

REPORT OF THE SECRETARY OF AGRICULTURE, INDUSTRIES, AND COMMERCE FOR THE YEAR ENDED 31st MARCH, 1917.

Wellington, 4th August, 1917.

The Hon. Ministers of Agriculture and of Industries and Commerce.

I BEG to submit the annual reports of the following officers of the Department for the year ended 31st March, 1917: The Director of the Live-stock Division; the Director of the Fields Division; the Director of the Horticulture Division; the Director of the Dairy Division; the Chemist; and the Biologist. These documents give an excellent review of the work for the year, and are of such reasonable brevity as to render a *résumé* by me unnecessary. I shall therefore limit my own report to a few matters that seem to me of outstanding importance or significance. As usual these will be confined more or less to the Department's own operations, on the understanding that more general questions affecting our agriculture, industries, and commerce will be referred to in the Ministerial statement.

The war-pressure has, of course, affected our work very materially, especially as the number of officers on active service has steadily increased; but thanks to the self-denying efforts of the staff almost all the work has, with some assistance from temporary officers, been kept going efficiently. In these circumstances it would be unreasonable to expect much in the way of new developments, but nevertheless some notable changes have been initiated during the year.

WERAROA CENTRAL DEVELOPMENT FARM AND ALLIED MATTERS.

The most important of these changes is the conversion of Weraroa Experimental Farm into a Central Development Farm for the Dominion. It is intended to carry on at that institution the principal research and experimental work of the Department, mainly in connection with pasture-formation, field-cropping, and sheep and dairy husbandry for the present at least, and to diffuse from this centre, through the other experimental farms and the instructional officers of the Fields Division, to farmers throughout the Dominion the benefit of the results of such researches and experiments as are brought to a successful conclusion. It is further proposed to carry on at the Central Development Farm the training of a number of young men of good general education for instructional positions in this Department or under the Education Boards, and for research work. The principal feature of this training will consist in giving the students full opportunity for working in the field or laboratory in conjunction with the resident or visiting officers engaged in research or experimental operations. There will also be definite series of lectures by the officers, and the students will, of course, be grounded in the ordinary farming practices. It is expected that young men, after completing a course at Weraroa and gaining a few years' actual experience in instructional work under suitable oversight, will be fitted to take an active part in guiding aright the agricultural development of whatever part of the Dominion they may be located in. To provide a suitable staff for the Central Development Farm the headquarters of the Fields Division, and the whole of the Biology Section, of the Department have been transferred to Weraroa.

As already indicated, the activities at the Central Development Farm will in the meantime be mainly in connection with pastures, field crops, and dairy and sheep husbandry, and will therefore provide a training specially suitable for officers of the Fields and Live-stock Divisions; but as there is at present no specific provision for training in veterinary science, the higher branches of dairy factory and laboratory work, or advanced horticulture, it will be seen that if the training of scientific officers for veterinary work, or for dairy factory or horticultural instruction, is to be undertaken in New Zealand further provision will have to be made, either by extending the scope of the Central Development Farm or by establishing separate institutions. While a certain amount of economy during the earlier stages of training would result from having all these branches combined at the Central Development Farm, I consider that on the whole it would be better to train officers for these branches entirely separately.

For veterinary work the best arrangement will no doubt be to institute a special veterinary school, probably in connection with the medical and dental schools at the Otago University. Failing this we must continue to draw our veterinarians from veterinary schools beyond the Dominion, whose courses naturally have no particular bearing upon New Zealand conditions, and whose graduates will therefore require some years of experience in this Dominion before reaching their full degree of usefulness.

The training of Dairy Instructors could probably be best arranged for by drafting sufficient students from the Central Development Farm into the service of some of the best-equipped dairy factories, and when they had had sufficient training in actual dairy-factory work giving them a course at a special dairy laboratory to be established at the Central Development Farm or elsewhere.

Horticultural experts should, I think, be provided for by the establishment of a central horticultural station on similar lines to the Central Development Farm, but with orcharding, market-gardening, and apiculture as its objects.

In the case of each of these institutions students should undergo a preliminary science training of, say, two sessions at a University college.

It will be observed that these proposals would make provision for the training of experts in most of the principal branches of agriculture suitable for New Zealand, but that the course would be too long and too expensive—either to the Government or to the student—in the case