



Catalogue 21-522E

# Farming Facts 1991

Statistical Insights on Canadian Agriculture



21-522E

C.F.



Statistics  
Canada

Statistique  
Canada

Canada

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## INTRODUCTION

**S**tatistics Canada produces a wide range of information about Canadian agriculture. Statistics on farm income and expenses, livestock and crops are published at regular intervals. **Farming Facts 1991** provides examples of the kind of information about Canadian agriculture collected and published by Statistics Canada.

The agriculture statistics program includes a variety of telephone, in-person and mail-back surveys, the method chosen depending on the type and complexity of the survey. The **Census of Agriculture**, which is conducted once every five years, is a nation-wide stock-taking involving the collection of agricultural data from every farm in Canada. The data from the 1991 Census of Agriculture will be available in June 1992. The annual **National Farm Survey** and the **January Farm Survey** are sample surveys which collect current information on crop acreages, livestock inventory and farm expenses. In addition, a variety of annual, quarterly and monthly surveys provide current information on crop yields, poultry, specialized agricultural production (honey, greenhouse, etc.) and other products.

Statistics Canada makes every effort to keep the number of survey contacts to a minimum. For example, in Prince Edward Island and New Brunswick, the interpretation of satellite images (known as remote sensing) is used in making annual potato estimates. As well, wherever possible Statistics Canada uses alternative information sources such as administrative and tax records.

Statistics Canada cooperates extensively with the provincial departments of agriculture, provincial statistical agencies and with other federal and provincial departments in the collection and development of agricultural statistics.



# AGRICULTURAL STATISTICS - THE BENEFITS TO FARMERS

**A**gricultural statistics have many users including farmers and farmer organizations, market analysts, agri-business and policy makers. Summaries of statistics and analyses are widely reported in farm newspapers and government publications.

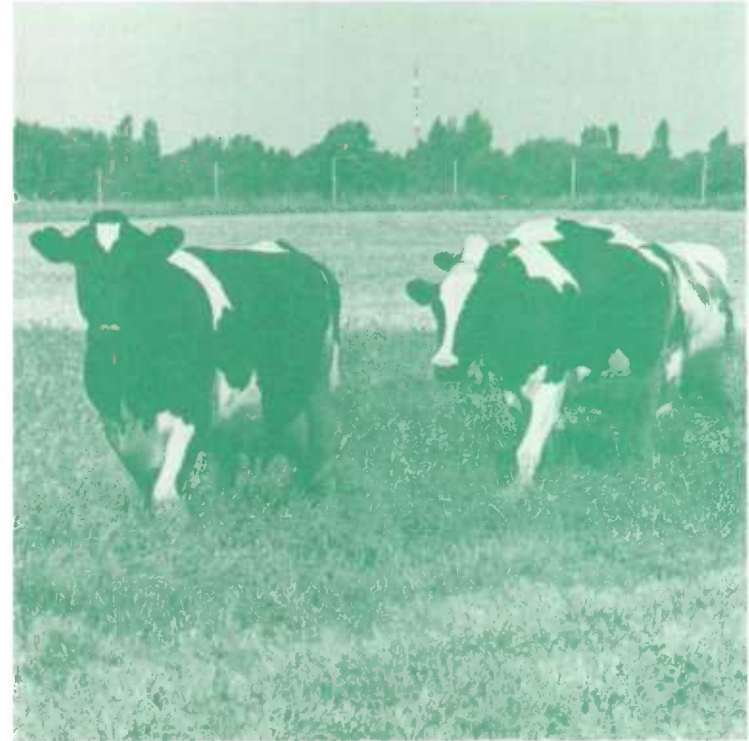
Some benefits of statistics to farmers include the following:

- wide access to accurate and objective information on market conditions is needed to ensure fair and efficient functioning of markets;
- farmers make production and marketing decisions based on market information generated in part from agricultural surveys; and
- some direct government payments to farmers (for example, Western Grain Stabilization Program) are based partly on survey data.

The provision of accurate and objective information to all data users is a major goal of the agriculture statistics program. It is important to ensure that all participants in the market have equal access to objective information on market conditions.

Another major use of agricultural statistics is in the making of production and marketing decisions. Farmers obtain market information and analysis, based partly on Statistics Canada data, from farm newspapers, market newsletters, agricultural representatives and other sources. For example, a hog producer after reviewing market information in relation to the hog production cycle may decide to increase or decrease production. Based on cattle inventory statistics, a farmer may decide to sell off some stock early as feeders rather than finish them for the slaughter market.

The **National Farm Survey** collects some of the data required by the administrators of the Western Grain Stabilization Program to calculate payments to farmers in the Canadian Wheat Board area. Under this program, total payments to participants in the plan from 1985 to 1989 have been over \$3.7 billion.





The agriculture industry in Canada continues to change as the trend to larger and fewer farming units continues. The number of census farms peaked at 733,000 in 1941. By 1981, the number of farms had declined to 318,000, although the volume of agricultural production was about 2.75 times greater than in 1941. The number of census farms continued to decline to 293,000 farms reported by the 1986 Census of Agriculture. However, this decrease is due to a declining number of small farms. The number of larger farms with gross sales above \$25,000 increased six percent between 1981 and 1986.

In 1931, the rural farm population represented over 31 percent of Canada's total population. By 1986, the proportion had fallen to under four percent. Despite fewer families living on farms, agriculture continues to consist almost entirely of family-controlled farming business. According to the 1986 Census of Agriculture, over 99 percent of all census farms were family-controlled, accounting for almost 95 percent of total agricultural sales.

Farms are becoming larger. In 1986 over 50 percent of all census farms had sales above \$25,000. These farms produced 95 percent of all farm sales, a seven percent increase over 1981.

Agriculture plays a significant role in Canada's economy, and is an important source of foreign exchange. Agriculture is particularly significant in the Prairie provinces where about half of Canada's net farm income is earned.

Cereal grains, oilseeds and forage crops are the major field crops grown in Canada, with wheat being the dominant crop. Canada is world renowned for its exports of high quality wheat.

A wide variety of fruits and vegetables are grown in Canada for domestic and export markets. The greenhouse and nursery industries produced horticultural products generating sales of \$807 million in 1989.

Commercial sales of livestock and poultry are important sources of income, approximately equal in value to the sales of crops in an average year. The beef breeding herd is rebuilding. The number of beef cows at July 1, 1990, was estimated at 3.6 million head, an increase of 11 percent since the 1986 Census. There were 3.2 million head of cattle and calves slaughtered in 1989 and an additional 516,600 head were exported. The 15.5 million pigs slaughtered in 1989 produced 1.2 million tonnes of dressed pork, 25 percent of which was exported.

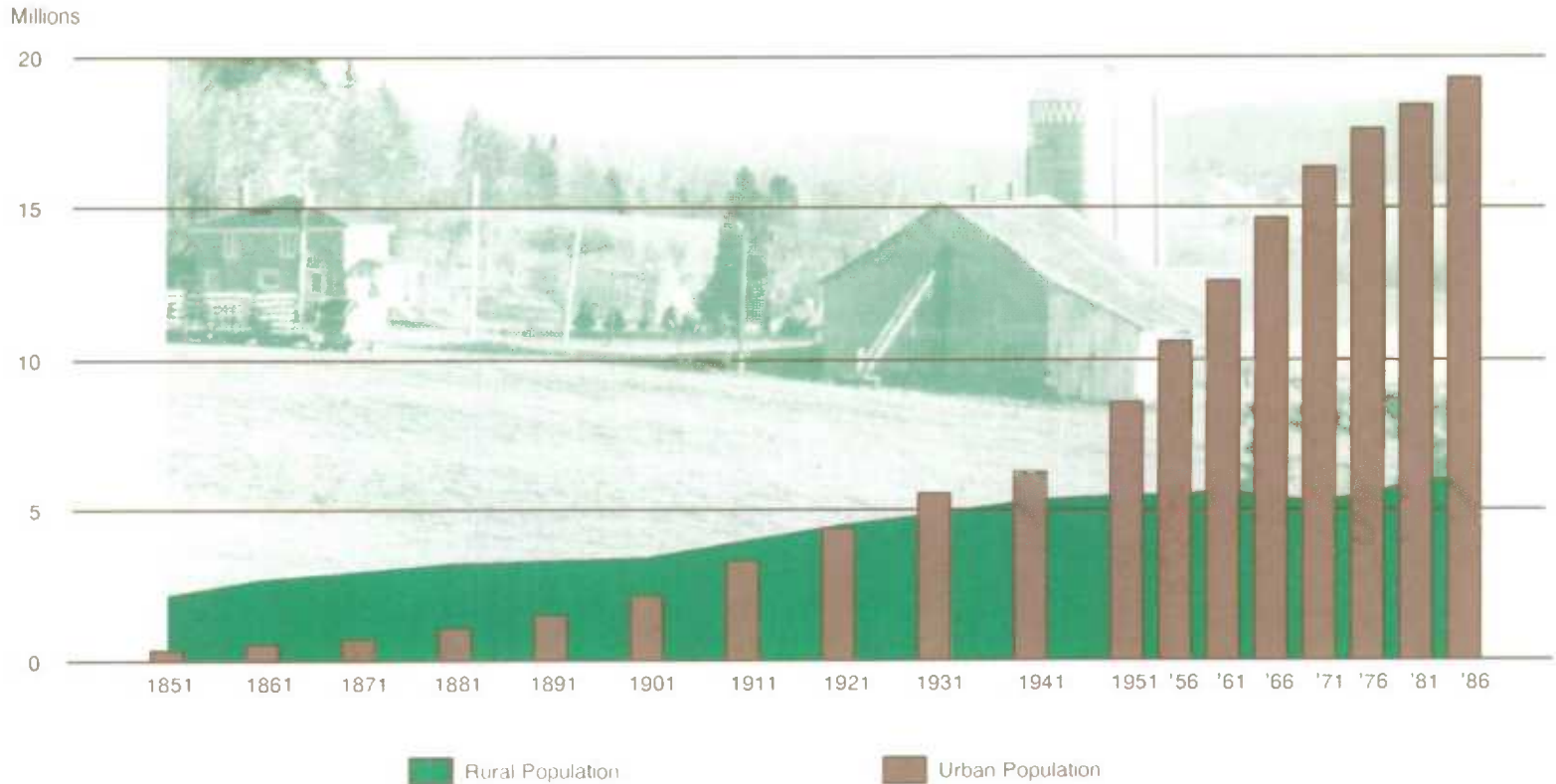
The number of dairy cows at July 1, 1990, was estimated at 1.4 million head and in 1989 the dairy herd produced approximately 7.3 million kilolitres of milk. Approximately 63 percent was sold as industrial milk for the production of butter, cheese, yoghurt, etc., and the other 37 percent accounted for fluid milk sales.

In Canada, the production of eggs, broiler chickens and turkeys is highly specialized and concentrated. Production of poultry has increased steadily while the production of eggs has remained fairly stable. In 1989, over 19.4 million turkeys and over 390 million chickens and stewing hens were produced. Almost 22 million layer hens produced over 5.7 billion eggs in 1989 for an annual average of about 260 eggs per hen.

Agricultural statistics can be found in regular Statistics Canada publications, or through CANSIM, Statistics Canada's computerized data bank. To obtain specific information, please contact:

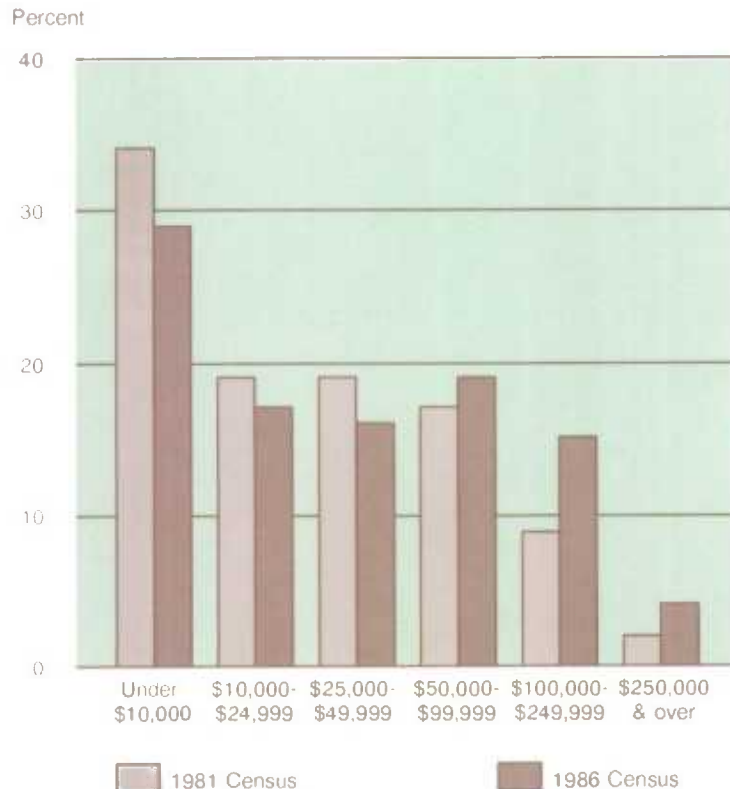
**Agriculture Division,  
Statistics Canada,  
Ottawa, Ontario.  
K1A 0T6,  
Tel (613) 951-4257.**

## Population Trends in Canada, 1851-1986



Source: *Census of Population, 1851-1986.*

## Distribution of Farms by Sales Class, 1981 and 1986



The June 4, 1991 Census is Canada's 17th national census since Confederation.

The size of the average farm family is 3.6 persons, higher than the 3.1 for a non-farm family. Under a million Canadians live in farm families.

Today's farmers have more formal education than in the past. From 1971 to 1986 the percentage of farmers with a high school diploma increased from 14 percent to 43 percent.

Full-time farmers (with no days of off-farm work) produce 80 percent of all farm sales and have almost three quarters of all farm capital.

Relatively little land in Canada is irrigated, just over two percent of Canada's cropland. Most irrigated land is in Alberta, where over one million acres or five percent of total cropland is irrigated.

In 1986, about 8,000 farmers had computers used principally to manage the farm business.



**P**roduction of Principal Field Crops, 1990  
('000 tonnes)

	Canada	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I.	Nfld.
Winter Wheat	1,631	--	163	109	27	1,301	20	2	5	4	--
Spring Wheat	25,758	136	6,069	13,880	5,443	54	150	8	3	14	--
Durum Wheat	4,410	--	667	3,348	395	--	--	--	--	--	--
<b>Total Wheat</b>	<b>31,798</b>	<b>136</b>	<b>6,899</b>	<b>17,337</b>	<b>5,865</b>	<b>1,355</b>	<b>170</b>	<b>10</b>	<b>8</b>	<b>18</b>	<b>--</b>
Oats for grain	3,507	100	1,450	879	409	287	315	25	17	24	--
Barley for grain	13,521	144	6,227	3,832	2,014	638	530	39	19	78	--
Fall Rye	883	9	168	470	193	43	--	--	--	--	--
Spring Rye	56	--	13	43	--	--	--	--	--	--	--
<b>Total Rye</b>	<b>939</b>	<b>9</b>	<b>181</b>	<b>513</b>	<b>193</b>	<b>43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Mixed Grain	1,051	12	204	67	78	541	90	--	--	59	--
Flaxseed	935	--	81	432	422	--	--	--	--	--	--
Canola	3,325	39	1,293	1,451	499	43	--	--	--	--	--
Corn for grain	7,033	--	17	--	155	5,055	1,800	--	6	--	--
Buckwheat	48	--	--	--	26	9	13	--	--	--	--
Peas, dry	297	--	103	112	82	--	--	--	--	--	--
Soybeans	1,327	--	--	--	--	1,276	51	--	--	--	--
Beans, dry white	111	--	--	--	--	111	--	--	--	--	--
Lentils	219	--	3	175	42	--	--	--	--	--	--
Mustard seed	265	--	39	209	18	--	--	--	--	--	--
Canary seed	176	--	--	154	21	--	--	--	--	--	--
Sunflower seed	115	--	--	10	104	--	--	--	--	--	--
Tame Hay	33,113	2,177	9,525	2,722	3,084	7,439	7,000	417	435	290	24
Fodder Corn	8,002	472	181	--	272	5,260	1,770	--	47	--	--
Sugar Beets	942	--	590	--	352	--	--	--	--	--	--

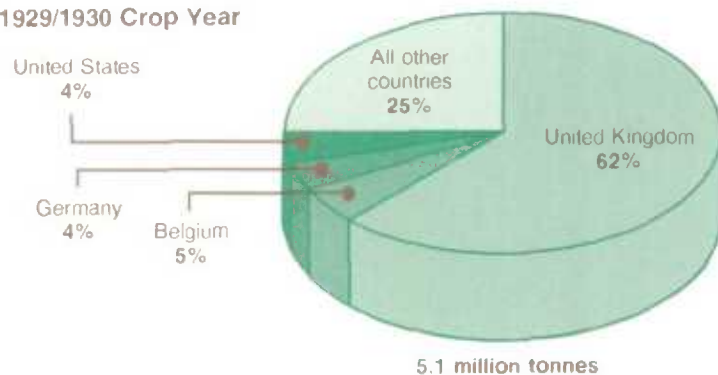
-- Values too small to be expressed

**Source:** *Field Crop Reporting Series, 1990, Catalogue No. 22-002.*

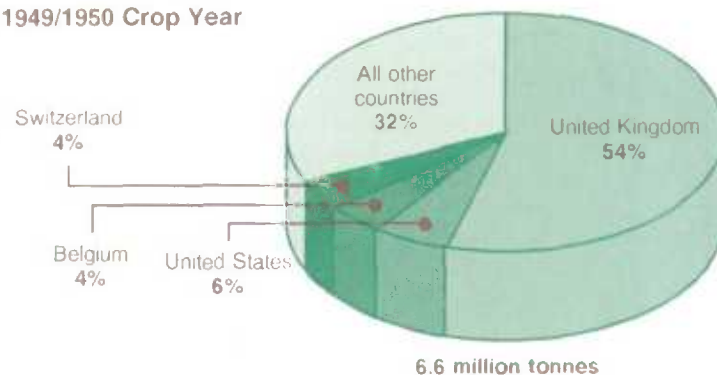


## All Wheat\* Exports by Final Destination, 1929/30, 1949/50, 1969/70, 1989/90 Crop Years

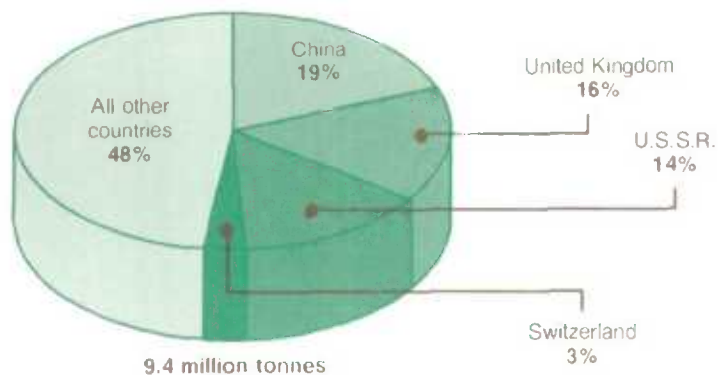
### 1929/1930 Crop Year



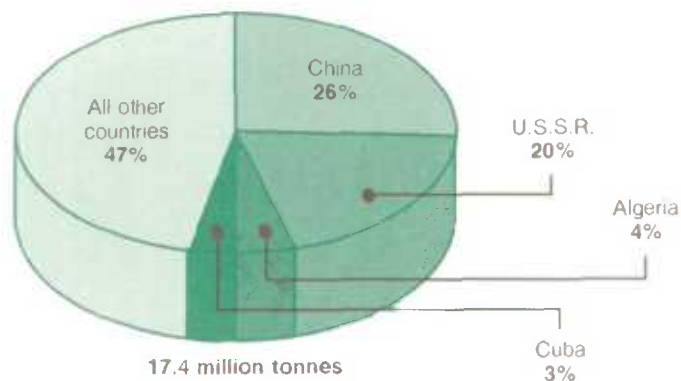
### 1949/1950 Crop Year



### 1969/1970 Crop Year



### 1989/1990 Crop Year



\* Includes wheat flour

Source: Grain Trade of Canada, Catalogue No. 22-201; Cereals and Oilseeds Review, Catalogue No. 23-007.

Over one-third of all Canada's Class One agricultural land can be seen from the top of the CN Tower.

Wheat is seeded to about 43 percent of cropland in Canada. About 67 billion 16 ounce loaves of bread could be baked from all the wheat produced in Canada in 1990. This is enough bread to pave a two-lane road between St. John's, Newfoundland and Vancouver, British Columbia 69 times.

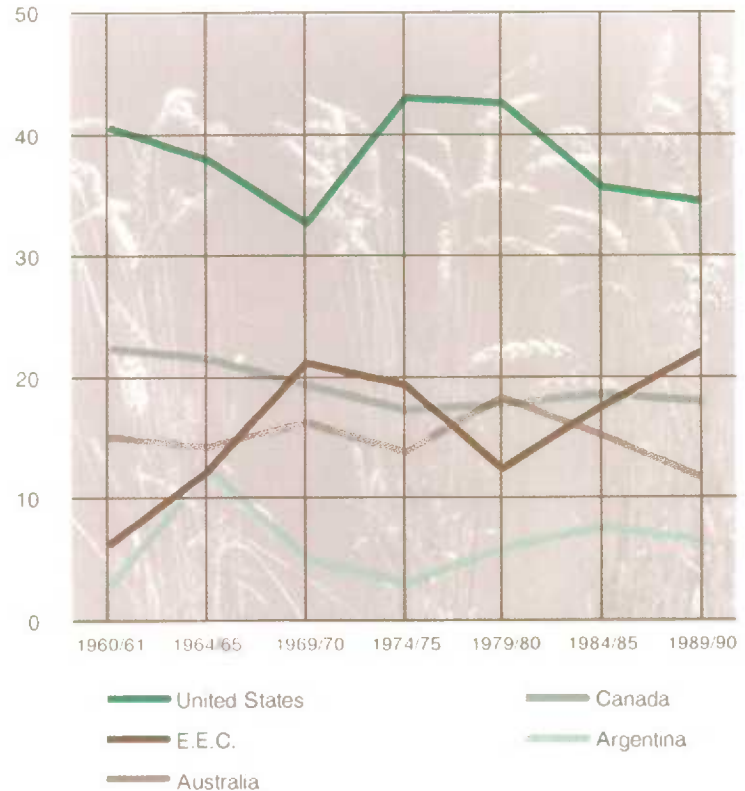
Annual pasta consumption per person is nine pounds in Canada, 12 pounds in the U.S. but 66 pounds in Italy. It takes about one and a half pounds of durum wheat to produce a pound of pasta. In 1990, Canada produced enough durum wheat (nine billion pounds) to supply Canada's pasta needs for 26 years.

The farmer's share of many products is quite small. A farmer receives 61 cents for the canola in a \$1.99, one-litre bottle of canola oil. There is six cents worth of wheat in a \$1.39 loaf of white bread, one cent worth of barley in a bottle of beer, and one cent worth of rye in a \$27.50 bottle of Canadian rye whiskey.

Although only one-sixth of the world's land is irrigated, that land produces one-third of the world's harvest.

### Market Share of World Wheat and Flour Trade, Five Major Exporters, 1960/61 to 1989/90 July-June Crop Years

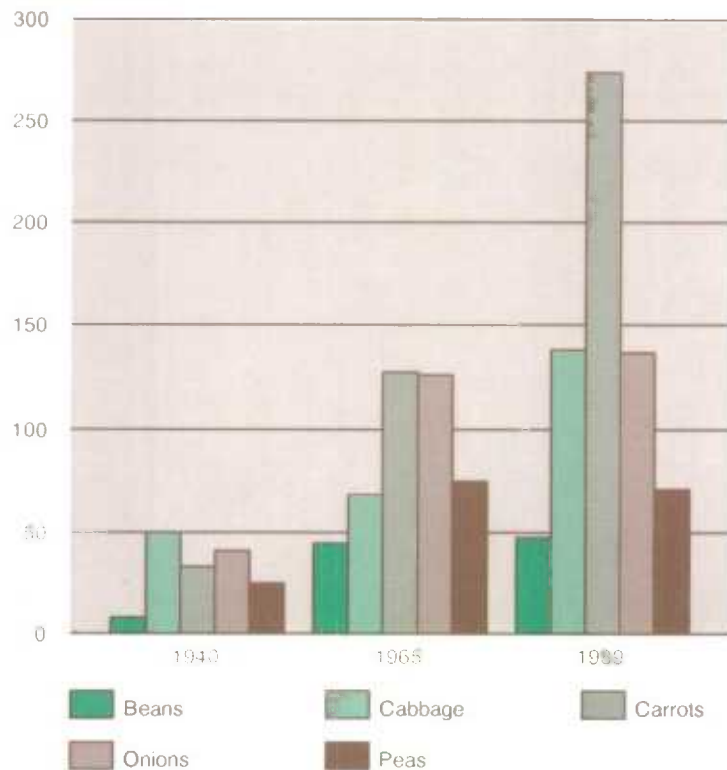
Percent



Source: USDA, FG10-90, Grains, World Situation and Outlook;  
USDA, FG16-85, Grains, Foreign Agriculture Circular.

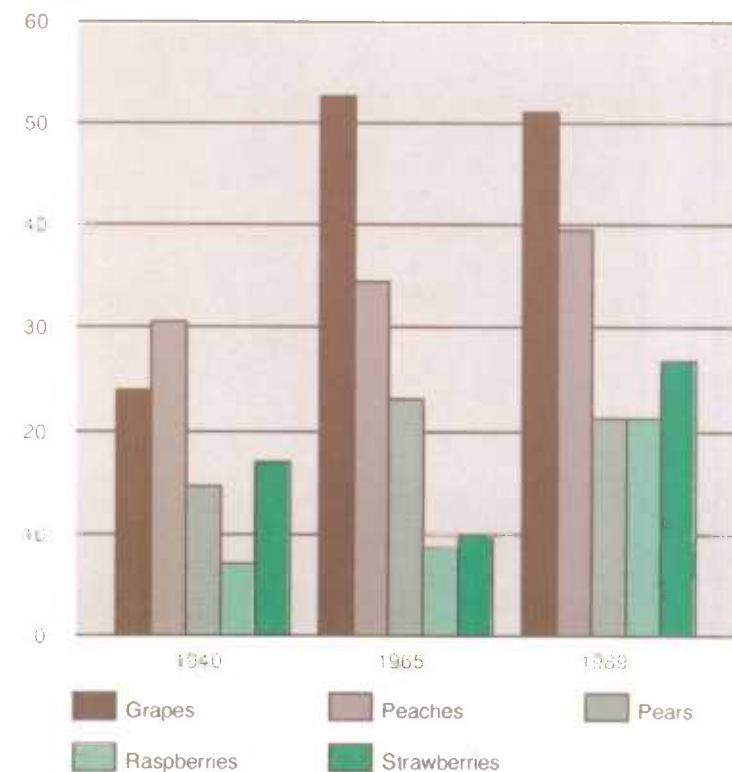
### Production of Selected Vegetables, Canada, 1940, 1965 and 1989

Thousand tonnes



### Production of Selected Fruits, Canada, 1940, 1965 and 1989

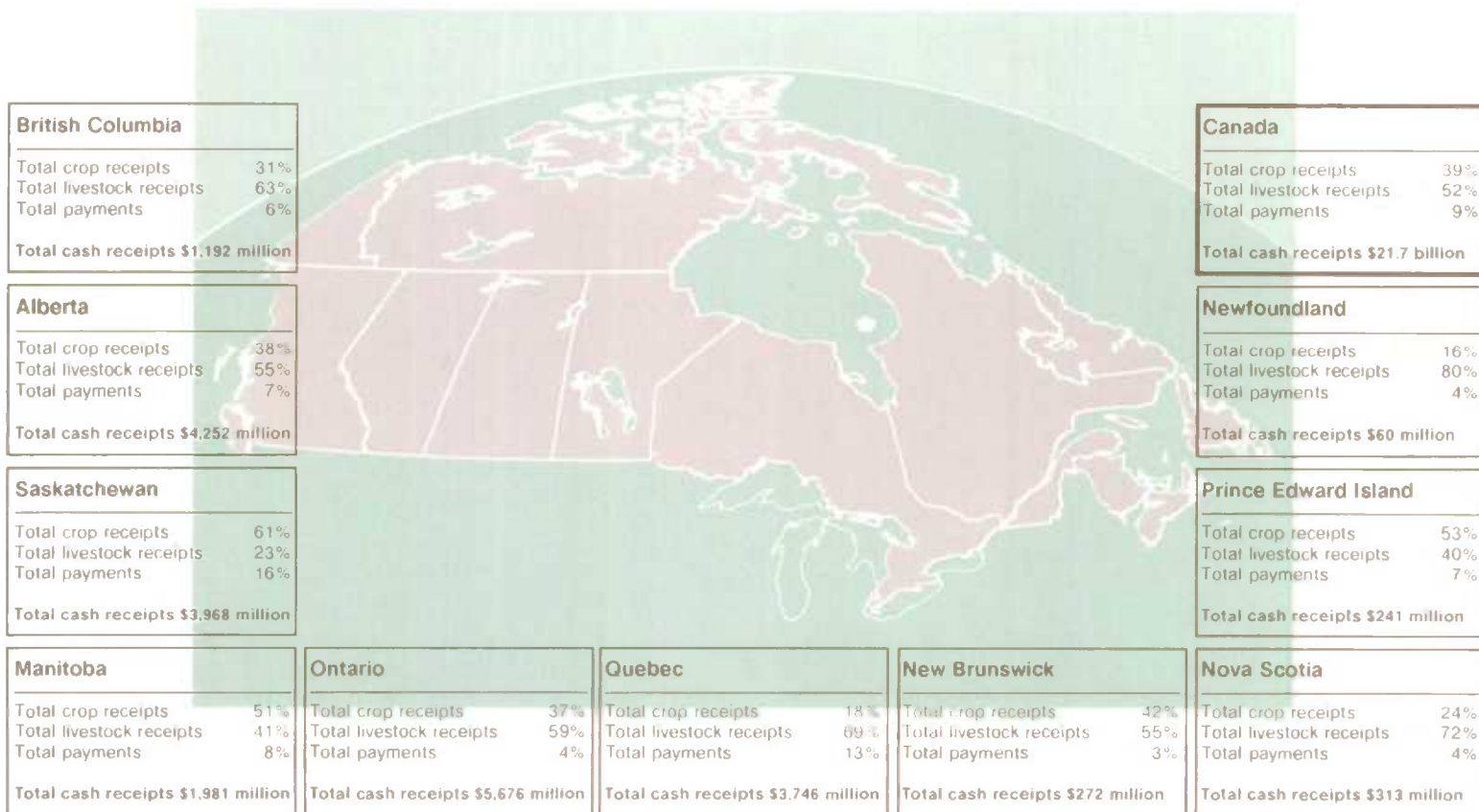
Thousand tonnes



Source: *Fruit and Vegetable Production*, Catalogue No. 22-003.

Source: *Fruit and Vegetable Production*, Catalogue No. 22-003.

## Farm Cash Receipts, 1990



**Note:** Total payments include gross payments directly paid to producers from various sources excluding program premiums or levies.

**Source:** Agriculture Canada Outlook Estimates, 1990.

## Farm Operating Expenses, 1990

### British Columbia

Wages to farm labour	23%
Commercial feed	21%
Interest on indebtedness	14%
Machinery expenses	12%
Other operating expenses	30%
<b>Total operating expenses \$919 million</b>	

### Alberta

Machinery expenses	19%
Interest on indebtedness	14%
Wages to farm labour	9%
Commercial feed	9%
Other operating expenses	49%
<b>Total operating expenses \$3,231 million</b>	

### Saskatchewan

Machinery expenses	26%
Interest on indebtedness	14%
Farm rent	8%
Fertilizer and lime	8%
Other operating expenses	44%
<b>Total operating expenses \$3,139 million</b>	

### Manitoba

Machinery expenses	20%
Fertilizer and lime	12%
Interest on indebtedness	11%
Commercial feed	10%
Other operating expenses	47%
<b>Total operating expenses \$1,565 million</b>	

### Ontario

Commercial feed	16%
Wages to farm labour	16%
Machinery expenses	14%
Interest on indebtedness	11%
Other operating expenses	43%
<b>Total operating expenses \$4,200 million</b>	

### Quebec

Commercial feed	26%
Interest on indebtedness	12%
Machinery expenses	12%
Wages to farm labour	12%
Other operating expenses	38%
<b>Total operating expenses \$2,495 million</b>	

### Canada

Machinery expenses	17%
Commercial feed	14%
Interest on indebtedness	13%
Wages to farm labour	12%
Fertilizer and lime	7%
Farm rent	5%
Other operating expenses	32%
<b>Total operating expenses \$16.2 billion</b>	

### Newfoundland

Commercial feed	43%
Wages to farm labour	21%
Machinery expenses	7%
Interest on indebtedness	6%
Other operating expenses	23%
<b>Total operating expenses \$45 million</b>	

### Prince Edward Island

Wages to farm labour	17%
Machinery expenses	16%
Commercial feed	15%
Interest on indebtedness	11%
Other operating expenses	41%
<b>Total operating expenses \$167 million</b>	

### Nova Scotia

Commercial feed	30%
Wages to farm labour	23%
Machinery expenses	12%
Interest on indebtedness	11%
Other operating expenses	25%
<b>Total operating expenses \$221 million</b>	

### New Brunswick

Commercial feed	23%
Wages to farm labour	22%
Machinery expenses	15%
Interest on indebtedness	11%
Other operating expenses	29%
<b>Total operating expenses \$187 million</b>	

**Note:** Other operating expenses include all other crop and livestock expenses not listed that are incurred in the general operation of the farm.

Totals are calculated after rebates.

**Source:** Agriculture Canada Outlook Estimates, 1990.



**F**or the five year period 1980-1984, Quebec maple producers sold an average of \$27 million worth of maple products. For the period 1985-1989 the average was over \$59 million, including a high of about \$85 million in 1988. Average production between the period 1980-1984 and 1985-1989 increased by 14 percent.

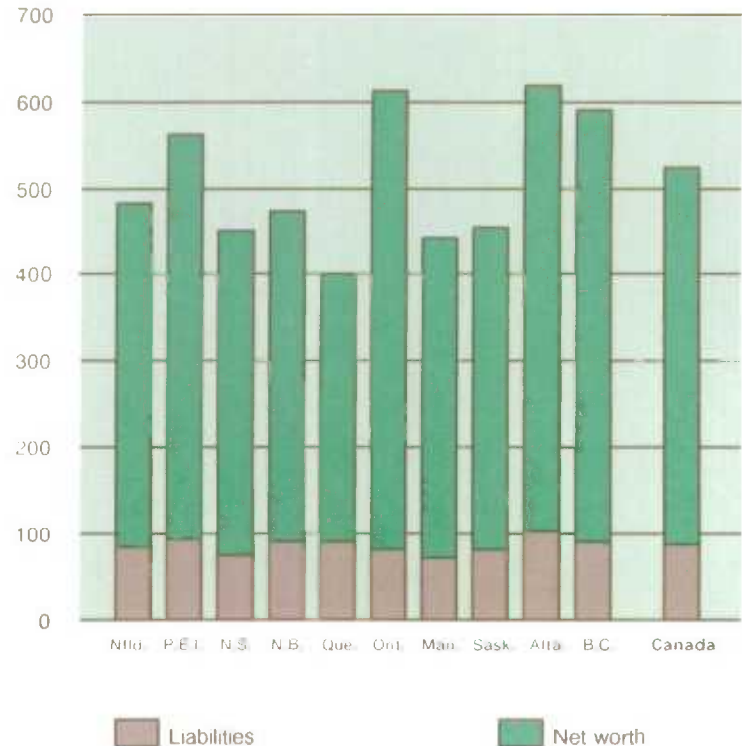
Canola/rapeseed represented less than one half of one percent of all crop receipts in 1959. Since 1986, canola/rapeseed has been second only to wheat, comprising 11 percent of total crops receipts. In the last decade, wheat has accounted for an average of 42 percent of all crop receipts in Canada.

According to the 1986 Census of Agriculture, farm families on farms with gross sales between \$10 thousand and \$50 thousand have the lowest average total income. Farm families on smaller farms (under \$10 thousand sales) have higher average total incomes due to off farm income sources.



### Average Assets\*, Liabilities and Net Worth of Canadian Farms, January 1990

Thousands of dollars

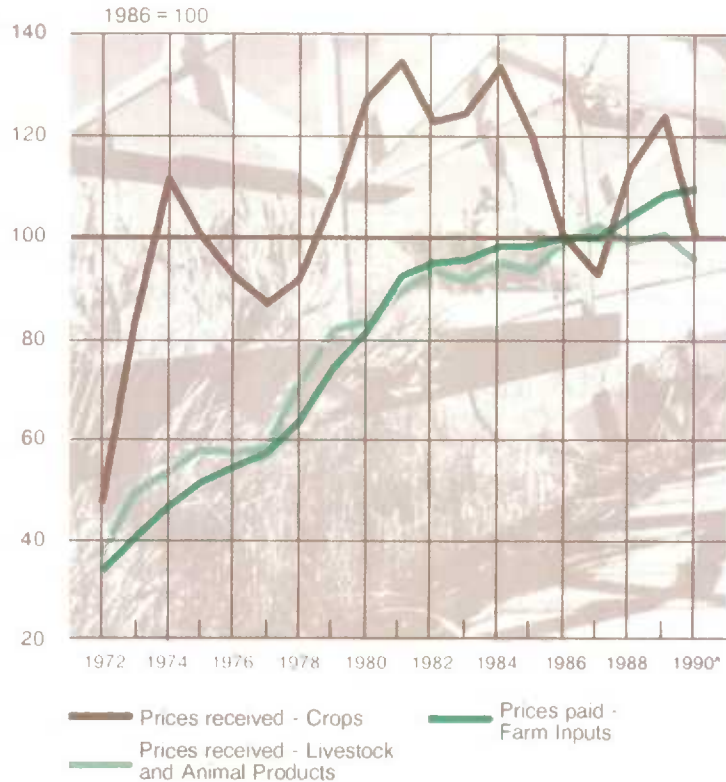


\* Assets = liabilities + net worth.

**Note:** Average values have been calculated for all farms with sales greater than \$2,000.

**Source:** Farm Credit Corporation, Farm Survey 1990.

## Selected Agricultural Price Indexes, Canada, 1972-1990



**Note:** A price index gives the average percentage change that occurs over time to specific prices. The graph shown displays three such indexes:

- (1) Farm product prices index (crops) [FPPI (crops)];
- (2) Farm product prices index (livestock and animal products) [FPPI (livestock)];
- (3) Farm input prices index [FIPI].

As stated above, the FPPI for crops gives the average percentage change (in prices) that farmers receive for their various crop products. Similarly, the FPPI for livestock and animal products gives the average percentage change (in prices) farmers receive for their livestock products. The FIPI gives the average percentage change (in prices) farmers pay for their farm inputs.

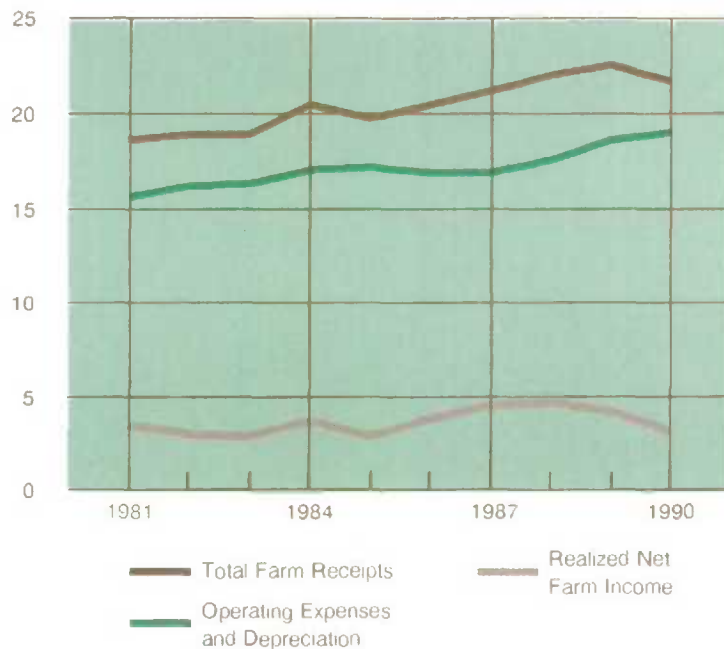
To demonstrate this percentage change over time, a base year is used (1986 = 100) and prices are calculated on yearly averages. For example, looking at the FPPI (crops) in the graph, it would show that the FPPI was indexed at 124 for 1989. This means that the prices received by farmers for crops products were 24 percent higher than those received in the base year (1986).

\* the values for 1990 are preliminary.

**Source:** *Farm Product Price Index*, Catalogue No. 62-003; *Farm Input Price Index*, Catalogue No. 62-004.

## Realized Net Farm Income, Canada, 1981-1990

Billions of dollars

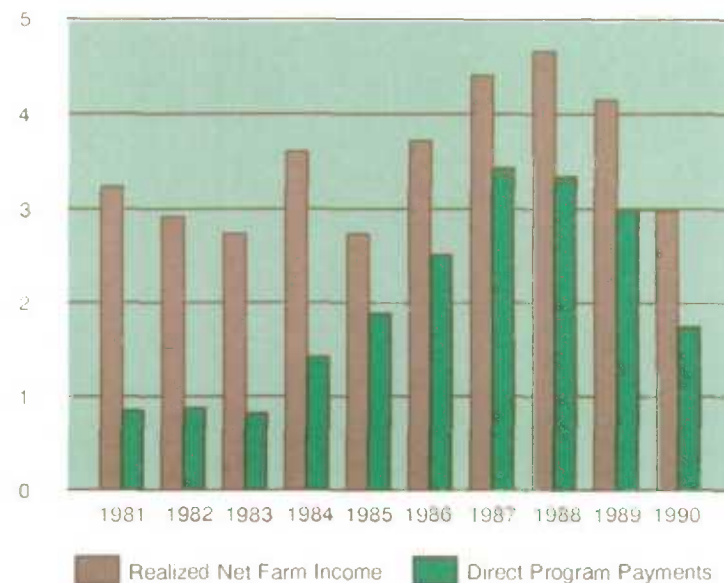


**Note:** Realized Net Farm Income is equal to farm cash receipts (including direct program payments) plus income-in-kind, less operating expenses and depreciation charges.

**Source:** For 1981-1989, *Agriculture Economic Statistics*, Catalogue No. 21-603E; for 1990, *Agriculture Canada Outlook Estimates*.

## Direct Program Payments to Farmers compared to Realized Net Farm Income, Canada, 1981-1990

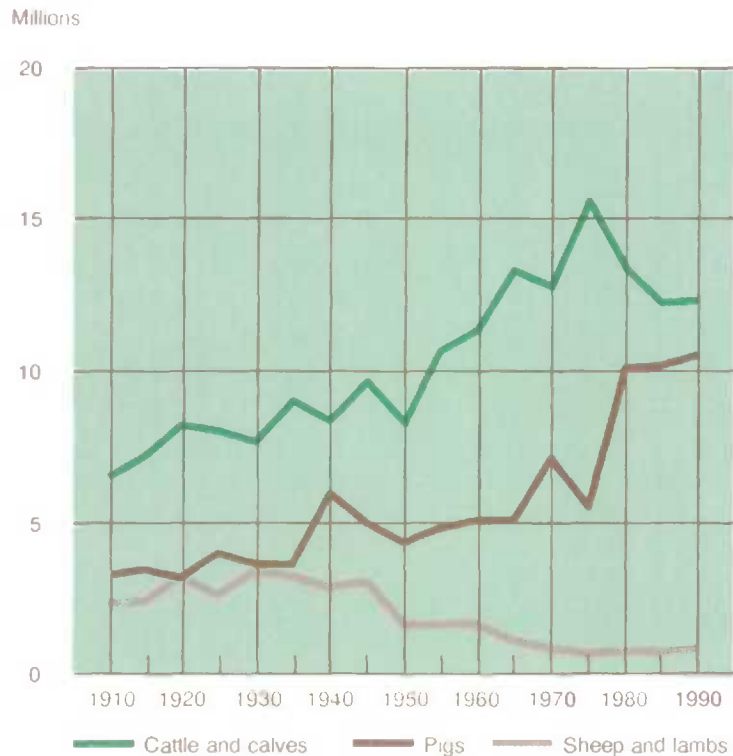
Billions of dollars



**Note:** Direct Program Payments represent net payments to farm operators under various federal and provincial government programs. These can be either payments enhancing receipts or expense reducing rebates. Realized Net Farm Income is equal to farm cash receipts (including direct program payments) plus income-in-kind, less operating expenses and depreciation charges.

**Source:** For 1981-1989, *Agriculture Economic Statistics*, Catalogue No. 21-603E; for 1990, *Agriculture Canada Outlook Estimates*.

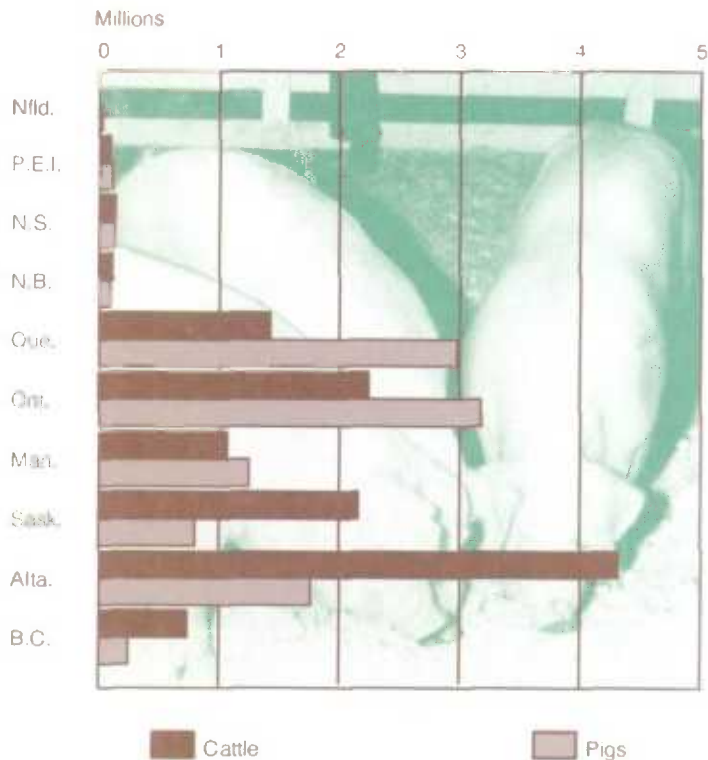
## Livestock on Farms at July 1, 1910-1990, Canada



**Note:** Before 1975, the reference date for Livestock inventories was June 1. In 1975 it was changed to July 1.

**Source:** *Livestock Report*, Catalogue No. 23-008; *Livestock and Animal Products Statistics*, Catalogue No. 23-203; *Handbook of Agricultural Statistics, Part VI*, Catalogue No. 21-514.

## Cattle and Pigs on Farms, by Province, at July 1, 1990



**Note:** In 1990, 8,800 head of cattle and 16,500 head of pigs were reported for Newfoundland.

**Source:** *Livestock Report*, Catalogue No. 23-008.

One chicken produces more eggs in a year than the average Canadian eats.

The milk producing ability of the average Canadian dairy cow has more than doubled since 1961.

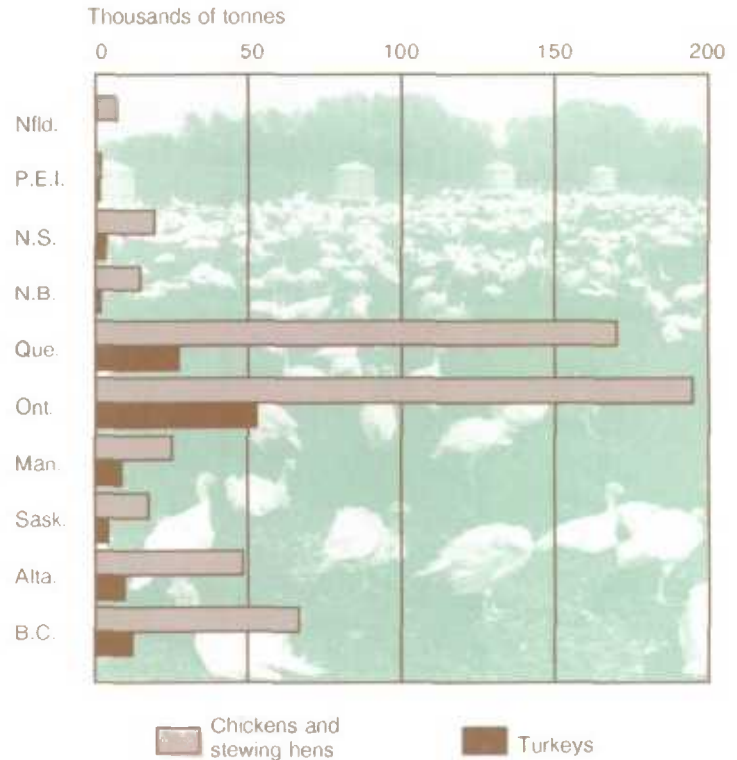
The number of cattle in Ontario in 1990 was about the same as in 1901, at just over two million head.

Canada had only about one third the number of sheep in 1990 (728 thousand) as it did in 1871 (2.2 million). By comparison, Australia has about 150 million sheep.

The number of pigs on Canadian farms almost doubled between 1976 and 1986, while the number of farms with pigs declined by almost half.



## Poultry Production by Province, 1989

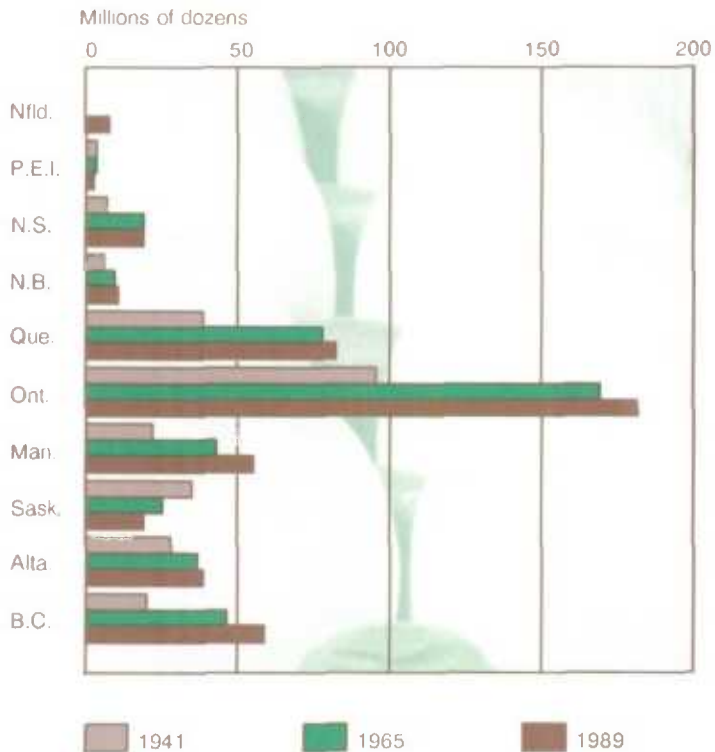


**Note:** 1989 data for turkeys in Newfoundland is confidential. P.E.I. turkey production in 1989 was 24 tonnes.

**Source:** *Production of Poultry and Eggs*, Catalogue No. 23-202.



## Egg Production by Province, 1941, 1965 and 1989



**Note:** 1941 and 1965 Newfoundland data not available.

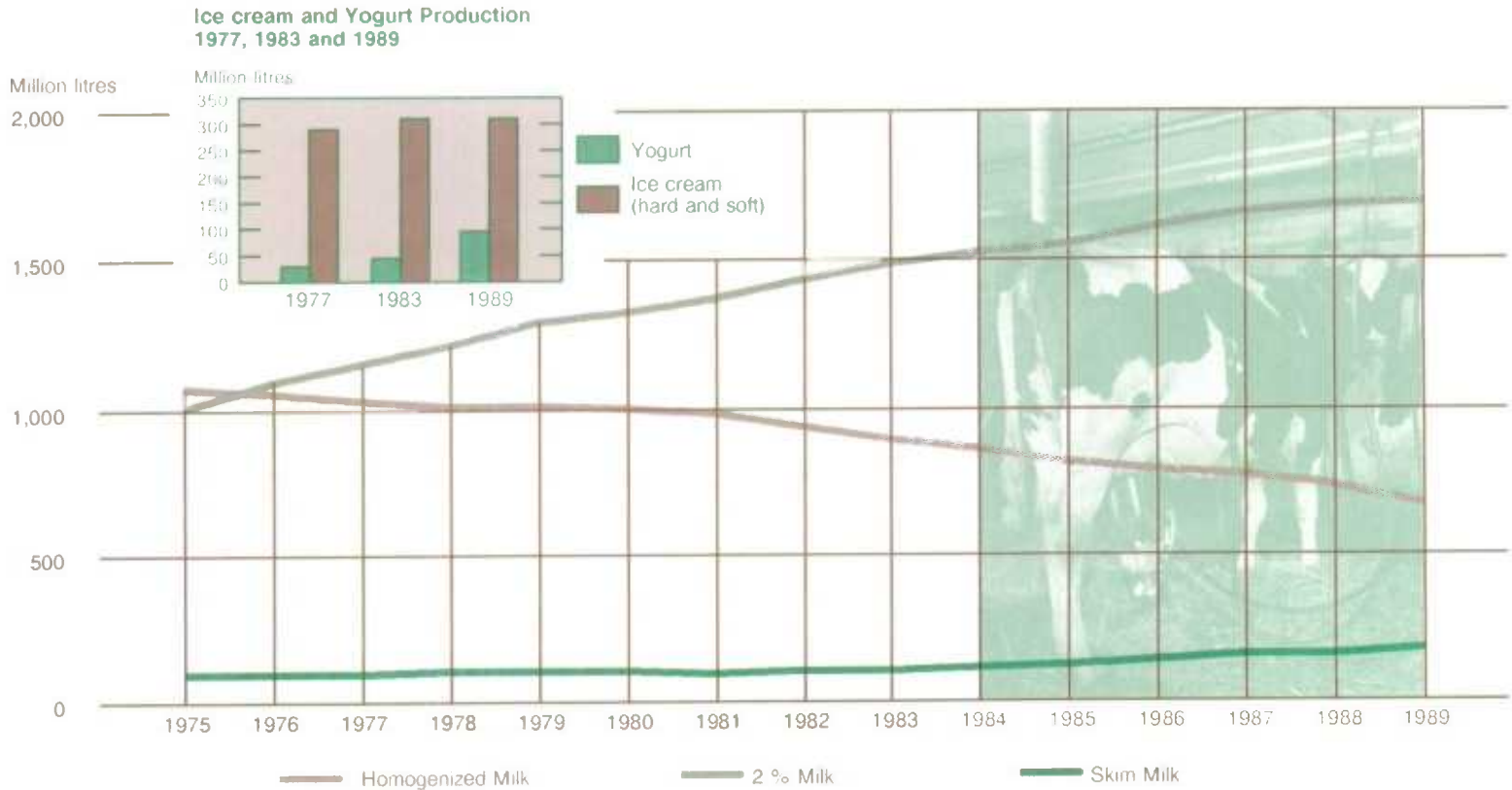
**Source:** *Production of Poultry and Eggs*, Catalogue No. 23-202.

## Did you know that . . .

- when it comes to electronic equipment, farm households are much like other Canadian households: 98 percent have telephones, 97 percent have at least one television and 65 percent have a video cassette recorder.
- about four percent of Canada's labour force is in agriculture. The U.S. has three percent, France six percent, Japan seven percent, the U.S.S.R. 22 percent and China 60 percent.
- in 1986, 11.5 percent of Canada's farmers were foreign born; farmers born in the Netherlands represented the largest proportion at 2.6 percent.
- in 1950, it took about 2,700 bushels of wheat to buy a 50 horsepower tractor. Today, the average Saskatchewan farm tractor has 135 horsepower and costs over 16,000 bushels of wheat.
- in 1986, one third of all Canadian farmers were over 54 years old.



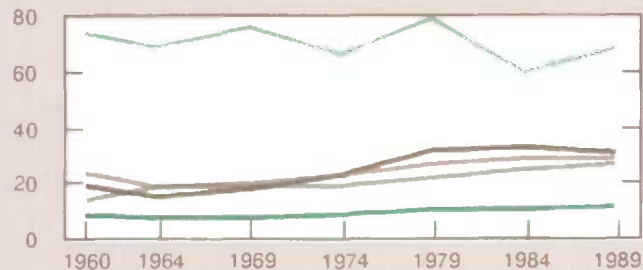
## Market Shares of Pasteurized Milks, Canada, 1975-1989



## Apparent Per Capita Food Consumption in Canada, 1960-1989

### Selected Fruits and Vegetables

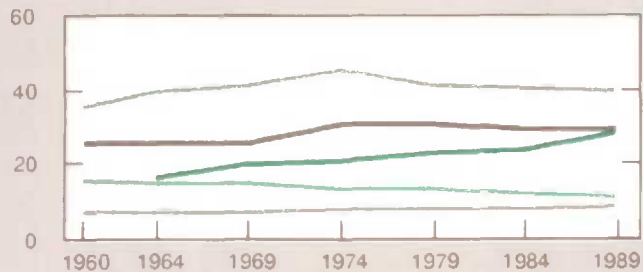
kg/year



Apples\* Oranges\* Carrots\*  
Potatoes\* Tomatoes\*

### Meats, Eggs and Fish

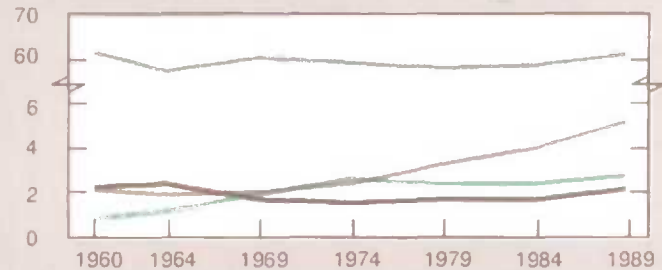
kg/year



Beef (including veal) Pork Poultry  
Eggs\*\* Fish\*

### Wheat Flour and Selected Cereals

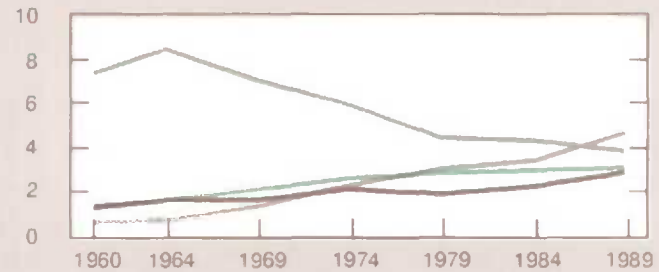
kg/year



Wheat Flour Oatmeal and Rolled Oats  
Corn Flour and Cornmeal Rice

### Selected Dairy Products

kg/year



Butter\* Cheddar Cheese  
Processed Cheese Variety Cheese

\* values for 1989 are estimates.

\*\* For 1989, this represents approximately 16 dozen eggs.

Source: Apparent Per Capita Food Consumption in Canada, Catalogue Nos. 32-229 and 32-230.



1010068632

Ca OOS

## Rankings of Provinces by Selected Agriculture Characteristics.

	First	Second	Third	Fourth	Fifth	Sixth
<b>Number of Farms, 1986 Census</b> Canada total 293,089 farms	Ont. 72,713	Sask. 63,431	Alta. 57,777	Que. 41,448	Man. 27,336	B.C. 19,063
<b>Land on Farms, 1986</b> ('000 of acres) Canada total 167.6 million acres	Sask. 65,728	Alta. 51,040	Man. 19,127	Ont. 13,953	Que. 8,992	B.C. 5,958
<b>Average Farm Size, 1986</b> (acres) Canada average 572 acres	Sask. 1,036	Alta. 883	Man. 700	B.C. 313	N.B. 284	N.S. 240
<b>Farm Real Estate Values, 1986</b> (\$ per acres) Canada average \$478 per acre	Ont. 1,288	B.C. 884	Nfld. 868	P.E.I. 727	Que. 662	N.S. 637
<b>Number of Cattle, July 1, 1990</b> ('000 head) Canada total 12.3 million head	Alta. 4,310	Ont. 2,250	Sask. 2,160	Que. 1,413	Man. 1,075	B.C. 740
<b>Number of Pigs, July 1, 1990</b> ('000 head) Canada total 10.5 million head	Ont. 3,181	Que. 2,975	Alta. 1,760	Man. 1,240	Sask. 790	B.C. 234
<b>Number of Sheep and Lambs, July 1, 1990</b> ('000 head) Canada total 759,200 head	Alta. 233	Ont. 215	Que. 118	B.C. 58	Sask. 56	N.S. 34
<b>Area Planted to Principal Field Crops, 1990</b> ('000 acres) Canada total 79 million acres	Sask. 31,580	Alta. 22,307	Man. 11,210	Ont. 7,700	Que. 4,031	B.C. 1,344
<b>Potato Production, 1990</b> ('000 cwt) Canada total 64.6 million cwt.	P.E.I. 18,750	N.B. 12,495	Que. 8,488	Ont. 8,036	Man. 7,755	Alta. 6,120
<b>Apple Production, 1989</b> (tonnes) Canada total 536,720 tonnes	B.C. 199,128	Ont. 192,216	Que. 89,272	N.S. 51,437	N.B. 4,667	—
<b>Total Direct Payments and Rebates, 1989</b> (\$000,000) Canada total \$3 billion	Sask. 968	Ont. 550	Que. 509	Alta. 467	Man. 373	B.C. 59
<b>Farm Debt Outstanding, December 1, 1989</b> (\$000,000) Canada total \$22 billion	Alta. 5,508	Sask. 5,116	Ont. 4,638	Que. 3,149	Man. 1,789	B.C. 1,137
<b>Net Farm Income, 1989</b> (\$000,000) Canada total \$4.8 billion	Ont. 1,147	Sask. 1,109	Que. 913	Alta. 802	Man. 434	B.C. 180