## REPORT OF THE ACTING DIRECTOR-GENERAL.

Wellington, 15th July, 1938.

THE HON. THE MINISTER OF AGRICULTURE,-

Herewith is appended the annual report of the Department of Agriculture, describing in detail the various activities carried out during the financial year ended 31st March, 1938. These activities have again shown an increase, and in many directions gratifying achievements have been recorded, but there are some features about our agricultural and pastoral industries which call for greater investigational and advisory services if the progress in the utilization of our land resources is to be efficiently maintained. In this report it is proposed to deal with some of the salient problems confronting us.

The discovery in 1882 that dairy produce and meat could be successfully shipped to the consuming markets of the world in a frozen state shaped the destiny of New Zealand farming. The Dominion became a producer and an exporter of an ever-increasing volume of animal products. Perhaps in no other country have soil and climate been more tractable to the industry of man, and since the door of opportunity was opened by refrigeration the development of live-stock farming has been phenomenal. However, we have now reached a stage in intensification when the increases in our live-stock production have raised problems of animal husbandry which must receive greater attention than has been paid to them in the past. The losses in our flocks and herds are too serious to be disregarded.

Up to 1900 the main feature of land-development in New Zealand was extensive settlement on large holdings and farming on an extensive scale, but with the turn of the century an increasing demand for land became apparent with a corresponding intensification of farming practice. With the development of the dairy industry there was a general trend towards the subdivision of Crown lands and large private holdings into family farms. This movement was accelerated by the graduated land-tax and a liberal supply of capital from the State to intending The war brought a quiescent period, but immediately after the cessation of hostilities there was a pressing demand for land at inflated values. The pressure of financial commitments, both private and public, necessitated increased production. Despite a certain amount of migration, labour continued to be scarce. This factor stimulated the demand for labour-saving Rapid development of pasture-production, through the sowing of superior strains of grasses and clovers, the more enlightened use of artificial fertilizers, and the improvement of live-stock from the production angle all contributed towards an expansion of production. Substantial areas of our farm lands deteriorated through mismanagement, inadequate resources for development, or overwhelming financial commitments, but advances in farming technique raised the carrying-capacity of the remaining areas, and up to the present the losses through land going out of production have been more than offset by increased efficiency in the exploitation of farms on which the fertility of the soil as a producer of pasture has not been impaired.

The following table, showing the totals of stock, the areas occupied, and the area under grass in New Zealand at the opening of the present century, the first post-war year, and 1936–37 (the latest figures available), illustrate strikingly the increases in the stock-carrying capacity of New Zealand pastures:—

Season,			Total Cows in Milk or Dry at 31st January.	Total Cattle at 31st January.	Total Sheep and Lambs at 30th April.	Breeding-ewes at 30th April.	Total Area occupied.	Total Area in Grass (Smoothed Estimate), sown, Native or Tussock,
1901-02 1919-20 1936-37		••	$\begin{array}{c} 381,491 \\ 903,454 \\ 1,805,405 \end{array}$	1,361,784 3,139,223 4,389,101	20,342,727 $23,919,970$ $31,305,818$	$9,610,149 \\ 11,569,675 \\ 19,332,077$	35,507,889 43,473,079 43,199,893	28,412,100 30,813,300 31,697,600

Note.—Before 1914–15 the tussock and native grass areas were included in the total unproductive area, and the estimation for 1901–2 has been obtained by taking "straight-line" trend back to that date.