

British fats, oils industry depends on imports

Former JAOCS assistant news editor Sara Arndt recently completed a 10-month, around-the-world tour by returning to her native England. Here is the last in a series of reports she has written for JAOCS on fats and oils in various nations, this one on England's fats and oils industry.

The British seed crushing and oil refining industry processes approximately one million metric tons of oil and fats every year, a figure which has remained static for several years and which comprises approximately 90% of Britain's consumption of edible oils.

Although the number of companies is relatively small, the British industry employs more than 7,000 people, largely concentrated in the port areas of Manchester, East London and Hull, which traditionally have been major centers for importing the oilseeds which make up the bulk of the British crush.

Rapeseed is the only domestic crop grown for its oil content; the British Isles produced 270,000 metric tons of rapeseed in 1980/81. Sunflower is grown as a forage crop, but due to climatic reasons it does not produce sufficient oil for economical extraction. Although trials are underway in Europe to grow soybeans, it is difficult to develop soybean varieties that give yields to compete with the traditional crops of wheat, sugarbeet and barley.

In 1981, British plants crushed 1,051,300 metric tons of soybeans, 434,000 tons of rapeseed, 58,000 tons of palm kernels, 55,200 tons of sunflower, 53,000 tons of linseed, and 32,700 tons of maize germ (a byproduct of the British starch industry). The total crush—which also included some shea nuts, copra, illipe and castor seed—produced 48,000 metric tons of crude oil.

Approximately 85% of oilseeds crushed in Britain are imported—a total of 1,496,000 tons in 1980. Soybeans, which make up 62% of the total crush, are imported mainly from the U.S.A., but also from Argentina and Brazil. Soy imports reached 1,159,000 metric tons in 1980. Since the 1960s, soybeans have been the prime raw material for crushing plants in Britain, where facilities are geared to soybeans or soy and other oilseeds. Domestic and imported rapeseed—from Canada, the EEC, India and China—makes up 20% of all oilseeds crushed in Britain. Imports of rapeseed totalled 137,000 metric tons in 1980. All sunflowerseed is imported, the major sources being the USA, Europe, Central and South America. About 125,000 metric tons of sunflowerseed were imported in 1980.

Palm kernels and other tropical seeds, such as groundnut, now only make up 7% of the oilseeds crushed in Britain, although during the 1950s, these were the major

British oilseed imports. In recent years, there has been a discernible trend towards a decline in the supplies of raw materials of tropical origin to the EEC. The share of seeds imported to the EEC from tropical origins has declined from 12.5% in 1975 to 4.3% in 1980, whereas seeds from temperate climates have increased from 87.5% in 1975 to 95.7% in 1980. This is largely a result of an escalating growth in the crushing and refining industries in developing countries, such as Malaysia, which now crushes most of its own raw materials and refines much of its palm oil. As developing countries become more sophisticated in processing and marketing, they will tend to trade more with each other as importers and exporters and to develop advantageous trading conditions. The Seed Crushers' and Oil Processors' Association (SCOPA), a trade association, believes that the decline in imports of tropical seed will continue as Britain and the EEC depend more on developed countries as a stable, certain and continuing source of oilseeds.

Groundnut and palm are tending to be replaced by rapeseed and sunflower, now large crops in Europe, which are subsidized by the EEC. An important development for the British industry has been the increased production of indigenous rapeseed, which could reach 500,000 metric tons during the next few years. SCOPA members see much room for expansion in the production of rapeseed, since consumption of rapeseed oil in Britain has doubled since 1977 and the country exports very little rapeseed or rapeseed oil.

Exports of any oilseeds or oil from Britain are minimal. However, the British crushing industry also produces about 1.3 million metric tons of protein-rich meal, used to formulate animal feeds for the farming industry. Britain is fifth in the EEC in volume of oilseeds crushed.

Crude oil from oilseeds crushed in Britain, together with imports of crude oils amounting to over 0.6 million metric tons, are processed by British refining plants. One million metric tons of refined oil are produced each year to be used for edible or technical purposes in a variety of industries.

In 1981, the British refining industry produced 158,000 metric tons of soybean oil (an increase from 152,000 tons in 1980 and from 148,000 tons in 1977) and 142,500 tons of rapeseed oil (an increase from 103,000 tons in 1980 and from 68,000 tons in 1977). The production of refined palm oil in 1981 was 129,000 tons, a fall from 145,000 tons in 1980 and from 186,000 tons in 1977.

Marine oils, imported mainly from European sources, make up the largest single section (21%) of refined oil in Britain. Production of processed marine oil reached

217,000 tons in 1981. Soybean takes a 20% share, palm oil (imported in its crude form largely from Malaysia) has 16%, rapeseed oil (mostly from the British crushing plants) 12%, and linseed and castor oil 3%. About 7% of processed oils are extracted from animal fats. The two main oils imported for refining are fish oils and palm oil, both of which are best separated from their raw materials at the place of origin owing to spoilage problems.

The seed crushing and oil processing industry in Britain supplies oil for soaps, detergents, lubricants, paints and resins, plasticizers and cosmetics. However, the percentage of oils used for technical and industrial purposes only amounts to 16% of the 1.1 million metric tons (including domestically refined oils and imports) of processed oils. About 7% is used in retail cooking oils and fats, 21% in retail margarine and 56% in food manufacturing and catering. This means that over 800,000 tons of oil purchased in Britain is used as edible oil either to produce margarine and cooking fats or as an ingredient of specialty fat in a variety of food products.

The Seed Crushers' and Oil Processors' Association (SCOPA) represents all companies engaged in oilseed extraction and oil refining in Britain. The association presents members' views to the government and to the EEC Commission in Brussels, particularly concerning tariffs, trade and policy matters.

David Airey, SCOPA's chairman, in his paper 'The role of the U.K. seed crushing and oil processing industry and the issues we face' points out that the U.K. industry, as with oils and fats industries in various parts of the world, is defined by the pattern of oil demand, by consumer preference and by the availability of indigenous raw materials. In the U.S.A., where soybean oil makes up more than two thirds of the total oil/fat usage, large crushing plants and refining facilities are geared to one particular seed. Malaysia, too, has set up processing plants to match its large oil output. Airey comments that "In contrast, Europe, following from close ties with former colonies, tends to use a much broader base of oils and fats." Britain's reliance on several different kinds of oils and fats has necessitated the growth of multi-oil refineries, which are more expensive to operate, but the plants are able to offer an extensive range of sophisticated oil and fat blends to the British food industry.

Unless a particular food product demands the use of a premium oil (such as 'Flora' margarine which specifies sunflower), the "best oil" for British manufacturers varies each season according to price, availability and timing (most manufacturers have limited storage facilities). The guiding principle of the British industry is the interchangeability of

oils and fats, particularly in the production of margarine.

In Britain, margarine consumption now exceeds that of butter for the first time since 1956—probably due to the recession and the demand for cheaper foods, combined with an increasing concern for health on the part of the consumer. In general, however, SCOPA believes the British public to be behind on consumer awareness with regard to fats and oils. Products are still labeled "blended oils" and there is—as yet—no requirement to state which oils have been used. David Morgan, SCOPA's secretary, says that the reduction of erucic acid levels in rapeseed in the UK was accomplished very quickly and solved before it became a problem.

Margarine production in Britain in 1981 reached 397,000 metric tons. The largest single oil used in margarine manufacture was fish oil, totalling 162,500 metric tons, and of the vegetable oils used—a total of 126,900 metric tons—soybean was the most popular (49,000 metric tons), followed by rapeseed (44,900 metric tons).

SCOPA members are facing several crucial issues concerning high utility costs, stringent import regulations, and heavy port dues which mean that, in many cases, Britain cannot compete with its neighbors in the EEC. David Airey stresses that the British fats and oils industry is an essential one in Britain and that organizations such as SCOPA and the MSMA (Margarine and Shortening Manufacturers Assoc.) must ensure effective representation to the government, and particularly to the EEC Commission, on economic, political and legislative issues. He believes that considerable productivity improvements have been achieved in the past few years and that much confidence has been generated by the industry's efficient use of assets and professional performance.

Soviet oil output lags

Soviet vegetable oil production was 2,603,000 metric tons for calendar year 1981 according to *Oil World*, a weekly fats and oils report published in Germany.

Soviet production, *Oil World* said, was the smallest in ten years and compared with 2,650,000 tons in 1980, 2,819,000 tons in 1979, and the record 3,412,000 tons in 1974. Margarine production for 1981 was reported at 1,361,000 metric tons compared to 1,263,000 metric tons in 1980. Butter production declined slightly to 1,210,000 metric tons in 1981 compared to 1,278,000 metric tons in 1980.