• *AOCS Commentary*

Soybean Production and Exports—Trends and Policies for the '70s

Remarks by Assistant Secretary of Agriculture C. D. Palmby at the ISF-AOCS Meeting, Chicago, September 1970.

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The export sector of the U.S. soybean economy has, in only 20 years, boomed from a mere 15 million bushels to a record 430 million bushels, an annual rate of growth of 22%.

The reasons for the spectacular success that U.S. soybeans have had in world trade are first, that our country is the world's most efficient producer of soybeans. This ideal combination of nature and people and technology has made it possible for us to produce an outstanding product at competitive prices. Second, living standards around the world are improving, and this means greater consumption of meat, milk, poultry products, plus an outstanding use of vegetable oils. Both trends add to the growing market for soybeans. Third, U.S. soybeans are able to move with relative freedom into many markets that take a protectionist attitude toward some of our other products. For example, our soybeans have duty-free entry into the European Community under "bindings" negotiated under the General Agreement on Tariffs and Trade; we are eager to maintain that zero duty. Also, U.S. soybeans have had generally good access to the Japanese market, with some further liberalization coming about this year. Fourth, this country has been highly responsible in its soybean trade policies. We have not been guilty of "dumping" or paying subsidies to penetrate markets. The U.S. has exported soybeans and soybean oil—even under PL 480—at prices no different than those prevailing domestically.

As we look into the next 10 years, the central growth opportunity for U.S. soybeans in world trade is that nations are growing, populations are expanding, there is a general rise in living standards in many countries and there is a growing determination among people to live better and to eat better—that adds up to a greater use of animal products and, in most areas, an expanded use of vegetable oils.

We are in a period of change in the use of fats and oils. There is an overall increase in the use of these products, and an increasing share of this market has gone to vegetable oils. It is significant for the future that vegetable oil is one of the most sought-after commodities under the PL 480 agreements. All in all, the U.S. soybean grower, if he has reasonable access to the world's markets, can continue to make a tremendous contribution to better living in the world.

In the 1970 fiscal year, the U.S. exported $1.1 billion in farm commodities to Japan, a new record to any single country. U.S. soybeans contributed almost a fourth of that total, second only to feed grains which accounted for almost a third. The large import of U.S. soybeans and feed grains by Japan is a classic example of changing food requirements as living standards rise.

Since the mid-1950s, per capita food consumption in Japan has increased about 10% in terms of calories. During that period, the use of starchy foods has dropped off; instead of providing three fourths of per capita calories, they now provide less than 60%. The typical Japanese is now consuming twice the amount of animal products, in terms of calories, that he was using a decade and a half ago. This trend will continue. Studies of Japan's food needs for the late 1970's and the 1980's indicate that per capita consumption of dairy products, meat, eggs and vegetables will increase significantly while the demand for rice will continue to decline.

As an example of Japan's changing patterns of eating, consider the expanding use of eggs. In 1960, the Japanese consumed 90 eggs per person. By last year, that figure had risen to 210. And there is still room for growth when you realize that Japan could expand its per capita egg consumption by another 50% before reaching the level of the United States.

There is also big growth opportunity in broilers.

Japan has more than quadrupled its per capita consumption of poultry meat since 1960—but consumption is still modest in comparison with Western Europe and the United States. The Japanese consumed 6.6 lb. of poultry meat per person last year.

West Germany consumed 16.5 lb., of which about 10 lb. consisted of broiler chickens. France used 25.4 lb. of poultry meat per person, and perhaps 10 lb. or more of that consisted of broilers.

The average American, meantime, consumed about 35 lb. of broilers last year, a growth of 50% since 1960 and a quadrupling since 1950. We have seen, in U.S. broilers, what a change in eating habits can mean to the producers of feedstuffs.

It is interesting to speculate on what further sharp increases in broiler consumption might mean to the market for soybeans in other developed countries.

To make a very rough approximation, it would require something like 600 thousand metric tons of soybean meal to bring West Germany's per capita consumption of broilers up to the U.S. level. It would take over 1¼ million tons of meal to raise Japan's broiler consumption to the same level. In terms of soybeans, just these two countries combined would require an additional 85 million bushels.

These numbers assume modern feeding practices, and they are strictly "horseback" estimates. But they indicate the direction that consumption patterns are taking in the developed countries, and implications for the use of feedstuffs. Of course, if our soybean producers are to benefit from all this, our prices must remain competitive so that these gains are not all realized by African peanut producers or Peruvian fishmeal producers.

In Europe, rising hog numbers may be a "sleeper" in the outlook for feed use. At the beginning of this year, hog numbers in Western Europe totaled 81.9 million head, up 7% from 1969, due primarily to increases within the European Community. Except for Luxembourg, which was unchanged, every one of the EC countries showed an increase from 1969 levels. The largest increase was in Italy, where numbers went from an estimated 7.3 million head in 1969 to 9.2 million head in 1970.

Hog numbers are also up in Eastern Europe. In the Soviet Union, numbers increased by 7 million head from the 49.0 million of early 1969. This 14% jump came after two straight years of decline.

Europeans are big consumers of pork, and supplies have not always expanded rapidly enough to take care of the growth in demand. The European Community, which normally produces about 105% of its own pork, was barely self-sufficient last year. The Community maintained its export of pork by means of an export subsidy, but in doing so it created a degree of shortage, and higher prices, in the domestic market.

There continues to be an unsatisfied demand for pig meat, particularly in the West European countries outside the EC. Increased supplies of pork during 1970 should therefore have no trouble in finding a home, and indications are that there will be no dampening of hog numbers by the beginning of 1971.

Thus there is change blowing toward expanded produc-

tion and use of livestock and poultry products, particularly in the more developed countries. The primary export markets for U.S. soybeans and soybean products will probably continue to be the more developed countries. At the same time, the contributions of protein and oils in improving human nutrition in less developed areas will be one of the big food stories of the 1970's. Oils are one of the lowest-cost sources of calories; in addition, they are valuable in making palatable a wide range of other foods that are rich in proteins and other nutrients.

It is important to recognize the place of oils in the changes that are taking place in eating habits and food preferences, in both developed and less developed areas. In this country, for example, the rise in U.S. consumption of fats and oils, possibly 5% in 1969–70, is attributed largely to the proliferation of drive-in restaurants plus the popularity of frozen foods. Various "fast food" enterprises feature "deep fried" chicken, fish and potatoes, and there is a growing demand for frozen foods similarly prepared.

In Japan, oil consumption has continued to increase as that country's economy has boomed, in other Asian countries, including Taiwan and Pakistan, improving economic conditions have stimulated oil consumption.

As incomes rise in the lesser developed countries, a growth in edible oil consumption seems probable. In the more developed countries, per capita consumption is already quite high, and further expansion in use will be more nearly related to population growth although some per capita increase is also occurring.

With reference to U.S. exports of soybean oil, only about 30% moves in the form of oil. And of this, a high proportion moves under the Government programs, PL 480. Large amounts of oil are being produced abroad from U.S. soybeans, so that dollar exports of U.S. oil to Japan and Western Europe are quite limited. About two thirds of our soybean oil exports in 1969–70 were noncommercial shipments to needy countries.

As we look at the continued growth in demand for oils and meals, we see the probability that foreign demand will continue to outrun foreign suppliers, with a possible steady growth in U.S. soybean acreage to make up the difference. Prospects are also that the growth in meal demand will continue to outpace the growth in oil demand.

Accentuating the oil versus meal problem is the foreign expansion already under way of high oil content crops. Virtually every other oil bearing crop is much higher in oil and lower in meal content than soybeans.

During the 1960's heavy plantings were made of oil palm trees in Malaysia and coconut trees in the Philippines. These are now coming into bearing, and the output is primarily for export. Other countries in Asia, Africa and Latin America have also increased planting of these tree crops. Already in 1970, we are expecting an increase in their production of 220 million pounds of coconut oil and 470 million pounds of palm oil, and in 1971 the increase of each should be even larger. Both of these yield relatively little meal compared to oil, and being tree crops, their acreages are inflexible over the short term. So regardless of the market situation, we can expect larger export availabilities of these two oils, barring weather catastrophes, such as typhoons.

And even in the case of annual oilseed crops, we may see an upswing in acreage. The West African peanut grower had been discouraged by the lower world prices which prevailed until 1969 and the internal marketing arrangement which until recently did not permit him to share the benefits of even high world prices. Both of these factors have been modified of late and the African grower may now have considerably more incentive to plant peanuts for the export market.

Rapeseed, which can grow on wheat land, is being increasingly planted in Canada and the Common Market. And now, Australians, looking for an alternative to wheat, are considering going into rapeseed production.

Sunflowerseed acreage is apparently moving up again, in response to the more attractive prices than had prevailed from late 1967 until mid-1969. There are indications of acreage expansion in Argentina, Eastern Europe and possibly Western Europe and the Middle East, where it has not been important.

Only cottonseed and olive oil, of the major oils, do not appear to have much potential.

The American farmer, together with the producers of oilseeds in other parts of the world, has a tremendous stake in world market growth. Soybean and meal exports alone accounted for the production of over 20 million acres in the past year. At least 5 bushels of every 10 produced went into export channels as beans or meal.

Without this growing offshore market, we could not have had the increase in total disappearance that we have had, and the accompanying growth in soybeans as a contributor to farmers' income.

In the crop year that ended August 31, 1969, this nation disappeared a volume of soybeans valued at $2.3 billion. This past marketing year, which ended August 31, 1970, the nation disappeared $2.9 billion worth of soybeans. As we look ahead at the present marketing year, it could be that the value of soybean disappearance will rise to $3.4 billion—a rise of over a billion dollars in two years.

Such is the importance of the work to further the contribution that soybeans and other oilseeds make to the welfare of this country, and the world.

Opening of E. M. Laboratories, Inc. in the U. S.

E. M. Laboratories, Inc., an affiliate of E. Merck, Darmstadt, Germany, began operations in the United States with the opening of modern offices and warehouses in Elmsford, within 20 miles of New York City.

E. M. Laboratories will be one of many affiliates of E. Merck, which is one of the most famous chemical firms in the world. E. M. Laboratories will be the representative for all of the firm's products in the United States.

Although E. M. will sell all of the parent Company's products, marketing efforts will be concentrated on many of the specialties available only from E. Merck. E. M. Diagnostic Tests, highly specialized industrial and laboratory chemicals, and pharmaceutical intermediates, will be foremost in E. M. marketing plans.

In special industrial chemicals, E. M. has the generic names: Patinal (vacuum deposition chemicals), Licristal (liquid crystals), Selectipur (chemicals for the electronic industry, meeting special purity requirements), Optipur (crystal growing substances), Suprapur (chemicals of extreme purity), and Fotopur (photographic chemicals). Most of these products, along with special pharmaceutical intermediates, are currently imported by George Uhe Co., Inc. of New York.

E. Merck is also one of the world's major suppliers of laboratory preparations. Their products for thin layer chromatography have been marketed in the United States by Brinkmann. E. M. Laboratories will now market these through other laboratory supply houses as well, but they will also offer many other important products for the laboratory; such as, their E. M. Diagnostic Tests for clinical use, non-bleeding pH indicator sticks, which leave no impurity in the solution, Titrisols, special purity organic chemicals, including biochemicals as enzymes, carrier-bound enzymes, steroids and many others. A catalog of the products E. M. Laboratories will stock for scientists in the United States will be published shortly.

The President of E. M. Laboratories is W. A. Schmidt. Dr. Schmidt has an M.D. and an M.A. in Chemistry. There will be two separate sales departments for E. M., one for laboratory chemicals and the other for industrial chemicals. Both will be headed by M. W. Moers, who will serve as the National Sales Manager for E. M. Laboratories, Inc.