SUNFLOWER PRODUCTION AND UTILIZATION TRENDS
Northern United States
By

-- Ralph Hayenga

Vice-President of Minnesota Linseed Oil Company
Division of Farmers Union GTA
Minneapolis, Minnesota, U.S.A.

My remarks will be confined to the production and utilization of oil type sunflower seeds. Trends in production of oil seeds are really not significant at this time. Except for test plot production, the first year of producing oil type sunflower seeds in the northern areas of the United States was in 1967 when three processors contracted for approximately 100,000 acres. This production was confined to the Red River Valley in Minnesota and North Dakota and in a few counties adjacent to the Valley. The seed harvested from this production was used in experimental plant operations. As of today, most of this production has been processed but this small quantity has not allowed sufficient time for crushers to standardize their sunflower processing operation in their individual plants. Needless to say, these processing experiments have resulted in less than profitable operations for these crushers. In the 1968 crop year, these three processors were willing to contract for an excess of 250,000 acres. This volume of production was thought necessary to effectively standardize procedures and to further experiment with the sale of the oil and meal. Although the processors involved were willing to process at a less-than-break even point, the price they were able to pay to producers for this production was not sufficient to attract the farmers in this area. this price structure, less than 50,000 acres were contracted. It is very doubtful that this small volume will solve the problem of plant standardization but additional information will be realized.

In spite of this modest acreage, we feel that the sunflower crop has proven its ability to compete in this area; and, if and when prices to producers are more attractive, a considerably larger acreage can and will be produced. Additional work must be done and is being done to increase yield per acre. These efforts are and will continue to be supported by all phases of the industry. I am sure you will hear more of these efforts later.

In this area, we feel that the future of our oil type sunflower crop is entirely dependent on the value of the sunflower oil. Therefore, let's take a hard look at this side of the picture.

Trends in Sunflower Oil Marketing

The world market for edible oils is very competitive indeed. The Rotterdam price of sunflower oil is under 7¢ per lb. In spite of some

reduction of production likely in a few exporting countries, the prospects are for continued relatively low prices this year and also for most years in the near future, or until standards of fat and oil consumption can be raised in the developing countries. If U. S. sunflower oil were to compete on the Rotterdam market today, the price of sunflower seeds would have to be close to 2.5¢ per lb. to the producer, assuming current returns for meal and transportation and crushing.

U.S. sunflower production is therefore not competitive, nor in the near future likely to compete in the world market.

Domestic Market for Sunflower Oil

The current U.S. consumption for edible fats and oils is about 48 lbs. per person per year. We seem to consume about the same quantity per person per year no matter how high or how low the prices. The total U.S. edible consumption is approaching 9 billion pounds per year and is increasing roughly in proportion to our population increase at an average of about 150 million pounds per year.

The U.S., however, produces from 1 to 3 billion pounds per year more than is consumed. For all but one year of the past twenty, this production above domestic requirements has proven to be more than could be moved to export for dollars. The government has had to assist in the movement of this surplus oil through the PL 480 Food for Peace Program. U.S. sunflower oil production of course, in these broad terms, increases U.S. edible oil surplus.

We are starting the 1968 crop year with the largest carry in of soybeans we have ever had--of about 170 million bushels, and the largest prospective crop of 1.064 billion bushels. The cottonseed crop is about 50% greater than last year in oil terms, an increase of about 500 million pounds. Altogether, the other edible fats and oils are expected to be about the same. We are moving into a year of, by far, the greatest surplus availability of these edibles that we have ever had. This is occurring at a time when our export prospects - even with government assistance, to put it mildly, is not bright.

However, the sunflower oil and all other edible fats and oils not involved in this country's prices support programs, can move to market at a price. The edible surplus will tend to be held in the form of soybeans owned by CCC or under re-seal or under new crop loan or in the form of cottonseed oil acquired by CCC under its cottonseed support program.

For the relatively limited sunflower production expected in this area for the next few years, we would expect that the sunflower oil will be marketed in the following manner:

- 1. As a replacement for cottonseed, corn, and safflower oil in the area adjacent to the sunflower processing plant. In this manner, sunflower oil will be able to take advantage of the cheaper shipping costs than the other oils which would have to be brought in from points of production from considerably further away.
- 2. For industrial uses in paints, etc., replacing safflower oil, particularly in Central and Eastern United States.

3. As a specialty oil:

Here I believe lies the immediate future for this fine oil. One margarine manufacturer has already produced a Sunflower Oil Margarine. Although separation problems have been encountered with this product, we are sure that this will be corrected. Another use would be in a specialty Sunflower Salad Oil and a Sunflower Cooking Oil. The potato chip processors are already interested in using sunflower oil as a replacement for cotton-corn oil blends. Recent tests at Grand Forks, North Dakota, have shown great promise for increased use.

Sunflower oil is widely recognized as being superior to soybean oil and about equal in quality to Cotton-Corn and Safflower. It is in the price range of these premium oils that sunflower oil will have to find its place in the market.

To date the United States has not produced sufficient tonnage to attract the interest of any large potential buyers. To do this, we must produce a steady supply. We cannot be in and out and expect acceptance at premium prices.

Sunflower meal holds forth promise of being readily acceptable in the protein market. Once the processing methods are standardized and the quality of the meal is established, further research may well open broader markets for this by-product.

As in most successful ventures, advertising holds the key. This can be very true for sunflower oil, particularly in the specialty field. The sunflower plant lends itself beautifully to animation and the crop is grown in the Red River Valley, an area widely recognized through previous advertising as a romatic garden. Just think of all the possibilities open to an advertising agency in presenting the sunflower oil product on TV commercials. Let's keep our enthusiasm and work to make these potentials a reality.

* * *

DISCUSSION

Question: What is the total acreage of sunflowers in the Northern area?

Hayenga: There are about $100_{p}000$ acres for birdseed and about 50,000 for oil. This is a total of 150,000 compared to a total acreage of 200,000 in 1967.

Question: What is a reasonable price relationship between sunflower oil and soybean oil?

<u>Hayenga</u>: For a number of years, sunflower oil has traded about a cent a pound above soybean oil. The world price for soybean right now is $7\frac{1}{4}$ cents at Rotterdam. If this still holds for the time ahead, this is going to be difficult for the sunflower industry as it stands today in the U.S.A. The preliminary studies we have at Minnesota Linseed indicate that we are going to have to have about a dime a pound if we are going to stay in business. You understand the figures are based on current conditions.