# II. FISHERIES BY-PRODUCTS

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#### 1. Fish Liver Oil

The manufacture of a medicinal oil containing Vitamin A was started using shark livers only. Research showed that livers of other fish also contained high levels of Vitamin A but shark livers were more economical to process as the livers were of larger size (5%) of the shark compared to 1-2% in other fish) and the amount of oil was much higher (40%) in shark liver, under 10% in other livers). However, in view of their Vitamin A content it was found feasible to bring back for processing livers of all large fish whenever the amount of shark liver obtained was below the handling capacity of the plant.

### 2. Dried Fish

This is of two types:

- (a) Condiment type. This is a product with strong flavours to be used in limited quantities. Maldive Fish, Jardi and much of our local dried fish are of this type. There is a demand for this type of product which must be met by local manufacture, but in my opinion, the use of fish as a condiment need not be encouraged as we have an abundance of vegetable spices as substitutes. We can probably learn to do without maldive fish as we now do without "diyahakuru" another fish condiment from the Maldives.
- (b) Food type. This is a product salted and dried without fermentation. Local processing methods are crude so that fermentation flavours develop and change the product towards the condiment type. A method of preparing unfermented dried fish was worked out and a rough marketing test showed that as this dried fish was different from the usual market varieties, it had to be accepted on its own merits as a new product. I suggest that the Corporation manufactures and markets unfermented, hygienically prepared dried fish for use as a direct substitute for iced or frozen fish. Conversion into dried fish can be recommended for varieties of fish which are unpopular when fresh but acceptable in dried form and also in areas where icing and freezing facilities are inadequate or not available.

## 3. Seaweeds

One variety of red seaweeds (Kanji parsi) is well-known as a foodstuff in Ceylon as it contains agar which is used as a jelly. Research on this weed revealed the presence of extensive beds off the east coast and an export trade with Japan was established for this seaweed. A simple process of extracting crude agar was also worked out so that its local manufacture could be encouraged. Brown seaweeds contain alginic acid and have a wide variety of industrial uses. The extent and quality of our brown seaweeds are presently being investigated to assess their commercial possibilities.

#### III. THE ROLE OF TECHNOLOGY IN FISHERIES DEVELOPMENT IN CEYLON

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As an industry, Fisheries of Ceylon is unique in that it has received more attention from foreign experts than any other in the island. Hora and Pilla pointed out in 1955 that "Very few countries have had the benefit of advice from so many specialists in planning the development of fisheries as