

THE AUSTRALIAN OILSEED INDUSTRY

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(Mr. Barr, General Manager of Meggitt Limited, addressed a luncheon meeting of the Society in Sydney on 7 April 1971 on the subject "Prospects and Problems of the Vegetable Oil Industry". He has extended his informal talk in this more comprehensive paper on the oilseed industry.)

Oilseeds are an increasingly important component of the world-wide fats and oils industry, which ranks highly in terms of worth to the agricultural, industrial and trading economies of many countries.

Production of oilseeds in Australia has been established mainly by the efforts of private enterprise, there being in the past little sustained Government support, particularly in the development and breeding of new oilseed varieties and in the tariff legislation required to support higher domestic oilseed prices.

Until the last few years, when prices for wool gave farmers good incomes and wheat was grown without quota controls, most farmers were satisfied with their returns; they were not interested in diversifying into the growing of oilseed crops except at prices substantially higher than world parity. It was this situation which required an adequate tariff, per medium of duty on oil imports, to assist the development of the Australian industry.

Although local industries provided limited quantities of linseed and peanut milling kernels, imports were the main source of vegetable oils and meals until the early 1960's. Since then the volume and range of oilseeds produced in Australia has increased greatly, with domestic producers supplying a rising proportion of the expanding market. Nevertheless significant quantities of vegetable oilseeds, oil and meal are still imported.

These changes in the total level of vegetable oil production from Australian grown oilseeds, and in the relative importance of the various vegetable oilseed crops, have arisen through a number of factors. These include the growth of the cotton and peanut industries, giving rise to increased output of the by-product oilseeds; the development of better varieties of specialised seeds with improved oil content, such as safflower seed, rapeseed and sunflower seed; a declining market for linseed oil; and the growing of oilseed crops as an alternative to wheat and as a means to restore depleted farm incomes.

This last mentioned development appears to have been particularly important in stimulating oilseed production in the past two seasons, especially that of rapeseed and sunflower seed. Grower interest has reached a level this season where there are waiting lists for contracts to supply the home market requirements, and export contracts are being sought. Government support has improved considerably as they see in oilseed production a partial answer to some of the rural problems.

A sizeable soybean industry has yet to be established in Australia, owing largely to a lack of varieties suitable for growing under Australian conditions.

These changes in local production reflect only the beginnings of growth because the absolute level of imports has continued to rise, due to the increase in demand from the domestic market, despite greatly increased domestic production and the rising share of the local market being supplied by Australian producers. Total imports in the three years ended 1969-70 averaged 54,000 tons, compared with 45,000 tons in the three years ended 1964-65. Over this period the increase was mainly in the edible vegetable oils of the types produced in Australia, imports of such oils rising from 18,000 tons to 26,000 tons.

Imports of palm derivatives (coconut, palm kernel and palm oils) have

remained fairly constant over the years, at around 25,000 tons. Coconut oil is the dominant oil in this group, supplies being imported largely from the Territory of Papua and New Guinea in the form of copra for crushing in Australia, and currently represent about half our total vegetable oil imports. Linseed oil imports fluctuate widely from year to year with variations in the level of domestic production, but Australia is now self-sufficient in this oil.

Changes in recent years in availability of the various groups of vegetable oils, for consumption in Australia, may be summarised as follows:-

	<u>Average Annual Availability</u>	
	3 years ended 1964-65 tons	3 years ended 1969-70 tons
Edible - domestically produced	4,110	16,840
- imported	<u>18,090</u>	<u>26,300</u>
Coconut, palm and palm kernel oils - imported	22,200	43,140
Linseed - domestically produced	25,520	24,140
	13,120	9,380
<u>TOTAL</u>	<u>60,840</u>	<u>76,660</u>

The increase in consumption of edible oils, which are used primarily in margarine manufacture and as cooking or salad oil, may be associated with changes in relative prices, health considerations and changing taste patterns. The influx of migrants from Europe, where vegetable oil consumption is considerably higher than in Australia, has been a contributing influence. Other factors such as population growth, the development of polyunsaturated margarines, the increasing sales of cooking margarines capable of being used for table purposes and greater use of vegetable oil in bulk cooking and confectionary manufacture, have also played a part.

The extent to which vegetable oil may be used in margarine manufacture is controlled by State legislation, which limits both the quantities of table margarine which may be produced and the proportion of vegetable oils which may be included in cooking margarines. The decline in use of linseed oil is associated mainly with increased competition from synthetics in this oil's major end uses, including the manufacture of paint and floor coverings.

Oilseed Meals

Australian supplies of oilseed meals are obtained from the crushing of home-grown oilseeds, linseed, rapeseed, sunflower, cottonseed, peanuts and safflower seed - except for soybean meal, the bulk of which is imported from the United States, and coconut meal, which is processed in Australia from imported copra.

The total apparent availability of oilseed meals (domestic production plus imports), while fluctuating from year to year, rose from 60,000 tons in 1964-65 to some 100,000 tons in 1969-70. The bulk of this increase resulted from the greater domestic production which accompanied the expansion of the oilseed growing and crushing industries, supplied from domestic crops rising from 35,500 tons to 61,900 tons. However imports, which consist mainly of soybean meal, also rose significantly from 12,600 tons to 28,800 tons. Production of coconut meal from imported copra fell from 11,600 tons to 9,300 tons.

The usage of high protein meals of all types in Australia is limited by the

nature of the livestock industries, and by the difficulties associated with producing suitable livestock meals (especially for pigs and poultry) from many of the varieties of oilseeds grown in Australia.

The major grazing industries (sheep and beef cattle) are primarily pasture based; only relatively small quantities of grain and other supplements such as meal are normally fed, usually when green feed is in short supply. There has been a marked expansion in the more intensive pig and poultry industries in recent years, however, and this has given rise to greater demand for high protein meals. The most favoured meals are soybean meal and fishmeal, supplies of which are predominantly imported.

Meals produced from the main types of oilseeds grown in Australia have, at present, a less desirable amino acid balance than soybean meal and several, either because of their chemical composition or their fibre content, are unsatisfactory for feeding to non-ruminants unless treated. There are substantial exports of these meals and indeed, on balance, Australia is a net exporter of vegetable protein meals.

The World Situation

World production of the types of vegetable oils produced in Australia from locally grown oilseeds, together with the three palm oils, increased from 16.6m tons (oil equivalent) in 1962 to 20.5m tons in 1969; a further rise is expected in 1970. Such oils represent slightly more than half of the world's total supplies of fats and oils from non-mineral sources.

The most notable increases in output occurring in recent years have been in sunflower seed and oil production in the U.S.S.R. and Eastern Europe, in soybean oil production in the United States and more recently in rapeseed production in Canada. The rate of growth in production of vegetable oils, as a whole, was fairly rapid throughout the 1960's.

An important development in 1970 was the approximate doubling of Canada's rapeseed production to a record 1.6m tons, following the diversion of large areas of wheat lands to alternative uses. Major gains in rapeseed production have also occurred in France and Poland, and there have been good sunflower crops in the Soviet Union and Eastern Europe.

Along with the growth in world production of vegetable oils there has been a market expansion in output of meals, production rising from 35m tons in 1962 to 47m tons in 1969. Owing to the spectacular growth of soybean production and the low oil extraction rate for soybeans, a major part of the increase in world oilseed meal production has been in soybean meal, which now represents slightly more than half of world meal output.

World Trade

A far higher proportion of world vegetable oil and meal production enters international trade than for most other agricultural commodities. In 1969, 34% of world output of oil and 38% of meal was traded internationally. The main areas where surpluses are produced for export are North America, the tropical developing countries and Eastern Europe (including the U.S.S.R.); the largest importing markets are in Western Europe and Japan. A feature of the international market is the presence of single dominant suppliers of individual oils and meals.

Over the past decade there has been a steady expansion of world trade in oilseeds, vegetable oils and oilseed meals. Of particular significance has been a rapid increase in exports of sunflower seed and oil, following a sharp expansion in output in the U.S.S.R. and Eastern Europe, though shipments seem to have slackened somewhat in recent months. In addition, trade in soybeans and soybean oil and meal expanded rapidly, following large production increases in the United States, whilst shipments of rapeseed from Canada, France and Eastern Europe rose markedly.

Overall, trade in meal (including the meal equivalent of trade in seeds) increased considerably faster than trade in oil during the 1960's, although major gains were made in exports of some oils, particularly those of the types being produced in Australia. World exports of the major oilseed meals expanded between 1962 and 1969 from 11.1m tons to 17.9m tons; while shipments of vegetable oils rose from 5.8m tons to 7.1m tons.

Increased consumer demand for meat, rapid growth of intensive livestock industries and improved stock feeding practices, led to a marked upward trend in the demand for high protein meals, especially in Europe and Japan, during the 1960's. However, as the proportion of animals being fed with concentrates rises, this trend may slacken off. Also any long run tendency for feed grains to become relatively cheaper could lead to some substitution of grains for high protein meals in livestock rations, particularly in Western Europe.

Outlook

Australia's oilseed production rose substantially in the 1970-71 period to 185,833 tons, stimulated mainly by the marketing difficulties producers are experiencing with other crops. Further expansion in production at a satisfactory rate is expected, although this will be influenced mainly by the relative profitability of oilseeds compared with that of alternative crops and livestock products.

The domestic market for edible oil (safflower, sunflower, rapeseed, and in particular, soybean), is expected to continue to grow, although the rate of expansion will depend to some degree on legislative restriction on the composition and output of the various end-products. Also the prospects for Australian edible oil will depend on their prices, relative to those for coconut oil crushed in Australia from copra imported largely from the Territory of Papua and New Guinea.

Even if domestic requirements of edible oilseeds continue to expand as they have in recent years, the Australian market will be small relative to the farmer's productive capacity, and any further significant increases in Australian production will inevitably lead to an overflow onto the export market.

The world demand for vegetable oils is expected to increase steadily in the next decade because of the increase in population (estimated to double in the next 35 years) and the growth in consumption, particularly in Japan and in the developing countries; and also because the developing consumer preferences for products which contribute to a lower fat and cholesterol level in the blood. Heart and circulatory diseases and deaths are now major statistics in the developed countries, and there is an unquestionably clear correlation between dietary habits and the probability of the disease. The edible oilseed industry contribution in countering the present trend in the frequency of coronary disease, by improving the one factor which is most under the individual's control - the visible fat content in our diet - could indeed be very important and very large.

The rate of increase in the use of protein meals for feeding to livestock may slacken from that of the 1960's, because of competition from other feedstuffs and the decreasing proportion of animals converting to the use of feed concentrates. The need to utilise crushing capacity in Western Europe and Japan will be reflected in a preference for imports of oilseeds rather than oils.

Summary

Prospects for the Australian Oilseed Industry appear to be good for continuing steady growth to service the home market requirements and to participate in export. Stability in the production of oilseeds will be a main pre-requisite and, having regard to Australia's variable climate, each year's harvests will be the factor which controls success.