

SUNFLOWER ROLE IN DEVELOPING COUNTRIES

By

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Mr. Chairman, Ladies and Gentlemen,

I am supposed to say a few words about the role of sunflower in the developing countries. And I will certainly do this, but at the same time place it in the perspective of the sunflower role in the entire world.

At this moment sunflower seed is produced in significant commercial quantities in at least 20 different countries dispersed among the developed, developing, and centrally planned economies. Accounting for about 7 percent of the world's total oil crop production it claimed the 6th position on the list of oil producing crops in 1977 with soybeans ranking on top.

Global production of sunflower seed has fluctuated during the past decade but the general trend has been upward from around 8 million tons in 1967 to about 10 million tons in more recent years. This trend has been interrupted twice with a marked increase in production. First in 1973 when world production surpassed the threshold of 12 million tons for the first time in history, followed by another sudden increase in 1977 when production reached the all time record of 12.4 million tons. And there are indications that the 1977 level will be equaled if not exceeded this year and probably become a starting point for a further expansion during the next decade.

In 1967 the developed, developing and centrally planned economies accounted for 6, 13 and 81 percent of the world sunflower seed production, respectively. However, by 1977 the centrally planned countries' share has fallen to 61 percent while the developed and developing countries increased their share to 22 and 17 percent, respectively.

World sunflower seed production is dominated by the U.S.S.R., which accounts for about 50 percent of the total. This share is tending to decline, due partly to an increasing interest in sunflower seed production in other countries but also to a gradual shift to the production of oil crops other than sunflower in the USSR itself. Countries such as Argentina, Australia, South Africa, Spain, and the United States have all made significant strides in extending sunflower cultivation in recent years. And it seems likely that in particular the developed countries are to increase their interest in the crop still further. For example, the U.S. production for 1977 was 1.2 million tons of seed compared with 0.5 million tons in 1975 and 25,000 tons in 1967. Also Canada is contemplating sunflower seed as a complementary oil crop to rapeseed. With an expansion program that was initially planned for the province of Saskatchewan it reached a record production of 84,000 tons last year.

Regarding the developing countries Argentina remains the world's second largest producer of sunflower seed. After a short decline in the mid-seventies it seems to consolidate its recent upward move with an estimated production of 1.5 million tons for this year.

Completely different, however, is the situation in Turkey, where as a result of low seed prices farmers have been discouraged to grow sunflowers and seed production has fallen in recent years from around 0.6 to about 0.4 million tons per annum. Very few other developing countries produce sunflower seed in significant quantities, although India has established a target of one million ha by 1979. Several other countries have conducted trials, particularly some of the Middle Eastern countries and one or two in East Africa. The degree of success in some of these countries has been encouraging and it seems likely that more developing countries will contribute to the world's sunflower seed production in the foreseeable future.

Only a small proportion of sunflower seed, usually less than 10 percent, enters international trade, although the total volume traded has risen from 250,000 tons in 1967 to almost 1 million tons in 1977. The U.S. and Hungary have dominated the world market throughout accounting for more than 75 percent of all exports. The most notable feature of the market was the increase in exports from the United States from about 1,000 tons in 1967 to over 600,000 tons last year. And it seems probable that, following its intention of expanding sunflower production, the U.S. will continue to be a significant sunflower seed exporter.

In 1967, the Federal Republic of Germany was the largest importer with 74,000 tons or 34 percent of the world total, with Italy and the German Democratic Republic taking second and third places with 32 and 16 percent, respectively. By 1977, the Federal Republic of Germany had its leading position still maintained with 340,000 tons of imported seed, while thanks to an increased domestic production, Italy's sunflower seed import could be reduced to 16,000 tons or less than 2 percent of the world total.

Since only a few countries keep records of crushing activities, precise figures on the quantity of seed that is converted into oil are difficult to obtain. Data given hereafter must, therefore, be regarded as approximations.

Estimates made by F.A.O., U.S.D.A. and commercial sources are in general agreement that the amount of sunflower produced in 1977 must have been about 3.5 million tons. Relating this figure to the total world sunflower seed production of 10 million tons underlying this, leads to a relatively high oil content of 35 percent on seed basis. This indicates that the majority of the seed produced must have been converted into oil and very little has been taken up for direct human consumption.

Another interesting aspect is the fact that although about 15 percent of the global sunflower seed was produced in developing countries in 1976 only 19 percent was locally converted into oil out of which 150,000 tons or about 50 percent was exported again. Thereby leaving more than half of the world's population with less than 5 percent of the total quantity of sunflower oil, produced last year.

With a total quantity of 560,000 tons in 1977 sunflower oil exports have virtually doubled over the past 10 years. Most of this expansion took place during the late sixties. Since 1970, exports have tended to fluctuate annually. For more than a decade the U.S.S.R. has been the dominant exporter with as much as 70 percent of the market, but currently its share is about 42 percent. Other

European countries specifically Bulgaria, Hungary and Romania, account for a further 25 percent of the market with Romania being by far the leading exporter for the region.

Apart from these countries, only Belgium, the Federal Republic of Germany, The Netherlands and since two years also South Africa and Argentina are contributing significantly to the sunflower oil trade. The latter being a major exporter in 1967, traded very little sunflower seed oil in the mid-seventies but recaptured its market position in recent years.

Trade in sunflower oil is characterized by a large number of importers, who, individually, handle comparatively small quantities. Almost a quarter of all imports go to countries which in themselves handle no more than 4 percent of total imports, and often much less.

Broadly, however, trade in sunflower oil is dominated by Europe. Within Europe the Federal Republic of Germany, France, The Netherlands, Czechoslovakia and Poland are the leading importers with 245,000 tons or 44 percent of the total imports in 1977. Outside Europe, only Algeria, Cuba, India and Iran are major importers, accounting collectively for about 20 percent of the total imports last year.

It seems very unlikely that the European dominance of the sunflower oil trade will change in the near future, but the emergence of new producers, especially the U.S., could bring a measure of diversification.

Next I would like to make a few remarks on sunflower meal production and trade.

Sunflower meal is a valuable feed for livestock, but its use in poultry and swine feeds is limited because of its low lysine and high fiber content. Nevertheless, world sunflower meal production has shown a constant increase reaching a record level of 4.8 million tons in 1974. Thereafter, due to a sudden fall in seed production in the U.S.S.R., the upward trend was temporarily disturbed, but gained momentum again last year. And it is expected that this year's production will be close to 5 million tons.

Exports of sunflower meal showed a similar development from 270,000 tons in 1967 to around 400,000 tons in the early seventies. Here again after a short recession the world market demand for sunflower meal increased substantially and even sharper than that for oil and it is expected that exports will reach as high as 550,000 tons this year.

Similar to oil the U.S.S.R. has been a major exporter of sunflower meal for the past decade. In the seventies, however, its market share had tended to decline, presumably in response to smaller sunflower seed crops and larger domestic meal requirements.

Reduced acreages of sunflower during the mid-seventies were also the main reason for a drastic decline in meal exports from Argentina. But with the explosive increase in seed and oil production the export availability of sunflower meal improved accordingly in the past 2 years, surpassing the 300,000 tons' level last year.

Another remarkable exporter of sunflower meal is Turkey. In 1974 it export peaked at 93,000 tons, which accounted for 23 percent of the then total, entering world trade, but by 1977 exports had contracted sharply to only 32,000 tons.

The market for sunflower meal is largely confined to the European Economic Community. Within the E.E.C. and indeed worldwide the Federal Republic of Germany is the primary importer. Imports were 145,000 tons last year representing 28 percent of world imports. Eastern Europe forms the second major grouping of importers. Their share of world imports was 24 percent in 1977.

"What will be the Demand and Supply Balance in 1985?"

The evidence of what I said before is that the production of sunflower seed in the medium term is likely to increase at a fairly rapid rate. Primarily responsible for this increase will be the developed countries with the exception of some countries with a centrally planned economy where a further change over to alternative oil crops is to be expected.

With regard to the developing countries the situation is somewhat different. Here expansion programs are likely to be more erratic, depending upon relative price and income incentives to farmers and on developments in seed technology.

In total, however, one may expect a noticeable further increase in sunflower seed production in the developing countries.

However, since the sunflower oil sector has direct links with both the seed sector and the derivative industry sector it is convenient to focus analysis on supply and demand for the oil rather than upon the future production of sunflower seed.

In many of the developed countries sunflower oil is becoming an increasingly important component in the diet, whereas in most of the developing countries the demand for this oil will remain low for the time being.

For the developed countries the annual average increase in oil consumption is estimated at 4 percent against less than 1 percent for the developing countries for the next 7 years.

The implication of this demand projection for the developing countries is highly significant. The likely pattern of future supply and demand for sunflower oil will be increasingly dominated by the developed countries, thereby making the developing countries more and more dependent. However, since the production of sunflower seed is expected to increase more rapidly in the developing countries than the demand for oil their dependence could be reduced considerably if measures are taken to extend the local milling and processing facilities.

On the other hand, intensive livestock development, and consequently the rapid growth of the compound feed industry, and promising in Eastern Europe and increasingly so, in certain developing countries having high density urban centers. In the case of the latter, intensive monogastric production is the simplest and most efficient solution to the problem of rapidly increasing the supply of first class protein for the human population.

The livestock industry can therefore be expected to grow rapidly in the hinterland of a large number of metropoli, such as Baghdad, Buenos Aires, Istanbul, Lagos, Nairobi, Sao Paulo, Seoul and Tehran and this will require an accompanying development of the feed industry.

Whereas the rate of growth of demand for livestock products is influenced mainly by per capita income levels and population growth it is expected that the overall demand for oil meals including sunflower meal will tend to be similar if not stronger to that for oil both for the developed as well as for the developing countries.

The latter being another stimulance for the development of local processing facilities.

Finally, I would like to spend a few words on the long-term prospects for the sunflower. Thereby not intending to be in any way definitive, but rather offer benchmarks against which the potential of the developing countries for increasing their share of the world sunflower seed industry can be estimated.

From the point of view of seed production the situation for the long term is to improve considerably. The main reason for this optimistic view is the intensive research going on around the world into the development of new varieties of seed, adaptable to local conditions, in many cases emphasizing sunflower in view of its high quality oil. Significant improvement in seed technology can therefore be expected over the next 25 years, but the effect is expected to be gradual rather than dramatic.

Of greater importance, possibly, will be the increased adoption in developing countries of seed varieties and cultivation techniques whose existence is already known. This will come about through the gradual improvement of extension services, skills, techniques, infrastructure, and availability of capital.

With regard to markets, these will depend on the trends in income and population in developed and developing countries, and in the case of the latter, upon the relative expansion of oilseed processing and derivative industries, all of which can be expected to change only gradually.

Overseas markets for sunflower seed will remain important, though increasing quantities will be crushed domestically. The position with regard to trade barriers is difficult to predict, depending considerably upon general economic prosperity and policies of the developed countries which form the main import markets. Significant changes in trade barriers could occur within a relatively short space of time with considerable effect on the developing countries, but it is virtually impossible to predict these over a period as long as 25 years.

In the case of sunflower seed processing, the general situation up to 2000 with regard to the main variables is somewhat similar to that for seed production. No dramatic changes are foreseen and in the developing countries gradual improvement in skills, operation efficiency, infrastructure and backward linkage with sunflower seed producers is expected to continue.

The principal change in the developing countries as a whole will be a steady spread over the more advanced technologies that are already available.

Medium scale commercial screw presses will tend to give way to pre-pressed solvent extraction plants.

With the development and sophistication of the margarine industry in the developing countries there will be an increased demand not simply for refined vegetable oil but also for individual fatty acids and fractions to be used in developing suitable blends. As far as sunflower oil is concerned, increased demand will tend to be confined to an increasing use in poly-unsaturated fat margarines.

To meet the demand and the increased requirements of both a quantitative and qualitative nature, gradual improvements can be assumed in all fields of the sunflower economy.

On the agricultural side extended research will lead to improvement of varieties and productivity, while on the processing side the adaptation of existing technologies and of technologies under development at present in developed countries will continue to expand their application in developing countries.

To end my speech I like to quote my master, Dalton E. Gandy, the late President of the International Sunflower Association, who once said: "I think you will agree with the increasing acceptance of sunflower oil being superior to any other edible oil, it is not inconceivable that in the next 25 years we will see sunflower become the number one vegetable oil in the world."

Thank you for your attention.