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Agriculture has made outstanding advances in the past quarter-century in increasing output per man. This has been made possible through farm mechanization on a large scale. To assist this advance, the Research Branch has expanded its agricultural engineering staff to deal with specific problems and to provide more liaison with universities and provincial extension officers. The Branch conducts a continuing soil survey in all provinces in co-operation with provincial departments of agriculture and with faculties of agriculture in universities; it also conducts an extensive program of research on soil fertility and cultural practices, with a view to using agricultural soils most effectively and conserving them for the future.

In addition to research done by Branch staff, considerable co-operative work is undertaken with staff of university faculties and provincial governments. Through operating and extramural grants, support is given to research workers at universities. Close liaison is maintained with these agencies to avoid unnecessary duplication of programs and special attention is given to maintaining contact with provincial extension officers. Branch establishments across the country are represented on provincial committees concerned with making recommendations on crop varieties, fertilizers, cultural practices, pest control, animal management, and other problems. Such collaboration ensures that research results are made available to extension officers and to producers as quickly as possible.

The Production and Marketing Branch conducts many of the promotional and regulatory functions of the Department. Six specialized divisions administer legislation and policies in the production and marketing of livestock, poultry, fruits and vegetables, dairy and plant

products, and policies concerned with the control of disease in plants.

The Livestock Division administers legislation dealing with the grading of meat, wool and fur, with the registration of livestock pedigrees, with performance testing of cattle and hogs and with the supervision of race-track betting. Other activities include the promotion of livestock improvement and the compilation of market statistics. The Poultry Division carries out the policies of the national poultry breeding program, including Record of Performance for poultry, and hatchery inspection, as well as administering the regulations for the grading of poultry products. The Fruit and Vegetable Division administers legislation having to do with the grading of fruit and vegetables in both fresh and processed form, maple products and honey; it is also responsible for the licensing of interprovincial and international dealers and brokers who deal in fresh fruit and vegetables.

The Dairy Division administers legislation covering grades and standards for dairy products, including butter, cheese, concentrated milk products and ice cream. The Plant Products Division administers Acts and Regulations respecting seeds, feeds, fertilizers and pest-control products, conducts field inspections of seeds and maintains regional testing laboratories for agricultural product samples taken by Branch inspectors. The Plant Protection Division is responsible, under the Destructive Insect and Pest Act, for safeguarding against the introduction of serious plant insects or diseases into Canada or their spread in Canada, for certifying freedom from disease and pests in plant exports, and for seed potato certification. Other organizational units include the Grains Division, responsible for cereal grains and

special crops, and the Marketing and Food Advisory services.

The Health of Animals Branch administers the Animal Contagious Diseases Act, the Meat Inspection Act and the Humane Slaughter of Food Animals Act, and operates laboratories for the study of animal diseases. It is composed of four Divisions: Contagious Diseases, Meat Inspection, Animal Pathology, and Education and Development. The Contagious Diseases Division controls contagious diseases of animals through preventive measures of inspection and quarantine of imported livestock and restricted commodities such as meat, farm products and other possible sources of infection; through conducting disease eradication programs, notably of bovine tuberculosis, brucellosis and Johne's disease; through the control and eradication of serious animal diseases, such as Newcastle disease, hog cholera, rabies and anthrax when outbreaks occur; and through inspection and certification as to health of livestock for export. The Meat Inspection Division conducts antemortem examinations; ensures the application of strict humane slaughter regulations for all food animals; conducts continuous postmortem examinations of animals slaughtered at packing plants operating under the Meat Inspection Act; and ensures maintenance of sanitary standards during processing of the products, accurate labelling, and the proper kind and use of ingredients and preservatives, in order that only wholesome, unadulterated meats and meat food products will be marketed.