

Up to Dec. 31, 1948 (which period covers the first forty-six months of operation of this Act), 69,818 loans were made for a total of \$60,754,259.93. During this period of operations under the Act there have been no claims for losses. Particulars of loans by provinces are:—

<i>Province</i>	<i>No.</i>	<i>Amount</i>
		\$
Alberta.....	25,562	21,810,811.12
Saskatchewan.....	23,633	20,944,378.75
Manitoba.....	10,704	8,985,696.83
Ontario.....	6,332	5,998,770.96
British Columbia.....	1,828	1,601,957.81
Quebec.....	1,188	952,330.68
Nova Scotia.....	259	197,669.54
New Brunswick.....	209	192,966.04
Prince Edward Island.....	103	69,678.20
TOTALS.....	69,818	60,754,259.93

Research and Experimentation

In its efforts to aid the farmer in the solution of his problems, the Department of Agriculture conducts, on a broad scale, scientific research and experimentation on the control of pests and diseases, the nutritional requirements of plants and animals, the microbiology of soils and foods, the breeding and testing of new varieties of plants and animals, investigations of crop production and cultural methods and many other matters. The two main divisions of the Department that carry on such work are Science Service and Experimental Farms Service.

Science Service.—The work of Science Service is directed toward the solution of practical problems of agriculture through the application of scientific investigation. The work is carried on in co-operation with other agencies within and without the Department, not only at the central laboratories at Ottawa, but at branch laboratories all across the country.

Many studies are being carried on in the field of animal pathology. Among the more important are a comprehensive investigation of the antigenicity of tuberculin and a fundamental investigation of the reactivity of fowl to various invading agents, with a view to perfecting diagnostic procedures. Bang's disease and mastitis of cattle are being investigated, while with poultry major attention is focused on pullorum disease and coccidiosis.

The research work of the Division of Bacteriology and Dairy Research is devoted to problems of milk production and the manufacture of dairy products, food processing and preservation, soil fertility, and to other varied problems of agricultural production bearing on the science of microbiology.

Dairy research includes studies in improved methods for clean milk production and the evaluation of milk quality. Projects in cheese investigation deal with better control of the manufacturing process, and the cause and remedy of defects of flavour and texture in Cheddar cheese. Methods for improving the keeping quality of butter are also under study.

Studies in food microbiology are directed towards improvement in quality of Canadian fruit and vegetables preserved by different methods, with special attention to frozen-pack products. Improvement in production and in control methods for dried-egg products are under study.