

# Production and Use of Rapeseed in Europe<sup>1</sup>

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## ABSTRACT

Rapeseed production and use in Europe has substantially increased in the past several years. This increase has been fostered by the European Economic Community through payments to raise the price to the farmer without penalizing the processor. Production in Europe has risen to about 2 million metric tons with most of the seed being processed and used in Europe.

Production of rapeseed oil in the world outside of China amounted to about 1.4 million metric tons in 1968 or 4% of 35.5 million metric tons for all fats and oils. This percentage was about equal to those for olive, palm and fish

<sup>1</sup>One of nine papers presented at the Symposium, "Cruciferous Oilseeds," ISF-AOCS World Congress, Chicago, September 1970.

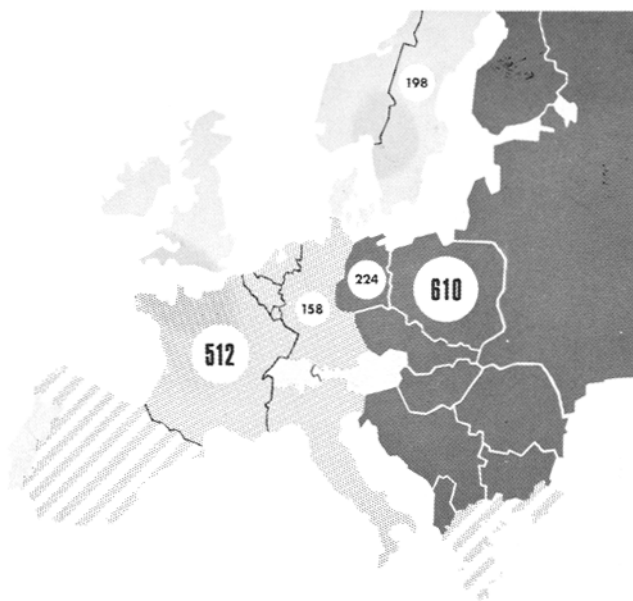


FIG. 1. Rapeseed production in Europe for 1969 (1000 metric tons of seed) based on information from the Food and Agriculture Organization.

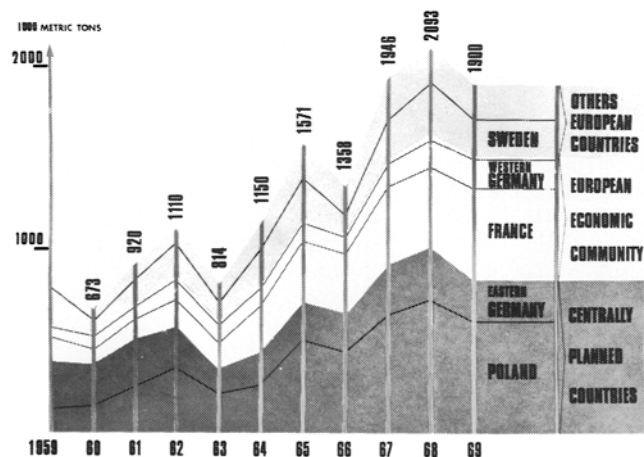


FIG. 2. Rapeseed production in Europe by economic group 1959-1969 (1000 metric tons of seed) based on information from Food and Agriculture Organization.

oils and well below that for butter (14%), soybean oil and tallow (each 12%), lard (11%), sunflower (8%), peanut (7%) and cottonseed (6%). Since production of rapeseed appears likely to increase, we may expect it to become more and more of a factor in world as well as European supplies.

In 1969 according to information from the Food and Agriculture Organization, world production of rapeseed was about 5.65 million metric tons. Production was divided as shown in Table I into four main areas of Canada, Europe, India and China with percentages as shown. In the last 10 years for which figures are readily available, world production has increased from 3.6 million metric tons to 5.65 million metric tons. During the same period European production increased at a faster rate than world production from 0.850 to 1.9 million metric tons. The main producers in Europe are Poland, France, East Germany, Sweden and West Germany as shown in Figure 1. Although the 1969 harvest in Poland may be less than indicated because of unfavorable weather, Poland is one of the largest potential producers of rapeseed in Europe. The trend in both

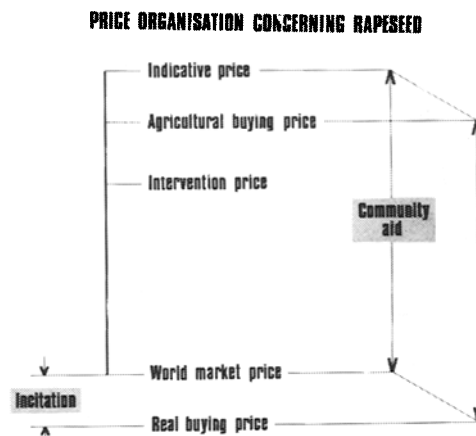


FIG. 3. Price relationships in the European Economic Community to provide incentive to the producer.

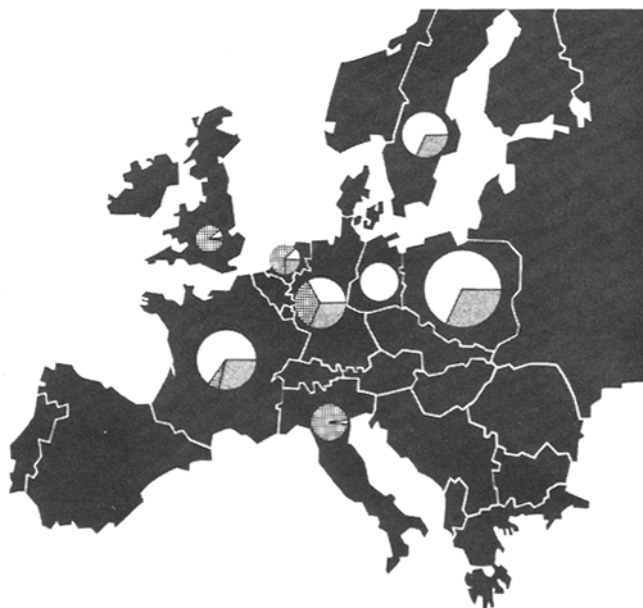


FIG. 4. Trading of rapeseed at the production □, importation ▨ and exportation ■ levels in Europe.

TABLE I  
Production of Rapeseed

Country	Thousands of Metric Tons, percentages of total
North America (Canada)	850 (15)
Europe	1900 (34)
Asia (mainly India)	2000 (35)
China	900 (16)
Total	5650

European and the world production will probably continue toward more rapeseed. Indeed Canada is expected to have a considerable increase in 1970.

### INCENTIVE FOR PRODUCTION

European production is divided among three different types of economic communities as follows: (1) eastern or countries with centralized planning as Poland and East Germany; (2) the European Economic Community including France, Italy, West Germany, Holland, Benelux; (3) the other countries—Sweden, United Kingdom, etc. All three groups are increasing their production as shown in Figure 2.

These increases have resulted because of a combination of factors as follows: (1) a price policy satisfactory to the producer; (2) agricultural research which has led to the development of suitable varieties; (3) new outlets for both oil and meal.

Although the marketing procedures used in all three of these groups has had its effect on production, a few details about the system used in the European Economic Community may suffice to show how production is encouraged. The Community hopes by its procedures to achieve the following: (1) give the producers a more adequate return for growing rapeseed; (2) encourage industrialists to purchase rapeseed without interfering with their trade with the rest of the world. To achieve these objectives the Community set up the price relationships shown in Figure 3.

Salient features of this marketing organization for rapeseed are as follows: (1) a suggested or indicative price for the whole of the European Economic Community and sufficiently high to be of interest to the producers; (2) an intervention or intervening price, based on the suggested price at a slightly lower level and variable and based on geographical distances from the main harbors; (3) a world market price calculated by the Community in Brussels based on current rates.

The purchase price at the producer's level or agricultural buying price is situated between indicative and intervention price. The industrialist who buys the seed receives a subsidy called "Community Aid" which is represented in Figure 3. Thus the industrialist pays less than he would on the world market. The difference between world market and the real

TABLE II  
Consumption of Rapeseed Oil in Europe—1968

Country	Thousands of Metric Tons
Poland	156
East Germany	114
France	107
Italy	88
West Germany	71
Sweden	56
United Kingdom	48
Holland	30
Benelux	10
Other Countries	52
Total for Europe	732

TABLE III  
Rapeseed Meal Consumption  
in Europe Excluding East European Countries

Year	Use in Thousands of Metric Tons
1962	316
1963	292
1964	287
1965	400
1966	470
1967	477
1968	635
1969	678

buying price encourages the industrialist to use rapeseed; thus it is an incitation or incentive. Controls are organized in the factories, lot by lot, and are somewhat complicated to explain and apply. A similar system is in effect for exports.

### TRANSACTIONS IN RAPESEED

Three types of transactions occur with rapeseed. These transactions can be characterized as production, i.e., purchases at the production level, exports from a country and imports into a country. The sum of these three types represents the importance of rapeseed in each country. Figure 4 summarizes these data. They show again that Poland, France, and Sweden dominate production and exports. Italy, United Kingdom and Holland are the big importers; West Germany engages to a considerable extent in all three transactions. Overall, Europe has a very slight excess of exports over imports and most of the production is consumed in Europe.

### INDUSTRIAL INSTALLATIONS

Most installations have not been specifically designed to handle rapeseed. Installations and technology were developed for other oilseeds such as peanut and soybean, but the keynote has been primarily to be able to diversify, i.e., to be able to use the best and lowest priced oils and fats available. Analytical methods now permit close control of production at all stages. Improved quality in available products has been attained as compared with products on the market only 10 years ago.

### USE OF RAPESEED

Edible oil and animal feeds are the two main outlets for rapeseed. The oil consumption in Europe for 1968 is given in Table II. Poland, East Germany and France are the main users but considerable consumption does occur in the Northern as well as the Southern European countries.

The European Economic Community plus the United Kingdom have rather rapidly increased their use of rapeseed oil from an average of 112,000 metric tons in 1959-1964 to about 350,000 metric tons in 1968. The figures available show that consumption did not change much between 1959-1964 in these countries with use varying between 95,000 and 130,000 metric tons. The increase came as a result of agricultural and technical progress that led to new uses for rapeseed for both liquid oils and solid fats. In Northern Europe, particularly in the countries of Sweden, Denmark, Poland, West Germany and Holland, rapeseed has found outlets in solid fats such as margarine. Hydrogenation of rapeseed permits substantial reduction in the linolenic acid content for solid fats but less reduction for salad, cooking and table oils. Thus in Southern Europe including France increased use of rapeseed oil is occurring in table oil but the increase has come somewhat slower than in the Northern countries.

The sulfur compounds present in rapeseed meal limit the

amount that can be used in a given ration for animals. However research has led to more extensive use of rapeseed meal and relatively large amounts of it are being consumed by cattle. In France 20% of rapeseed meal is permitted in cattle and broiler rations and 5% in pig rations.

Rapeseed meal consumption in Europe, not including the Eastern European countries, has substantially increased since 1962 with most of the increase coming in 1965-1969. Increase in meal consumption paralleled the increase in oil use. The data for meal consumption are given in Table III.

Rapeseed like sunflower seed production appears likely to increase because they are the principal oilseed crops adapted to the climate and conditions of European agriculture. From a nutritional viewpoint both rapeseed oil and meal need to be improved. New varieties are now available or being selected in producing countries that will improve the quality. Thus outlets for rapeseed should increase.

[Received October 26, 1970]

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