PUBLICATION 1262

630.4 C212 P 1262 1981 OOAg c.3

griculture anada

THE REAL PROPERTY OF THE PROPERTY OF THE PARTY OF THE PAR

guide fo federal agricultural services

PUBLICATION 1262



PUBLICATION 1262, available from Information Services, Agriculture Canada, Ottawa K1A 0C7

©Minister of Supply and Services Canada 1981 Cat. No. A15-1262/1981E ISBN: 0-662-11530-9 Printed 1967 Revised 1981 10M-6:81

Aussi disponible en français

This publication outlines the agricultural services of the federal government, as well as those provided jointly with the provinces.

Several federal departments and agencies have services for farmers and others working in agriculture, but by far the largest number of services are provided by Agriculture Canada through its various branches, divisions and special administrations.

Although provincial and federal governments share in administering some agricultural services, the provinces also have their own programs affecting, for example, farm credit and farm management. Farmers, others concerned with agriculture, and homemakers will find that it pays to know about the services offered by their provinces as well as those available at the federal level. Provincial government and university extension personnel are good sources of information on both federal and provincial programs. Bank managers in rural areas are usually familiar with current terms and conditions of federal, provincial and other sources of credit for financing farm operations.

The services described in this guide are presented in alphabetical order under subject heading. The name of the department or agency to contact for more information is given at the end of each item. Where a service is provided by Agriculture Canada, the name of the branch concerned is also included. To find the addresses of departments and agencies, refer to the section *Where to Write for More Information*. Requests for information about federal agricultural services may also be sent to Information Services, Agriculture Canada, Ottawa.

CONTENTS		FARM CHEMICALS	
CONTENTS		Fertilizers	17
		Pesticides	
ADVANCES, SUBSIDIES AND		Pesticide residue compensation	17
GRANTS		FARM MANAGEMENT	
Advance payments for crops		Farm development program	18
Prairie grain advance payments Feed grain subsidies		FIELD CROPS	
Grants to fairs and	·	Feed grain storage assistance	18
exhibitions	7	Forage seed	
Grants to 4-H	8	Grain elevators	19
AGRICULTURAL ADJUSTMENT AN	ID	Grains Group	
SUPPORT PROGRAMS		Grain inspection and weighing Grain ships	
Agricultural products	8	Grain storage	20
Agricultural stabilization		Hay and straw	20
Dairy support	9	Seeds	
Western grain stabilization	9	Seed potatoes	21
AGRICULTURAL EMPLOYMENT		FRUITS AND VEGETABLES	
Hired help	10	Grading and inspection	21
Unemployment insurance	. 10	Storage construction	0.4
BUILDING PLANS		assistanceVegetable seeds	
Canada Plan Service	. 11	HEALTH OF ANIMALS	
CONSERVATION AND		Diagnostic and veterinary	
DEVELOPMENT		services	22
Agricultural development	. 11	Laboratories	
Prairie farm rehabilitation		Veterinary officers	
Soil surveys		Disease control and	0.0
CREDIT		eradication Bovine brucellosis	
		Hog cholera	22 23
Farm improvement loans		Rabies	
Farm mortgage loansFarm syndicate loans	13	Tuberculosis	
Home mortgage loans		Compulsory slaughter	23
Business development loans	13	Inspection of livestock and	0.0
CROP DEVELOPMENT		meat Livestock exports	
		Livestock exports	23
New Crop Development Fund	. 14	Meat exports and imports	24
CROP PROTECTION		Red meat slaughtering and	
Plant inspection and		processingStamping and labeling	24 24
quarantine			24
Crop insurance	. 14	LIVESTOCK	
DAIRY PRODUCTS		Beef cattle	
Grading and inspection	. 15	Grading Record of performance	25
EGGS AND POULTRY		Sires on loan	25
Grading and inspection	. 15	Dairy cattle	25
Hatcheries		Record of performance	25
Poultry stock evaluation		Sheep Grading	25 25
Food technology	_ 16	Wool grading	25
Poultry meat inspection	16	3	

Record of performance		RESEARCH	
Sires on loan Swine Grading Record of performance Sire loan Registration of livestock Canadian National Live Stock Records Livestock feeds	26 26 26 26 26 26 26	Research Branch, Ottawa Food Production and Inspection Branch, Ottawa Alberta British Columbia Manitoba New Brunswick Newfoundland Nova Scotia	_ 33 _ 34 _ 34 _ 39 _ 39
MARKETING		Ontario Prince Edward Island	_ 30
Agricultural Products Cooperative Marketing Act Agricultural Products Marketing		QuebecSaskatchewanSTATISTICS Agricultural statisticsGrain statisticsLivestock feed statisticsWEATHER INFORMATION Meteorological services for agricultureWHERE TO WRITE FOR MORE INFORMATION	3; 3; 3;
Consumer services Cooperatives advisory service Co-ops information Food and nutrition Foreign agricultural services Liaison service Trade services Grains Marketing agencies Market reports Stockyards administration	_ 28 _ 29 _ 29 _ 29 _ 29 _ 29 _ 29 _ 30 _ 30 _ 31		
PUBLIC INFORMATION SERVICES (AGRICULTURE CANADA)			

31

News media and public services;

publications_

ADVANCES, SUBSIDIES AND GRANTS

Advance payments for crops

The Advance Payments for Crops Act applies to all storable crops grown in Canada, except for wheat, oats and barley grown in the area covered by the Canadian Wheat Board. It provides eligible producer groups with guaranteed, interest-free loans to make advance payments to their members. The rate per unit of crop is set by Agriculture Canada after consultations with producer groups. The amount of an advance cannot exceed one half of the expected market price for the crop in that crop year. Each producer may receive an advance of up to \$15 000 each year. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Prairie grain advance payments

The Prairie Grain Advance Payments Act provides for interest-free cash advances to producers in western Canada for wheat, oats and barley stored on farms. Advances can also be made in special cases, for example, where grain remains unharvested over the winter. Advances, which are subject to quota acreage restrictions, are repaid by deductions from payments for subsequent deliveries of grain. Canadian Wheat Board.

Feed grain subsidies

The federal government assists in paying freight charges on grain shipped from the Prairie Provinces to eastern Canada and British Columbia for use exclusively as livestock and poultry feeds; on wheat and corn shipped from Ontario to the Atlantic Provinces; and on wheat shipped from Ontario to Quebec. Canadian Livestock Feed Board.

Grants to fairs and exhibitions

For the promotion of agricultural production and marketing, grants are provided to listed fairs and exhibitions for judges' fees, junior activities and permanent improvements, and for prizes in livestock classifications. The prize money assistance is given to

competitive beef and dairy cattle, sheep and swine shows held at listed exhibitions adopting the classifications offered by Agriculture Canada. This assistance is provided through reimbursement of up to 50% of the prize monies paid out under the prize-money schedules authorized by the Department. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Grants to 4-H

The National 4-H Council receives an annual federal grant to assist in its work of coordinating the Canadian 4-H program, which is designed to develop Canada's future food producers. In addition, contributions are made to the provincial treasuries to assist in the financing of local 4-H club work. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

AGRICULTURAL ADJUSTMENT AND SUPPORT PROGRAMS

Agricultural products

Under the Agricultural Products Board Act, the Board is empowered to buy, sell, or import agricultural products and to administer food contracts and other commodity operations. It may purchase and hold reserve stocks of agricultural products for later sale, emergency relief purposes in Canada, and food assistance programs abroad. **Agricultural Products Board.**

Agricultural stabilization

The aims of the Agricultural Stabilization Act are to stabilize prices of agricultural products to assist farmers to realize fair returns for their labor and investment, and to maintain a fair relationship between the prices received by farmers and the costs of the goods and services they buy. It assures price support for nine key commodities: cattle, hogs, sheep, industrial milk and cream, corn, soybeans, and oats and barley grown outside the Canadian Wheat Board area. Support prices for these commodities are set at a minimum of 90% of the previous 5-year average market returns, indexed for changes in the cash cost of

production. Other commodities may be designated for price support if the government deems it advisable. The Agricultural Stabilization Board may support prices by buying products outright, by making deficiency payments, or by making direct payments to producers at a fixed rate. **Agricultural Stabilization Board.**

Dairy support

The Canadian Dairy Commission is responsible for the federal support program for industrial milk and cream, and manufactured dairy products. There are four key parts to the Commission's operations: an offer-to-purchase program for creamery butter and skim milk powder; producer levies; market-sharing quotas; and direct subsidy payments. The purchase program stabilizes the market for manufactured dairy products and establishes a basic market value for industrial milk and cream. Costs incurred by the Commission in assisting export sales of dairy products are defrayed by a levy on producer returns from deliveries of milk and cream. The market-sharing quotas allotted to producers are designed to maintain a balance between production and market demand. Subsidy payments are made directly to producers of industrial milk and cream to supplement their market returns and reduce consumer prices for dairy products. Canadian Dairy Commission.

Western grain stabilization

This program, administered by the Department, is aimed at protecting net returns of prairie grain growers. Under the Western Grain Stabilization Program, producers contribute, on the basis of gross grain sales, to a special fund to which the federal government contributes two dollars for each dollar the producer pays in. In a year when the net cash flow from sales of prairie grains is less than the average net cash flow in the previous 5 years, a stabilization payment roughly equal to the difference is made from the fund. The program applies to producers of wheat, oats, barley, rye, flax, rapeseed and mustardseed. Agriculture Canada: Western Grain Stabilization Division, Farm Income Services Branch.

Hired help

A wide range of employment-related programs are provided by the Canada Employment and Immigration Commission through a network of 63 specialized agricultural employment service agencies, called Farm Labor Pools, and through its more than 400 Canada Employment Centers across Canada. The programs include employment counseling, purchase of training for workers who require upgrading in education or occupational skills, financial assistance for unemployed or underemployed workers to move to areas where they can find suitable employment, and a complete recruitment and placement service to assist workers in finding jobs and employers in obtaining suitable workers.

A number of farm-worker programs are conducted under federal-provincial agricultural employment development agreements. In addition, the Commission is responsible for arranging the movement of large numbers of workers for seasonal work and harvest operations, and arranging for a supply of experienced farm workers from other countries on a seasonal basis. During the peak of fruit, vegetable and tobacco harvesting, Canada Farm Labor Pools and Canada Employment Centers arrange for the placement of day workers. Canada Employment and Immigration Commission.

Unemployment insurance

A federally operated plan of unemployment insurance applies to most wage-earning employees in Canada, including farm workers. The plan is administered jointly by the Department of National Revenue, Taxation, and the Canada Employment and Immigration Commission. The former is responsible for determining whether a person is or was employed in insurable employment, and for collecting unemployment insurance premiums from workers and their employers. The Commission is responsible for payment of unemployment insurance benefits. Canada Employment and Immigration Commission.

Canada Plan Service

Federal and provincial agricultural engineers cooperate to produce building plans for a wide variety of farm uses. Leaflets describing the plans, and the plans themselves, are available only through provincial departments of agriculture. Agriculture Canada: Research Branch; Provincial Departments of Agriculture.

CONSERVATION AND DEVELOPMENT

Agricultural development

Agricultural development is supported by the Department of Regional Economic Expansion (DREE) under a number of federal-provincial General Development Agreements and under the Comprehensive Development Plan in Prince Edward Island. The programs are designed to selectively expand productivity in the agricultural sector and to improve employment opportunities. Assistance is provided for such activities as expansion and improvement of agricultural products and land base, technology transfer, farm management training, marketing, extension services and agricultural planning. In addition, the Regional Development Incentives Program provides for grants and loan guarantees to food-processing facilities. **Department of Regional Economic Expansion; Provincial Governments.**

Prairie farm rehabilitation

The Prairie Farm Rehabilitation Administration (PFRA) is primarily concerned with combating drought and soil erosion in the low-precipitation areas of Manitoba. Saskatchewan and Alberta. It assists in developing small water-storage and irrigation projects; and plans, surveys and constructs larger reservoirs. Irrigation works have changed thousands of acres of unproductive land into thriving farming areas. The PFRA tree nursery provides seedlings free (other than a small transportation charge) to prairie farmers for use in establishing shelterbelts (windbreaks). The agency has developed and now operates 89 nonprofit community pastures which accommodate more than 250 000 head of livestock annually. PFRA is also responsible for

engineering studies and supervision of construction for projects carried out under joint federal-provincial Agricultural Service Centers Agreements with Manitoba and Saskatchewan, which are designed to help eligible rural communities upgrade their water supply and waste disposal systems. **Department of Regional Economic Expansion.**

Soil surveys

The federal and provincial governments and agricultural colleges are jointly surveying and classifying our soil resources. The information obtained from this work forms the basis for soil management and land use programs. New and more-detailed survey information is being produced in important agricultural regions, and soils are rated for their capacity to produce field and pasture crops. The soil maps produced under this program are distributed by Agriculture Canada for the Department of the Environment. Agriculture Canada: Research Branch; Provincial Governments.

CREDIT

Farm improvement loans

Under the Farm Improvement Loans Act, farmers may obtain short- and intermediate-term credit to purchase agricultural implements and foundation livestock, and to finance a wide range of farm-improvement projects. The loans are made by designated lenders (including chartered banks) under a government guarantee of repayment. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Farm mortgage loans

Long-term mortgage loans are available to farmers through the Farm Credit Act administered by the Farm Credit Corporation. The objective of the Corporation is to assist competent farmers in obtaining long-term credit to develop economic farm units. The farm unit to be formed must show that it will be able to provide an income that will meet all operating and maintenance costs, yield an adequate living for the family, and pay off debts with interest within an appropriate term. Farm Credit Corporation.

Farm syndicate loans

Under the provisions of the Farm Syndicate Credit Act, the Corporation makes loans to syndicates for farm machinery, buildings and installed equipment that can be shared to mutual advantage. A farm syndicate is a group of three or more farmers, the majority of whom have farming as their principal occupation, who have signed an agreement acceptable to the Farm Credit Corporation for the purchase and use of machinery, equipment or buildings that can be used profitably by them in their farming operations. Cooperative farm associations and certain farming corporations may qualify as syndicates for loans without the members entering into a formal syndicate agreement. Farm Credit Corporation.

Home mortgage loans

The Canada Mortgage and Housing Corporation (CMHC) administers the National Housing Act and coordinates the activities of the federal government in housing. CMHC insures mortgage loans made by approved lenders for home ownership and may make direct loans to individual homeowners in areas where approved lenders are inactive. In addition to mortgage loans, the Corporation may make loans for the repair and rehabilitation of existing properties. Information on these programs is available from any CMHC office. Canada Mortgage and Housing Corporation.

Business development loans

A Crown corporation, the Federal Business Development Bank provides financing, usually in the form of mortgage loans, for new and existing agricultural enterprises whose owners require assistance for sound projects, but are unable to obtain the required financing elsewhere on reasonable terms and conditions. **Federal Business Development Bank.**

New Crop Development Fund

The purpose of the New Crop Development Fund is to promote greater diversification in crop production to broaden market opportunities. Through the Fund, financial assistance is available to the private sector for the development of new crops, varieties and production practices that show promise for Canadian agriculture. Eligible for assistance are developmental projects proposed by commercial organizations, industry and producer associations, universities, provincial agencies, and nonprofit groups incorporated in Canada. Contributions may range up to 50% of eligible costs for commercially or provincially sponsored proposals, but may be higher for proposals advanced by noncommercial organizations. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

CROP PROTECTION

Plant inspection and quarantine

To protect Canada's crops and forests, quarantine and treatment regulations are enforced to prevent the entry into, or the spread within, the country of exotic insect pests and diseases of plants. Plants and some plant products may be imported only after a permit has been obtained. Imports are inspected and treated when necessary. Where required by importing countries, plant material for export is examined, treated and certified in Canada. Flour mills that ship to foreign markets are inspected periodically to ensure they are free of insect infestations. Departmental experts also carry out field and nursery surveys and administer measures to prevent the spread of plant pests and diseases from one area of Canada to another. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Crop insurance

Crop insurance is designed to provide stability of income against loss of crops, by insuring crops against specified risks and by guaranteeing a certain level of production at a specified price. Under

the Crop Insurance Act, the federal government assists provinces in making all-risk crop insurance available to Canadian farmers. The federal government contributes financially to approved, provincially operated crop insurance plans that are developed in accordance with provisions of the Act and for which premium rates are established that are judged to be actuarially sound. The federal government makes a financial contribution to participating provinces of either 50% of the administrative costs plus 25% of the necessary premiums or, where the province pays all the administrative costs, 50% of the necessary premiums. In addition, the risk is shared by way of loans or reinsurance whenever indemnities greatly exceed premiums and reserves. Farmer participation is voluntary but it is considered desirable to have at least 25% of the eligible farmers insured in an area to continue the program. Agriculture Canada: Crop Insurance Division, Farm Income Services Branch; Provincial Crop Insurance Agencies.

DAIRY PRODUCTS

Grading and inspection

Agriculture Canada is responsible for ensuring that grade standards for creamery butter and dry skimmed milk are applied uniformly across Canada. It also inspects these and other manufactured dairy products for quality and content. Plants that produce manufactured dairy products for interprovincial or export trade are inspected and licensed by the Department. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

EGGS AND POULTRY

Grading and inspection

Shell eggs, processed eggs and processed poultry must be graded, packed and marked to federal requirements when imported, exported or moved from one province to another. In addition, each province has concurrent regulations that make grading mandatory for egg and poultry products to be sold within the province. Federal inspectors enforce both federal and provincial regulations to avoid duplication of services. They ensure the uniform application of grade standards in registered egg, poultry and processed egg stations and

also provide information and guidance to producers, wholesalers, consumers and marketing boards on the grading and inspection of eggs and poultry. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

Hatcheries

The Registered Hatchery Policy provides for inspection of chickand poult-producing operations, with particular attention being given to sanitation and the production of healthy stock. The federal government helps operators design and operate hatcheries efficiently and provides guidance on fumigation and other sanitary measures. Diseases are controlled through the enforcement of hatchery supply-flock policies in cooperation with provincial departments of agriculture. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

Poultry stock evaluation

The central poultry testing and evaluation program carried out at Ottawa provides data for use by producers, hatchery operators and processors in selecting high-performance stock. Test results are made available to the industry. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

Food technology

Expert advice and assistance on technical matters and the development of processed poultry and egg products are available to processors. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

Poultry meat inspection

About 95% of all poultry slaughtering in Canada is done at federally registered plants. Federal veterinarians in these plants inspect poultry before and after slaughter to ensure that diseased or unwholesome carcasses or portions of carcasses are destroyed. Each

operation within a plant is carefully inspected and supervised. Agriculture Canada: Food Inspection Directorate, Food Production and Marketing Branch.

FARM CHEMICALS

Fertilizers

All fertilizers and supplements (nonfertilizers used to improve the physical condition of soils or to aid plant growth) sold in Canada must meet all federal requirements for standards, labeling and guarantees. All products must also meet standards for safe use, to protect humans, animals and plants. Specialty fertilizers, supplements and fertilizers containing pesticides (excluding customer-formula sales) must be registered. Fertilizers or supplements available in Canada are regularly sampled by departmental inspectors and are subject to laboratory analysis. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Pesticides

Pesticides sold in Canada are required to be truthfully labeled as to active ingredients, intended use, cautions and instructions for effective and safe use. Presale registration is required. Labeling and composition are examined on the basis of inspection in commercial channels and laboratory analyses of official samples. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Pesticide residue compensation

Under the Pesticide Residue Compensation Act, producers may be compensated for loss of domestic sales because of excessive residues on farm products arising from the recommended use of a pesticide. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Farm development program

Information on the latest technical developments, on the adoption of new and existing technology, and on farm economics is available to farmers to help them make sound management decisions. The objective of the Farm Development Program is to foster an economically viable farming industry, with the family farm as the basic production unit. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

FIELD CROPS

Feed grain storage assistance

Three federal programs provide financial assistance for the expansion of feed grain storage in areas of Canada that are deficient in feed grain production.

LOCAL FEED GRAIN SECURITY — Under this program, the federal government pays storage and interest charges on any additional grain stocks resulting from new storage capacity built by feed mills in the grain-deficient areas of eastern Canada and British Columbia. The program applies to mills where storage capacity has been increased to accommodate at least an additional 65 tonnes of feed grain. Canadian Livestock Feed Board.

NEW ELEVATOR CONSTRUCTION — Under this program, the federal government advances up to 50% of the capital cost for construction of new inland elevators for feed grain. The maximum contribution for a new elevator is \$500 000. Repayment begins in the fourth year of operation of the new facility and ceases after the tenth year or when 40% of the contribution has been repaid, whichever comes first. The advances are interest-free. Canadian Livestock Feed Board.

EXPANSION OF EXISTING ELEVATORS — This program provides grants of up to 30% of the capital costs of enlarging existing inland elevators, with a maximum contribution in each case of \$150 000. To be eligible for a grant, the owner must increase the elevator's storage capacity by at least 544 tonnes. Canadian Livestock Feed Board.

Forage seed

The Canadian Seed Growers' and Seed Trade Associations cooperate with the federal and provincial governments in the operation of the Canadian Forage Seed Project, which promotes the production and use of improved varieties of forage crops. A project committee pilots breeder seed to the crop production level. Agriculture Canada underwrites the funding of foundation seed production by selected growers. Foundation seed is distributed, through the provinces and the trade, to growers for certified production. (See also Seeds, page 00.) Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Grain elevators

The National Harbours Board owns transfer houses and terminal elevators at Halifax, N.S.; Saint John, N.B.; Montreal and Quebec, Que.; Port Colborne and Prescott, Ont., and Churchill, Man. Some are leased to private operators; the government operates the others.

Agriculture Canada periodically examines export elevators to ensure they are free of insects, so that grain can be certified when required by an importing country. The Canadian Grain Commission collaborates in this work and examines samples of grain stocks and shipments to detect insect infestations. National Harbours Board; Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch; Canadian Grain Commission.

Grains Group

The Grains Group was formed in 1969 with the cooperation of Agriculture Canada, the Department of Industry, Trade and Commerce, and Transport Canada, and the agencies related to these departments. It provides a focus for the development of policies and programs for the grain industry. The Minister responsible for the Canadian Wheat Board serves as chairman of this group.

Grain inspection and weighing

The Canadian Grain Commission supervises the handling of grain at licensed elevators. Grain is officially sampled and inspected, and

weighing is supervised at terminal and process elevators. Other grain inspection and weighing services are provided on request in both western and eastern Canada. The entomological section of the agency inspects elevators and stored grain to detect insect infestations, and advises on control measures where necessary. The Commission's Research Laboratory analyzes samples of cereal grains and oilseeds to assess the quality of the year's crops and to monitor the quality of export shipments. **Canadian Grain Commission.**

Grain ships

All ships carrying Canadian grain or cereal products are inspected before loading to ensure that their holds are free of insects and extraneous matter. When necessary, inspectors recommend and supervise the application of pest-control measures. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Grain storage

Grain elevators are licensed by the Canadian Grain Commission, which also supervises bonding of licensees and insurance on stored grain. All elevators are subject to inspection, and scales and other equipment are tested periodically. The Commission investigates complaints arising from the handling and shipping of grain at licensed facilities. Canadian Grain Commission.

Hay and Straw

Sale by grade is optional. Classes and grades of hay and straw are established and federal inspection is available on request. A fee is charged for this service. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Seeds

Seed sold in Canada by variety name must be pedigreed. The Canadian Seed Growers' Association is the agency responsible for prescribing crop standards and for issuing crop certificates for Canadian-produced pedigreed seed of all agricultural crops, with the

exception of potatoes. Departmental staff are responsible for field inspection of pedigreed seed crops, for sampling and testing of the seed for purity and germination, and for tagging and sealing the seed according to its pedigree status and grade. Seed that is not pedigreed must also meet minimum requirements for purity, germination and labeling.

Departmental laboratories also provide, on request, purity and germination analyses of seed. There is a charge for this service. Frequently, seed for export must be certified as being free of certain diseases. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

Seed potatoes

Certified seed potato crops are inspected in the field and before marketing to ensure adherence to established tolerances for disease and purity for domestic as well as export sales. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

FRUITS AND VEGETABLES

Grading and inspection

Fresh fruits and vegetables produced in Canada are inspected and their grade certified at shipping points before being moved to export or interprovincial markets. Imported and domestic produce is also inspected and certified for grade and condition at destination. Fruits and vegetables produced and sold in the same province may or may not be inspected and graded by provincial or federal officers, depending on the province's regulations. Processed fruits and vegetables, maple products and honey bearing federal grade names (for example, Canada Fancy) are inspected and graded at registered plants in which sanitary conditions are maintained. Labels used by registered plants must be approved by Agriculture Canada. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

Storage construction assistance

Federal financial assistance is available to producer groups to help meet the cost of constructing or renovating specialized storages for fruits and vegetables destined for the fresh market or for processing. The objective is, by encouraging an increase in storage capacity, to extend the marketing period for domestic produce and reduce reliance on imported fruits and vegetables. Under the program, groups of three or more primary producers may obtain financial assistance of up to a third of the total cost of a project, to a maximum of \$500 000. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Vegetable seeds

Root and vegetable crop seeds and onion sets are covered under federal Seeds Regulations, but licensing is required only for potato varieties. Departmental permission is required before importing seed of plant varieties not covered in the regulations. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

HEALTH OF ANIMALS

Diagnostic and veterinary services

LABORATORIES — Agriculture Canada maintains nine animal pathology laboratories and institutes across the country and their main functions are research and the diagnosis of reportable diseases of animals. Veterinarians and livestock owners may submit specimens to these laboratories in cases where reportable or exotic diseases are suspected, or where provincial diagnostic facilities are not available. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

VETERINARY OFFICERS — Federal veterinary officers are located in all livestock-producing areas to assist owners in maintaining the health of their livestock. Agriculture Canada: Veterinary Inspection (Operations) Directorate, Food Production and Inspection Branch.

Disease control and eradication

BOVINE BRUCELLOSIS — A program aimed at eradication of this disease is pursued by Agriculture Canada. Brucellosis is identified

through testing of herds, of cattle at markets, and of milk samples taken from dairies. Herds in which the disease has been found are placed under quarantine and all infected cattle must be slaughtered. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

HOG CHOLERA — To prevent outbreaks of hog cholera, premises licensed to feed garbage to hogs are regularly inspected to ensure sanitary conditions and that the garbage is properly cooked. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

RABIES — All suspected cases of rabies are investigated by federal veterinary authorities. Quarantines are imposed where required and diagnoses are carried out in federal animal pathology laboratories. In most provinces where rabies is endemic, an indemnity program is available to compensate owners for certified deaths of livestock from rabies. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch; Provincial Agriculture Departments.

TUBERCULOSIS — Bovine tuberculosis has been brought under control in Canada. To maintain this position, retesting continues in areas where the disease is most likely to recur. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

COMPULSORY SLAUGHTER — Owners are compensated when animals infected with certain contagious diseases are ordered to be slaughtered. Payments are usually at market value, but there are maximum amounts applicable to cattle and horses destroyed under a disease-eradication program. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

Inspection of livestock and meat

LIVESTOCK EXPORTS — Federal inspection, testing and control of livestock for export help to maintain health standards and keep world markets open to Canadian livestock. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

LIVESTOCK IMPORTS — Imported livestock may enter Canada only through quarantine and inspection ports where the animals are examined and, if necessary, tested. Import permits are required, except for livestock from the United States. Permits are not issued for livestock from countries where there are serious livestock diseases, such as foot-and-mouth. Livestock of countries from which importation

is permitted must pass certain health tests and undergo a period of quarantine in the country of origin and further quarantine on arrival in Canada. Agriculture Canada: Health of Animals Directorate, Food Production and Inspection Branch.

MEAT EXPORTS AND IMPORTS — Meat products may not be exported from Canada or moved from one province to another unless they are from animals that have been slaughtered and processed in plants operating under federal meat inspection regulations. Meat products prepared by farmers for movement interprovincially are subject to special provisions. All imports must meet the requirements of the Canada Meat Inspection Act. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

RED MEAT SLAUGHTERING AND PROCESSING — Approximately 87% of Canada's livestock slaughtering is done in meat-packing plants operating under federal meat inspection regulations. In these plants, animals are slaughtered in accordance with the Humane Slaughter of Food Animals Act, and federal veterinarians ensure that all diseased carcasses or portions are destroyed. In addition to the inspection of all meat-processing procedures, plant construction and maintenance is also monitored. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

STAMPING AND LABELING — Carcasses passing veterinary inspection are identified by an inspection legend. This indicates that the meat is suitable for consumption by humans, but does not indicate quality or grade. The legend is included on the labels of all federally inspected meat products. Labels and markings on meat products from inspected premises must have departmental approval, to ensure that the information is correct. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

LIVESTOCK

Beef cattle

GRADING — Beef carcasses that have passed veterinary inspection are graded by departmental staff assigned to federally or provincially registered packing plants in Canada. The service is provided at the request of the packing plant and is used by producers to facilitate the sale of animals on a carcass weight and grade basis. Although grading is not compulsory, beef is usually sold by grade. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

RECORD OF PERFORMANCE — The federal-provincial R.O.P. program helps purebred and commercial beef producers to identify objectively animals of superior and inferior genetic calibre for those traits of economic importance. A variety of programs are available, ranging from centralized station testing of bulls to on-farm testing. Bulls in artificial insemination units are also evaluated under the R.O.P. program. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

SIRES ON LOAN — Above-average sires are lent to groups of farmers (Bull Clubs) in outlying districts to encourage herd improvement and increased productivity. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Dairy cattle

RECORD OF PERFORMANCE — Milk and butterfat production records are collected, analyzed and reported for cows in dairy herds enrolled in the federal R.O.P. dairy program. Although the emphasis of the program is placed on the purebred sector of the industry, grade cows in predominantly purebred herds can be enrolled if they are identified through the National Identification Program. R.O.P. production records are certified by the federal government and are recognized world-wide. Additionally, genetic evaluations of all bulls in artificial insemination service are made semiannually, enabling dairymen to accurately select superior bulls for breeding purposes. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Sheep

GRADING — All lamb and mutton carcasses at inspected and approved plants may be presented for grading. Some producers sell on a carcass weight and grade basis and therefore receive grading certificates indicating weights and quality grades of their lambs. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

WOOL GRADING — Wool grading is done by warehouse personnel at registered wool warehouses, with supervision being carried out by officers of the Department. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

RECORD OF PERFORMANCE — The federal-provincial R.O.P. program for sheep assists producers in identifying the most productive and genetically superior sire and dam lines, and replacement stock, in purebred and commercial flocks. Both on-farm testing and centralized station testing programs are available. Emphasis is placed on those traits of economic importance for efficient and profitable sheep production. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

SIRES ON LOAN — Above-average rams are lent to sheep improvement organizations to encourage flock improvement and increased productivity. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Swine

GRADING — Market settlement to the producer is done on a grade index evaluation based on warm carcass weight and backfat measurement. All this information appears on the grading certificate statement for each hog. Agriculture Canada: Food Inspection Directorate, Food Production and Inspection Branch.

RECORD OF PERFORMANCE — On-farm and station testing services are available under the federal-provincial R.O.P. program for swine. The on-farm service enables producers to genetically assess and compare male and female breeding animals within herds for leanness and rate of growth, two of the most important economic traits in efficient swine production. Centralized station testing facilities across Canada allow both the genetic evaluation of individual boars as well as the evaluation of boars in artificial insemination service, based on the performance of their progeny. The strictly controlled, standardized station tests provide the most accurate means known of genetically evaluating potential breeding stock. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

SIRE LOAN — Under the Sire Loan Program, boars of superior quality are purchased by the Department and lent to artificial insemination units. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Registration of livestock

CANADIAN NATIONAL LIVE STOCK RECORDS — Financial assistance is given the Canadian National Live Stock Records, a

recording organization for 47 affiliated breed associations, to support registration of 105 distinct breeds of purebred livestock. All registration certificates issued by the C.N.L.S.R. are signed on behalf of the Minister of Agriculture and the departmental seal is affixed. Twelve other associations maintain their own registration, making a total of 59 purebred livestock associations incorporated under the Live Stock Pedigree Act. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

Livestock feeds

Commercial feeds for sale in Canada are regulated with respect to composition and label representation. Presale registration is required for mixed feeds. Labeling and composition are examined by inspection in commercial channels and by laboratory analysis of official samples. Labels must show the nutrient content and must include cautions and directions for the safe use of the feeds. Agriculture Canada: Plant Products and Quarantine Directorate, Food Production and Inspection Branch.

MARKETING

Agricultural Products Cooperative Marketing Act

Farmers who market their products under pooling arrangements may make use of this legislation by agreement with Agriculture Canada. Such an agreement may provide for a guaranteed cash advance to the cooperative organization. In practice, banks advance funds to the selling agencies to make initial payments and to cover estimated operating costs, to an agreed maximum. Federal government guarantees protect the banks against losses. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Agricultural Products Marketing Act

Under this Act, a provincial marketing board that regulates the marketing of an agricultural product within a province may be granted authority to extend its powers to include interprovincial and export trade. The provincial board may also be authorized to impose levies

and charges for equalizing returns among producers, for creating reserves, and for making payments for losses or expenses resulting from interprovincial or export movement of the agricultural product. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Consumer services

Information on buying and preparing Canadian foods, and guidance in interpreting grading and inspection regulations are provided for consumers by food consultants of Agriculture Canada. Projects are carried out in food laboratories to improve methods of cooking and preserving foods for home and institutional use. Taste panels evaluate foods to assess grades and standards. The information is relayed to the public through departmental publications, and press, radio and television services. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Inspectors regularly visit retail food stores to check grades and standards of farm products, and to encourage retailers to keep the products in good condition. **Department of Consumer and Corporate Affairs.**

The Health Protection Branch of the Department of National Health and Welfare is organized to safeguard the public from a variety of present and potential health hazards by advising on legislation pertaining to areas such as foods, microbiology, radiation, drugs, cosmetics and toxic substances; and by enforcement of that legislation through education and through monitoring and inspection services. The program of the Branch's Educational Services is one of continuing education and information, to explain and clarify legislation for the benefit of consumers and professionals and to keep them informed about Branch activities. Health Protection Branch, Department of National Health and Welfare.

Cooperatives advisory service

A special cooperatives unit in the Department provides information and advisory services for cooperatives and producer marketing boards, and represents their interests in the formulation of government policy and legislation. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Co-ops information

The Cooperatives Information Retrieval System, a joint venture of the Cooperatives Unit and the Libraries Division of Agriculture Canada, is a computerized system containing references to current literature concerning Canadian cooperatives of all types. Referenced material includes articles, books, research papers, annual reports and educational material published since 1970. The service is available, without charge, to members of cooperatives, and to students and researchers. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Food and nutrition

The Food and Nutrition Service of Agriculture Canada has three main goals: to provide consumers with more information about food; to increase technical support to the food-processing industry, and to improve departmental expertise in the nutritional aspects of food. It coordinates activities in these areas within the Department and with the food and nutrition activities of other federal departments. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Foreign agricultural services

LIAISON SERVICE — The International Liaison Division of the Regional Development and International Affairs Branch coordinates the activities of Agriculture Canada in international agencies such as the Food and Agriculture Organization. In cooperation with Canada's Trade Commissioner Service, the Division provides an agricultural intelligence service, reporting on commodities and policies in other countries through the publication of weekly, monthly and bimonthly periodicals. It also carries out studies to evaluate the impact of foreign policy trends on Canadian agriculture. Agriculture Canada: International Affairs Directorate, Regional Development and International Affairs Branch.

TRADE SERVICES — The Department of Industry, Trade and Commerce has responsibility for the establishment, growth and efficiency of manufacturing, processing and tourist industries in Canada, as well as for the development of export trade and external trade policies.

The Agriculture, Fisheries and Food Products Branch of the Department, in cooperation with the food and agricultural industry, has

a continuing series of studies and share-cost projects under way, which are aimed at expanding the efficiency and variety of Canadian agricultural production. It is also responsible for the export of foods, fisheries and agricultural products and to this end is involved in trade negotiations as well as numerous promotional projects in world markets. The Branch participates in overseas trade fairs, sponsors and arranges outgoing or incoming groups of business visitors, produces promotional materials in appropriate languages and generally supports the efforts of Canadian exporters to expand their agricultural product sales.

The Trade Commissioner Service is the overseas arm of the Department. Through 84 offices in 60 countries, it is constantly engaged in expanding and protecting Canadian trade interests. About 10% of the trade commissioners are professional agriculturists located at posts abroad where our agricultural interests are particularly important. This ensures a constant flow of market advice and information. **Department of Industry, Trade and Commerce.**

Grains

The Canadian Wheat Board is the sole marketing agency for wheat, oats and barley produced on the prairies for export or for consumption by Canadians. Under the 1974 Domestic Feed Grains Policy, feed grades of these grains can be sold directly within Canada. All receipts from Wheat Board grain sales are pooled to provide an equal payment to all producers for the same type and grade of grain, no matter when it is delivered in a crop year. There are five pools: wheat, durum wheat, oats, barley and designated barley. The Wheat Board is also responsible for coordinating the transportation of the six major prairie grains from country elevators to export positions. Canadian Wheat Board.

Marketing agencies

The Farm Products Marketing Agencies Act provides for the establishment of national marketing agencies for farm products other than those regulated by the Canadian Dairy Commission and the Canadian Wheat Board. Under the Act, the National Farm Products Marketing Council advises on the establishment of marketing agencies, reviews the operations of agencies and assists them in promoting more-effective marketing of farm products. National Farm Products Marketing Council.

Market reports

The Markets Information Services Group of Agriculture Canada works cooperatively with other federal and provincial departments and agencies in issuing market reports on a daily, weekly, monthly, quarterly and annual basis. Statistics are collected from Canadian and international sources. The published information covers marketings of livestock, dairy products, eggs and other poultry products, fruits and vegetables, maple products and honey. Detailed information is provided on such things as market receipts, movements between markets and provinces, prices, gradings, and rail and truck unloadings. Information on major national and international livestock markets, updated daily, is available through the toll-free phone-in service maintained by the Department. In addition, a telecopier network links the field offices of the Food Production and Inspection Branch, supplying daily and weekly information on commodity markets for distribution to the agriculture industry in their areas. Agriculture Canada: Market Development Directorate, Marketing and Economics Branch.

Stockyards administration

Under the authority of the Livestock and Livestock Products Act and the Stockyards Regulations, producers are assured financial protection and pricing integrity at the following stockyards: Edmonton, Calgary, Prince Albert, Saskatoon, Regina, Winnipeg, Toronto and Montreal. Agriculture Canada: Production Development Directorate, Regional Development and International Affairs Branch.

PUBLIC INFORMATION SERVICES (AGRICULTURE CANADA)

News media and public services; publications

Information Services of Agriculture Canada carries out a broad public affairs program to inform Canadians about the policies, programs, research findings and activities of the Department. The Branch disseminates the information through its news media services section (press, radio, television, films and exhibits), through its public services section which answers individual requests for technical information, and through publications covering a wide range of agricultural topics. A list of the publications and copies of free publications are available

from the Branch. Priced publications are obtained from Supply and Services Canada, Publishing Center, Mail Order Services, Ottawa K1A 0S9. Agriculture Canada: Information Services.

RESEARCH

Most agricultural research, except that on animal diseases, undertaken by the federal government is done by Agriculture Canada's Research Branch, which operates a network of research establishments across Canada. Research on animal diseases of economic significance is conducted by the Health of Animals Directorate, Food Production and Inspection Branch, at eight laboratories across the country. In addition, it also carries out research under maximum security at the Grosse Ile, Que., experimental station. Research on the quality of cereal grains and oilseeds is done by the Canadian Grain Commission. The locations and specialties of the main research establishments of the Department follow.

Research Branch, Ottawa

ANIMAL RESEARCH CENTER: animal, poultry and pilot organism genetics; ruminant, monogastric, and poultry nutrition; pesticide residues; toxicology; animal waste; general physiology and physiology of reproduction of animals and poultry.

BIOSYSTEMATICS RESEARCH INSTITUTE: taxonomy of insects, nematodes and arachnids; taxonomy of native and cultivated plants; economic botany; mycology. Maintains the Canadian National Collections of Insects and Fungi, and the Vascular Plant Herbarium. The Institute also provides a national identification service.

CHEMISTRY AND BIOLOGY RESEARCH INSTITUTE: agricultural microbiology; winter survival of plants and related seed dormancy; host-parasite interactions of viruses, mycoplasma, bacteria and fungi; symbiotic nitrogen fixation; pesticide residues and general analytical chemistry; and soil chemistry and mineralogy. Also provided are services in analytical chemistry, instrumentation, electron microscopy and X-ray crystallography.

ENGINEERING AND STATISTICAL RESEARCH INSTITUTE: food-processing engineering; mechanization of crop production; electronics and instrumentation; equipment for scientific agricultural research and production; water resources, waste management, and energy; farm

buildings (the Institute is headquarters for the Canada Plan Service); statistical advice and computation. Maintains a computer program library and carries out research on mathematical statistics. Manages contract research on agricultural engineering and maintains a source of information on agricultural engineering.

FOOD RESEARCH INSTITUTE: food composition, quality and processing; milk proteins and vegetable proteins; flavor; sensory analysis; chemistry and biochemistry of proteins, lipids and carbohydrates; meat quality and processing.

LAND RESOURCE RESEARCH INSTITUTE: national programs include soil survey and classification, and land evaluation and climate assessment for crop production. Has responsibility for the Canadian Soil Information System (CANSIS), for an agrometeorological information system, and for production of soil and agrometeorological maps.

RESEARCH PROGRAM SERVICES: editing and production services for Branch publications; graphic arts and photographic services; pesticide research information system; coordination of international agreements on science and technology.

Food Production and Inspection Branch, Ottawa

ANIMAL DISEASES RESEARCH INSTITUTE: diseases of cattle, sheep, goats, horses, poultry and wildlife; animal product bacteriology; reproductive diseases; embryo transfer; blood-typing; production of diagnostic biologic reagents.

Alberta

RESEARCH STATION, BEAVERLODGE: center for agricultural research in the North; soil management and microbiology; cereals and oilseeds; grass and legume seed production; pollination; crop-environment interactions. Associated experimental farm at *Fort Vermilion*: forage crop management and crop adaptation.

RESEARCH STATION, LACOMBE: beef cattle, swine and poultry breeding; meats research; cereals; weed control; soil fertility and management; plant diseases; cropping practices. Substation at Vegreville: soils.

RESEARCH STATION, LETHBRIDGE: production problems of irrigated and dryland soils; Canadian center for insects affecting animals; irrigation farming; range management; cereal and forage breeding; dairy and beef cattle; cattle crossbreeding; sheep breeding

and wool research; animal and poultry nutrition; cereal insects. Substations at *Manyberries:* beef cattle and sheep breeding, range management; and *Vauxhall:* irrigation, drainage.

At UNIVERSITY OF ALBERTA, EDMONTON: soil survey.

ANIMAL DISEASES RESEARCH INSTITUTE, FOOD PRODUCTION
AND INSPECTION BRANCH, LETHBRIDGE: animal and poultry diseases.

British Columbia

RESEARCH STATION, AGASSIZ: soil fertility; forage crop and soil management; vegetable crops; dairy cattle and poultry genetics, nutrition and management.

RESEARCH STATION, KAMLOOPS: rangeland vegetation; range management and reseeding; forage crops on dry and irrigated land; fertilizers on native and cultivated forages; poisonous plants. Associated experimental farm at *Prince George*: forage crops; fertility and management of Gray Wooded soils.

RESEARCH STATION, SIDNEY: ornamentals; nursery and green-house crops; bulbs; holly; flowers; vegetables; small fruits; weed control; soils.

RESEARCH STATION, SUMMERLAND: tree fruits; vegetables; food processing; irrigation; forage crops; tree fruit diseases and insects. Substations at *Creston*: crop adaptation, soil fertility, and *Kelowna*: tree fruits.

RESEARCH STATION, VANCOUVER: plant viruses and virus vectors; virus diseases of small fruits, vegetables, and forage crops; biochemistry and physiology of viruses; small fruits and vegetable insects; small fruits breeding; soil genesis and survey.

ANIMAL PATHOLOGY LABORATORY, FOOD PRODUCTION AND INSPECTION BRANCH, VANCOUVER: animal and poultry diseases.

Manitoba

RESEARCH STATION, BRANDON: breeding and physiology of beef cattle, swine and poultry; barley breeding; corn production; forage management; soil fertility and salinity; weed control.

RESEARCH STATION, MORDEN: tree fruits; small fruits; vegetables and ornamentals; special crops including sunflowers, flax, soy-

beans, buckwheat and peas; crop management; soil fertility; weed control; plant diseases. Substation at *Portage la Prairie*: special crops.

RESEARCH STATION, WINNIPEG: Canada's main center for cereal breeding, cereal diseases and pests, insect pests of stored cereals and products; soil survey.

GRAIN RESEARCH LABORATORY, CANADIAN GRAIN COMMISSION, WINNIPEG: cereal grains and oilseed crops.

ANIMAL PATHOLOGY LABORATORY, FOOD PRODUCTION AND INSPECTION BRANCH, WINNIPEG: animal and poultry diseases.

New Brunswick

RESEARCH STATION, FREDERICTON: Canada's center for potato research; animal nutrition; agricultural engineering; small fruits; vegetables; pests and diseases of fruits and vegetables; soils; soil survey. Substation at Benton Ridge: potato breeding. Associated experimental farm at St. Joseph de Kent: research on fruits and vegetables and on livestock feed crops.

ANIMAL PATHOLOGY LABORATORY, ATLANTIC AREA, FOOD PRODUCTION AND INSPECTION BRANCH, SACKVILLE: animal and poultry diseases.

Newfoundland

RESEARCH STATION, ST. JOHN'S WEST: bogland agriculture; soil fertility and survey; horticultural crops and potatoes; insects and nematodes.

Nova Scotia

RESEARCH STATION, KENTVILLE: horticultural research center for Atlantic region; management, physiology, nutrition and breeding of tree fruits, small fruits, vegetables; food storage and processing; pesticide residues; control of pests and diseases of tree fruits, small fruits, vegetables; weed control; poultry breeding. Associated experimental farm at Nappan: livestock management and nutrition; adaptation and management of forage crops; management of dikeland and upland soils; pasture program.

At NOVA SCOTIA AGRICULTURAL COLLEGE, TRURO: pedology and soil survey.

Ontario

RESEARCH STATION, DELHI: Canada's main tobacco research center. Studies on soils and nutrition, genetics, breeding, physiology, diseases, insects, nematodes, harvesting and curing.

RESEARCH STATION, HARROW: breeding, nutrition, physiology and protection of tree fruits, vegetables, corn, soybeans, wheat, field beans, tobacco, and greenhouse crops; soil fertility, weeds, and irrigation. Substation at *Woodslee*: crop management on fine-textured soils.

RESEARCH CENTER, LONDON: fungicides, herbicides, insecticides, and naturally occurring, biologically active substances; selective action of pesticides; toxins, antibiotics, repellents and attractants in organisms as related to environmental toxicology and integrated pest management.

RESEARCH STATION, OTTAWA: breeding of cereals, forages, corn, soybeans, ornamentals; agronomy; insect ecology; apiculture; cytogenetics and tissue culture genetics. Maintains Central Experimental Farm, gardens and arboretum. Associated experimental farms at Thunder Bay: crop evaluation and management; and Kapuskasing: crop evaluation and management; nutrition and overwintering of cattle.

RESEARCH STATION, VINELAND: biology and control of insects, mites, nematodes, viruses and diseases of tree fruits, grapes, small fruits, and vegetables; engineering for crop spraying and harvesting. Associated experimental farm at *Smithfield*: management, nutrition, protection and processing of apples, vegetables and small fruits.

At UNIVERSITY OF GUELPH, GUELPH: soil survey
ANIMAL PATHOLOGY LABORATORY, FOOD PRODUCTION AND
INSPECTION BRANCH, GUELPH: animal diseases, meat bacteriology.

Prince Edward Island

RESEARCH STATION, CHARLOTTETOWN: soil fertility; plant nutrition; cereal and forage crop production and management; potatoes, tobacco, vegetables and small fruits; pests and diseases of crops; breeding and management of dairy cattle and calf nutrition.

Quebec

RESEARCH STATION, LENNOXVILLE: nutrition and management of dairy and beef cattle, sheep and swine; forage crops; soil fertility; pastures.

RESEARCH STATION, ST. JEAN: breeding and nutrition of fruit trees and management of apple orchards; production of small fruits and vegetables; toxicology and chemistry of pesticides; ecology and control of insects, weeds and diseases in fruit and vegetable crops; chemistry and management of organic soils; breeding, management, protection and harvesting of tobaccos and grain corn; tobacco curing and drying of grain corn. Associated experimental farm at L'Assomption: cigar tobacco. Substations, Lavaltrie: cigarette tobacco; Ste. Clothilde: vegetables on organic muck soils; Frelighsburg: tree fruit and berries; and L'Acadie: canning vegetables and grain corn.

RESEARCH STATION, STE. FOY: soil genesis, classification, fertility and management; cereal and forage breeding; control of legume diseases; plant physiology and biochemistry; winterhardiness of forage crops. Associated experimental farms at *La Pocatiere:* forage breeding and management, potato diseases, sheep; and *Normandin:* crop evaluation and management, dairy cattle.

ANIMAL PATHOLOGY LABORATORY, FOOD PRODUCTION AND INSPECTION BRANCH, ST. HYACINTHE: animal and poultry diseases.

Saskatchewan

RESEARCH STATION, MELFORT: pasture and forage utilization and management; forage seed production; soil fertility and management; beef cattle and swine nutrition; weed control.

RESEARCH STATION, REGINA: prairie center for weed research; cultural and chemical control of weeds in crops and native grasslands; cereal and forage seed increase and distribution. Associated experimental farm at *Indian Head*: cereal and forage crop management; soil fertility and management.

RESEARCH STATION, SASKATOON: breeding of forage crops and oilseeds; cattle bloat; diseases of cereals, forages and oilseeds; ecology and control of insects affecting man, animals and crops; soil classification and chemistry; soil survey. Substation at Scott: soil fertility, crop management; weeds.

RESEARCH STATION, SWIFT CURRENT: physics, chemistry and management of dryland and irrigated soils; breeding and management

of grasses and legumes; cereal breeding and physiology; agricultural engineering; turkey nutrition and breeding.

ANIMAL PATHOLOGY LABORATORY, FOOD PRODUCTION AND INSPECTION BRANCH, SASKATOON: animal and poultry diseases; chemical residues.

STATISTICS

Agricultural statistics

Statistics Canada collects, compiles and publishes statistics on practically every aspect of agricultural activity in Canada as part of its overall legal obligation to report regularly on economic and social conditions across the nation. In cooperation with provincial departments of agriculture, farmers, dealers and processors, Statistics Canada regularly conducts surveys to compile agricultural statistics. These are analyzed and published in periodical reports on crop conditions; crop and livestock estimates; wages of farm labor; prices farmers receive for their products; farm income and expenditure; per capita food consumption; marketing of grains and livestock; dairy, milling and sugar industries, and cold-storage holdings. In addition, Statistics Canada conducts a census of agriculture every 5 years. Details of the statistical reports dealing with agriculture and with the industries processing farm products or serving agriculture are given in a catalogue which is available free from Statistics Canada's User Services Division or from its regional offices. Agricultural data is also available on CANSIM, the agency's machine-readable data base system. Statistics Canada.

Grain statistics

The Canadian Grain Commission collects, compiles and publishes extensive statistics covering the handling and shipping of grains and oilseeds through the licensed elevator system. Canadian Grain Commission.

Livestock feed statistics

The Canadian Livestock Feed Board collects and publishes statistics on feed grain supplies, prices and markets. Canadian Livestock Feed Board.

WEATHER INFORMATION

Meteorological services for agriculture

In addition to its public weather forecasts, the Atmospheric Environment Service of the Department of the Environment provides specialized farm weather bulletins, weather warnings and other information to assist farmers across Canada. AES also provides specialized services in various provinces, many of them in collaboration with provincial agriculture departments. Agrometeorologists are available as consultants at AES headquarters and seven regional offices. These specialists are backed by climatological support which can provide the statistical data and other information required for the solution of a wide variety of weather-sensitive agricultural problems. Atmospheric Environment Service, Department of the Environment.

WHERE TO WRITE FOR MORE INFORMATION

Agriculture Canada at Ottawa

(Postal code is K1A 0C5 except where otherwise indicated)

FARM INCOME SERVICES BRANCH: Crop Insurance Division; Western Grain Stabilization Division (located at 303 Main Street, Winnipeg, Man. R3L 3G7).

FOOD PRODUCTION AND INSPECTION BRANCH: Food Inspection Directorate; Health of Animals Directorate; Plant Products and Quarantine Directorate; Veterinary Inspection (Operations) Directorate; Production and Inspection (Operations) Directorate.

MARKETING AND ECONOMICS BRANCH: Market Development Directorate; Market Analysis and Trade Policy Directorate.

REGIONAL DEVELOPMENT AND INTERNATIONAL AFFAIRS BRANCH: Production Development Directorate; International Affairs Directorate; Regional Development Directorate; Federal-Provincial Relations Directorate.

RESEARCH BRANCH (K1A 0C6): Animal Research Center; Biosystematics Research Institute; Chemistry and Biology Research Institute; Engineering and Statistical Research Institute; Food Research Institute; Land Resource Research Institute; Ottawa Research Station; Research Program Services.

INFORMATION SERVICES (K1A 0C7): News Media Services Section; Publications Section; Public Services Section.

(Agriculture Canada maintains offices in many communities across Canada. If there is one in your area it will be listed in your telephone directory under 'Government of Canada'.)

Associated agencies

AGRICULTURAL PRODUCTS BOARD

Sir John Carling Building, Central Experimental Farm, Ottawa K1A 0C5.

AGRICULTURAL STABILIZATION BOARD

Sir John Carling Building, Central Experimental Farm, Ottawa K1A 0C5.

CANADIAN-DAIRY COMMISSION

2197 Riverside Drive, Ottawa K1A 0Z2.

CANADIAN GRAIN COMMISSION

Headquarters: 303 Main Street, Winnipeg, Man. R3C 3G8. District offices: Calgary, Edmonton and Lethbridge, Alta.; Prince Rupert and Vancouver, B.C.; Chatham, Harrow, Thunder Bay and Toronto, Ont.; Baie Comeau, Bromptonville, Quebec City and Montreal, Que.; Moose Jaw, Regina and Saskatoon, Sask.

CANADIAN LIVESTOCK FEED BOARD

Headquarters: 5180 Queen Mary Road, Montreal, Que. H3W 3E7. Branch office: 401 Federal Building, 325 Granville Street, Vancouver, B.C. V6C 1S5.

FARM CREDIT CORPORATION

Head office: 434 Queen Street (P.O. Box 2314, Postal Station D), Ottawa K1P 6J9. Regional offices: Edmonton, Kelowna, Moncton, Quebec, Regina, Guelph, Winnipeg.

NATIONAL FARM PRODUCTS MARKETING COUNCIL

300 Sparks Street, Ottawa K1R 7S3.

Other federal agencies and departments

CANADA EMPLOYMENT AND IMMIGRATION COMMISSION

Headquarters: Phase 4, Place de Portage, Hull, Que. K1A 0J9. Canada Employment Centers are located throughout the country.

CANADA MORTGAGE AND HOUSING CORPORATION

Head office: Montreal Road, Ottawa K1A 0P7. Regional offices: Saint John, Montreal, Toronto, Saskatoon, Vancouver. Local offices in all major urban areas.

CANADIAN WHEAT BOARD

Head office: 423 Main Street, Winnipeg, Man. R3C 2P5.

DEPARTMENT OF CONSUMER AND CORPORATE AFFAIRS

Headquarters: Ottawa-Hull K1A 0C9. Regional offices: Halifax, Montreal, Toronto, Winnipeg, Vancouver.

DEPARTMENT OF THE ENVIRONMENT

Atmospheric Environment Service — Headquarters, 4905 Dufferin Street, Downsview, Ont. M3H 5T4. Regional offices: Vancouver, B.C., Edmonton, Alta., Winnipeg, Man., Toronto, Ont., Dorval, Que., (Canadian Meteorological Center), Ville St. Laurent, Que., Bedford, N.S.

DEPARTMENT OF INDUSTRY, TRADE AND COMMERCE

Headquarters: 235 Queen Street, Ottawa K1A 0H5. Regional offices: Charlottetown, Edmonton, Fredericton, Halifax, Montreal, Quebec City, Regina, St. John's, Toronto, Winnipeg, Vancouver.

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

Educational Services, Health Protection Branch: Tunney's Pasture, Ottawa K1A 1B7.

DEPARTMENT OF REGIONAL ECONOMIC EXPANSION

Headquarters: 200 Promenade du Portage, Hull, Que. K1A 0M4. Regional offices: Moncton, Montreal, Toronto, Saskatoon. Provincial offices in provincial capitals.

Prairie Farm Rehabilitation Administration (PFRA) — Headquarters: Motherwell Building, Regina, Sask. S4P 0R5. Regional offices: Calgary and Winnipeg. Field offices across the Prairie Provinces.

FEDERAL BUSINESS DEVELOPMENT BANK

Head office: 901 Victoria Square, Montreal, Que. H2Z 1R1. Branch offices: Calgary, Edmonton, Grande Prairie, Lethbridge and Red Deer, Alberta; Burnaby, Campbell River, Chilliwack, Cranbrook, Kamloops, Kelowna, Langley, Nanaimo, New Westminster, North Vancouver, Prince George, Richmond, Terrace, Vancouver, Vernon, Victoria and Williams Lake, British Columbia; Bathurst, Edmundston, Fredericton, Moncton and Saint John, New Brunswick; Corner Brook, Grand Falls and St. John's, Newfoundland; Yellowknife, Northwest Territories; Bridgewater, Halifax, Sydney and Truro, Nova Scotia; Barrie, Chatham, Etobicoke, Hamilton, Kenora, Kingston, Kitchener, London, North Bay, Oakville, Oshawa, Ottawa, Owen Sound, Peterborough, St. Catharines, Sault Ste. Marie, Scarborough, Stratford, Sudbury, Thunder Bay, Timmins, Toronto and Windsor, Ontario; Charlottetown, Prince Edward Island; Chicoutimi, Drummondville, Granby, Hull, La Salle, Laval, Levis, Longueuil, Montreal, Quebec, Rimouski, Rouyn-Noranda, St. Jerome, St. Laurent, St. Leonard, Sept Iles, Sherbrooke, Trois Rivieres and Valleyfield, Quebec; Prince Albert, Regina, and Saskatoon, Saskatchewan; Whitehorse, Yukon Territory.

GRAINS GROUP

235 Queen Street, Ottawa, K1A 0H5.

NATIONAL HARBOURS BOARD

320 Queen Street, Ottawa K1A 0N6.

STATISTICS CANADA

Central Inquiries, Statistics Canada, Ottawa K1A 0T6. Regional offices in St. John's, Halifax, Montreal, Toronto, Winnipeg, Regina, Edmonton, Vancouver.

Provincial governments

The nearest source of information about provincial agricultural services is the agricultural representative, district agriculturist or agronome who is the local agent of the provincial department of agriculture. Inquiries and requests for provincial publications may also be addressed to these offices:

ALBERTA — Communications Branch, Alberta Agriculture, 9718 107th Street, Edmonton T5K 2C8.

BRITISH COLUMBIA — Information Branch, Department of Agriculture, Parliament Buildings, Victoria V8W 2Z7.

MANITOBA — Communications Branch, Department of Agriculture, 200 Vaughan Street, Winnipeg R3C 1T5.

NEW BRUNSWICK — Communications and Marketing Branch, Department of Agriculture and Rural Development, Fredericton E3B 5H1.

NEWFOUNDLAND — Department of Rural Agriculture and Northern Development, Confederation Building, St. John's A1C 5T7.

NOVA SCOTIA — Department of Agriculture and Marketing, P.O. Box 550, Truro B2N 5E3.

ONTARIO — Information Branch, Ministry of Agriculture and Food, Legislative Buildings, Toronto M7A 1A5.

PRINCE EDWARD ISLAND — Management Services Branch, Department of Agriculture and Forestry, P.O. Box 2000, Charlottetown C1A 7N8.

QUEBEC — Services de l'information, Agriculture Québec, 200A chemin Ste-Foy, Québec G1R 4X6.

SASKATCHEWAN — Director of Communications, Department of Agriculture, Administration Building, Regina S4S 0B1.



