

Federal Agricultural Research Organization.—CDA research activities are undertaken mainly by the Research Branch at some sixty centres across the country, although important contributions are also made by the Economics Branch, the Health of Animals Branch and the Grain Research Laboratory operated by the Board of Grain Commissioners for Canada. About 1,000 research workers are employed by the Department and their specialties run the gamut of scientific agriculture from genetics to engineering.

The bulk of the research is directed from *Research Branch* executive headquarters at the Central Experimental Farm in Ottawa. Also located there are the statistical, engineering and analytical chemistry research services, together with six of the eight institutes for research on animals, food, entomology, microbiology, plants, soils, biological control, and pesticides. Throughout the ten provinces there are 13 research stations, 27 experimental farms, a laboratory and a number of substations.

Originally, the main task of the experimental farms was to determine the potential of the various combinations of soil and climate for producing crops and maintaining livestock, and to develop and test varieties, breeds and management practices suitable for each area. Today's federal research program continues with this early work but is designed to meet new problems, including tailoring agricultural products to meet the specific needs of domestic and export markets. The accent is on promoting greater efficiency in production and diversification of cropping practices.

Research and advisory services on economic matters affecting agriculture are performed by the *Economics Branch* with the object of increasing efficiency in agricultural production and marketing and of facilitating the adjustment of farming operations to changing situations and thereby improving farm income and living conditions. Research is undertaken to assist farmers in the management of their farms and to provide information for use by the government in the development of agricultural policies. With respect to farm production, studies are carried out on the use and management of land, water, human and capital resources in agriculture, on the financing of farming operations, agricultural insurance, agricultural adjustments, farm income and expenditures, and farm efficiency. In the marketing and trade area, studies are undertaken to increase marketing efficiency, to improve agriculture's position in international trade and to assist in carrying out the agricultural stabilization program. Such studies include short-term and long-term forecasts of demand and supply, market structure and potential and alternative trading arrangements.

The Animal Pathology Division of the *Health of Animals Branch* consists of the Animal Diseases Research Institute at Hull, Que., the Animal Diseases Research Institute (Western) at Lethbridge, Alta., and seven branch laboratories. The Division conducts research and investigations on infectious diseases of animals and produces such products as tuberculin, johnin and mallein, *Brucella abortus* antigen, for the use of the Health of Animals Branch in the control and elimination of tuberculosis, brucellosis, etc. The Division provides a diagnostic service to the other Divisions of the Branch and to the livestock industry in general, and conducts a training program for departmental officers and veterinarians from other lands.

Division research is, in the main, for findings that can be applied in the control and elimination of disease, for example, the development of precise and rapid diagnosis. Tests have been developed that enable the Division to diagnose hog cholera within a matter of a few hours after receiving specimens, thus permitting the immediate implementation of control measures. This is a far cry from older methods that took from seven to 14 days and sometimes as long as a month. In addition, the diagnostic service facilitates the export of livestock to other countries; to satisfy the health requirements of countries trading with Canada, the laboratories test for brucellosis, leptospirosis (as many as 12 serotypes), vibriosis, trichomoniasis and other infectious diseases. Imported animals are also tested for the presence of infectious diseases. Another service of importance to the livestock