expected that things will not turn out that way. Farmers probably will not plant that much, but only partially for the reason explained above. There also may be a problem with some farmers being unable to borrow money for production costs. More than the usual number are already over-extended on debt and cannot secure more funds, especially with poor prices which offer little or no profit. Also yields probably will not reach a national average of 31 bushels per acre. This assumption is based on weather probabilities of historic long-range cycles.

Demand improvement is likely in the months ahead, at least in major industrial countries, because of better economic conditions. Thus, it is safe to assume soybean price improvement based on both supply and demand considerations unless the U.S. dollar continues its relentless strength.

AOCS 

508 South Sixth Street, Champaign, IL 61820 USA

**Proceedings of the symposium on
HIGH DENSITY LIPOPROTEINS (HDL)**

- I. Structure, Function and Analysis
II. Clinical, Epidemiological and Metabolic Aspects**

PRICE: \$10 for AOCS members; \$15 for nonmembers

Prices subject to change