

The total value of the produce of the Dominion's fisheries for the year thus amounts to £497,004.

Unfortunately, we are still without the means of obtaining fishery statistics in a systematic and comprehensive manner, and it is to be observed that the returns which reach this office vary considerably in their approximation to accuracy. By issuing log-books to individual skippers and by obtaining records from fishing-vessel owners or fish depots and markets endeavours have been made to supplement and to check the information derived from the annual returns of local Inspectors. The facts provided by such data afford the only material evidence upon fishery conditions which we can acquire, and those records have already proved to be extremely useful to us in considering various fishery problems. For this reason a great deal of time and attention, which could ill be spared from other duties, has been devoted to tabulating and summarizing material of this nature. Being heterogeneous, it is difficult to digest into departmental records. For the same reason, and because it is special and more or less confidential, it is not suitable for publication. We can only make the best use of opportunities for obtaining it, though compared with systematically collected statistics it is like catching rain-water in buckets instead of using a properly engineered water-supply system.

That a uniform system of collecting and collating fishery statistics is an urgent need will be appreciated fully if one endeavours to learn anything from the figures published as statistics in the Annual Reports of the Marine Department for the last fifteen years. We require to know, and to place on record for the guidance of future administration, the following facts with regard to the fisheries :—

- (1) The approximate quantity of each of the more important kinds of fish landed each year for the principal ports :
- (2) The variations in production in different seasons and different regions :
- (3) The quantities of fish caught by each of the principal methods of fishing.

This information can only be obtained by the total abolition of our existing plan of collecting annual returns, and replacing it with a method of collecting more frequent and more detailed statistics. This will call for more work on the part of our representatives at the ports, whose present exiguous pay should therefore be increased. It will also provide work for an extra statistical clerk at headquarters. In a year when retrenchment and economy are necessary I should not urge this development but for the fact that it has already been too long delayed and that the work is such that being deferred its fruits are lost for ever.

Possibly the conditions in New Zealand, with its varied methods of landing and distributing fish and its scattered sources of supply, are somewhat difficult to square with a uniform system of fishery returns. In some places the best source of information would be the buyer who purchases the fish when first landed. I was at first inclined to advocate this method of obtaining data, which is the system used in California ; but on further consideration it would appear most satisfactory to require simple returns of the kinds, quantities, and value of the fish landed, and the method of fishing, from each licensed fishing-vessel owner (or skipper) and to collect such returns monthly. Proposals to give effect to such a scheme have been submitted. The Minister of Marine has power under the Fishery Act of 1908 to make regulations compelling fishing-vessel owners (but not fish-buyers) to make such returns. I am quite confident that resort to penal measures will be unnecessary or will play a very small part in the scheme in practice. The information is necessary for that proper understanding of the fisheries which is required for their rational administration and, indeed, for their rational development, both of which are essential to the well-being of the fisheries and those engaged in the industry. There will be difficulties to overcome before the scheme can work smoothly and efficiently. The principal condition for success is an attitude of mutual helpfulness between those working in the industry and those working for the administration. Generally speaking, I believe this attitude exists, although usually the occasions for intercourse between fishermen and Fishery Inspectors are limited to those connected with the enforcement of regulations. The scheme for the collection of statistics would facilitate and increase opportunities for intercourse between fishermen and officials to the benefit of the industry and the Department.

The interest and value of a statistical record of fishery production is not, however, confined to the administrative point of view, which is concerned mainly with measures for conservation. It has a very real value for those interested in industrial developments. Very few people will be inclined to invest capital in a concern unless they are provided with data which give them information as to its probable productivity. Mining operations are organized on the basis of surveys and assays ; agricultural undertakings with careful regard to the yield per acre. But who knows anything about the yield per unit area of the fishing-grounds of New Zealand ? Accounts and pictures of occasional big catches tickle the idle fancy of the newspaper reader, but the person who is interested in a business sense demands averages. The fluctuations in a fishery are the most intriguing and embarrassing of all the difficult problems associated with the industry, and their significance can only be appreciated as elucidated by statistical treatment.

I may conclude these remarks by referring to actual cases showing how enterprise has been foiled and impeded by the lack of statistical information. The question of establishing a fish-reduction plant for the purpose of making fish-meal and oil from offal at a certain port is raised. What capital will be required ? It depends on the size of the plant, and this depends upon the quantity and the frequency of the landings of fish. Not having the necessary statistical data for reference, the question is left in the air, and the enterprise thwarted. The same difficulty is encountered in discussing projects for the better preservation of fish. The question of improved systems of transport similarly turns upon consideration of quantities to be handled. Without the fundamental data no organized scheme is possible, and the trader struggles along on the narrow and out-of-date lines of individualistic industry.