THE PRESENT ECONOMIC CONDITION OF THE COCONUT AND OTHER OIL-PRODUCING INDUSTRIES*

THE GENERAL SITUATION OF THE OILS AND FATS INDUSTRIES

THE present disastrous fall in prices is the result of a combination of factors affecting a number of related industries; these factors cover a wide range of geographical and climatic conditions. The products concerned comprise not only coconut, palm and palm kernel oils, but also whale oil, soya bean oil, cotton seed oil, groundnut oil, olive oil and tallow, together with a number of other oils of lesser importance; the production of dairy butter and lard also has an important bearing on the situation.

All these oils are extensively used in the manufacture of margarine, lard substitutes, and cooking and edible oils; they are also employed in the manufacture of soap and toilet preparations, and on the condition of these industries the market for them depends. Moreover, margarine and lard substitutes enter into competition with butter and lard, so that any marked increase of production and corresponding decrease of price in the case of the latter will lead to decreased consumption of the substitute products, because domestic consumers prefer the genuine article provided it is within their means.

Owing to scientific advances it is now frequently possible to substitute one oil for another in manufacturing processes. Consequently, manufacturers have a wide range of choice in their raw materials and are able to take advantage of marked lowering in price of any of the more important vegetable or animal oils and fats by changing their formulae and their purchases to suit market conditions. It is seen, therefore, that the raw materials are closely inter-connected, and over-production of any one may seriously affect consumption in any other, or all of the others.

There has been greatly increased production in practically all of these raw materials, and in several there is serious over-production. It seems not improbable that the total surplus may approximate to about one year's normal consumption.

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* The following is a portion of an Abstract of the Report of the Vegetable Oil Committee appointed by H. E. the Governor of the Straits Settlements and High Commissioner for the Malay States on 21st April, 1934, and under the Chairmanship of Dr. H. A. Tempany, C.B.E., Director of Agriculture, Federated Malay States and Straits Settlements. The terms of reference were: "To investigate and report on the present economic condition of the coconut and other vegetable oil-producing industries and to make recommendations." From *The Malayan Agricultural Journal*, Vol. XXII, No. 9, September, 1934.

Over-production dates back to the years succeeding the War, when prices for vegetable oils and fats rose to unprecedented figures. Consequently, all branches of the edible oil industry apparently offered attractive openings for capital and great expansion of the areas planted under oil crops therefore followed. Concurrently, increased capital was introduced into certain industries, notably the whaling and the soya bean industries, resulting in greatly increased supplies of these oils being placed on the world's markets.

On the other hand, there has been a steady decline in the consumption of margarine and probably, to a less extent, of soap. This has been accompanied by a steady increase in the production of butter which is now coming on to the world market in large quantities at prices which compete with margine.

A further factor which has profoundly influenced the situation is general instability coupled with lessened purchasing power.

The present world-wide move towards economic nationalism has also considerably affected the position. As a result of the latter, Governments all over the world are vying with one another in fostering the production of such oils and fats as can be produced within their own boundaries. As a part of the campaign, higher and higher tariff barriers are being erected against foreign produce, quota systems are being introduced and in some cases, complete prohibition of the entry of certain fats has also been effected.

In the British Empire, under the Ottawa agreements and the British Import Duties Act of 1932, coconut, palm oil and kernels obtain a preference varying in different countries, which in the Report are set forth in some detail.

In France, vegetable oil imports are subject to a quota restriction; in Germany the importation of oils and fats is a Government monopoly and the imports allowed were nominally reduced in 1933 to 50 per cent. of imports in 1932. Quota restrictions on the importations of certain vegetable oils, including coconut oil, are also in force in Italy, Spain, Switzerland, Denmark, Czecho-Slovakia and Austria.

The position in the United States is the most disturbing of all, inasmuch as from 11th May, 1934, a processing tax has been imposed which has the effect of raising the duty by 3 cents a pound on imported foreign coconut and palm oils, the total duty becoming 5 cents per lb. on coconut oil and 3 cents per lb. on palm oil, i.e., £22.4.0. per ton on coconut oil and £13.9.0 per ton on palm oil (copra being taxed proportionately to its oil content).

The immediate outlook for the oil-producing industries is likely to be extremely difficult for some time to come; there appears to be little likelihood of an early recovery in prices, although in a situation so complex, the possibility of recovery and of expansion in the consumption of certain by-products must not be overlooked. So far as can be seen, however, recovery is more likely to take place by the elimination or reduction of certain sources of supply; it is also possible that the position may become worse before improvement sets in.

The remedy of artificial restriction of production is obviously inapplicable to the relief of the coconut and palm oil industries. Apart altogether from special difficulties in relation to these industries which would be formidable, if not insuperable, owing to the large proportion of native producers and the geographical distribution of these crops, it would also be necessary for effective control to regulate the output of all related oils and fats. Unless this could be achieved, limitation of production in the case of one or two products would merely lead to increased production of others.

It is conceivable, however, that some degree of regulation of further planting might be feasible, combined with some system of Imperial and International agreement for the admission on a quota basis of various oils and fats into consuming countries. In any event, it seems probable that only the most efficient and the cheapest producers are likely to survive under present conditions.

THE USES OF COCONUT OIL, PALM OIL AND PALM KERNEL OIL

Coconut oil and palm kernel oil are principally used for the manufacture of margarine and soap, while glycerine is an important by-product. In the United States, prior to the imposition of the new processing tax, from 55 to 60 per cent. of the total consumption of these oils entered into soap, 25 to 30 per cent. into margarine and from 10 to 15 per cent. into other food.

Palm oil is used mainly in soap making, but an important addition is its use as a flux in the manufacture of tin plate, for which purpose nearly 7,000 tons were consumed annually in the United States. It is also used to a minor degree in margarine making.

Coconut oil is used in the margarine industry as a principal ingredient of vegetable oil margarine and no other oil which has been tried on a commercial scale has proved as satisfactory in making this type of margarine. In the United States, vegetable oil margarine is practically exclusively manufactured; elsewhere than in the United States, however, vegetable oils used in margarine manufacture have suffered from the severe competition of whale oil since, in Europe, hardened and refined whale oil is a major constituent of margarine.

Whale oil production is now in the region of 350,000 tons per annum. The increase is due primarily to the exploitation of the Antarctic waters and to modern methods of whale catching. Norway produces about half the world supply of whale oil, and Great Britain and British Possessions produce the next largest quantity.

The production of soya bean oil has also greatly increased of recent years and it has become a serious competitor with coconut oil in margarine making in Europe. The chief supplies are derived from Manchuria.

Before the art of refining, deodorising and hardening oils was as well understood as at present, some difficulty was experienced in utilising whale and soya bean oils, but now, taste and smell can be completely removed and a hard fat can be obtained.

THE COCONUT INDUSTRY

The world acreage under coconuts is not accurately known, but a fairly reliable estimate in 1930 placed the area at about 7¼ million acres, as compared with 5½ million acres in 1921. British Empire countries account for slightly more than half the world acreage. Some part of the new acreage has not yet come into bearing, while other areas are not yet in full bearing, hence the supply of coconut products should tend to increase for some years to come. The bulk of the production is in the hands of small-holders; large coconut estates probably do not account for more than 10 per cent. of the total. The world production of coconuts, in terms of copra, may be estimated at about 3 million tons in 1929, the peak year, aggregate exports from producing areas in terms of copra amounted to only 1·7 million tons or under 60 per cent. of the estimated total production. It therefore appears that over 40 per cent. of the total production is consumed in the countries of origin.

The principal products of the industry are copra, coconut oil, fresh nuts, shredded and desiccated coconut together with coconut cake and meal, coir, arrack, toddy and shell by-products. Of these products, copra is, by far, the most important, although in recent years the manufacture of coconut oil in countries of production has increased considerably.

The net exports of copra from the principal producing countries in 1930 were 1,033,000 tons, of which over 401,000 tons were from the British Empire. The net exports of coconut oil in 1933 are estimated at 230,000 tons, of which 70,000 tons were derived from the British Empire.

Of the total world supply of copra in 1930, 35·7 per cent. was from Netherlands India, 15·1 per cent. from the British Southsea Islands, 16·5 per cent. from the Philippine Islands, 9·8 per cent. from Malaya, 8·7 per cent. from Ceylon, and 14·2 per cent. from various other sources. Of coconut oil exports, 73·6 per cent. was from the Philippine Islands, 21·8 per cent. from Ceylon and 4·5 per cent. from Malaya.

Although half the total area of coconuts is in the British Empire, Empire produce only comprises about one-third of the total exports from producing countries. This is due to the fact that India, which possesses the largest area under the crop, now exports no coconut products, and since 1914 has been an importing country.

DISTRIBUTION OF WORLD SUPPLIES AMONG THE CONSUMING COUNTRIES

The principal copra importing countries in 1933 were: United States of America 295,032 tons, France 196,644 tons, Germany 121,181 tons, United Kingdom 102,095 tons.

Before the war, Germany was the principal importer of copra with France, second. Since the war, however, the United States has been, by far, the largest importer, while the United Kingdom has also largely increased its imports of copra in recent years. In addition to imports

of copra for crushing, a number of countries import coconut oil both from copra-producing areas and also from copra-crushing countries outside these areas.

MARKET PRICES FOR COPRA AND COCONUT OIL

The price of copra both before the War and in the earlier years of the War was subject to substantial fluctuation; between January, 1911 and July, 1914, the average monthly price c.i.f. London for fair merchantable sundried Singapore copra lay between £21.2.6. and £31.2.9. During the War, prices rose to £45.15.0. in November, 1917. No further change occurred until after the war, as prices of oil seeds were regulated until March, 1919, when the control was removed and the price fell to £33.10.0. Thereafter, the price again rapidly rose, the peak being reached in February, 1920, with an average of £69.10.0 per ton. Thereafter, the price sagged, until at the present time the lowest level recorded has been reached at £9.10.0 per ton. Prices for coconut oil have followed a somewhat similar course.

CHARACTERISTICS OF COPRA AND COCONUT OIL

The quality of copra varies considerably according to the degree of care exercised in its preparation. Well-prepared copra is white, of low moisture content and hard; it should be free from dirt, moulds and smoke and should contain from 4 to 6 per cent. of moisture and not less than 65 per cent. of oil. Well-prepared copra is less liable to mould attack and insect attack than low grade copra; the presence of excessive moisture conduces to the growth of mould which, in turn, favours the attack of insects, both leading to material loss in weight in transit, not attributable to moisture loss alone.

Generally, copra is classified according to its country of origin and is graded into two qualities. The higher quality is known as f.m.s. (fair merchantable sundried) although the term "sundried" does not necessarily describe the method of preparation — and is used as a trade description — and f.m. (fair merchantable).

The recognised order of merit of copra produced by various countries is shewn in a table. The first ten places are for the f.m.s. grade from Malabar (f.m.g.w.s.)* Ceylon, Seychelles, Mauritius, West Indies, West Africa, Java, Straits, Dutch Indies, Samoa (Plantation). Ceylon f.m.s. commands a premium of 5 per cent. over Straits; Straits f.m.s. 15 per cent. over Southseas f.m.s., and 17 per cent. over Philippine f.m.s.; Straits Sundried commands 21 per cent. premium over Straits Mixed.

Copra is employed exclusively for the manufacture of coconut oil, the quality of which depends on the quality of the copra crushed. Good copra produces an oil with a minimum amount of free fatty acid, suitable, when refined, for edible purposes, whereas oil expressed from lower grade copra is mostly used for soap making.

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* "Fair merchantable good white sundried." The term "sundried" and "kiln-dried" are terms of quality and do not necessarily indicate the method of manufacture.

The highest grade of copra was formerly that coming from the Malabar coast of India, but this is now consumed in the country of origin. The second place is held by Ceylon copra, but this is also coming on the markets in decreasing quantities, largely owing to the fact that India appears to be taking more and more of the Ceylon supplies.

Straits f.m.s. copra formerly ranked above copra from Netherlands India, but during the past two years the position has become reversed and f.m.s. Java copra is now graded higher than Straits copra. Southsea Islands copra, which is one of the largest sources of supply, is definitely of low grade.

The general indications are that, in the existing depressed condition of the market, the demand for high grade copra is increasing.

Owing to the price grouping of copra according to the country of origin, it is difficult for any improvements in market quality effected by producers to meet with an immediate response of an enhanced price; this is said to be due to the fact that little interest is taken by buyers in individual consignments, although cases exist where estates, which have established a reputation for turning out high quality copra, can command a steady premium for their produce. On the other hand, a general upgrading of the quality of copra shipped from any country seems likely, in the long run, to meet with a better market demand.

Concerning the future outlook of the market, it seems problematic whether, at prevailing low prices, shippers can possibly maintain the present high rate of exports. Many estates unfavourably situated as regards cost of transport can only work at a loss and it is therefore doubtful whether they will continue to collect the nuts under present circumstances.

For the time being, it may be expected that the Philippine producers will continue to compete for the European business, but the possibility is not excluded that the present record crop may be followed by a smaller production next season.

As will be observed, there is unfortunately no improvement in sight in the price of copra. As for other oilseeds, visible supplies are plentiful, and with the existing low price of butter, the value of edible fats can hardly improve to any considerable extent. Therefore, it will only be a general improvement in world trade conditions, or an automatic drop in copra shipments, which can lead to higher prices for this article.

EMPIRE PREFERENCE AND PROTECTION

The principal markets have hitherto been on the Continent of Europe and in the United States of America. Restrictions on imports in the former area and the heavy processing tax recently introduced in America, hamper and restrict trade in copra. The American legislation may divert a large part of the enormous Philippine supplies to European and other markets.

Of the total world exports, about 40 per cent. is derived from the British Empire. In view of this fact, it is suggested that representations be made aksing for preference and protection of Empire copra and coconut oil against the three serious competitors of coconut oil, which are wholly or in considerable part produced from foreign sources of supply, namely: soya beans, whale oil and cotton seed, which are at present admitted to the United Kingdom duty free.

It is suggested that the Imperial Government might consider the possibility of requiring that a fixed minimum percentage of coconut oil must be included in margarine produced and/or sold in the United Kingdom. Further, it is suggested that the Imperial Government should be invited to negotiate for the inclusion of British Empire coconut oil in the quotas for importation of vegetable oils and fats which have been established in various countries.