

other larger districts in which the results seem likely to prove of even greater benefit. The soil and land utilization researches have pointed the way to greatly increased carrying capacity in one province in which they are at present concentrated, but, which is perhaps more important in the long run, the soil studies generally have led to more exact diagnosis of the processes involved in land deterioration and erosion. With such diagnosis the remedy is made easier and more economic.

In meteorology the foundations have been completed during the year for a service which will function adequately for the rigorous requirements of the rapid development of commercial aviation.

In plant research fundamental experiments and tests have been made for the building-up of a linen flax industry, while studies have been made in many general directions in relation to plant breeding and disease control. In dairy research great headway has been made on the problems of openness of cheese and cheese ripening and flavour.

Geological survey work during the year has led to some valuable generalizations regarding the occurrence of gold-bearing lodes in the Reefton district, while geophysical work has simplified our knowledge of structures possibly associated with oil in three districts.

In regard to seismology, important results have accrued from work during the year in the tracing of earthquake epicentres, and the data which are being assembled in regard to seismic activity in the Dominion are proving of considerable assistance in framing building by-laws and in connection with standards for building-materials.

In the Dominion Laboratory varied experiments are in progress—for example, those dealing with the gas-storage of apples, the curing of lemons, and the pulping of flax.

At the Wheat Research Institute an important advance has been made in the study of natural bread improvers.

Many other cases could be cited, but I quote these examples to show the nature of the progress made.

In my statement accompanying last year's report I emphasized the importance which I attached to the vigorous development and adoption of industrial and commodity standards in order to help in attaining maximum efficiency and productive output in our industries. It is clear that the sane application of the principles of standardization to our industrial and economic life is eminently desirable in that they should assist in securing a maximum return of goods and services from a minimum expenditure of effort, and should thus raise the standard of life of the people of New Zealand by conserving the buying powers of the consumer. The recognition of the fundamental importance of standards in relation to industrial development, particularly throughout this century, in almost every country of the world confirms this claim.

The progress made by the Standards Institute in the adoption and promulgation of standards has been most gratifying, especially in view of the short period in which it has been in effective operation. A large number of committees and sub-committees have been set up, and a very wide range of projects has been dealt with. The good will and active co-operation of the various interests to whom draft specifications have been sent for comment have greatly facilitated the work of the Institute.

To turn now to the social use and implications of scientific progress, it has come to be recognized that all changes in the material equipment of a country, in systems of production and distribution, have social implications of great importance. In a purely individualistic world the people affected by these changes would be left to take care of themselves; but twentieth-century opinion shrinks from such a view, and it is the task of the legislator to endeavour to anticipate and make provision for the consequences of the inevitable social changes which spring from scientific and economic progress. The demand for fundamental inquiries into the conditions of social life has come only with the progress of civilization. This demand has been stimulated in no small measure by the contributions which have already been made by researches in the fields of economics, political science, sociology, psychology, and education. That the future will