

MINISTER'S STATEMENT

THE continuation of the war has necessitated the maintenance of the Department's interests on matters directly relating to its prosecution and to the war economy of the Dominion's industries. The soundness of the development undertaken in previous years has been amply demonstrated by the continued help which the Dominion Laboratory, the Dominion Physical Laboratory, the Radio Development Laboratory, the Laboratories established in association with Auckland University and Canterbury University Colleges, have rendered to all branches of the fighting Services and to the production of munitions. Though with the recession of the Pacific front away from New Zealand the urgency of these needs has lessened, nevertheless all these sections of the Department still continue to render very valuable service towards the successful prosecution of the war. Opportunity has been taken also to test out the efficacy of this co-ordinated organization in handling certain manufacturing problems which will be of importance in the peacetime development of New Zealand industries.

Increased attention has been paid to food problems in view of the very serious situation which is developing on a world-wide scale. The range of the Department's activities enable it to render useful services in this direction. Its Soil Survey Division has during the year devoted attention to soil-fertility problems, and has produced maps showing where this is being reduced through erosion. The Grasslands Division has evolved new strains of grasses and clovers, and investigated how these may be grazed or otherwise utilized to effect maximum production. The Agronomy Division has produced improved grain, pulse, and fodder crops. The Plant Diseases and Entomology Divisions have played important roles in reducing losses through the ravages of plant pests. The Wheat Research Institute and the Dairy Research Institute have devised means for the better processing and the improvement of the quality of grain and dairy products. The Dominion Laboratory and the Plant Chemistry Laboratory have given valuable scientific assistance to the vegetable and fruit dehydration plants towards providing a product possessed of high nutritive value for use by the Forces. As yet only the fringe of the food problem has been touched. The war and the post-war problems of food, the relation of food to health and nutrition, must be live interests of research in such an important food-producing country as is New Zealand.

Steady progress has been made in research work relating to all New Zealand's three main fibres—wool, linen flax, and phormium. The successful introduction of a dry chlorination non-shrinking process will henceforth enable our woollen-mills to improve markedly the quality of their woollen goods. Machinery has been designed and tested which will enable linen-flax tow to be better prepared for manufacture.

Much work has been accomplished and is being pushed forward now as rapidly as possible on surveys and tests of all readily accessible supplies of coal, both on the West Coast and in the Auckland province. Considerable progress has also been made in surveys and tests of clay deposits which are being utilized to a much greater extent in the growing brick, tile, and pottery industry.

In view of both its immediate and post-war importance, much attention is being devoted to building research problems, and three officers of the Department have been sent overseas in order that the best possible information of the latest overseas developments may be available for New Zealand. An important achievement during the year was the devising of a cheap and ready method for controlling the development of moulds which disfigured seriously the plaster lining material of many houses.

The Department has continued to develop its policy of fullest collaboration with all State Departments in projects which have required scientific assistance. By the appointment of scientific liaison officers in Australia and the United States of America during the year it has been possible to establish closer connections between these countries and the Dominion. The Scientific Liaison staff in London has continued to render excellent service which has enabled the Dominion to be kept fully abreast of scientific progress in both the civil and the defence spheres in Great Britain.

I desire to express to the staff of all branches of the Department my appreciation of the good services they have rendered in carrying out the heavy responsibilities which they have been required to undertake during the year.

D. G. SULLIVAN,
Minister in Charge of Scientific and Industrial Research Department.