

large increase in the population of our towns and cities has caused a very large increase in the demand for fish, and I think it is quite correct to say that at the present time the demand for fish by our own people exceeds the average supply coming forward; so that if for no other reason than the interests of the people's food-supply, it is imperative that a great deal more attention should be given to the development of the fisheries. Up to the present New Zealand's fishing industry has not been given anything like the attention its importance demands. As one of the most important food-supplies for its people, as a source of employment, and as an industry capable of developing an important export trade it deserves being given a more important place than some departments on which large sums have been and are being spent; and I would strongly urge that its development should now be taken in hand vigorously, scientifically, and practically, and for this purpose I beg to make the following recommendations, viz. :—

1. That the fisheries of this Dominion (sea and fresh water) be administered by a department to be called "The Fisheries Department."
2. That the coastal waters out to 100 fathoms be scientifically prospected *section by section*; the Government to purchase a properly constructed and equipped vessel for this work.
3. That the Government encourage practical fishermen to engage in fishing by advancing money for the purchase of suitable boats, and by supplying professional fishermen with benzene and lubricating-oil at cost price, plus transport and working expenses.
4. That in any isolated locality where an extensive and prolific fishery exists the Government should erect, or assist in the erection and maintenance of a fish-freezing and oil and fish fertilizer manufacturing plant.
5. That a bonus be given for the manufacture of fish fertilizer of a standard quality, and for the production of fish-oils other than whale-oil.
6. That a bonus be given for the destruction of sharks, dogfish, and other enemies of the market fish on the regular fishing-grounds.
7. That every possible facility be given by the Government for the conveyance of fresh fish by the most suitable trains from the fishing-ports to the principal markets and inland.
8. That a proper system of collecting fishery statistics be adopted.
9. That fishermen be encouraged and assisted to use the most up-to-date methods of catching fish.
10. That the Government persevere with the introduction of the Atlantic salmon and also other useful fresh-water and sea fishes.
11. That a biological examination of our rivers and lakes be made by encouraging and assisting professors and students from the Universities to undertake a section each vacation, in order to acquire a knowledge of the biological conditions, with a view to the introduction of other species of fish or insects if considered advisable.

Taking these recommendations seriatim, I wish to give the following information with regard to each, viz. :—

1. The importance of the fisheries as an industry demands that they should be administered by a separate department, for I am convinced that no proper system of organization and development can be planned and put into effect as long as its affairs are mixed up with the business of another department. The staff, to begin with, need only be a modest one—at headquarters, a Secretary or Director, who would also be Chief Inspector, a clerk, and a typist would be sufficient. Three permanent Assistant Inspectors would be required for the North Island and three for the South Island. The services of police officers, and paid as at present, could be made use of at certain places if necessary.

2. The scientific prospecting of the coast *section by section* is the first, and one of if not the most important step which requires to be taken in connection with the development of our fisheries. It has always been made a strong feature of the good work carried out annually by the fishery authorities of England, Scotland, Ireland, Canada, the United States of America, South Africa, and now it is taken up vigorously by the Australian Commonwealth with most satisfactory results.

Properly carried out, it must be of the greatest assistance to the fishermen, showing him, as it does, where certain market fishes are to be found in payable quantities, the depth of water and character of bottom, &c., and thus saving him from much disappointment, loss of time, and expense in searching for new grounds.

It will take several years to accomplish this, and in order to carry it out satisfactorily, it will be necessary to get a vessel specially fitted for the work. I do not think it is possible to pick up a suitable vessel in this country, as all the small steamers are of too light draught. A vessel suitable for all kinds of exploration work, including deep-sea trawling, should be built on the lines of the largest trawlers now in use in England and Scotland—*i.e.*, about 160 ft. in length, beam in proportion, and of deep draught. It should be fitted with a refrigerator, insulated chambers for storing market fish, storage-room for specimens, &c., laboratory room, and suitable accommodation for the scientific director and officer in charge of the expedition, and should be equipped for trawling, long-lining, &c., and all the outfit necessary for exploration work. A vessel specially built of the dimensions stated would probably cost about £12,000, but I think it is possible, at some of the large trawling-ports in England to buy a second-hand vessel of suitable dimensions for considerably less than that amount, and the inside arrangements could be altered to suit the work she was required for.

The vessel should be employed six or eight months during spring, summer, and autumn each year scientifically and practically exploring a section of the coast, and during the winter season, when market fish is scarce, she could fish for market over the section tested that year, and thus demonstrate practically in the winter season the value of each section as a payable fishing-ground, and also demonstrate the possibility of a vessel of this class catching fish at this season in payable quantities. By working in this way each section of the coast would in time be scientifically and also practically tested