

There are two broad aims behind this legislation, the first of which is the improvement and development of farms. Loans are made to enable a farmer to equip his farm with modern, labour-saving equipment, more and better live stock, and to make such other improvements necessary to maximum farm production. The second is the improvement of living conditions on farms. These loans enable the farmer to provide his home with electrification, refrigeration, heating systems, water systems, and all those things that make for comfort and convenience in living and do much to eliminate the drudgery of the farm housewife.

There are seven classes of Farm Improvement Loans: (1) purchase of agricultural implements; (2) purchase of live stock; (3) purchase of agricultural equipment or installation of a farm electrical system; (4) alteration or improvement of a farm electrical system; (5) fencing or drainage; (6) construction, repair or alteration of, or addition to, farm buildings; (7) general improvement or development of the farm.

Up to Dec. 31, 1947 (which period covers the first thirty-four months of operation of this Act), 39,387 loans were made for a total of \$31,423,129.23. Particulars of loans by provinces are:—

<u>Province</u>	<u>No.</u>	<u>Amount</u>
		\$    cts.
Alberta.....	14,600	11,176,435.47
Saskatchewan.....	12,908	10,438,919.84
Manitoba.....	5,916	4,453,351.46
Ontario.....	3,905	3,738,720.44
British Columbia.....	1,063	854,634.54
Quebec.....	658	504,971.56
Nova Scotia.....	169	125,053.71
New Brunswick.....	126	107,370.71
Prince Edward Island.....	42	23,671.50

## 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 micro-biology 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 System.

**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 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.