# 966

# ECONOMIC OVERVIEW OF FARM INCOMES

### All Farms

Economic and Policy Analysis Directorate Agriculture and Agri-Food Canada Publication No. 1959/B

Vol. 1, No. 1, October 1998 Bulletin Series, ISSN 1480-9591 Agriculture Division Statistics Canada Catalogue No. 21-005-XIE

#### **CONTENTS**

Introduction 1
Farm Income by Revenue Class 2
Farm Income by Province 4
Concentration of Production 5
Degree of Specialization 6
Physical Characteristics 6
Glossary 7
Tables 8
Methodology 14

To obtain more information on this analysis please contact:

Margaret Zafiriou Agriculture and Agri-Food Canada Tel.: (613) 759-7397 E-mail: zafirim@em.agr.ca

To obtain additional data, please call:

Alain Bertrand Statistics Canada Tel.: 1 800 465-1991 E-mail: bertala@statcan.ca

This bulletin is also available on the Internet at:

http://www.agr.ca/policy/epad
and

http://www.statcan.ca

#### INTRODUCTION

This is the first in a series of bulletins that will be published jointly by Agriculture and Agri-Food Canada (AAFC) and Statistics Canada (STC). The bulletins replace AAFC's annual publication An Economic Overview of Farm Incomes by Farm Type, Canada (publication no. 1946/E) and STC's annual publication Agricultural Financial Statistics (catalogue no. 21-205-XPB). The objective of the bulletins is to provide a detailed analysis of farm level revenues, expenses and net operating income before depreciation by revenue class and province for eight major farm types for 1996. Information is provided on the concentration of production by revenue class and the degree of specialization of farms producing specific agricultural commodities. In addition there is a brief description of the physical characteristics of farms in Canada.

Most of the analysis in this series is based on data derived from STC's Taxation Data Program (TDP). The bulletins also include information from the June Crops Survey (JCS) and the July Livestock Survey (JLS). The TDP estimates presented in these bulletins are derived from a random sample of income tax returns of individuals operating unincorporated farms with operating revenues of \$10,000 and over and incorporated farms with revenues of \$25,000 and over and for which 51% or more of their sales come from agricultural activities. Communal farming operations, such as

Hutterite colonies, are also included. Group averages, not individual records, are provided by STC to AAFC, and are subject to confidentiality restrictions prior to release. (See the Methodology section of the Bulletin for further discussion.)

STC's TDP is the only source of annual intercensal data at the farm level that provides a detailed picture of revenues and expenses by size (revenue class), type and province. These data, which are derived from Revenue Canada tax returns, are the most comprehensive available but are not as timely as analysts would like. Information for tax purposes is collected in the year following the "tax year" being reported upon; in this case, 1996 data were collected in 1997. STC then undertakes extensive verification and confidentiality procedures before releasing the data a year later. While not timely, the resulting information is comprehensive, accurate and available on a consistent basis over time. Most importantly, it facilitates on-going analysis of major trends in farm structure and performance.

Bulletins 2 to 9 will present similar information for each of the eight major farm types (grain and oilseed, cattle, dairy, hog, fruit and vegetable, poultry and egg, greenhouse and nursery, and potato). The final two bulletins will present information on farm and off-farm sources of income for farm operators (Bulletin 10) and farm families (Bulletin 11).



verage net farm operating income rose 1.8% in 1996 to \$23,977 per farm. However, only large "commercial" farms (\$250,000 or more in revenues) showed an increase.

The trend toward an increasing number of large "commercial" farms continued in 1996.

#### **FARM INCOME BY REVENUE CLASS**

#### **Distribution of Farms by Revenue Class**

The trend toward an increasing number of large "commercial" farms (revenue of \$250,000 and over) continued in 1996.

In 1996, the estimated number of farms with revenues of \$10,000 and above fell to 234,390 from 236,415 in 1995, a 0.9% decline (Table 1). The number of small farms (revenues under \$50,000) declined by 2.1%, medium farms (\$50,000 to \$99,999) by 2.7%, and large farms (\$100,000 to \$249,999) by 1.9%. These declines, however, were offset by a 9.0% increase in the number of large "commercial" farms (\$250,000 and over). These developments reflect the long-term trend toward an increasing number of large "commercial" farms in Canada. Although the overall number of farms fell, the decline was not evident for all farm types. Grain and oilseed farms (Bulletin No. 2) and greenhouse and nursery farms (Bulletin No. 8) increased between 1995 and 1996.

#### **Net Operating Income**

While average net operating income was up in 1996, only large "commercial" farms (\$250,000 and over) reported increases.

Compared to 1995, average net operating income for Canadian farms increased 1.8% to \$23,977 (Table 1). However, compared to the previous five-year average (1991 to 1995), it was 18.0% higher. Increases were not distributed evenly across revenue classes. Only farms earning more than \$250,000 reported increases: up 5.8% for the largest farms (\$500,000 and above) and 1.8% for large "commercial" farms (\$250,000 to \$499,999). Farms with revenues under \$250,000 reported decreases.

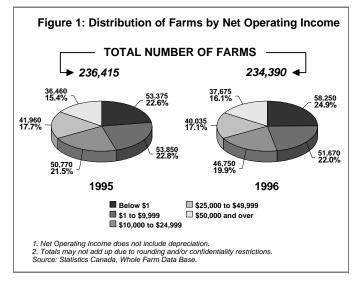
#### **Distribution of Farms by Net Operating Income**

One quarter of farms reported operating losses in 1996, including almost half of the smallest farms (revenues under \$25,000) and 10.7% of large farms (\$100,000 and over).

Almost half (109,925) of the estimated 234,390 farms reported net operating income of less than \$10,000 (Table 2 and Figure 1). Almost a quarter (51,670) had income between \$1 and \$9,999 and a quarter (58,250) incurred losses, having a net operating income below \$1. Of those farms reporting losses, almost half (25,760) were in the \$10,000 to \$24,999 revenue class, while 15.6% had revenue over \$100,000.

At the other extreme, 37,675 farms (16.1%) reported net operating income of \$50,000 and over. Almost all (35,965) were large farms with revenues of \$100,000 and over.

Compared to 1995, the percentage of farms reporting operating losses increased from 22.6% to 24.9% in 1996. Those with net operating income of \$50,000 and over increased from 15.4% to 16.1% (Figure 1).



# Comparison of 1995 and 1996 Major Revenues and Expenses

Higher prices for feed, fertilizers and pesticides led to an increase in average operating expenses while higher revenues from grain and oilseed and hog sales resulted in higher operating revenues.

Between 1995 and 1996, average total revenues for Canadian farms rose from \$138,781 to \$145,837, an increase of 5.1% (Table 1). Livestock revenues and expenses both decreased by about 1.0% between 1995 and 1996, while crop revenues and expenses increased by 15.3% and 9.9%, respectively. The decline in livestock revenues was largely the result of lower steer and calf prices in 1996 as cattle producers continued to reduce herd size in response to higher feed costs, especially in

#### Economic Overview of Farm Incomes, 1996 - All Farms

the first half of the year. Wheat prices, while down in the last half of the year, rose by more than 20% in 1996 compared to 1995, and deliveries were up 2.0% over this period.

Direct program payments also increased in 1996. On average, farms received about \$615 more in program payments in 1996 compared to 1995. The smallest farms (revenues below \$25,000) reported the largest increase, up 30.8% in 1996, while large farms (\$250,000 to \$499,999) received 2.8% less. Net Income Stabilization Account (NISA) withdrawals for unincorporated farms are not included in these figures. This is significant because there is greater participation by large farms in NISA.

Total operating expenses for the average Canadian farm rose from \$115,220 in 1995 to \$121,860 in 1996, an increase of 5.8%. A large part of this increase was due to higher feed grain prices, which led to increased feed costs. Fertilizer, pesticide and machinery repair costs were also up in 1996 as a result of increased demand for these inputs due to increased acreage seeded. Livestock expenses, on the other hand, were down in 1996 as cow-calf prices fell to a cyclical low in the face of heavy herd liquidation.

# Relative Importance of Revenue and Expense Items

The relative importance of revenue and expense items reflects both the production mix of Canadian farms as well as the effect of relative prices on input costs and returns to farming. In 1996, 47.8% of total revenues on average came from the sale of livestock, 41.0% from the sale of crops, 3.9% from direct program payments and 7.4% from the sale of other products and services. These percentages are based on information provided in Table 3. Total operating expenses of \$121,860 included general expenses (39.2% of the total), livestock expenses (33.2%), crop expenses (15.8%) and machinery expenses (11.7%). Of general expenses, salaries were the most important (23.3%) followed by net interest expenses (16.6%) and custom work and machine rental (12.7%).

#### **Detailed Operating Revenues**

Canadian farms received 3.9% of their revenues from program payments in 1996, up from 3.6% in 1995. Program payments were relatively less important for larger farms.

Sales of cattle accounted for a relatively large share of total live-stock revenues (39.9%), while dairy product revenues and subsidies were less important (23.0%) as were swine (18.7%) and poultry and egg sales (14.9%) (Table 3). Cattle sales were a significantly more important source of livestock revenues (about two thirds) for farms with revenues under \$100,000. For large farms in the \$100,000 to \$249,999 range, dairy products and subsidies were relatively more important (46.3%) than the average for all farms. For the largest farms (\$500,000 and over),

poultry and egg sales and swine sales made up a significantly larger share than for other farm sizes. Of total crop revenues, the largest share came from grain and oilseed sales (73.2%), while fruit and vegetable revenues (7.5%) and greenhouse and nursery sales (8.1%) were relatively less important.

On average, Canadian farms received about 3.9% of their total revenues from direct program payments in 1996. This was up from 1995 but significantly lower than in the early 1990s when these payments represented 10.1% of revenues (as in 1992). Program payments declined in importance as farms got larger, falling from 7.3% of revenues for the smallest farms (\$10,000 to \$24,999) to 2.0% for the very largest farms (\$500,000 and over).

#### **Detailed Operating Expenses**

Livestock expenses were the most important expense item for the average farm in 1996, despite lower prices for cattle. Of these expenses, the cost of feed represented almost one half, while cattle purchases were approximately one third of livestock expenses for the average farm. By revenue class, feed expenses were relatively more important for large farms (\$100,000 and over) while the cost of purchasing cattle was more significant for smaller farms (under \$100,000). The major components of crop expenses included fertilizer (46.8%), pesticide (25.7%) and seed expenses (22.5%). Pesticides were more important for the medium- to large-sized farms (\$50,000 to \$499,999) and seed for the very largest farms (\$500,000 and over).

#### **Operating Margins**

Average operating margins were down in 1996 to 16.4 cents per dollar of revenue. Margins generally increased with farm size and were highest for farms in the \$100,000 to \$249,999 revenue class.

Operating margins are a measure of profitability and the rate of return to farm capital, labour and management. They reflect to some degree the efficiency of the farm operation, especially when comparing similar farm types. Farms generally become more efficient as they get larger, up to a point. In 1996, the average operating margin of farms with revenues of \$10,000 and over was 16.4 cents per dollar of revenue (Table 3), down from 17.0 cents in 1995 and 16.9 cents for the previous five-year average. Farms in the revenue class \$10,000 to \$24,999 reported a negative operating margin in 1996, reflecting the inefficiencies of small farm operations. Operating margins increased along with revenue, up to 21.4 cents for revenue class \$100,000 to \$249,999. The very largest farms (\$500,000 and over), on the other hand, reported lower rates of return at 12.5 cents per dollar of revenue. This possibly reflects the type of farms distributed in this revenue class. For example, cattle farms tend to have lower operating margins than other farm types (Bulletin 3), and there are many such farms in this revenue class.

#### **FARM INCOME BY PROVINCE**

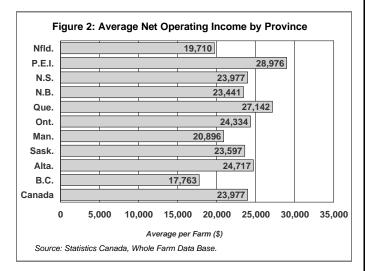
One quarter of farms in Canada were in Saskatchewan (26.4%), followed by Alberta (23.6%) and Ontario (20.8%).

Of the 234,390 farms in Canada with revenues of \$10,000 and over, the largest numbers were distributed in Saskatchewan (26.4% of the total), Alberta (23.6%) and Ontario (20.8%). However, farm income and the importance of the various revenue and expense items are largely influenced by the distribution of farms by farm type in each province as well as to some extent, average farm size. The importance of each of the eight major farm types in each province as measured by the number of farms by farm type is shown in Table 5. Grain and oilseed farms made up a large share of farms in the Prairie provinces, particularly in Saskatchewan. In Manitoba, on the other hand, there was a relatively large share of cattle farms as well. In Prince Edward Island, potato farms made up the largest share of farms followed by cattle and dairy farms. In Quebec, the number of dairy farms exceeded that of other farm types, followed by cattle and grain and oilseed farms. Ontario had more grain and oilseed and cattle farms than any other types while British Columbia reported more cattle and fruit and vegetable farms.

#### **Net Operating Income**

Average net operating income was highest in Prince Edward Island and lowest in British Columbia in 1996.

The type of farms found in each province and their recent performance determine the average net operating income in each province. In 1996, only farms in Prince Edward Island and Quebec reported net operating income that was significantly above the national average (Figure 2). In Prince Edward Island, potato farms have experienced good prices and yields most years since 1994, while dairy and hog farms in Quebec have benefited from higher prices and good returns. In British Columbia, on the other hand, where cattle and fruit and vegetable farms are important, net operating income was significantly below the national average because of the relative weakness in cattle markets. Farms in British Columbia tend to be relatively small with many operators working on a part-time basis, based on Census of Agriculture data, and this results in lower net operating income.



# Comparison of 1995 and 1996 Revenues, Expenses and Net Operating Income

Alberta farms benefited from higher grain and oilseed revenues, while farms in Prince Edward Island experienced lower potato revenues in 1996.

The 1996 net operating income changes for farms in each province are presented in Table 4. From 1995 to 1996, farms in Nova Scotia, New Brunswick, Ontario and Alberta reported increases in average net operating income. Alberta reported the greatest increase, up 14.9%, and Ontario the most modest, 3.0%. Over this period, the average net operating income of farms declined in all the other provinces. Farms in Newfoundland reported the most significant decline, down 26.4%, followed by Prince Edward Island, down 17.2%.

To explain these changes, there is a detailed breakdown of revenue and expense items for farms in each province and their percentage change over 1995 (Table 4). For example, in Ontario, where poultry and egg production is significant, higher prices for these products resulted in higher revenues and therefore higher net operating income (up 3.0%). In Prince Edward Island, net operating income fell 17.2% as a result of higher crop expenses (up 6.0%). Alberta farms benefited from the increase in grain and oilseed prices with higher net operating income (up 14.9%). New Brunswick farms experienced good returns to fruit and vegetable and hog production and income consequently rose 13.8%. In most provinces, expenses related to crops such as seed, fertilizers and pesticides were higher in 1996, as were the costs of swine, poultry and eggs and small tools. However, the cost of cattle was down and, depending on production mix, influenced the net operating income of farms in each province.

# Relative Importance of Revenue and Expense Items

#### **Detailed Operating Revenues**

The relative importance of the various revenue and expense items for farms in each province depends on farm types in each province. For example, while almost half of total revenues for farms at the national level was derived from the sale of livestock, livestock sales ranged from a high of 82.7% of revenues in Newfoundland to a low of 20.4% in Saskatchewan. Crop sales accounted for a higher share of total revenues in Saskatchewan (63.9%), Manitoba (51.6%) and Prince Edward Island (51.5%) compared to the national level (41.0%). These provinces have significant numbers of grain and oilseed farms and potato farms.

Revenues from program payments varied by province as well. Farms in Saskatchewan (7.6%) and Quebec (6.3%) received a larger percentage of revenues from this source than farms in British Columbia (1.2%), Nova Scotia (1.8%) and Newfoundland (1.8%). Some of the provincial differences arise from the type of farms in each province and the programs available. Crop insurance is important in Saskatchewan, for example, but not in Newfoundland. Quebec offers provincial programs for agricultural commodities not covered by NISA in that province, and these contribute to the higher program payments.

#### **Detailed Operating Expenses**

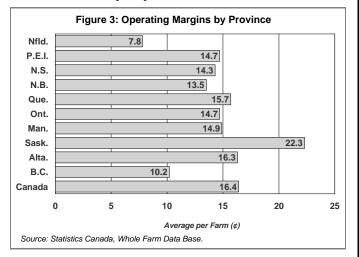
On the expense side, compared to the national average, livestock expenses were more important for farms in Newfoundland (52.3%), where dairy and poultry and egg farms are significant, in Alberta (43.7%) where there are large numbers of cattle farms and Quebec (41.0%), where dairy production is important. Expenses related to crop production, on the other hand, were higher for farms in Prince Edward Island (24.6%), Manitoba (24.0%) and Saskatchewan (23.7%) because of the importance of grain and oilseed and potato farms in these provinces.

#### **Operating Margins**

Saskatchewan farms were most profitable in 1996, while those in British Columbia and Newfoundland were the least.

Operating margins, as a measure of profitability, are also influenced by farm type in each province. In 1996, relative to the national average of 16.4 cents per dollar of revenue, Saskatchewan had significantly higher operating margins at 22.3 cents (Figure 3). The high profitability of Saskatchewan farms in 1996 probably reflects the relatively strong performance of grain and oilseed farms, heavily concentrated in this province. Farms in Newfoundland and British Columbia had significantly lower than average operating margins of 7.8 cents

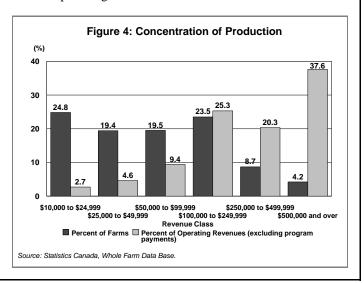
and 10.2 cents respectively. Farms here tend to be small and their small size, combined with major declines in net operating income in 1996, helps explain their low rates of return.



#### **CONCENTRATION OF PRODUCTION**

Large farms (\$100,000 and over) contribute most to total agricultural production, representing over one third of farms in Canada but accounting for 82.7% of production in 1996.

The concentration of production describes the contribution of farms to total agricultural production by revenue class. Small farms with revenues under \$25,000, represented one quarter of all farms in Canada, but accounted for only 2.7% of farm output (Figure 4). Those with revenues under \$100,000 made up almost two thirds of farms, but produced less than one fifth of output. On the other hand, the very largest farms (\$500,000 and over) made up only 4.2% of Canadian farms, but accounted for 37.6% of total agricultural production. Therefore, production tends to be concentrated in a small number of large farms. This concentration varies by farm type, as will be seen in upcoming bulletins.



#### **DEGREE OF SPECIALIZATION**

Dairy farms and greenhouse and nursery operations were most specialized in 1996, while hog and cattle were the least.

Specialization measures the degree to which a farm's sales are derived from any one particular commodity. This will influence their ability to respond to changing market conditions and price shocks. More specialized farms, who depend to a greater extent on a particular commodity, will be more vulnerable to its price declines. However, increased specialization also increases the cost efficiency in producing that commodity.

A farm is considered "highly specialized" when 90% or more of its agricultural sales are derived from the sale of one product or product group. In 1996, 65.4% of farms reporting agricultural sales from greenhouse and nursery products were "highly specialized" (Figure 5). Similarly, a large proportion (61.3%) of farms reporting revenues from the sale of dairy products were "highly specialized" (Figure 6).

By comparison, only 25.8% of farms reporting sales of hogs were "highly specialized". The majority (52.1%) of farms reporting hog sales received less than 51% of sales from this source. These farms were "diversified" and produced hogs in combination with other livestock or grain and oilseed products. Similarly, a large percentage of farms producing poultry and eggs (56.1%) and cattle (47.7%) reported less than 51% of sales from these products.

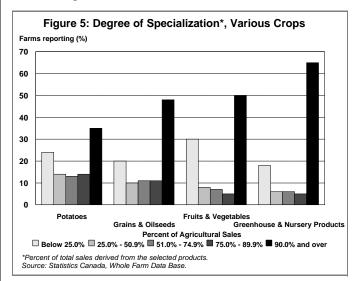


Figure 6: Degree of Specialization\*, Livestock Products Farms reporting (%) 60 50 40 30 20 10 0 Hoas Cattle Poultry & Eags Dairv\* Percent of Agricultural Sale ☐ Below 25.0% ☐ 25.0% - 50.9% ☐ 51.0% - 74.9% ☐ 75.0% - 89.9% **☐** 90.0% and over \*Percent of total sales derived from the selected products \*Includes dairy subsidies Source: Statistics Canada Whole Farm Data Base

#### PHYSICAL CHARACTERISTICS

#### The average farm in Canada continued to increase in size.

The allocation of land to crops versus livestock is determined in part by relative prices and in part by returns to the respective commodities. In 1996, the average farm in Canada was 722 acres, an increase of 1.7% from 1995 (Table 6). The average area devoted to crops increased by 0.7% to 420 acres per farm, of which 333 acres were in grain and oilseed production, an increase of 3.7% over 1995, and 87 acres were devoted to other crops (up 10.3%). The average number of cattle and calves increased by 15.1% to 84 head per farm while the average number of hogs remained relatively unchanged at 48 hogs per farm in 1996.

Future bulletins will look at physical characteristics of farms by farm type and revenue class to reflect differences in production practices and land resource requirements for the various types of farm operations.

#### GLOSSARY

**Concentration of Production.** Describes the contribution of farms to total agricultural production (total revenues excluding program payments) by revenue class.

**Degree of Specialization.** Measures the percent a particular commodity contributes to that farm's total agricultural sales (excluding program payments). Farms are "highly specialized" when 90% or more of their sales are derived from the sale of any one commodity or commodity group.

**Depreciation.** Measures the loss in value of an asset over its estimated life due to wear and tear and obsolescence. In the bulletins, depreciation is not included in expenses and net operating income is calculated before depreciation. (For tax purposes, depreciation is represented by the capital cost allowance, an amount deducted from income to account for annual depreciation costs at a rate specific to the depreciable capital item).

**Farm Operations.** Include unincorporated farms with gross operating revenue of \$10,000 or more, and incorporated farms with sales of \$25,000 or more and for which 51% or more of their sales come from agricultural activities. (Since 1993, farm operations have also included communal farming operations that reported gross operating revenues of \$10,000 or more.)

**Farm Type.** Classification is determined by the contribution of a particular commodity's sales to a farm's total agricultural sales. (For example, farms on which 51% or more of sales are derived from dairy products are considered dairy farms.) Eight major farm types are discussed in the bulletins: grain and oilseed, cattle, dairy, hog, fruit and vegetable, poultry and egg, greenhouse and nursery, and potato farms.

**Net Operating Income.** The profit or loss of the farm operation measured by total operating revenues less total operating expenses, before depreciation, and before other adjustments, for tax purposes.

**Operating Expenses.** The business costs incurred by the farm operation in the production of agricultural commodities. (Inter-farm purchases are included in these costs and depreciation expenses are excluded.)

**Operating Margin.** The ratio of net operating income to operating revenues, measured in cents per dollar of revenue. It is a measure of profitability and the rate of return to farm capital, labour and management.

**Operating Revenues.** Those from the sale of agricultural commodities as well as agricultural program payments and subsidies. (Revenues from the sale of forest products and other farm income are also included, as are inter-farm sales).

**Program Payments.** Include income from provincial stabilization programs, the Gross Revenue Insurance Plan (GRIP) now terminated, payments and other subsidies (such as hog incentive programs, acreage payments, assistance for clearing land and government grants), plus aggregate amounts reported for subsidies, patronage dividends and reimbursements. Program payments also include insurance proceeds from programs for crops and livestock due to adverse weather conditions, disease or other reasons. Dairy subsidies are not included in program payments nor are Net Income Stabilization Account (NISA) withdrawals of unincorporated farms.

#### **TABLES**

Table 1: Operating Revenues and Expenses by Revenue Class, Canada, 1995 and 1996

		\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and over	All Farms
Number of Farms	1996	58,095	45,360	45,770	55,045	20,310	9,805	234,390
rtamber er r anne	1995	57,475	48,150	47,045	56,110	19,055	8,590	236,415
				Revenues	s - Average p	per Farm (\$)		
Total Crops	1996	6,887	17,109	37,326	75,306	151,279	397,610	59,738
	1995	6,786	16,096	34,279	66,516	130,881	377,838	51,805
Total Livestock	1996	5,942	11,818	23,184	64,697	155,807	781,830	69,693
Total Livestook	1995	6,135	12,514	25,479	69,390	170,339	857,026	70,429
Program Payments	1996	1,192	2,435	4,509	7,608	12,611	26,086	5,618
1 Togram r ayments	1995	911	2,025	3,720	6,911	12,978	25,962	5,003
Total Other Revenues	1996	2,413	4,687	7,311	11,092	21,754	80,441	10,788
Total Other Revenues	1995	2,706	5,529	8,790	14,629	24,116	71,436	11,543
Total Revenues <sup>1</sup>	1996	16,433	36,049	72,330	158,704	341,451	1,285,967	145,837
Total Revenues	1995	16,539	36,164	72,268	157,447	338,315	1,332,262	138,781
				Expenses	s - Average p	per Farm (\$)		
Total Crops	1996	1,960	4,724	11,404	24,786	51,605	128,374	19,291
Total Grops	1995	1,850	4,650	10,778	23,620	47,518	125,937	17,551
Total Livestock	1996	3,416	5,616	9,712	25,623	75,193	575,692	40,449
Total Livestock	1995	3,803	6,109	11,369	28,934	82,569	629,337	40,806
Total Machinery	1996	4,043	7,126	11,862	19,105	29,388	61,327	14,297
Total Machinery	1995	3,926	6,917	11,167	18,137	27,370	58,142	13,207
Total General Expenses	1996	7,764	14,109	25,533	55,159	117,429	359,773	47,823
Total General Expenses	1995	7,054	13,052	23,381	50,996	114,214	366,840	43,656
Total Expenses <sup>1</sup>	1996	17,183	31,574	58,512	124,673	273,616	1,125,166	121,860
Total Expenses	1995	16,633	30,729	56,695	121,688	271,672	1,180,256	115,220
			Net	Operating I	ncome - Ave	rage per Fai	rm (\$)	
Net Operating Income <sup>2</sup>	1996	(750)	4,475	13,818	34,031	67,835	160,801	23,977
Net Operating income	1995	(94)	5,435	15,573	35,759	66,643	152,006	23,561

<sup>1.</sup> Totals may not add up due to rounding and/or confidentiality restrictions.

Table 2: Distribution of Net Operating Income by Revenue Class, Canada, 1996

		Net Operating Income <sup>1</sup>								
Revenue Class	Below \$1	\$1 to \$9,999	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 and over	Total				
			Number	of Farms						
\$10,000 to \$24,999	25,760	24,680	7,655	_	_	58,095				
\$25,000 to \$49,999	14,315	13,925	13,135	3,975	_	45,360				
\$50,000 to \$99,999	9,085	8,310	14,660	11,995	1,705	45,770				
\$100,000 and over	9,095	4,745	11,300	24,055	35,965	85,170				
Total Farms <sup>2</sup>	58,250	51,670	46,750	40,035	37,675	234,390				
Percent of Total Farms	24.9	22.0	19.9	17.1	16.1	100.0				

<sup>1.</sup> Net operating income does not include depreciation.

<sup>2.</sup> Net operating income does not include depreciation. Source: Statistics Canada, Whole Farm Data Base.

<sup>2.</sup> Totals may not add up due to rounding and/or confidentiality restrictions. Source: Statistics Canada, Whole Farm Data Base.

Table 3: Operating Revenues and Expenses by Revenue Class, Canada, 1996

	\$10,000	\$25,000	\$50,000	\$100,000	\$250,000	\$500,000	All
	to \$24,999	to \$49,999	to \$99,999	to \$249,999	to \$499,999	and over	Farms
Number of Farms	58,095	45,360	45,770	55,045	20,310	9,805	234,390
			Revenues	- Average p	er Farm (\$)		
Grains & Oilseeds	5,421	14,160	32,092	63,792	115,585	200,693	43,746
Potatoes	24	115 *	307	904	4,894	32,486	2,084
Fruits & Vegetables	450	1,252	2,141	3,998	9,502	46,188	4,467
Tobacco	20 **	103 **	267 *	1,923	7,337	7,099	1,462
Greenhouse & Nursery Products	127	296	748	1,856	8,063	83,037	4,843
Forage Crops (including seed)	832	1,171	1,689	2,521	4,315	6,038	1,981
Other Crops	13 **	12 **	81 **		1,583	22,069	1,155
Total Other Crops	1,466	2,949	5,234	11,514	35,694	196,917	15,992
Total Crop Revenues	6,887	17,109	37,326	75,306	151,279	397,610	59,738
Cattle & Semen	4,533	9,076	14,647	22,603	43,239	311,627	27,833
Swine	266	702	1,815	6,659	29,367	199,537	13,013
Poultry & Eggs	147	180	487	2,722	19,894	187,005 *	10,354 *
Dairy Products & Subsidies	132	722	4,820	29,978	57,731	68,282	16,014
Other Livestock & Products	863	1,139	1,414	2,735	5,576	15,378	2,479
Total Livestock & Product Revenues	5,942	11,818	23,184	64,697	155,807	781,830	69,693
Program Payments Custom Work & Machine Rental	1,192	2,435	4,509	7,608	12,611	26,086	5,618
	769	1,770	2,998	5,047	10,160	54,436	5,462
Rental Income	318	715	929	1,152	2,422	5,888	1,125
Forest & Maple Products	426	713	1,275	1,065	1,096	2,148	928
Miscellaneous Revenues Total Other Revenues	900	1,488	2,109	3,828	8,076	17,969	3,274
	2,413	4,687	7,311	11,092	21,754	80,441	10,788
Total Operating Revenues <sup>1</sup>	16,433	36,049	72,330	158,704 - Average p	341,451	1,285,967	145,837
Fertilizer & Lime	000	0.000				40.007	0.000
Pesticides	960 431	2,300 1,176	5,723	12,635 6,655	25,040 13,835	49,897 30,277	9,026 4,956
Seed & Plants	468	1,176	3,036	4,785	11,096	35,948	4,349
Other Crop Expenses	101	210	2,269 377	4,765 712	1,634	12,251	4,349 961
Total Crop Expenses	1,960	4,724	11,404	24,786	51,605	128,374	19,291
Cattle Purchases	1,282	2,350	3,923	7,932	20,090	204,025	13,678
Swine Purchases	48	113	292	1,050	4,593	41,213	2,460
Poultry & Egg Purchases	20	24	74	435	3,526	45,293 **	2,400
Other Livestock Purchases	303	377	458	706	1,718	5,250	772
Feed, Supplements, Straw & Bedding	1,413	2,205	4,088	13,128	40,738	268,482	19,421
Vet Fees, Medicine & Breeding Fees	350	543	872	2,267	4,134	10,665	1,699
Other Livestock Expenses	_	3 **	5 *	105	394	763	92
Total Livestock Expenses	3,416	5,616	9,712	25,623	75,193	575,692	40,449
Small Tools	281	404	578	778	748	622	534
Net Fuel Expenses, Machinery, Truck, Auto	1,788	3,192	5,208	7,973	12,088	22,903	5,956
Repairs, Licenses and Insurance	1,974	3,530	6,077	10,354	16,552	37,802	7,807
Total Machinery Expenses	4,043	7,126	11,862	19,105	29,388	61,327	14,297
Salaries (including CPP, QPP, EI)	546	1,425	3,192	9,561	28,809	127,994	11,131
Rent	373	836	1,640	3,515	8,864	23,500	3,151
Insurance	522	818	1,348	2,875	6,171	14,844	2,382
Utilities	818	1,200	1,833	3,462	7,083	25,766	3,298
Custom Work & Machine Rental	988	1,995	3,831	7,466	14,835	39,702	6,079
Net Interest Expenses	1,396	2,672	4,804	10,298	19,961	47,817	7,950
Net Property Taxes	982	1,396	1,996	3,010	4,574	8,540	2,364
Building & Fence Repairs	710	987	1,481	2,805	5,298	15,663	2,429
Miscellaneous Expenses	1,429	2,779	5,408	12,169	21,833	55,948	9,039
Total General Expenses	7,764	14,109	25,533	55,159	117,429	359,773	47,823
Total Operating Expenses <sup>1</sup>	17,183	31,574	58,512	124,673	273,616	1,125,166	121,860
			perating In				
Net Operating Income <sup>2</sup>	(750)	4,475	13,818	34,031	67,835	160,801	23,977
	(1.00)		Operating M				,
Operating Margin	(0.05)	0.12	0.19	0.21	0.20	0.13	0.16
Operating Margin (excluding interest)	0.04	0.20	0.26	0.28	0.26	0.16	0.22
Totals may not add up due to rounding and/or confiden			· · · · · ·	* Use with			· · · · · · · · · · · · · · · · · · ·

<sup>1.</sup> Totals may not add up due to rounding and/or confidentiality restrictions.

<sup>2.</sup> Net operating income does not include depreciation.

Source: Statistics Canada, Whole Farm Data Base.

<sup>\*</sup> Use with caution.
\*\* Unreliable.

Table 4: Operating Revenues and Expenses by Province, 1996

	Newfo	undland		Edward and	Nova	Scotia	New Br	unswick
	1996	Change 1996/1995	1996	Change 1996/1995	1996	Change 1996/1995	1996	Change 1996/1995
Number of Farms	250	(7.4)	1,670	(5.9)	2,305	1.8	1,840	0.3
				nues - Aver				
Grains & Oilseeds	378	X	9,582	29.4	1,832	47.9	4,366	0.3
Potatoes	2,608	61.5	83,669	(1.1)	1,880	(23.9)	41,211	(5.6)
Fruits & Vegetables	14,451	6.6	4,213	10.9	22,911	5.3	9,196	6.9
Tobacco	-	X	1,785	(58.0)	X	X (7.5)	X	Х
Greenhouse & Nursery Products	16,964	(8.3)	1,603	61.3	12,033	(7.2)	8,219	0.4
Forage Crops (including seed)	1,573	3.9	472	4.2	1,093	0.1	1,268	21.7
Other Crops	-	Х	-	(0.5)	X	(0,0)	X	X (0.7)
Total Other Crops	35,595	X	91,743	(2.5)	38,773	(0.9)	60,584	(2.7)
Total Crop Revenues	35,972	2.1	101,325	(0.2)	40,605	0.6	64,950	(2.5)
Cattle & Semen Swine	7,102	(1.9)	25,922	(1.1)	12,698	(17.2)	14,710	(5.6)
	2,268 *	34.6	21,287	30.0	17,074	26.5	12,485	38.9
Poultry & Eggs Dairy Products & Subsidies	108,557	(28.3)	5,476	13.7	31,741	9.4	22,379	(5.5)
Other Livestock & Products	88,504	16.5	28,707	9.8	40,007	(7.6)	36,646	2.0
Total Livestock & Products  Total Livestock & Product Revenues	1,634	5.7	1,325	(23.3)	8,047	50.7	2,248	34.0
Program Payments	208,064	(12.6)	82,717	9.9	109,567	2.9	88,468	3.0
Custom Work & Machine Rental	4,488 *		5,123	(40.7)	3,082	8.1	5,030	28.1
Rental Income	1,560 *	64.9	4,041	(7.3)	5,131	12.5	4,543	6.2
Forest & Maple Products	216 *	(28.7)	667	22.6	502 5 479	28.7	369 7.610	(20.6)
Miscellaneous Revenues	183 *	(30.2)	530 *		5,478	3.7	7,619	15.1
Total Other Revenues	1,143	(26.7)	2,397	(7.6)	2,821	(11.5)	2,437	5.7
Total Operating Revenues <sup>1</sup>	3,102 <b>251,626</b>	1.0 <b>(9.5)</b>	7,636 <b>196,802</b>	(3.5) <b>1.8</b>	13,932 <b>167,186</b>	3.8 <b>2.5</b>	14,967 <b>173,414</b>	9.5 <b>1.9</b>
Total Operating Nevertues	231,020	(9.5)		nses - Aver			173,414	1.3
Fertilizer & Lime	F 24.4	10.4	18,346				0.057	(F. O)
Pesticides	5,314	19.4		6.9	4,709	6.3	8,957	(5.9)
Seed & Plants	1,071	(27.7) 23.4	11,414 7,922	26.2 (7.4)	2,537	1.9	5,467 6,755	(1.4) 2.4
Other Crop Expenses	6,036 * 2,419	(26.4)	3,558	20.7	3,949 2,403	(1.3) 2.0	2,554	
Total Crop Expenses	14,840	5.2	41,240	9.3	13,599	2.0	23,733	(6.9) (2.8)
Cattle Purchases	6,801	(0.7)	14,394	(6.1)	5,593	(15.8)	7,100	(8.4)
Swine Purchases	372 **	` ,	3,296	43.4	2,794	25.6	1,981	15.8
Poultry & Egg Purchases	22,642		662		7,094	16.9	-	(13.6)
Other Livestock Purchases	326 *	(29.6) 38.1	408 *	(7.5) 42.2	473	62.0	3,447 231	(9.8)
Feed, Supplements, Straw & Bedding	88,910		21,165	13.2	36,493	11.5	31,211	13.3
Vet Fees, Medicine & Breeding Fees	2,014	(5.2) 9.2	1,877	(2.6)	2,082	(1.3)	1,904	4.4
Other Livestock Expenses	321 *	(57.1)	42 *	(85.1)	165	(77.7)	260	(56.3)
Total Livestock Expenses	121,387	(10.6)	41,844	5.8	54,694	7.6	46,134	5.7
Small Tools	338	93.1	398	75.3	475		371	83.7
Net Fuel Expenses, Machinery, Truck, Auto	4,397	(9.1)	7,540	6.6	4,533	(6.0)	6,642	11.0
Repairs, Licenses and Insurance	7,981	27.2	10,774	1.8	6,786	(2.8)	10,079	(2.2)
Total Machinery Expenses	12,715	12.7	18,712	4.6	11,794	(1.9)	17,092	3.6
Salaries (including CPP, QPP, EI)	35,808	(13.9)	22,892	4.5	26,346	(1.6)	26,514	(3.4)
Rent	1,691	(16.4)	5,647	2.9	1,690	13.2	2,278	2.0
Insurance	2,814	(0.5)	2,641	(0.5)	1,959	(4.6)	3,527	(6.6)
Utilities	5,727	(24.0)	3,201	(2.2)	4,582	1.9	3,840	(0.0)
Custom Work & Machine Rental	3,679	14.0	5,616	14.4	4,947	1.5	4,903	7.8
Net Interest Expenses	9,658	1.2	12,600	9.1	8,817	(4.8)	8,871	2.5
Net Property Taxes	707	(4.3)	1,645	7.8	1,083	(4.6) 4.7	1,221	(0.9)
Building & Fence Repairs	2,719	(16.8)	2,938	15.0	2,410	(4.2)	2,579	(6.8)
Miscellaneous Expenses	20,172	4.1	8,848	(5.7)	11,288	(6.6)	9,281	(11.0)
Total General Expenses	82,974	(8.0)	66,029	4.4	63,123	(2.3)	63,015	(3.0)
Total Operating Expenses <sup>1</sup>	231,917	(7.7)	167,826	6.0	143,209	1.8	149,973	0.3
	201,017			ng Income				3.3
Net Operating Income <sup>2</sup>	19,710	(26.4)	28,976	(17.2)	23,977	6.8	23,441	13.8
parading moonio	19,710	(20.4)		ng Margin			20,771	13.0
Operating Margin	0.0	18		15		14	0.1	14
Operating Margin (excluding interest)	0.0			21		20	0.	
operating margin (excluding interest)	U.	14	U.	<b>-</b> I	U.	<u></u>	υ.	

<sup>1.</sup> Totals may not add up due to rounding and/or confidentiality restrictions.

<sup>2.</sup> Net operating income does not include depreciation.
Source: Statistics Canada, Whole Farm Data Base.

<sup>\*</sup> Use with caution.

<sup>\*\*</sup> Unreliable.

Table 4: Operating Revenues and Expenses by Province, 1996 (continued)

	Que	ebec	Ont	ario	Man	itoba	Saskate	chewan
	1996	Change 1996/1995	1996	Change 1996/1995	1996	Change 1996/1995	1996	Change 1996/1995
Number of Farms	29,375	1.9	48,695	(4.3)	22,485	(1.0)	61,900	
				ues - Aver			7	
Grains & Oilseeds	16,063	41.7	30,126	12.3	65,239	16.9	65,709	22.4
Potatoes	2,265	(8.9)	1,082	2.1	2,870	12.5	109 *	(4.4)
Fruits & Vegetables	8,885	9.4	8,449		653	10.1	143	(24.3)
Tobacco	X	X	6,511	(1.8)	Х		X	Х
Greenhouse & Nursery Products	6,630	4.4	10,197	0.2	X	X	312 **	
Forage Crops (including seed) Other Crops	901	39.0	1,330	20.6	2,042	0.7	1,314	2.3
Total Other Crops	x 19,630	x 6.5	2,798 30,366	(5.0) 	880 7,334	2.7 6.9	x 1,879	x 9.2
Total Crop Revenues	35,693	19.9	60,492	5.8	7,334	15.8	67,589	22.0
Cattle & Semen	14,367	(8.6)	23,749	(14.5)	19,747	(8.0)	13,959	(13.1)
Swine	34,391	16.4	16,148	17.4	21,153	23.0	3,446 *	46.6
Poultry & Eggs	17,607	4.1	22,498 **		5,973	1.8	1,245	22.5
Dairy Products & Subsidies	47,219	(6.3)	26,592	4.7	5,815	0.4	1,776	9.6
Other Livestock & Products	1,924	62.2	3,008	42.0	3,693	13.4	1,100	0.6
Total Livestock & Product Revenues	115,509	1.6	91,995	8.1	56,382	5.2	21,525	(2.8)
Program Payments	10,831	(15.1)	3,370	60.8	3,971	(39.4)	7,995	58.4
Custom Work & Machine Rental	3,596	16.1	6,033	28.9	3,605	23.1	3,881	25.1
Rental Income	727	26.2	895	8.6	560	(5.1)	755	12.4
Forest & Maple Products	4,651	10.8	395 *	14.2	70 **		34 **	36.0
Miscellaneous Revenues	1,809	(16.4)	2,745	0.1	3,453	(34.4)	3,978	(57.0)
Total Other Revenues	10,782	` 7.5 <sup>°</sup>	10,068	17.2	7,688	(12.9)	8,649	(33.7)
Total Operating Revenues <sup>1</sup>	172,815	3.9	165,925	8.5	140,614	6.8	105,757	10.6
			Expen	ses - Aver	age per F	arm (\$)		
Fertilizer & Lime	6,360	9.6	7,682	0.1	14,160	7.2	9,693	12.5
Pesticides	1,780	25.5	3,783	10.4	8,876	14.1	6,751	18.5
Seed & Plants	5,305	14.5	6,301	12.4	5,395	13.7	2,872	15.5
Other Crop Expenses	1,584	9.2	1,759	(11.5)	355	0.3	158	29.5
Total Crop Expenses	15,029	12.9	19,525	4.4	28,785	10.3	19,474	15.1
Cattle Purchases	6,204	(7.8)	12,100	(25.0)	7,466	(15.7)	5,483	(26.6)
Swine Purchases	8,152	9.2	2,851	9.3	4,066	17.9	417	33.7
Poultry & Egg Purchases	3,383	(4.2)	6,271 **		1,108	(15.2)	166	15.3
Other Livestock Purchases	424	61.8	1,134	31.7	610	14.7	508	(4.5)
Feed, Supplements, Straw & Bedding	38,021	13.2	25,672 *	31.5	15,424	22.0	4,403	24.6
Vet Fees, Medicine & Breeding Fees	3,223	(4.4)	2,249	3.8	1,356	0.5	661	2.5
Other Livestock Expenses	267	(68.9)	106	(68.3)	46	(62.3)	15 *	(75.4)
Total Livestock Expenses	59,674	6.9	50,383 *	11.9	30,074	6.4	11,653	(8.3)
Small Tools Net Fuel Expenses, Machinery, Truck, Auto	493		533	48.9	476	23.0	536	22.7 5.3
Repairs, Licenses and Insurance	3,866 7,854	7.8 2.8	4,882 7,161	9.9	7,813 8,748	8.2	7,142 7,686	5.3 10.4
Total Machinery Expenses	12,214	2.8 7.6	12,576	6.8 9.3	17,038	9.8 9.4	15,363	8.3
Salaries (including CPP, QPP, EI)	14,919	3.4	17,121	10.3	7,579	6.7	4,761	17.3
Rent	1,750	7.4	4,011	6.7	4,364	6.7	2,677	5.4
Insurance	3,665	(4.4)	2,611	(2.8)	2,417	(10.9)	2,077	24.9
Utilities	4,723	5.4	5,060	10.4	2,884	10.3	1,869	12.9
Custom Work & Machine Rental	5,488	15.2	6,483	16.2	5,727	24.4	5,658	34.8
Net Interest Expenses	10,536	(2.6)	8,552	5.7	7,484	1.6	5,663	2.8
Net Property Taxes	2,096	8.8	2,730	12.2	2,558	9.6	2,903	9.3
Building & Fence Repairs	4,072	1.3	3,084	16.6	2,136	4.7	1,337	30.3
Miscellaneous Expenses	11,509	3.8	9,454	7.5	8,671	22.0	8,775	82.1
Total General Expenses	58,756	3.1	59,106	9.3	43,821	9.7	35,670	27.0
Total Operating Expenses <sup>1</sup>	145,674	6.0	141,591	9.5	119,718	8.9	82,161	14.3
		Ne	et Operatir	ng Income	- Average	per Farm	(\$)	
Net Operating Income <sup>2</sup>	27,142	(5.9)	24,334	3.0	20,896	(3.8)	23,597	(0.7)
		. ,	Operatii	ng Margins	s per \$ of			· '
Operating Margin	0.1	16	0.1	5	0.	15	0.2	2
Operating Margin (excluding interest)	0.2		0.2	20	0.2	20	0.2	

Totals may not add up due to rounding and/or confidentiality restrictions.
 Net operating income does not include depreciation.
 Source: Statistics Canada, Whole Farm Data Base.

<sup>\*</sup> Use with caution.

<sup>\*\*</sup> Unreliable.

Table 4: Operating Revenues and Expenses by Province, 1996 (concluded)

	Albe	erta	British C	olumbia	Cana	ada
	1996	Change 1996/1995	1996	Change 1996/1995	1996	Change 1996/1995
Number of Farms	55,425	0.3	10,445	(2.6)	234,390	(0.9)
		Re	venues - Aver	age per Farm	(\$)	
Grains & Oilseeds	48,386	23.3	6,737	24.4	43,746	21.2
Potatoes	882	X	2,730	39.9	2,084	2.6
Fruits & Vegetables	599	17.0	22,729	(2.8)	4,467	1.2
Tobacco	-	X	X	Х	1,462	(5.6)
Greenhouse & Nursery Products	1,206	5.7	27,581	6.4	4,843	2.3 9.0
Forage Crops (including seed) Other Crops	3,769 637	6.6 0.5	2,972	12.4	1,981 1,155	(2.1)
Total Other Crops	7,093	10.8	x 62,785	x 4.3	15,992	1.7
Total Crop Revenues	55,478	21.5	69,522	5.9	59,738	15.3
Cattle & Semen	59,370	(16.2)	23,479	(19.6)	27,833	(14.4)
Swine	7,524	10.4	4,695	10.2	13,013	18.9
Poultry & Eggs	3,232	6.7	26,126	3.6	10,354 *	16.7
Dairy Products & Subsidies	5,078	6.5	30,609	(4.0)	16,014	(0.7)
Other Livestock & Products	2,777	22.1	4,579	27.9	2,479	25.7
Total Livestock & Product Revenues	77,982	(11.1)	89,488	(4.9)	69,693	(1.0)
Program Payments	3,656	3.6	2,083	(0.4)	5,618	12.3
Custom Work & Machine Rental	8,254	25.2	7,152	11.2	5,462	23.5
Rental Income	2,240	(0.2)	1,181	5.9	1,125	5.4
Forest & Maple Products	148 *	(2.6)	2,114	(7.5)	928	10.3
Miscellaneous Revenues	3,806	(26.9)	2,909	(8.7)	3,274	(37.2)
Total Other Revenues	14,447	1.8	13,356	2.6	10,788	(6.5)
Total Operating Revenues <sup>1</sup>	151,563	0.3	174,450	(0.2)	145,837	5.1
Fortilless O. Lives			penses - Avera			
Fertilizer & Lime Pesticides	9,350 4,489	7.8 20.3	5,623 2,251	4.1 10.1	9,026 4,956	7.4 16.6
Seed & Plants	2,644	20.3 12.9	2,251 7,174	2.2	4,956 4,349	11.4
Other Crop Expenses	356	(11.4)	7,174 3,701	2.2 6.9	4,349 961	(3.1)
Total Crop Expenses	16,839	11.2	18,750	4.6	19,291	9.9
Cattle Purchases	31,999	(24.0)	9,779	(31.2)	13,678	(23.3)
Swine Purchases	1,080	26.2	517	5.5	2,460	13.9
Poultry & Egg Purchases	547	7.5	4,371	(12.1)	2,327 **	28.9
Other Livestock Purchases	916	(7.8)	1,446	36.0	772	11.1
Feed, Supplements, Straw & Bedding	19,186	13.4	29,038	12.4	19,421	18.9
Vet Fees, Medicine & Breeding Fees	1,600	(3.8)	2,109	(2.1)	1,699	(0.8)
Other Livestock Expenses	58	(54.7)	234	(44.0)	92	(65.7)
Total Livestock Expenses	55,385	(12.3)	47,494	(3.4)	40,449	(0.9)
Small Tools	615	12.6	409	23.6	534	36.2
Net Fuel Expenses, Machinery, Truck, Auto	6,203	5.1	4,479	7.1	5,956	6.7
Repairs, Licenses and Insurance	8,072	9.5	7,311	5.9	7,807	7.9
Total Machinery Expenses	14,890	7.7	12,199	6.8	14,297	8.3
Salaries (including CPP, QPP, EI)	7,018	5.8	31,241	3.5	11,131	6.6
Rent	3,148	11.0	3,411	13.1	3,151	7.2
Insurance Utilities	1,881	(10.0)	2,226	(0.7)	2,382	(0.5)
Custom Work & Machine Rental	2,438 6,269	5.3 14.8	4,576 8,688	2.8 9.3	3,298 6,079	7.5 19.6
Net Interest Expenses	8,048	(3.6)	10,766	9.5 2.5	7,950	0.7
Net Property Taxes	1,769	1.0	1,594	6.0	2,364	8.1
Building & Fence Repairs	2,218	11.3	2,882	1.6	2,429	11.1
Miscellaneous Expenses	6,943	14.7	12,859	2.3	9,039	21.1
Total General Expenses	39,732	6.0	78,244	4.0	47,823	9.5
Total Operating Expenses <sup>1</sup>	126,846	(2.1)	156,687	1.9	121,860	5.8
			ating Income	- Average per		
Net Operating Income <sup>2</sup>	24,717	14.9	17,763	(15.9)	23,977	1.8
	Operating Margins per \$ of Revenue					
Operating Margin	0.1		0.1	0	0.16	
Operating Margin (excluding interest)	0.2	2	0.1	6	0.22	2

Totals may not add up due to rounding and/or confidentiality restrictions.
 Net operating income does not include depreciation.
 Source: Statistics Canada, Whole Farm Data Base.

<sup>\*</sup> Use with caution.

<sup>\*\*</sup> Unreliable.

Table 5: Distribution of Farms by Farm Type and by Province, 1996

Farm Type	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total
						(%)					
Dairy	20.0	21.6	18.9	19.6	34.7	16.3	3.6	0.8	1.6	8.5	9.6
Cattle	х	22.2	25.6	24.5	18.6	24.0	24.5	12.3	38.5	28.2	23.9
Hog	х	9.0	4.3	5.2	7.7	5.9	4.8	1.2	2.3	1.5	3.7
Poultry and Egg	16.0	2.1	4.1	3.8	3.0	3.5	1.7	0.3	0.8	5.6	1.9
Potato	х	28.1	х	16.0	0.9	0.3	0.4	х	0.1	0.8	0.6
Fruit and Vegetable	28.0	3.3	22.3	12.5	6.7	5.0	0.4	х	0.3	21.0	3.3
Greenhouse and Nursery	10.0	х	4.1	3.0	3.1	2.2	0.3	0.2	0.5	5.7	1.4
Grain and Oilseed	х	5.4	1.3	х	10.3	28.5	56.8	81.3	44.4	9.2	45.1
Other	14.0	8.7	18.9	14.9	15.0	14.4	7.5	3.8	11.4	19.5	10.5
All Farms <sup>1</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1.</sup> Totals may not add up due to rounding and/or confidentiality restrictions. Source: Statistics Canada, Whole Farm Data Base.

Table 6: Physical Characteristics, All Farms, Canada, 1995 and 1996

Farm Type		Total Area of Farms	Total Crops	Total Cattle & Total Hogs			
			Average N	Average N	o. of Head		
All Farms	1996	722	420	333	87	84	48
All Farms	1995	710	417	321	97	73	47

Source: Statistics Canada, June Crops Survey and July Livestock Survey.

#### **METHODOLOGY**

The following section provides a description of the methodology used for Statistics Canada's *Taxation Data Program*, the *June Crops Survey* and the *July Livestock Survey*.

#### **TAXATION DATA PROGRAM**

#### Sampling Frame

The sampling frame for the unincorporated sector consists of all individuals who claim either positive gross farm income or non-zero net farm income from self-employment on their Revenue Canada T1 General – Income Tax Return. Taxfilers in the two territories and in multiple jurisdictions (more than one province), and non-Canadian residents are out-of-scope for this program. For the incorporated sector, the frame consists of all corporations within the ten Canadian provinces that are classified as farms according to the Standard Industrial Classification (SIC) with agricultural sales of \$25,000 and over. Non-resident corporations are out-of-scope for this program. The frame also includes all communal organizations that report either positive gross farm income or non-zero net farm income on their Revenue Canada T3 Trust – Income Tax and Information Return.

#### **Sample Selection**

The sampling frame for the unincorporated sector is stratified by province. There is also a pre-specified sample (farms selected based on particular characteristics) to satisfy various requirements of the Whole Farm Data Project. Except for Newfoundland where a census is to be performed, the predetermined total sample size of the survey is allocated to ensure adequate representation of all provinces. Each province is divided into strata based on the gross farm income. The two smallest strata are pre-determined and have fixed sampling rates. As well, the largest stratum is take-all. In order to determine the sample sizes for the other strata, an allocation method, which minimizes the coefficient of variation for each province, is used. The sampling rates vary from a complete census in Newfoundland to about 11% in Ontario.

Starting with the 1996 taxation year, a substantial number of electronic tax returns are used to complete the sample of taxation data. When Revenue Canada receives an electronic tax return, it is classified as "clean" or "unclean" depending on whether it satisfies all editing rules or not. All "clean" electronic returns are added to the taxation data sample since there is no additional cost. Because "unclean" returns involve verification and correction costs to make them usable, they are sampled at the same sampling rate as taxation data.

The corporations in the sampling frame are also classified by farm type using the three-digit SIC Code, with less significant SICs grouped together to reduce the number of strata. Each farm type/province combination is divided into a maximum of three sub-strata (one take-all and two take-some) based on the sales. The sample sizes of the take-some strata are determined using an

allocation process that minimizes the coefficient of variation at the provincial level. The sampling rates vary from a complete census in the Atlantic provinces to about 40% in Ontario. Overall, about one in two farms are sampled at the national level.

For both sectors, the stratification may change each year. The sample is selected using a stratified pseudo-random sampling technique.

For communal farming organizations, a census is performed.

For the taxation year 1996, the sample included almost 156,000 records (143,000 unincorporated farms and 12,500 incorporated farms).

#### **Data Processing**

The sample selection specifications are sent to Revenue Canada. During the tax-processing period, for the incorporated farms, Revenue Canada forwards copies of the sampled tax returns with the supporting documentation to Statistics Canada. Data capture is then performed using a mini computer system, which operates on an interactive mode performing basic edit checks. Unincorporated farm tax data are captured at various Revenue Canada's Regional Taxation Centres and forwarded to Statistics Canada in electronic form.

All captured data are put through detailed edit programs that identify errors, inconsistencies, extreme values, etc. Data which fail to meet the predetermined criteria are referred to subject matter specialists for appropriate action. As a final check, records of the 25 taxfilers, which contribute the most for each income and expense item at the provincial level, are analyzed further.

Once all records have been passed through the editing steps, those requiring imputation are identified and isolated. A process of donor imputation is used in cases where taxfilers failed to itemize (all or part) their revenues and expenses.

#### **Estimation**

Total revenue and expense items for farms are estimated by inflating the in-sample revenue and expense items by an estimation weight. A weight reflecting the proportion of the population actually observed in the sample, multiplied by the partnership share of the entity, is assigned to each entity in order to represent the entire population. The pre-specified units are self-representing (estimation weight equals one) as they are included in the sample with certainty. The calculated weighted revenue and expense items are summed by domain to produce the total revenue and expense items. A domain is defined as a region, a type of farm, a revenue class or a combination of these variables.

For statistical purposes, the estimates presented in this bulletin cover both unincorporated farms and communal farming organizations with total farm operating revenues equal to or greater than \$10,000 as well as corporations with total agricultural sales of

#### **Economic Overview of Farm Incomes, 1996 – All Farms**

\$25,000 and over, deriving at least 51% of their total sales from agricultural activities.

#### JUNE CROPS SURVEY

#### Sample

The June Crops Survey (JCS) is one of a series of annual probability surveys conducted for the main field crops in Canada in order to collect and disseminate data on seeding intentions, acreage seeded and harvested, yields, production and inventories. In 1996, a sample of approximately 34,700 farms was drawn. This survey includes the acreage that growers seeded with field crops at the beginning of the 1996–1997 crop year.

#### Methodology

Every five years, the Census of Agriculture gathers information on agricultural holdings throughout Canada, including institutional farms, community pastures, Indian reserves, etc. The Census of Agriculture provides a list of the farms and their productive acreage, and it is on the basis of this list that a probability sample for the June Crops Survey is selected.

Two sampling frames are used for the June Crops Survey: a list frame and an area frame. The "list"-type frame represents all agricultural holdings in Canada as enumerated in the Census of Agriculture, except for institutional farms, farms on Indian reserves and farms in the Northwest Territories, Yukon and Newfoundland. This frame is stratified into homogeneous groups according to census characteristics (for example: farm size, productive acreage and farm type) and also according to provincial geographic boundaries. The area frame is made up of geographic regions and allows for including agricultural holdings that did not exist at the time of the last Census.

The data collection process is undertaken through the system of "Computer-Assisted Telephone Interviews" (CATI). With the CATI system, edit procedures can be carried out during the interview itself, thus lessening the need for telephone follow-up and reducing the respondent burden. No imputation is carried out for the missing data. Theoretical weighting factors are adjusted through a process called weighting factor adjustment in cases of partial or total non-response.

#### JULY LIVESTOCK SURVEY

#### Sample

The July Livestock Survey (JLS) is a probability survey conducted each year. The farms surveyed are asked to report all animals within the agricultural holding, regardless of who their owner is. In 1996, a sample of approximately 28,000 farms was drawn.

#### Methodology

Two sampling frames are used for the July Livestock Survey: a list frame and an area frame. The "list"-type frame represents farms that have been identified in the most recent census. The area frame is

made up of the geographic regions, and it allows for estimating livestock inventories on farms that did not exist at the time of the last Census.

The data collection process is conducted by means of the CATI system. Farmers must report their inventories as of July 1. The questionnaires are put through numerous edit and imputation procedures before the final estimates are produced.

#### CONFIDENTIALITY

Statistics Canada maintains a strict level of confidentiality. All tabulated data are subject to restrictions prior to release. Several computerized checks are performed on all data cells to prevent the publication or disclosure of any information deemed confidential. For each of the tabulations produced, the estimated number of farms is rounded to the base "5" and the estimates of the other variables within that table are adjusted by a variable factor. This method preserves the confidentiality of the data, without jeopardizing the quality of the actual estimates.

#### **DATA QUALITY**

All survey estimates are assigned coefficients of variation (C.V.s) to measure their quality. The C.V. is used to measure the sampling error of the estimates. As an objective statistical measure obtained through random sampling of the variation between each estimate and its "true" value, the C.V. indicates the degree of confidence that should be placed on a particular estimate. The users must determine if an estimate with a significant C.V. is appropriate for use.

The following rating system is suggested when using figures within a specific C.V. range:

C.V.	Rating
0.01% - 4.99%	Very good
5.0% - 9.99%	Good
10.0% - 14.99%	Acceptable, but use with caution
15.0% - 24.99%	Use with caution unless independent data source concurs with the estimate value
25.0% or more	Unreliable

In the tables, an asterisk (\*) indicates a C.V. between 15.0% and 24.99%; two asterisks (\*\*) indicate a C.V. of 25.0% or more. C.V.s below 15.0% are not shown on the tables.

#### **Symbols**

The following standard symbols are used in the tabulations:

•••	Figures not appropriate or not applicable
_	Nil or zero
	Amount too small to be expressed
X	Confidential to meet secrecy requirements of the Statistics Act

#### **ECONOMIC OVERVIEW OF FARM INCOMES**

#### **BULLETIN SERIES**

#### **CURRENT RELEASES**

Bulletin No. 1: All Farms

#### **UPCOMING RELEASES**

**Bulletin No. 2: Grain and Oilseed Farms** 

**Bulletin No. 3: Cattle Farms** 

**Bulletin No. 4: Dairy Farms** 

**Bulletin No. 5: Hog Farms** 

**Bulletin No. 6: Fruit and Vegetable Farms** 

**Bulletin No. 7: Poultry and Egg Farms** 

**Bulletin No. 8: Greenhouse and Nursery Farms** 

**Bulletin No. 9: Potato Farms** 

**Bulletin No. 10: Sources of Income for Farm Operators** 

**Bulletin No. 11: Farm Family Income** 

#### **NOTE OF APPRECIATION**

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Published by authority of the Minister of Agriculture and Agri-Food Canada and the Minister responsible for Statistics Canada. © Minister of Industry, 1998. Reproduction is permitted subject to the requirements that it is not for monetary gain; reproduced material remains in context; and the source is acknowledged on all copies as follows: Agriculture and Agri-Food Canada and Statistics Canada, Economic Overview of Farm Incomes, publication no. 1959/B and catalogue no. 21-005-XIE, along with date and page references.

Reproduction or use for commercial purposes requires the prior written approval from Economic and Policy Analysis Directorate, Agriculture and Agri-Food Canada and Licence Services, Marketing Division, Statistics Canada.