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## **WORKING PAPER #20**

### **Adjustment in Canadian Agriculture**

George McLaughlin

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## Preface

The author wrote this study while on secondment to the Department of Finance from the Canadian Grain Commission where he is Deputy Director, Statistics and Economic Research.

The study provides an analysis of the economic factors underlying decisions by farm households leaving agriculture for other sectors of the economy. The study also analyses the conceptual and measurement issues involved in estimating adequate agricultural and household incomes by size and type of farm.

The findings of the study are those of the author and do not necessarily represent those of the Department of Finance, the Canadian Grain Commission or Statistics Canada.



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## **EXECUTIVE SUMMARY**

Adjustment, or the reallocation of resources from one economic activity to another, is an inescapable fact of life in a dynamic economy. Agriculture is no exception, as evidenced by a reduction of more than 60% in the number of Canadian farms over the past half century. This decrease has occurred because the alternatives to farming have become more attractive and it now requires more acres than it did previously for farmers to earn incomes comparable to those available in other sectors of the economy.

Government policy has long influenced the movement of resources into and out of agriculture. The most graphic example was the policy late in the last century and early in this century of offering free homesteads in Western Canada. More recent policies explicitly aimed at affecting the number of farmers have more often been designed to help people exit from agriculture (for example, the Canadian Rural Transition Program). However, at the same time, other policies and programs, such as supply management and income stabilization and support, have served to retard the rate of adjustment out of agriculture and in some cases may have made the adjustment process more difficult than it would have been otherwise.

In order to estimate how much adjustment may occur in Canadian agriculture, this paper examines the impact of changing agricultural income, either by altering market returns or government support, on the number of farm households earning adequate incomes (as defined by Statistics Canada's low income cut-offs). To do this the agricultural incomes reported on the 1986 census forms were altered by various percentages and then the number of farms that would have earned adequate incomes was recalculated. The linkage of the Census of Agriculture and the Census of Population was used to produce these simulations.

The baseline statistics indicate that, in 1985, 81% of all farm households earned adequate total household incomes (82% of households on small farms and 80% of households on large farms). This percentage was quite consistent for different regions and farm types. However, only 9% of households on small farms had adequate incomes from their agricultural activities alone whereas for households on large farms the proportion was 50%. This percentage differed considerably between regions and farm types.

The simulated changes in agricultural income demonstrate that households on small farms, which earn a smaller portion of their total household income from agriculture, are less vulnerable to decreases in aggregate agricultural income than are households on large farms. For example, if net farm self-employment income in Canada in 1985 had been zero (versus the \$2.4 billion reported on the 1986 Census), only 57% of households on large farms would have earned adequate total household incomes whereas 79% of households on small farms would have continued to earn adequate total household incomes.

For grain farms the simulations related the number of grain farm households earning adequate total household incomes to net cash income from grain, a measure often utilized when assessing the adequacy of agricultural income for the grains and oilseeds sector. The results indicate that in 1985, if the total net cash income from grain had been \$1.4 billion (the returns from the market in that year), 61% of households on grain farms would have earned adequate total household incomes (74% of households on small grain farms and 53% of households on large grain farms).

If one assumes that in an equilibrium situation there would be no farm households earning inadequate total household incomes, one could expect that, if the net farm self-employment income stabilized at zero, there would eventually be up to 98 thousand, or one-third, fewer farm households than were enumerated in the 1986 Census of Agriculture. Similarly, if total net cash income from grain stabilized at \$1.4 billion, in 1985 dollars, (the level experienced in 1990) one could expect a reduction of up to 44 thousand grain farm households (39%) from the 1986 number.

However, for various reasons, there will always be households in agriculture earning inadequate total household incomes. If one assumes the proportion of farm households earning inadequate total household incomes were to remain the same as it actually was in 1985, then the reduction in the number of farm households would be considerably smaller than the 98 thousand mentioned above. This is illustrated in the following table.

Possible Reductions in the Number of Farm Households from 1986 if Net Farm Self-Employment Income Stabilized at Zero		
Location of Households	Low Estimates	High Estimates
- thousands of farm households -		
All Canadian Farms	52	98
Small Canadian Farms	5	27
Large Canadian Farms	47	71
Canadian Grain Farms	19	37

The statistics demonstrate the importance of non-agricultural income for farm households in the attainment of adequate total household income and illustrate the fact that farm households which earn a higher proportion of their total household income from agriculture (generally those on larger farms) are more vulnerable to decreases in aggregate agricultural income.

The simulations also show the limited ability of non-targetted income support measures to assist farm households with inadequate total household incomes to attain adequate incomes. Such households often have agricultural receipts that are too small or losses that are too great for such an approach to raise their total household incomes to an adequate level. At the same time, of course, agricultural income support policies tend to retard the rate of adjustment out of agriculture.

Other potentially more effective approaches for assisting farm households with inadequate household incomes without inhibiting the adjustment process include helping to improve producers' management skills, facilitating the diversification and expansion of on-farm enterprises, promoting rural development and other ways for farm households to increase their off-farm income, and assisting those who wish to exit from agriculture.

These alternatives should be analyzed to estimate their relative benefits and cost-effectiveness. Statistics Canada's linkage of the Census of Agriculture and the Census of Population provides a powerful and readily available tool for conducting this type of research.

## 1.0 INTRODUCTION

### 1.1 Adjustment in Agriculture

As stated in a recent study on structural change and the adjustment process, "Change in the Canadian economy is pervasive. Resources are constantly being transferred from one use to another for a variety of reasons. ... Firm and worker turnover serve to reallocate resources from lower to higher-value uses and thus make an important contribution to the Canadian economy."<sup>1</sup> A related study has defined adjustment as "... the set of decisions - private and public - through which this reallocation is conducted."<sup>2</sup>

The adjustment examined in this paper is primarily the movement of human resources into and out of primary Canadian agriculture in response to the returns and opportunities available in agriculture and in other sectors of the economy.

### 1.2 Scope of the Paper

Considerable research has been conducted on adjustment in agriculture and in other industries both in Canada and in other countries. Much of this research has been of a descriptive nature, i.e. tracing how a particular industry evolved to a certain state. While this paper considers this historical aspect of adjustment in Canadian agriculture, it also examines what sort of adjustment may occur in the future with different levels of aggregate net farm income. The major focus is on the net movement of farm households out of farming.

The paper first reviews the adjustment that has occurred in Canadian agriculture in the past half century and discusses the relationship between the rate of adjustment and those economic variables which indicate the relative returns and opportunities within and outside of agriculture.

Within this historical discussion the impacts of government policies on the rate and extent of adjustment are considered. These policies include those directly aimed at affecting adjustment and those which have had incidental effects.

Subsequently the paper examines how the number of farm households might adjust to various circumstances, specifically, differing farm income levels.

Finally, the paper considers some of the implications of the results for Canadian agricultural policies.

---

<sup>1</sup> Baldwin, J.R., and P.K. Gorecki, Structural Change and the Adjustment Process: Perspectives on Firm Growth and the Adjustment Process, Economic Council of Canada, 1990, p.1.

<sup>2</sup> Economic Council of Canada, Adjustment Policies for Trade Sensitive Industries, 1988, p.11.



## 2.0 HISTORY OF ADJUSTMENT IN CANADIAN AGRICULTURE

### 2.1 Background Statistics

As illustrated below, the number of Canadian farms has been decreasing for fifty years. This trend has been witnessed in all areas of the country and in all types of farms.

**TABLE 1**

NUMBER OF CENSUS FARMS, CANADA AND REGIONS<sup>1</sup>

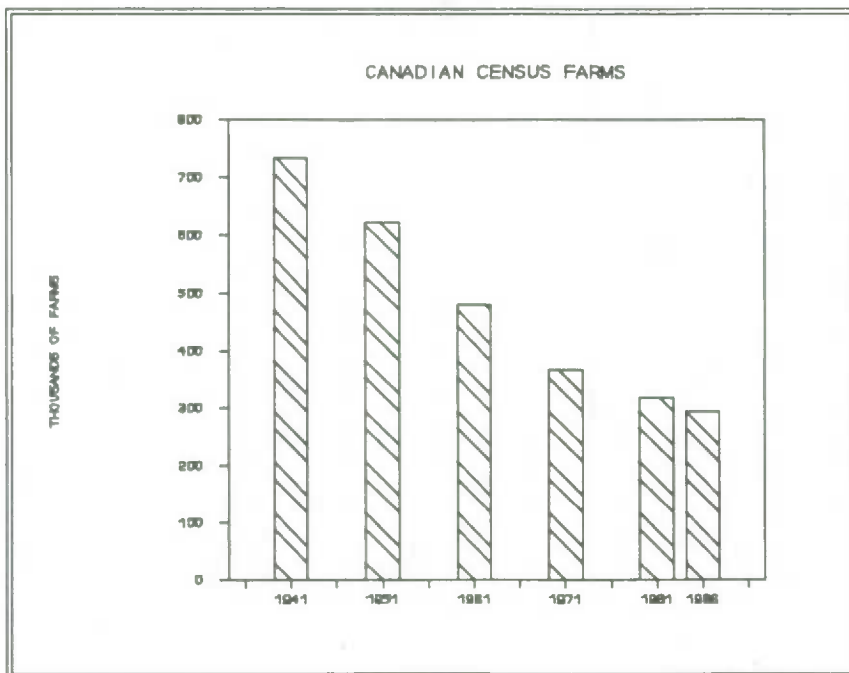
	1941	1951	1961	1971	1981	1986
Canada	732,858	623,091	480,803	366,128	318,361	293,089
Atlantic Provinces	77,096	63,709	33,391	17,078	12,941	11,321
Quebec	154,669	134,336	95,777	61,257	48,144	41,448
Ontario	178,204	149,920	121,333	94,722	82,448	72,713
Prairie Provinces	296,469	248,716	210,442	174,653	154,816	148,544
British Columbia	26,394	26,406	19,934	18,400	20,012	19,063

<sup>1</sup> The figures are not strictly comparable between census years due to changes in the definition of a census farm.

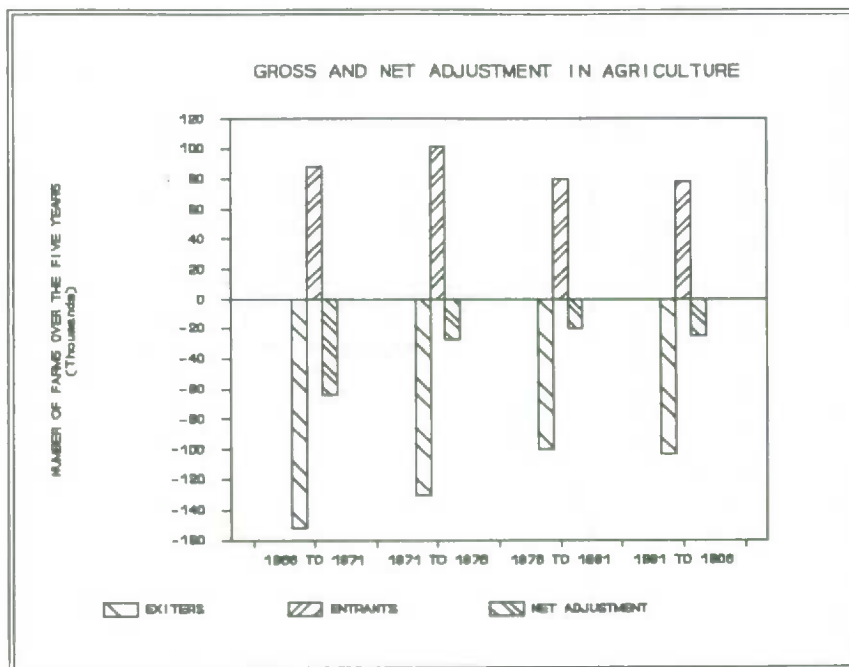
Source: Statistics Canada, Census of Agriculture, various years.

Although the general trend has been downward, there have been marked regional differences in the rates of decline as shown in Table 2. The rates of decrease have been greatest in the Atlantic Provinces and Quebec and lowest in the Prairie Provinces and British Columbia.

**FIGURE 1**



**FIGURE 2**



**TABLE 2**  
DECREASES IN CENSUS FARMS, CANADA AND REGIONS<sup>1</sup>

	1951	1961	1971	1981	1986
	- decrease from 10 years earlier -			- decrease from 1941 -	
Canada	109,767 (15%)	142,288 (23%)	114,675 (24%)	47,767 (13%)	439,769 (60%)
Atlantic Provinces	13,387 (17%)	30,318 (48%)	16,313 (49%)	4,137 (24%)	65,775 (85%)
Quebec	20,333 (13%)	38,559 (29%)	34,520 (36%)	13,113 (21%)	113,221 (73%)
Ontario	28,284 (16%)	28,587 (19%)	26,611 (22%)	12,274 (13%)	105,491 (59%)
Prairie Provinces	47,753 (16%)	38,274 (15%)	35,789 (17%)	19,837 (11%)	147,925 (50%)
British Columbia	-12 (0%)	6,472 (25%)	1,534 (8%)	-1,612 (-9%)	7,331 (28%)

<sup>1</sup> The figures are not strictly comparable between census years due to changes in the definition of a census farm.

Source: Statistics Canada, Census of Agriculture, various years.

Over the period examined the land base has not changed significantly with the obvious result that as farm numbers have decreased the average farm size has increased. This has been made possible by the substitution of capital for labour as the investment in farm machinery increased. These trends are illustrated in Table 3.

**TABLE 3**

**CANADIAN AGRICULTURAL LAND BASE AND VALUE OF MACHINERY<sup>1</sup>**

	Land in Agriculture	Average Size of Farms	Average Value of Machinery and Equipment
	- million acres -	- acres -	- current \$ -
1961	173	359	5,341
1971	170	463	10,696
1981	168	511	54,793
1986	168	571	70,851

<sup>1</sup> The figures are not strictly comparable between census years due to changes in the definition of a census farm.

Source: Statistics Canada, Census of Agriculture, various years.

Another way in which farmers have coped with the increasing size of farms and the decreasing pool of unpaid family labour has been to hire more workers. This is demonstrated in Table 4.

**TABLE 4**

**EMPLOYMENT IN CANADIAN AGRICULTURE BY TYPE OF WORKER**

	Self-Employed	Unpaid Family Workers	Paid	Total
	- thousands of workers -			
1951	596	243	100	939
1961	436	133	112	681
1971	291	118	102	511
1981	248	89	150	488
1990	232	39	157	428

Sources: Statistics Canada, Labour Force Survey (unpublished).  
Statistics Canada, Historical Statistics of Canada, Table D236-259.



## 2.2 Factors Affecting Adjustment in Agriculture

Adjustment of resources occurs in response to the relative returns and opportunities available in different uses and in different sectors of the economy. If an alternative use or sector is more rewarding than the one where a resource is currently employed, and there is opportunity to change to the alternative, then the likelihood exists that the resource will be shifted, i.e. that adjustment will occur.

A simple short run example within agriculture is the adjustment that occurs in response to a change in the returns from different crops. If the price and/or market opportunity of one crop increase relative to those of another crop, then land will be shifted from the less attractive crop to the more attractive crop. This type of adjustment is witnessed virtually every year.

A longer run example within agriculture is the shift between agricultural enterprises that occurs in response to changes in relative prices, profitability and market opportunities. Shifts into and out of cattle and hog production are examples of this type of adjustment.

The main interest of this paper is the adjustment of farm households out of agriculture and into other sectors of the economy. The statistics in the preceding section illustrate that this is a definite and long standing trend which suggests that, over time, the rewards to farm households at a given scale of production have decreased relative to the rewards available in other sectors of the economy.

A recent study attempted to quantify the relationship between the rate of adjustment of human resources out of agriculture and the economic variables which influence and indicate the relative returns to and opportunities in agriculture and alternative employment. In 1988 Serjak examined the relationship between the level of Prairie farm employment and several economic variables expected to influence it.<sup>3</sup> These included the farm income from farm operations, the price of wheat, the price of farm inputs, the price of land and buildings, yield per acre, the availability of non-farm employment (as indicated by the unemployment rate), government support payments and a time trend factor.

The regression analysis he prepared indicated that all of the factors had the anticipated impact on the level of farm employment but that only the time trend, the price of wheat and the unemployment rate were statistically significant. The analysis demonstrated that as the price of wheat and the unemployment rate went down, so did employment in Prairie agriculture. In other words, as the rewards to Prairie agriculture decreased and as the alternatives outside of agriculture increased, more human resources adjusted out of agriculture.

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<sup>3</sup> Serjak, J.L., Historic Rates of Adjustment in Prairie Farm Employment and Some International Comparisons, Economic Council of Canada, 1988.

### 2.3 Impact of Government Policies on Adjustment in Canadian Agriculture

Throughout Canadian history government policies have influenced the movement of human resources into and out of agriculture.

Perhaps the most striking example of government policy intentionally affecting the level of human resources in agriculture was the government's encouragement of agricultural development in Western Canada in the late 1800s and early 1900s by offering "free" homesteads. In two different decades (1881 to 1891 and 1901 to 1911) this contributed to the number of Prairie farms more than tripling within a 10 year period. However, regardless of how successful the policy was in attracting settlers to the Prairies, it was flawed because the 160 acre homesteads were too small to be economically viable. In 1976 the Alberta land use forum stated "There were many failures --- over 40 per cent of those who obtained homestead entries between 1905 and 1930 failed to obtain title. It was evident that the open, free homestead policy had many shortcomings, and after 1930, a period of painful readjustment began."<sup>4</sup>

In more recent decades government policies and programs explicitly aimed at affecting employment in agriculture have more often been designed to help human resources to adjust out of (rather than into) agriculture. For example, we have witnessed the Small Farm Development Program of the 1970s, the current Canadian Rural Transition Program and the programs to help grape and tobacco producers to shift to different commodities or to leave agriculture.

At the same time as the above programs were helping individuals adjust out of agriculture, many others have served to motivate individuals to remain in agriculture. They have done so by increasing the returns to agriculture and thereby making alternatives less attractive than they otherwise would have been. Examples of policies and programs which have had this effect include the ongoing price and income support/stabilization programs and supply management which serve to stabilize and increase the incomes of farmers. Other long term policies such as subsidized freight rates and interest rates have had similar effects.

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<sup>4</sup> Alberta Land Use Forum, Report and Recommendations of the Alberta Land Use Forum, Edmonton, 1976, p.30.

Short term ad hoc assistance has likely also retarded the rate of adjustment out of agriculture. Such assistance is generally in response to unusual and unanticipated events and is at least partly intended to keep the adjustment pendulum from swinging too far and too fast in response to temporary situations. In other words, it is intended to preserve human capital until conditions return to "normal". However, as pointed out in a recent study on adjustment, if the temporary conditions turn out to be permanent, the adjustment process will only have been postponed and may be more difficult than it would have been if it had started sooner.<sup>5</sup>

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<sup>5</sup> Economic Council of Canada, Adjustment Policies for Trade-Sensitive Industries, 1988, p.12.

### 3.0 AGGREGATE FARM INCOME LEVELS AND THE NUMBER OF FARM HOUSEHOLDS CANADIAN AGRICULTURE CAN SUPPORT

The purpose of this section is to relate differing levels of farm income to the number of farm households earning adequate incomes and with that information to estimate how many farm households might leave agriculture under various income scenarios.

#### 3.1 Historical Statistics

Before the results of the income simulations are reviewed the following overview statistics for the 1980s are presented to show how farm income has shifted between commodities, and between market receipts and government support.

Table 5 shows the dramatic drop in market income from grains and oilseeds during the 1980s while Table 6 illustrates the equally dramatic increase in government payments.

These tables also demonstrate that the majority of the net cash market income has shifted from grains and oilseeds to other commodities while for direct program payments the shift has been in the other direction, i.e. from other commodities to grains and oilseeds. The statistics suggest that without the increased government assistance to the grains and oilseeds sector there would have been significantly greater adjustment of human resources out of this sector during the past decade.

**TABLE 5**

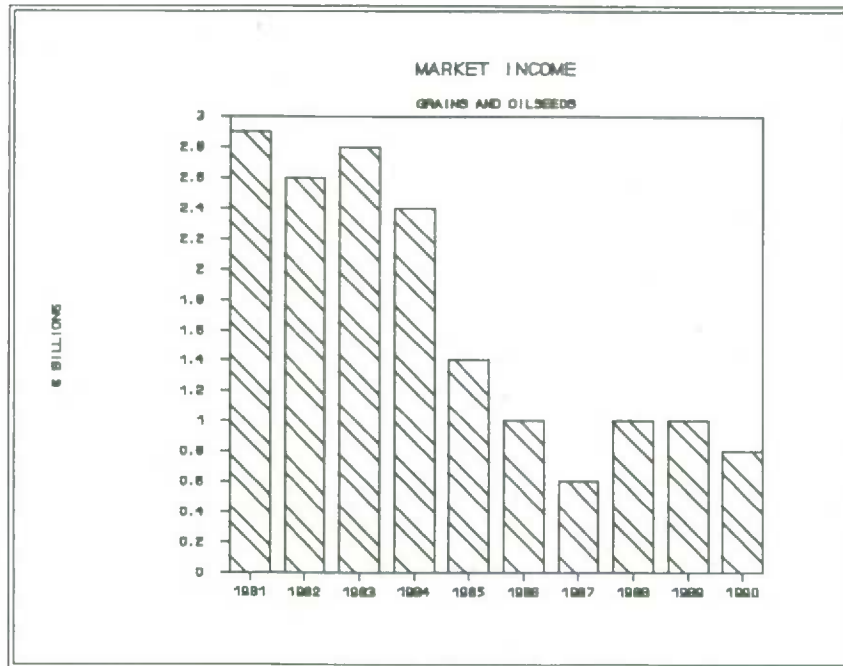
**NET CASH MARKET INCOME FROM AGRICULTURE<sup>1</sup>**

	Grains and Oilseeds	Other Commodities	Total
- \$ billions -			
1981	2.9	1.6	4.5
1982	2.6	1.6	4.2
1983	2.8	1.4	4.1
1984	2.4	2.0	4.3
1985	1.4	1.6	3.0
1986	1.0	2.2	3.2
1987	0.6	2.4	3.0
1988	1.0	2.3	3.3
1989	1.0	1.9	2.9
1990	0.8	2.4	3.2

<sup>1</sup> Net cash market income = market receipts less cash expenses.

Source: Agriculture Canada, Farm Income Financial Conditions and Government Expenditures, April, 1991

**FIGURE 3**



**TABLE 6**

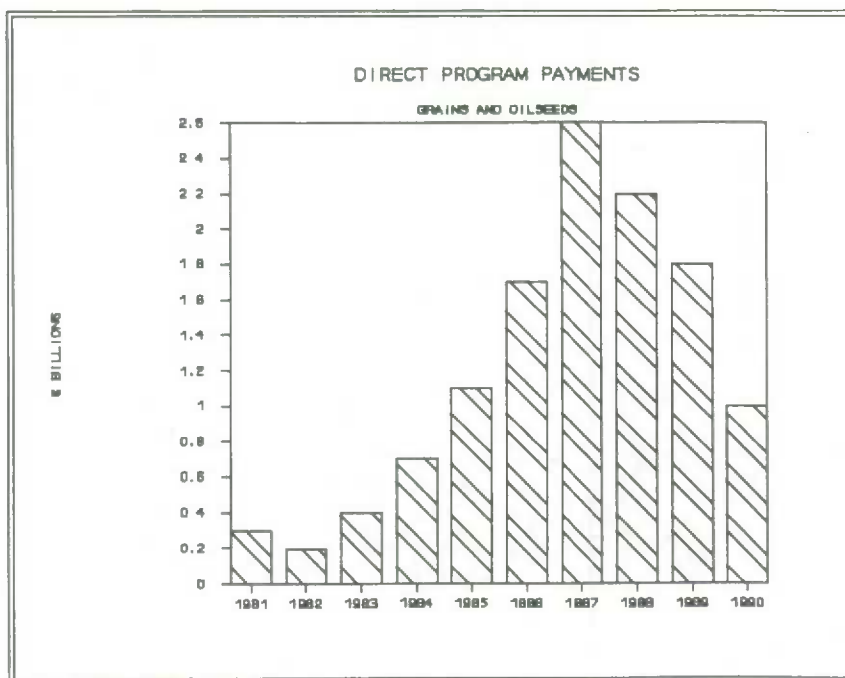
**DIRECT PROGRAM PAYMENTS TO AGRICULTURE**

	Grains and Oilseeds	Other Commodities	Total
- \$ billions -			
1981	0.3	0.8	1.1
1982	0.2	1.0	1.2
1983	0.4	0.8	1.2
1984	0.7	1.1	1.8
1985	1.1	1.1	2.3
1986	1.7	1.3	3.0
1987	2.6	1.3	3.9
1988	2.2	1.6	3.8
1989	1.8	2.0	3.8
1990	1.0	1.3	2.3

Source: Agriculture Canada, Farm Income Financial Conditions and Government Expenditures, April, 1991



**FIGURE 4**



**TABLE 7**

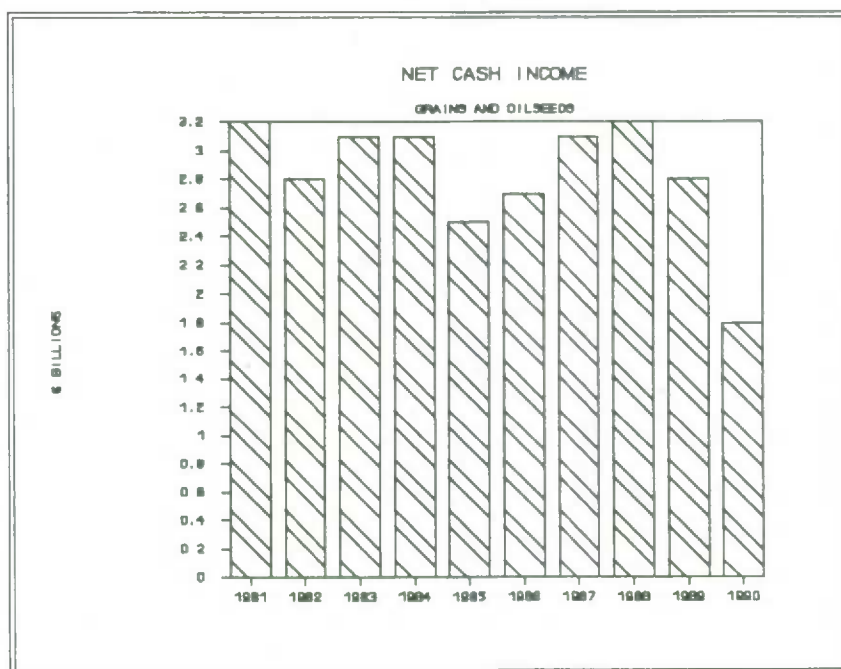
**NET CASH INCOME FROM AGRICULTURE<sup>1</sup>**

	Grains and Oilseeds	Other Commodities	Total
- \$ billions -			
1981	3.2	2.5	5.7
1982	2.8	2.6	5.4
1983	3.1	2.2	5.3
1984	3.1	3.0	6.1
1985	2.5	2.7	5.2
1986	2.7	3.5	6.2
1987	3.1	3.7	6.8
1988	3.2	3.9	7.1
1989	2.8	3.9	6.7
1990	1.8	3.7	5.5

<sup>1</sup> Net Cash income = net cash market income plus direct program payments.

Source: Agriculture Canada, Farm Income Financial Conditions and Government Expenditures, April, 1991

FIGURE 5



### 3.2 Detailed Baseline Statistics for 1985

The data for the analysis are derived from tabulations prepared by Statistics Canada from the linkage of the 1986 Census of Agriculture and Census of Population.<sup>6,7</sup>

Canadian farms are not homogeneous. Both production and net income are concentrated among the larger farms. In fact, the largest 56% of farms in 1985, in terms of gross agricultural receipts, accounted for 93% of total gross agricultural receipts and 94% of total (net) agricultural income (Figures 6 and 7).<sup>8</sup>

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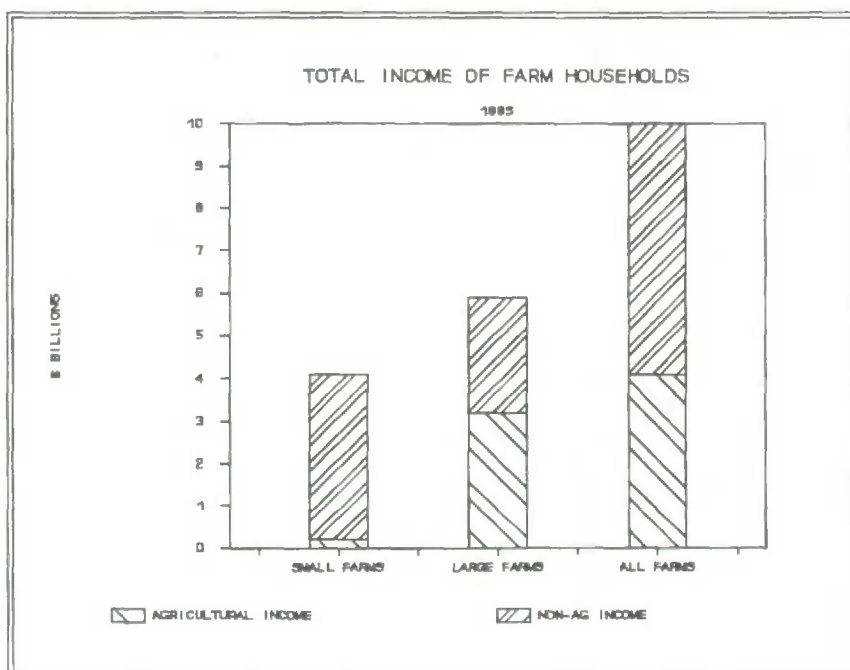
<sup>6</sup> The reader should note that institutional farms and community pastures and the households of their operators have been excluded from the statistics which follow.

<sup>7</sup> For more information on the linkage of the Census of Agriculture and the Census of Population, the reader may refer to the Statistics Canada publication Agriculture-Population Database published in December, 1988.

<sup>8</sup> While some basic statistics are presented in the text and illustrated in the figures in this section, much more detailed information is contained in the tables in Appendix 2.

Because all census farms are included in the analysis (including those with agricultural receipts as low as \$250) the importance to farm households of non-agricultural income is very evident. In 1985 the total non-agricultural income of farm households (\$6.5 billion) was almost twice as much as the total agricultural income (\$3.4 billion). Not surprisingly the non-agricultural income of households on small farms comprised a much larger proportion of their household income (95%) than did the non-agricultural income of households on large farms (45%).<sup>9</sup>

FIGURE 6



<sup>9</sup> The terms "small farms" and "large farms" appear frequently in the text of the paper. Small farms refer to farms with gross agricultural receipts below \$30,277 in 1985. Large farms refer to farms with gross agricultural receipts above \$30,276 in 1985.



FIGURE 7

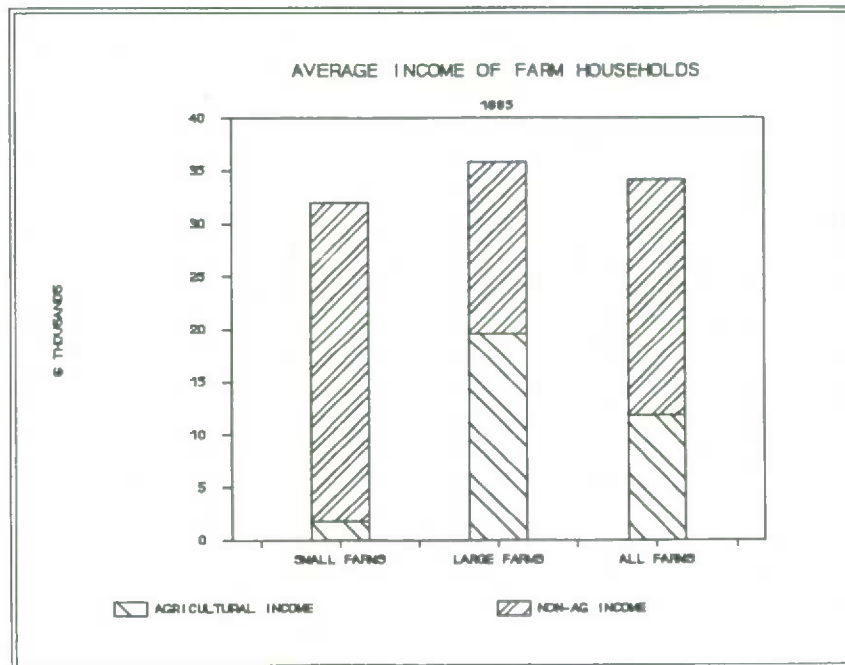
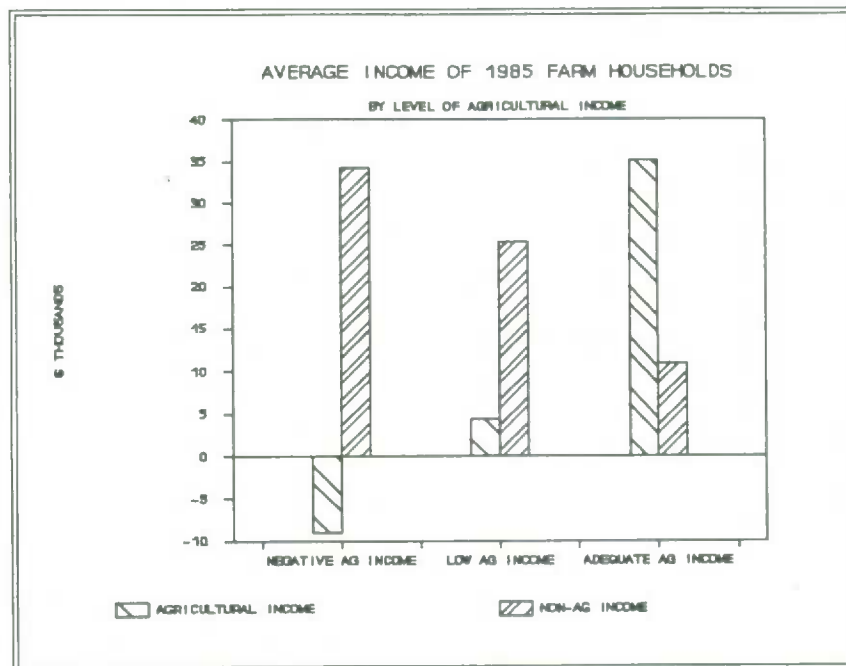


FIGURE 8



Figures 8 and 9 display information on farm households classified according to whether their agricultural income is adequate or inadequate, as measured by Statistics Canada. (An adequate income is one that is equal to or greater than Statistics Canada's low income cut-off. For rural Canada in 1985, the low income cut-off ranged from \$7,568 for one person to \$21,415 for families with seven or more persons.)

In 1985 only 32% of farm households earned an adequate income from their agricultural activities alone (Figure 9). These 93,200 farms accounted for 54% of gross agricultural receipts and 95% of (net) agricultural income. However, as these farm households were much less dependent on non-agricultural income than were other farm households, they accounted for only 16% of total non-agricultural income and 43% of the total household income earned by farm households. Conversely, those 68% of farm households with negative or low agricultural incomes accounted for 46% of gross agricultural receipts and 5% of total agricultural income. These farm households were much more dependent on non-agricultural income, with average non-agricultural incomes almost three times those of farm households with adequate agricultural incomes (\$28,687 versus \$10,999).

Figure 8 demonstrates that the average non-agricultural income decreased as the average agricultural income increased while figure 9 highlights how the agricultural income situations of households on small and large farms differed. As illustrated in figure 9, whereas 50% of households on large farms earned adequate incomes from their agricultural activities alone, the corresponding figure for households on small farms was only 9%.

FIGURE 9

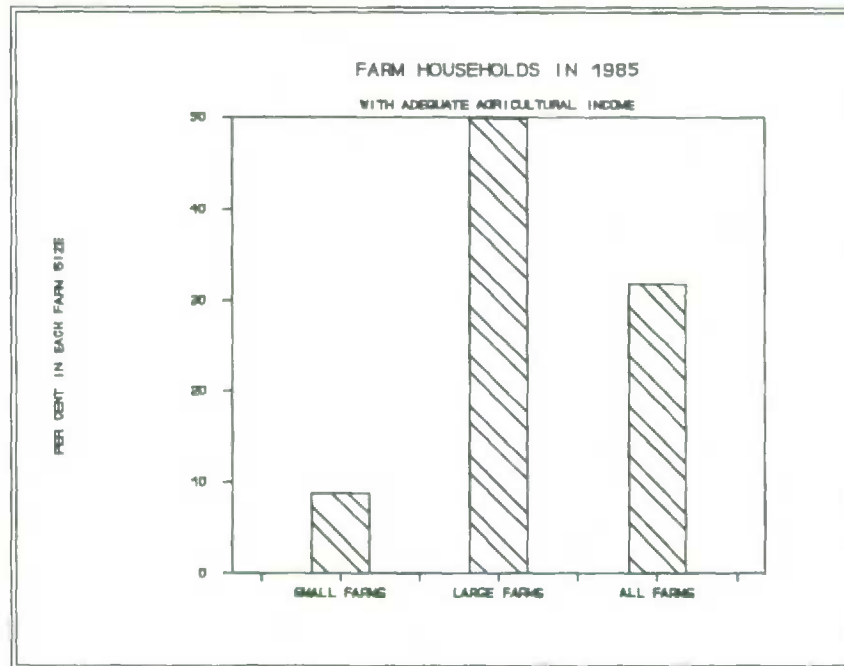
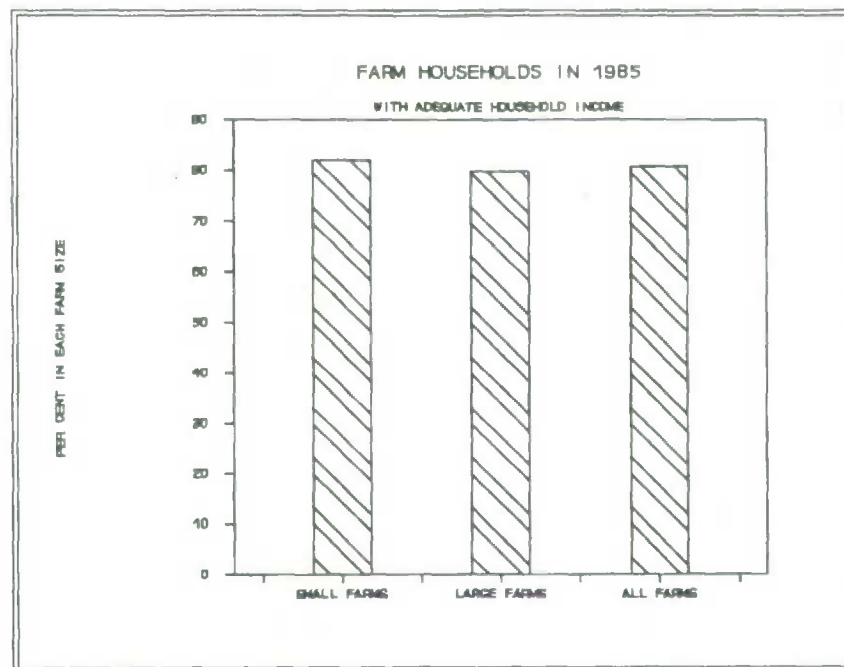


FIGURE 10



There were almost 9,000 farm households with negative household incomes and over 47,000 farm household with low household incomes in 1985. Notwithstanding this, 81% of farm households had adequate household incomes (82% of those on small farms and 80% of those on large farms - see figure 10). The statistics indicate that those farm households with inadequate household incomes had non-agricultural incomes which were significantly lower (about 75 percent lower) than the non-agricultural incomes of those farm households with adequate household incomes.

In fact, for households on small farms, non-agricultural income was a more important factor in accounting for the difference between the average total incomes of households with adequate and inadequate household income than was agricultural income. That is to say, of the average difference in household income between households on small farms with adequate and inadequate income (\$31,602), the difference in average agricultural income accounted for \$3,489 and the difference in average non-agricultural income accounted for \$28,114.

For households on large farms the total difference between the average household income of those with adequate and inadequate incomes was \$39,772. Of this total difference the largest component was the difference in the average agricultural income (\$26,327) while the difference in the average non-agricultural income totalled \$13,445.

In 1985 only 18% of Atlantic farm households earned an adequate income from their agricultural income alone versus 36% of Prairie farm households. This was highly correlated with the proportion of large farms in the region. When household income was considered, (the total of agricultural and non-agricultural income) about 80% (from 78% to 85%) of farm households in all regions earned adequate incomes (Figures 11 and 12).

Interesting variations can be observed between farm types (Figures 13 and 14). In 1985 almost half (48%) of the households on dairy and poultry farms earned adequate incomes from their agricultural incomes alone compared to 39% for households on grain farms and 24% for households on livestock farms. Again, this was highly correlated with the proportion of large farms. When household incomes were considered, close to 80% (between 79% and 87%) of farm households on all farm types earned adequate incomes. This balancing out at the household income level occurred because, on average, those households with lower average agricultural incomes had higher average non-agricultural incomes.

FIGURE 11

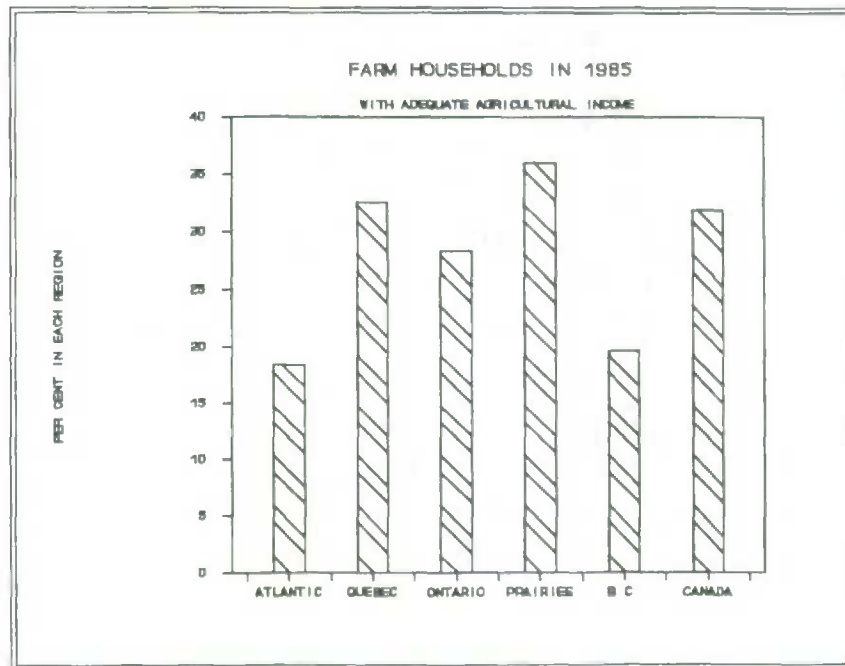


FIGURE 12

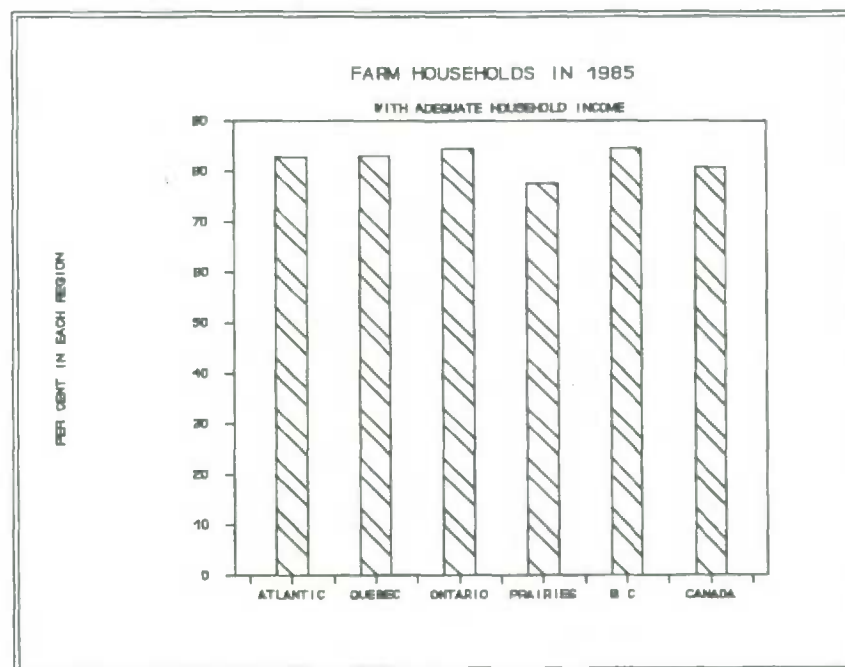


FIGURE 13

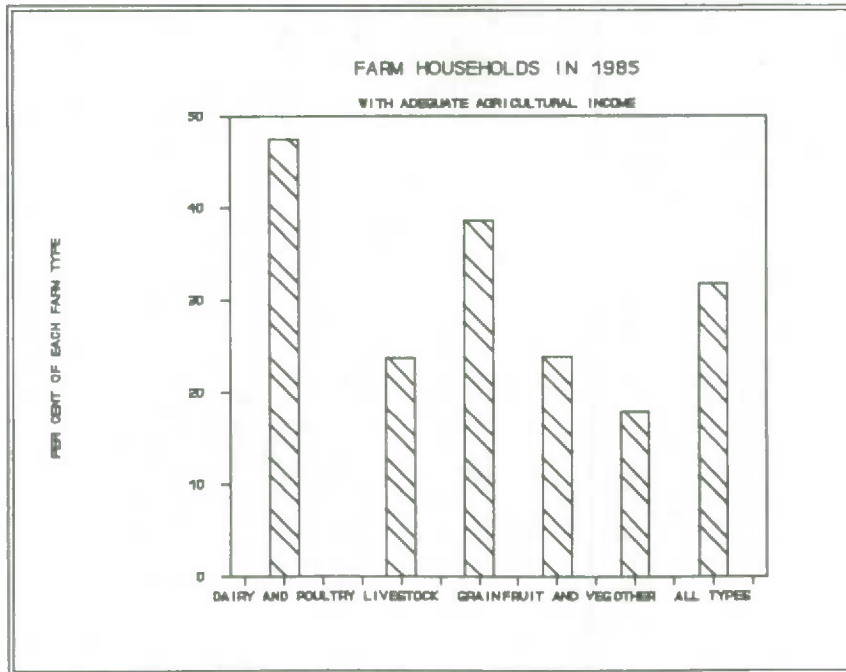


FIGURE 14

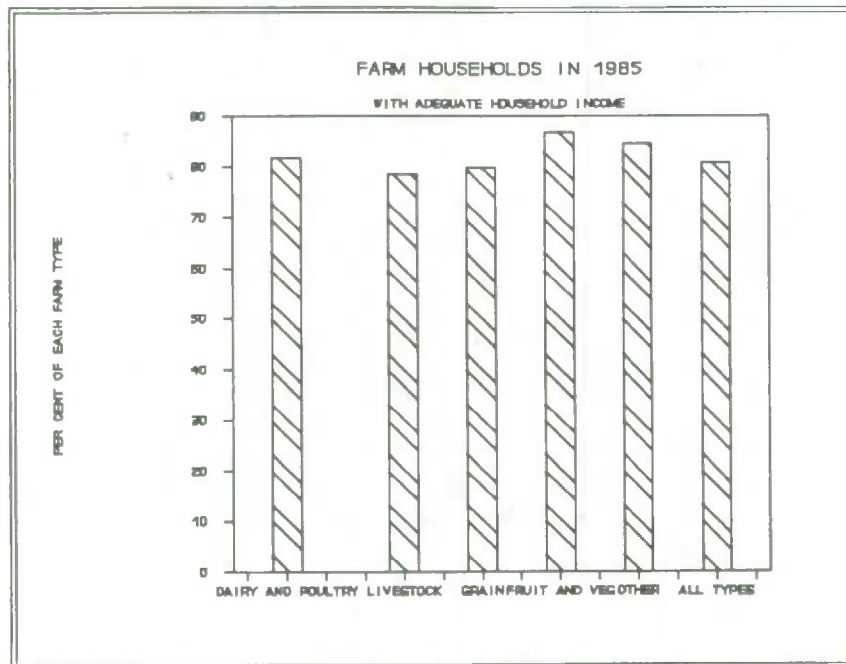


FIGURE 15

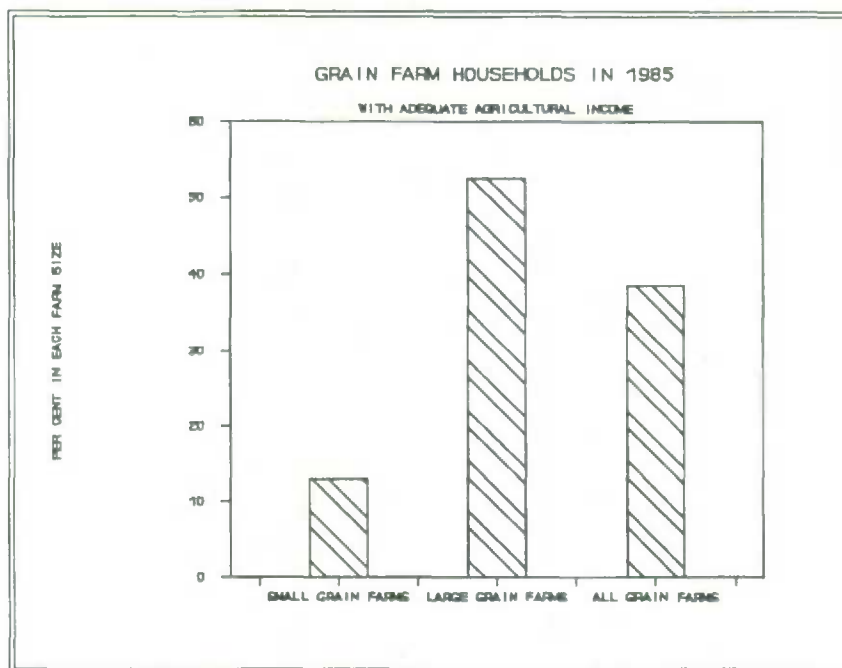
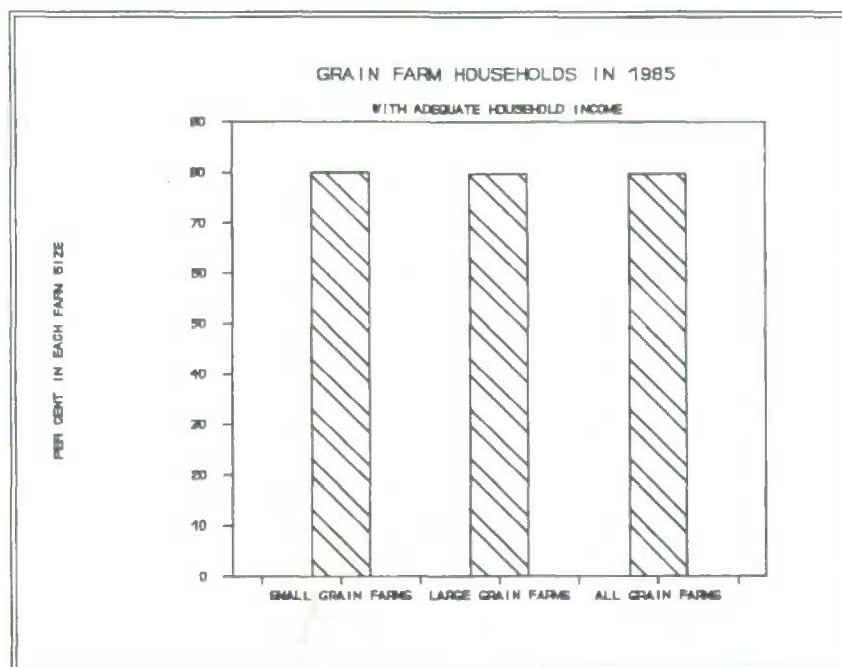


FIGURE 16





### 3.3 Comparison of 1985 and 1989 Statistics

Although the statistics from 1985 have become somewhat dated, the 1990 Farm Credit Corporation Farm Survey has provided more current statistics which indicate that the situation is still similar to that of 1985. Some of the key results are summarized in Table 8. As was that case in 1985, in 1989 households on smaller farms (in terms of gross agricultural receipts) had higher off-farm income, and thus were less vulnerable to decreases in farm income.

One should note that only farms with sales of agricultural products of more than \$2,000 in 1985 were included in the sample for this survey, as opposed to those with sales of \$250 or more in the linkage of the census of agriculture and population. Thus the 1990 survey excluded more hobby farmers and as a result the reported off-farm income was significantly smaller (\$4.9 billion versus \$6.5 billion).

Another important difference between the statistics is that the net farm income in the two years is not directly comparable because the 1985 statistics are for net farm self-employment income, after depreciation, whereas the 1989 statistics are for net cash farm income before depreciation.

**TABLE 8**

**FARM INCOME IN CANADA IN 1989 BY LEVEL OF GROSS AGRICULTURAL RECEIPTS**

	Below \$25,450	Between \$25,450- \$89,850	Above \$89,850	Total <sup>1</sup>
Farms - number <sup>2</sup>	85,124	85,160	85,219	255,503
- % of total	33.3%	33.3%	33.4%	100.0%
Gross Agricultural Receipts				
- total	\$1.0B	\$4.6B	\$20.7B	\$26.3B
- % of total	3.8%	17.6%	78.6%	100.0%
- average	\$11,700	\$54,200	\$242,600	\$102,900
Off-farm Income				
- total	\$2.3B	\$1.5B	\$1.0B	\$4.9B
- % of total	48.2%	30.3%	21.5%	100.0%
- average	\$27,600	\$17,300	\$12,300	\$19,100

(1) Components may not add exactly to totals.

(2) Excludes institutional farms, farms on Indian reserves, community pastures, farms part of multi-holding companies, and farms in marginal areas. Farms with sales of agricultural products of less than \$2,000 in 1985 were excluded from the sample.

Source: Farm Credit Corporation, Farm Survey 1990.



### 3.4 Impact of Changing Aggregate Agricultural Income Levels

This section presents the results of simulated changes in total gross agricultural receipts. The methodology consisted of first selecting targets for total net farm self-employment income (or, in the case of grain farm households, total net cash income from grains and oilseeds). The subsequent steps included determining by what percentage gross agricultural receipts would have to change to achieve the targets, changing the gross receipts for each farm by these percentages, recalculating all the other income measurements for each farm household accordingly, and reclassifying the income levels of each farm household.

Notwithstanding the obvious limitations to this type of simulation, it does provide an indication of the impact of reducing total net farm income on the number and percentage of farm households earning adequate incomes.

The percentage of farm households earning adequate household incomes in 1985 would have increased from 81% to 89% if total net farm self-employment income had doubled from \$2.4 to \$4.8 billion (Figure 17). On the other hand, if total net farm self-employment income had declined to zero, only two thirds of farm households would have earned an adequate household income. This is still a surprisingly high proportion.<sup>10</sup>

The impacts of changes in aggregate net farm income on average farm household income are quite different for households on small and large farms (Figure 17). Because agricultural income comprises a much smaller proportion of the household income of households on small farms than it does for households on large farms, households on small farms are much less vulnerable to decreases in agricultural income than are households on large farms. If the total net farm self-employment income had been 100% less in 1985, the proportion of households on small farms earning adequate incomes would have been only three percentage points lower while for households on large farms the proportion would have been 23 percentage points lower (Figure 17).

The statistics for Saskatchewan presented in Tables 26 to 28 in Appendix 2 demonstrate similar effects. Increasing the total net farm self-employment income from \$0.7 billion to \$1.2 billion would have raised the proportion of farm households earning adequate incomes from 77% to 87%. Decreasing the income figure to zero would have lowered this proportion to 57% (68% for households on small farms and 52% for households on large farms).

---

<sup>10</sup> The alternate total net farm self-employment incomes selected were zero and \$4.8 billion, i.e. 100% less than and 100% greater than the actual income for 1985. The reason for selecting this wide range was that it provides an indication of the sensitivity of the number of farm households earning adequate incomes to changes in net farm self-employment income. Also, because of the narrow margins in agriculture, it is possible that either end of the range may be reached.

FIGURE 17

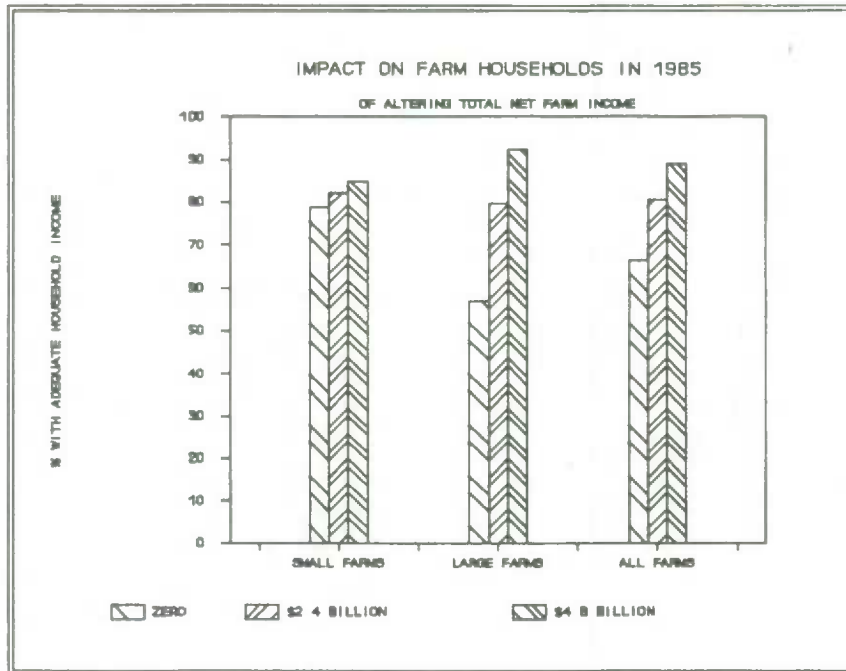


FIGURE 18

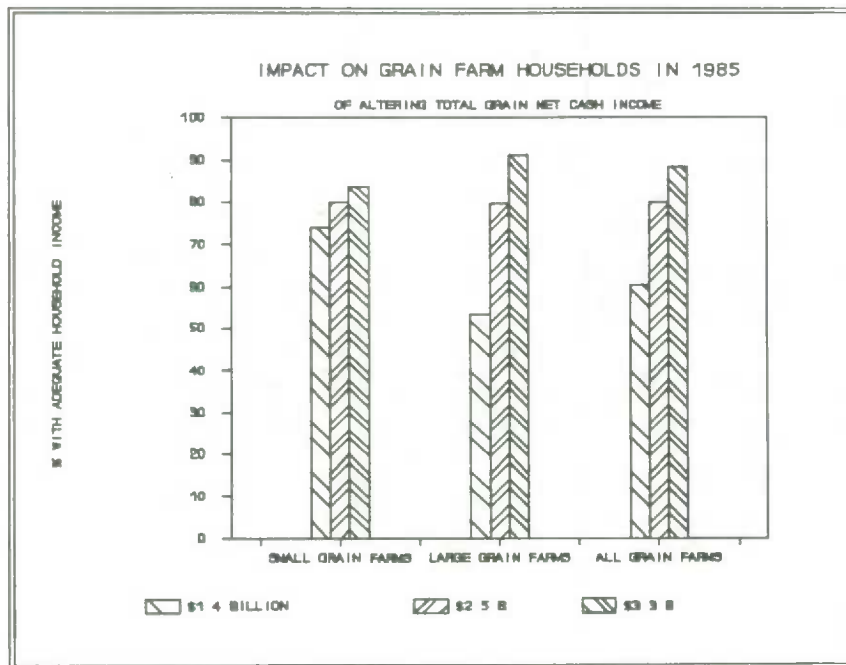


Figure 18 indicates how many grain farm households would have earned adequate incomes at different levels of total net cash income from grain. This measure (the net cash income from grain) is often used as an indicator of the health of the grains and oilseeds sector. More detail is presented in table form in Tables 13 to 15 in Appendix 2.

In 1985 with the actual total net cash income from grain (\$2.5 billion) 88,500 grain farm households in Canada or 80% all of grain farm households earned an adequate household income. This percentage was the same for both small and large farms. In Saskatchewan 79% of grain farm households earned adequate incomes.

If the total net cash income from grain had been \$3.3 billion, then the percentage of grain farm households earning adequate household incomes would have increased to 88% across Canada and also in Saskatchewan. If, on the other hand, the total net cash income from grain had been only \$1.4 billion (the 1990 level, when expressed in 1985 dollars), the percentage of grain farm households earning adequate household incomes would have decreased to 61% across Canada and 59% in Saskatchewan, with just over half of the households on large grain farms and about 70% of households on small grain farms earning adequate incomes.<sup>11</sup>

### 3.5 Adjustment Which Could Occur in Canadian Agriculture

The main factor which determines how many farm households remain in agriculture is the relative return available in alternative activities. Therefore, as the returns from agriculture decrease one would expect farm households to transfer resources to non-farm activities.

However, in some circumstances, such as in a general recession or in a province that is largely dependent upon agriculture, when returns are down in agriculture, there are also fewer alternatives. As a result, the shift out of agriculture might be less than one would expect.

Similarly, it is problematic trying to predict which households may exit from agriculture as returns to agriculture decrease. A priori, one might expect those households experiencing inadequate incomes would be the first to exit from agriculture. However, in some situations the

---

<sup>11</sup> The alternate total net grain cash incomes selected were \$1.4 billion and \$3.3 billion. The lower end of the range (\$1.4 billion) was selected for two reasons. First, that was the market income from grain in 1985 (net cash income before direct program payments). Second, the total net cash income from grain in 1990 (including direct program payments) was equal to \$1.4 billion in 1985 dollars (using the consumer price index as a deflator). The upper end of the range, \$3.3 billion, was somewhat less the 1981 market income from grain in 1985 dollars (\$3.7 billion) and approximated the total net cash income from grain in 1985 dollars in each of 1983 and 1984. (\$3.4 billion and \$3.2 billion). In other words, both ends to the range were within the realm of actual experience.

opposite could be the case if those households with adequate incomes have more alternatives open to them because of higher education and skills that are more transferable to other occupations.

Nevertheless, notwithstanding these and other difficulties, the statistics from the Agriculture - Population Census linkage can be used to estimate how much adjustment might occur in agriculture with various levels of aggregate net farm income.

Tables 9 and 10 present ranges of the possible changes in the number of farm households if the aggregate net farm income were altered as described previously and stabilized at the new levels.

To estimate the upper ends of the ranges, it was assumed that all farm households with inadequate household incomes would exit from agriculture and that their operations would be absorbed by existing farms or would be abandoned. That is to say, the assumption was that only those farm households with adequate household incomes would remain in agriculture.

However, this assumption is not very realistic because, for several reasons, there will always be farm households earning inadequate household incomes.<sup>12</sup>

Therefore, to estimate the lower ends of the ranges, it was assumed that the same ratio of farm households with inadequate household incomes to farm households with adequate household incomes that existed in 1985 would be maintained after the adjustment had taken place. These results are presented in Tables 9 and 10.

The final tables in this section indicate the annual rates of adjustment that would have to occur if the total adjustment took place over five or ten years.

It is important to keep in mind how the different scenarios were generated when examining the statistics. That is, the gross farm receipts for each farm were changed by the same percentage. In reality, of course, when total net farm self-employment income changes different farm types and regions are affected differently. In particular, the supply-managed sector (dairy and poultry) is generally affected less than other farm types when total net farm self-employment income changes because their agricultural incomes are more stable than those of other farm types.

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<sup>12</sup> These reasons include the fact that many farm households whose household incomes are adequate on average over the course of several years can experience individual years of inadequate income because of the vagaries of agricultural production and prices. As well, many beginning farmers are likely to have inadequate incomes. Finally, some producers may be prepared to accept inadequate incomes or may have no other choice.



In 1985 over 56 thousand farm households earned inadequate household incomes and might eventually exit from agriculture if total net farm self-employment income stabilized at the 1985 level of \$2.4 billion. These farm households accounted for \$3.9 billion (18%) of total gross agricultural receipts and had a total net farm self-employment income of -\$0.1 billion. Thus, in this scenario, if the farm households with inadequate household incomes exited from agriculture, the total net farm self-employment income would rise to \$2.5 billion from \$2.4 billion in the "first round", before their operations were taken over by other farm households. The eventual increase would be considerably greater if the remaining farm households which took over the operations of the exiters were able to produce their additional output at a profit.

If the total net farm self-employment income increased to and stabilized at \$4.8 billion in 1985 dollars (double the actual 1985 level) there would still be 32 thousand farm households earning inadequate household incomes and who might exit from agriculture. On the other hand, if total net farm self-employment income decreased to and stabilized at zero, 98 thousand Canadians farm households (over a third of the total enumerated in the 1986 Census) might exit from agriculture. Another and perhaps an even more striking observation of this scenario is that even if the total net farm self-employment income were zero almost two-thirds of Canadian farm households would continue to earn adequate household incomes and might be expected to remain in agriculture.

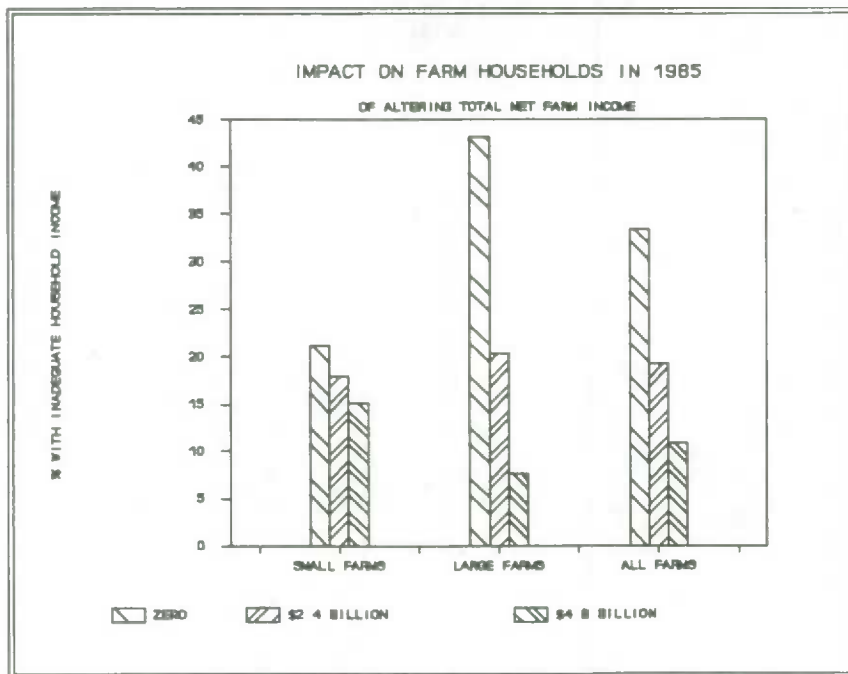
The household incomes of smaller farms are less vulnerable to decreases in net farm income than those of larger farms, due to the fact that households on small farms earn a smaller proportion of their household income from agriculture. Therefore, a smaller proportion of small farms might be expected to exit from agriculture if net farm income should fall (Figure 19).

The household incomes of farms in Ontario and British Columbia are the least vulnerable to the impact of decreases in gross farm receipts and net farm income. On the other hand the household incomes of dairy and poultry farms are the most vulnerable to the impact of decreases in agriculture receipts and income. However, given the supply management system they are the least likely to experience such decreases (Figures 20 and 21).

The results for Saskatchewan presented in Tables 20 to 22 in Appendix 2 demonstrate the same trends as those for the whole country.

Figure 22 indicates how many grain farm households might exit from agriculture under various levels of net cash income from grain. The statistics suggest that if the net cash income from grain stabilized at \$1.4 billion in 1985 dollars (the level experienced in 1990) then 39% of the grain farm households that existed in 1986 might exit from agriculture (26% of households on small grain farms and 47% of households on large grain farms).

**FIGURE 19**



**FIGURE 20**

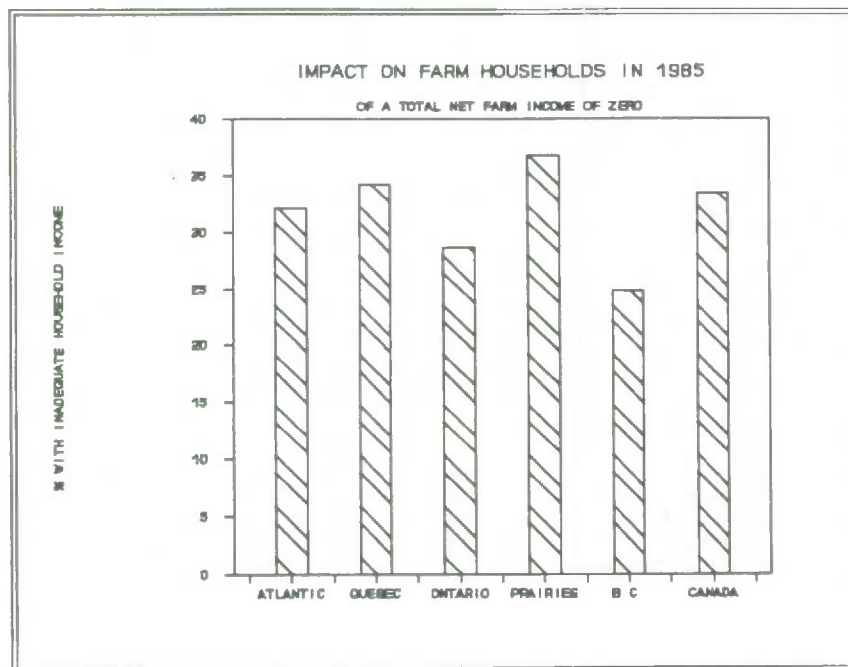


FIGURE 21

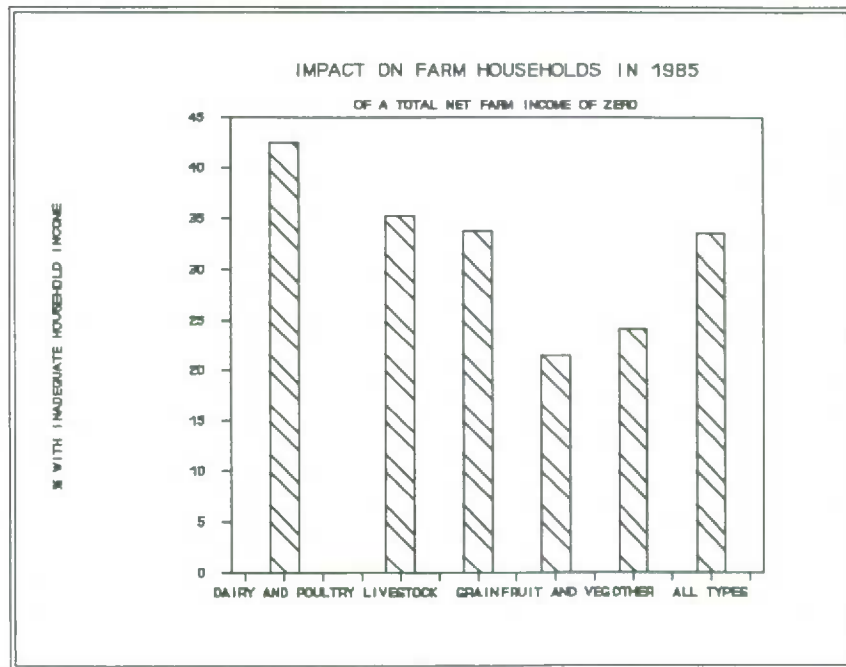
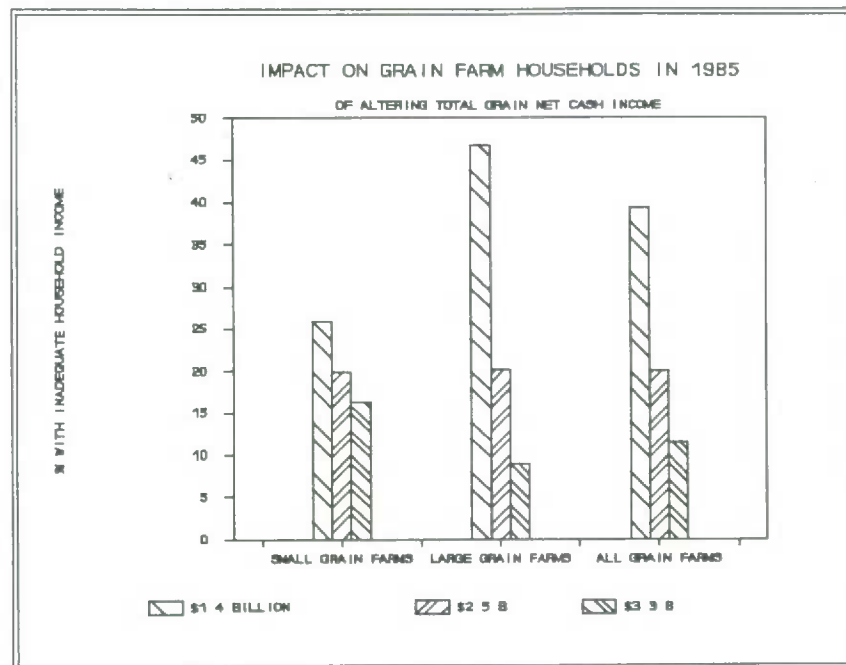


FIGURE 22



As indicated earlier, Table 9 compares the upper and lower estimates of the total adjustment in the number of farm households from the 1986 count that might occur if net farm self-employment income dropped to zero and stayed there.

Overall, the lower end of the range (51.6 thousand farm households) is just over half of the upper end (98.0 thousand). This relationship between the upper and lower ends of the ranges is fairly consistent for all regions and for all farm types.

TABLE 9		
ESTIMATED RANGE OF THE DOWNWARD ADJUSTMENT IN THE NUMBER OF FARM HOUSEHOLDS FROM 1986 WITH TOTAL CANADIAN NET FARM SELF-EMPLOYMENT INCOME OF ZERO		
Region	Low End of Range	High End of Range
	- thousands of farm households - (per cent of each category)	
Canada	51.6 (17.6%)	98.0 (33.5%)
Atlantic	2.0 (18.0%)	3.6 (32.1%)
Quebec	8.7 (21.0%)	14.2 (34.3%)
Ontario	11.4 (15.7%)	20.9 (28.7%)
Prairies	27.5 (18.6%)	54.5 (36.8%)
British Columbia	2.2 (11.3%)	4.7 (24.9%)
<u>Farm Type</u>		
Dairy and Poultry	12.1 (29.7%)	17.3 (42.5%)
Livestock	15.2 (17.6%)	30.5 (35.3%)
Grain	19.0 (17.1%)	37.4 (33.8%)
Fruit and Vegetable	1.2 (9.4%)	2.8 (21.4%)
Other	4.3 (10.3%)	10.0 (24.1%)
<u>Farm Size</u>		
Small <sup>1</sup>	5.1 (4.0%)	27.3 (21.2%)
Large <sup>2</sup>	47.0 (28.7%)	70.7 (43.2%)
 (1) Gross agricultural receipts in 1985 below \$30,277. (2) Gross agricultural receipts in 1985 above \$30,276.		



Table 10 presents the range in the potential adjustment of the number of grain farm households from the 1986 number if the net cash income from grain stabilized at the level experienced in 1990 (\$1.4 billion dollars in 1985 dollars). It indicates that under these circumstances the number of grain farm households could decrease between 26.8 thousand and 43.7 thousand with most of the reduction (around 80 to 90 percent) occurring in the number of households on large grain farms. Just under half of this decrease would occur in Saskatchewan.

TABLE 10			
ESTIMATED RANGE OF THE DOWNWARD ADJUSTMENT IN THE NUMBER OF GRAIN FARM HOUSEHOLDS FROM 1986 WITH TOTAL CANADIAN NET CASH INCOME FROM GRAIN OF \$1.4 BILLION, IN 1985 DOLLARS			
Region	Farm Size	Low End of Range	High End of Range
- thousands of grain farm households - (per cent of each category)			
Canada	Small <sup>1</sup>	2.9 (7.5%)	10.2 (25.9%)
	Large <sup>2</sup>	23.9 (33.4%)	33.5 (46.8%)
	All	26.8 (24.2%)	43.7 (39.4%)
Saskatchewan	Small <sup>1</sup>	1.4 (9.8%)	4.4 (30.2%)
	Large <sup>2</sup>	10.8 (31.3%)	15.7 (45.4%)
	All	12.3 (25.0%)	20.1 (40.9%)

(1) Gross agricultural receipts in 1985 below \$30,277.  
(2) Gross agricultural receipts in 1985 above \$30,276.

Tables 11 and 12 present the annual rates of adjustment in the number of farm households that would have to occur if the total adjustment presented in the previous tables were to take place over a five or a ten year period. For example, Table 11 shows that if net farm self-employment income were to fall to zero, the annual decrease in the number of Canadian farm households could range from five thousand to twenty thousand. For Canada and the regions these statistics are compared to the actual average annual decreases between 1981 and 1986.

**TABLE 11**

ESTIMATED RANGE OF THE RATES OF DOWNWARD ADJUSTMENT  
IN THE NUMBER OF FARM HOUSEHOLDS FROM 1986  
WITH TOTAL CANADIAN NET FARM SELF-EMPLOYMENT INCOME OF ZERO

Region	If Adjustment Occurred Over Ten Years	If Adjustment Occurred Over Five Years	Actual Net Rates of Exit 1981 to 1986
- thousands of farm households per year -			
Canada	5.2 to 9.8	10.3 to 19.6	5.1
Atlantic	0.2 to 0.4	0.4 to 0.7	0.3
Quebec	0.9 to 1.4	1.7 to 2.8	1.3
Ontario	1.1 to 2.1	2.3 to 4.2	1.9
Prairies	2.7 to 5.5	5.5 to 10.9	1.3
British Columbia	0.2 to 0.5	0.4 to 0.9	0.2
<u>Farm Type</u>			
Dairy and Poultry	1.2 to 1.7	2.4 to 3.5	
Livestock	1.5 to 3.0	3.0 to 6.1	
Grain	1.9 to 3.7	3.8 to 7.5	
Fruit and Vegetable	0.1 to 0.3	0.2 to 0.6	
Other	0.4 to 1.0	0.9 to 2.0	
<u>Farm Size</u>			
Small <sup>1</sup>	0.5 to 2.7	1.0 to 5.5	
Large <sup>2</sup>	4.7 to 7.1	9.4 to 14.1	

(1) Gross agricultural receipts in 1985 below \$30,277.

(2) Gross agricultural receipts in 1985 above \$30,276.

In all cases the range is very broad. However, given that, for Canada, the low end of the range is very close to the actual rate of adjustment that occurred between 1981 and 1986, a period in which realized net farm income averaged over \$3 billion in current dollars, it is unlikely that the actual rates of adjustment, if net farm self-employment income fell to zero, would be at the low end of the ranges presented.

**TABLE 12**

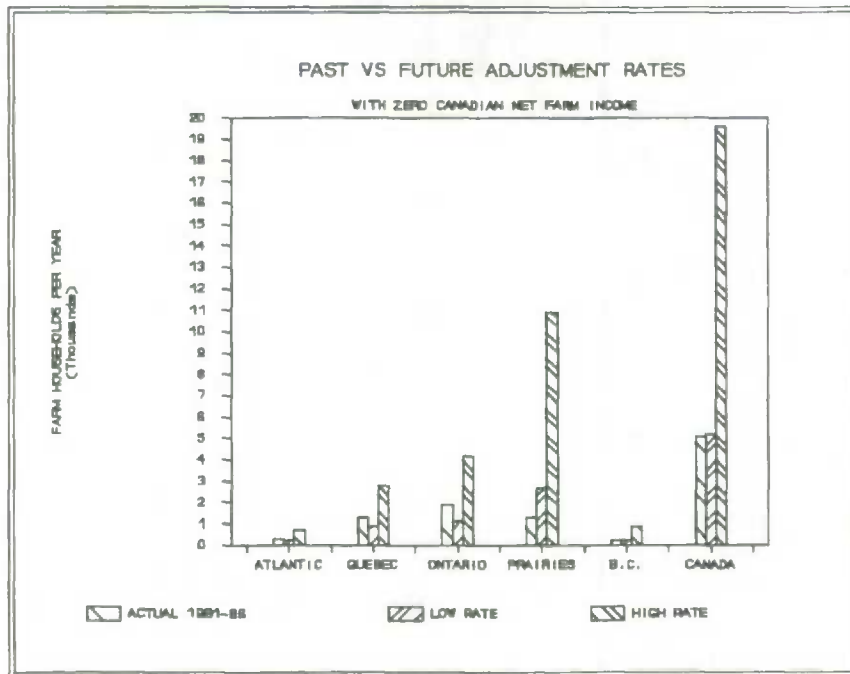
ESTIMATED RANGE OF THE RATES OF DOWNWARD ADJUSTMENT  
IN THE NUMBER OF GRAIN FARM HOUSEHOLDS FROM 1986  
WITH TOTAL CANADIAN NET CASH INCOME FROM GRAIN  
OF \$1.4 BILLION, IN 1985 DOLLARS

		If Adjustment Occurred Over Ten Years	If Adjustment Occurred Over Five Years
- thousands of farm households per year -			
Canada	Small <sup>1</sup>	0.3 to 1.0	0.6 to 2.0
	Large <sup>2</sup>	2.4 to 3.4	4.8 to 6.7
	Total	2.7 to 4.4	5.4 to 8.7
Saskatchewan	Small <sup>1</sup>	0.1 to 0.4	0.3 to 0.9
	Large <sup>2</sup>	1.1 to 1.6	2.2 to 3.1
	Total	1.2 to 2.0	2.5 to 4.0

(1) Gross agricultural receipts in 1985 below \$30,277.

(2) Gross agricultural receipts in 1985 above \$30,276.

**FIGURE 23**



**FIGURE 24**

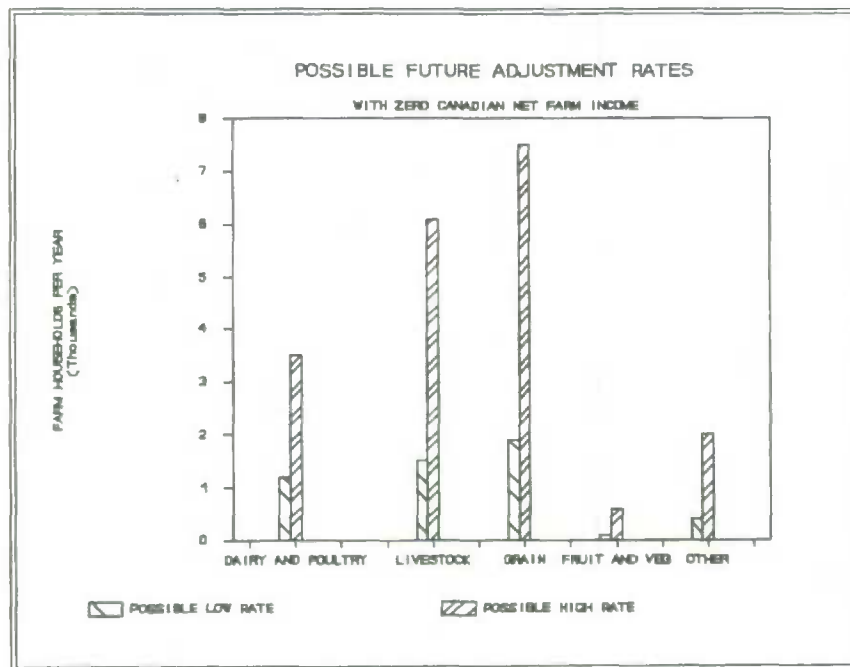


FIGURE 25

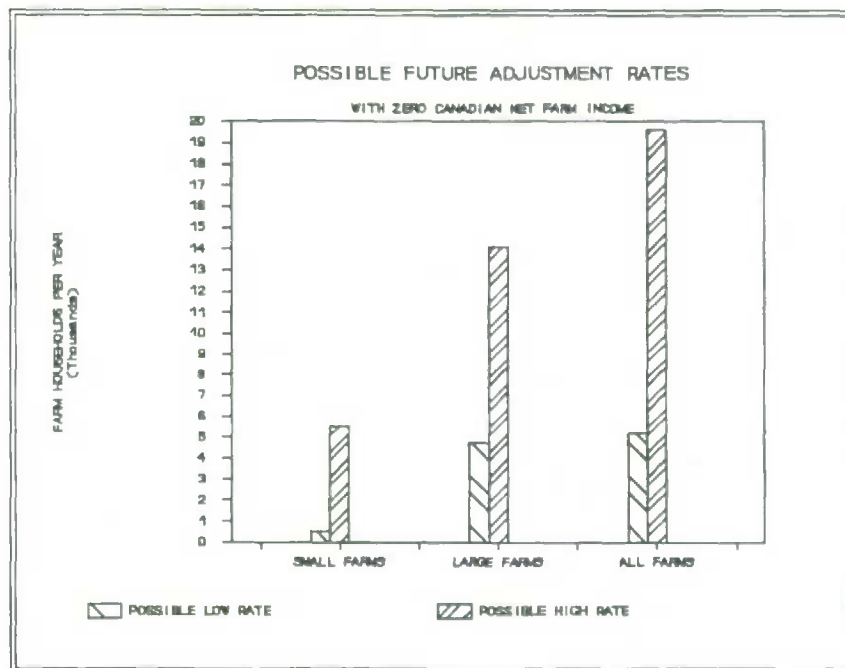
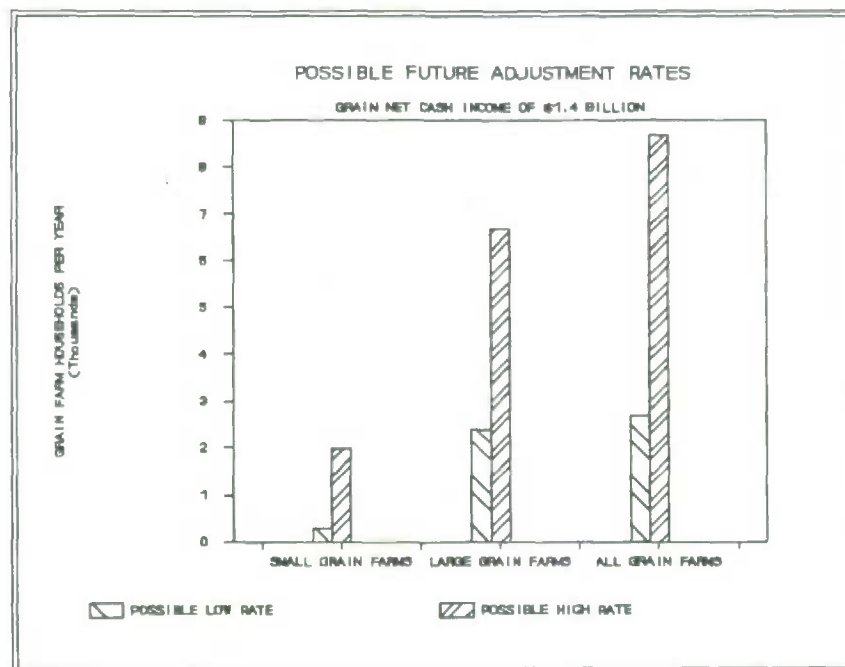


FIGURE 26



#### 4.0 IMPLICATIONS FOR AGRICULTURAL POLICY

The statistics presented in the previous section show that in 1985 only 32% of farm households earned adequate incomes from agriculture alone but that these farm households accounted for 54% of the gross agricultural receipts and 95% of (net) agricultural income. However, when non-agricultural income is considered, over 80% of farm households earned adequate incomes. The statistics also show that a large proportion of the difference between the incomes of farm households with adequate household incomes and those of farm households with inadequate household incomes was accounted for by the lower non-agricultural incomes of the farm households with inadequate household incomes. These facts tend to confirm the contention that "the pursuit of non-farm income sources can be viewed as a 'private income support program' created by farm families".<sup>1</sup>

The simulations of the impact of increasing total net farm income by a pro rata increase in gross agricultural receipts demonstrate the limited ability of a non-targetted approach to income support to assist farm households with inadequate household incomes to attain adequate household incomes. Such an approach dissipates the benefits among all farm households, including those which already earn adequate household incomes. For example, whereas doubling the aggregate net farm self-employment income in 1985 would have raised the average income of households on large farms which already earned adequate incomes by \$14,000, it would have decreased the number of farm households earning inadequate incomes by less than one-half. Almost 32,000 farm households would have continued to earn inadequate household incomes either because their gross agricultural receipts were too small or their farm losses were too great for such an approach to have been of much help to them.

At the same time, of course, agricultural income support policies tend to retard the rate of adjustment out of agriculture.

There are several potentially more effective alternatives to non-targetted income support which can assist farm households with inadequate household incomes without inhibiting the adjustment process. These include helping to improve producers' management skills, facilitating the diversification and expansion of on-farm enterprises, promoting rural development and other ways for farm households to increase their off-farm income, and assisting those who wish to exit from agriculture.

These alternatives should be analyzed to estimate their relative benefits and cost-effectiveness. Statistics Canada's linkage of the Census of Agriculture and the Census of Population provides a powerful and readily available tool for conducting this type of research.

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<sup>1</sup> Ehrensaft, P. and R.D. Bollman, The Microdynamics and Farm Family Economics of Structural Change in Agriculture, p.40.



## **Appendix 1**

### **Measures of Income**

The following measures of income appear repeatedly throughout the paper.

Gross (agricultural) receipts refer to market sales and direct program payments to producers. The gross agricultural receipts on some census records were adjusted upwards (as per Ehrensaft and Bollman, page 28) to account for apparent under-reporting.

Net farm self-employment income is the net farm income (after depreciation) reported by unincorporated farms on the Census of Population. In 1985 it totalled \$2.4 billion, somewhat less than the realized net income, the comparable figure for all farms (\$2.7 billion).

(Net) agricultural income includes net farm self-employment income, wages paid to family members and investment earnings attributed to the farm. For greater detail, the reader may refer to Ehrensaft and Bollman, The Microdynamics and Farm Family Economics of Structural Change in Agriculture, pages 24 and 25.

Non-agricultural income includes income from all other sources, including wages and salaries, other business income, investment income not attributed to the farm, pensions, unemployment insurance benefits, family allowance benefits, etc.

Household income refers to the total income from all sources received by the household. Household income does not include earnings retained by farm corporations.

Market income is equal to gross market receipts less cash expenses.

Net cash income is equal to market income plus direct program payments. Depreciation is not deducted.

*Appendix 2*

*Detailed Statistics*

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**TABLE 1**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF GROSS AGRICULTURAL RECEIPTS**

	Gross Receipts Below \$30,277	Gross Receipts Above \$30,276	Total <sup>1</sup>
Farm Households			
- number	128,665	163,780	292,445
- % of total	44.0%	56.0%	100.0%
Gross Agricultural Receipts <sup>2</sup>			
- total	\$1.6B	\$20.8B	\$22.4B
- % of total	7.2%	92.8%	100.0%
- average	\$12,532	\$126,934	\$76,602
Net Farm Self-Employment Income <sup>2</sup>			
- total	\$0.02B	\$2.4B	\$2.4B
- % of total	1.0%	99.0%	100.0%
- average	\$179	\$14,445	\$8,168
Agricultural Income <sup>2</sup>			
- total	\$0.2B	\$3.2B	\$3.4B
- % of total	6.5%	93.5%	100.0%
- average	\$1,741	\$19,678	\$11,787
Non-agricultural Income <sup>2</sup>			
- total	\$3.9B	\$2.7B	\$6.5B
- % of total	59.4%	40.6%	100.0%
- average	\$30,207	\$16,199	\$22,362
Household Income <sup>2</sup>			
- total	\$4.1B	\$5.9B	\$10.0B
- % of total	41.2%	58.8%	100.0%
- average	\$31,948	\$35,877	\$34,148

(1) Components may not add exactly to totals.

(2) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 2**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF NET AGRICULTURAL INCOME,  
ALL FARM HOUSEHOLDS**

	Negative Agricultural Incomes	Low <sup>1</sup> Agricultural Incomes	Adequate <sup>2</sup> Agricultural Incomes	Total <sup>3</sup>
<b>Farm Households</b>				
- number	51,295	147,915	93,200	292,445
- % of total	17.5%	50.6%	31.9%	100.0%
<b>Gross Agricultural Receipts<sup>4</sup></b>				
- total	\$2.2B	\$8.2B	\$12.0B	\$22.4B
- % of total	9.6%	36.8%	53.6%	100.0%
- average	\$41,949	\$55,713	\$128,821	\$76,602
<b>Net Farm Self-Employment Income<sup>4</sup></b>				
- total	(\$0.5B)	\$0.5B	\$2.4B	\$2.4B
- % of total	(20.9%)	19.9%	100.9%	100.0%
- average	(\$9,727)	\$3,221	\$25,869	\$8,168
<b>Agricultural Income<sup>4</sup></b>				
- total	(\$0.5B)	\$0.6B	\$3.3B	\$3.4B
- % of total	(13.5%)	18.5%	95.0%	100.0%
- average	(\$9,049)	\$4,304	\$35,123	\$11,787
<b>Non-agricultural Income<sup>4</sup></b>				
- total	\$1.8B	\$3.8B	\$1.0B	\$6.5B
- % of total	26.8%	57.5%	15.7%	100.0%
- average	\$34,221	\$25,421	\$10,999	\$22,362
<b>Household Income<sup>4</sup></b>				
- total	\$1.3B	\$4.4B	\$4.3	\$10.0B
- % of total	12.9%	44.0%	43.0%	100.0%
- average	\$25,173	\$29,725	\$46,122	\$34,148

(1) Low income - positive but below Statistics Canada's low income cut-offs.

(2) Adequate income - at or above Statistics Canada's low income cut-offs.

(3) Components may not add exactly to totals.

(4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 3**

FARM INCOME IN **CANADA** IN 1985 BY LEVEL OF NET AGRICULTURAL INCOME,  
HOUSEHOLDS ON FARMS WITH GROSS RECEIPTS BELOW \$30,277

	Negative Agricultural Incomes	Low <sup>1</sup> Agricultural Incomes	Adequate <sup>2</sup> Agricultural Incomes	Total <sup>3</sup>
Farm Households				
- number	33,840	83,425	11,390	128,665
- % of total	26.3%	64.8%	8.9%	100.0%
Gross Agricultural Receipts <sup>4</sup>				
- total	\$0.4B	\$1.0B	\$0.2B	\$1.6B
- % of total	22.8%	63.7%	13.5%	100.0%
- average	\$10,868	\$12,318	\$19,045	\$12,532
Net Farm Self-Employment Income <sup>4</sup>				
- total	(\$0.2B)	\$0.2B	\$0.1B	\$0.02B
- average	(\$6,519)	\$1,842	\$7,898	\$179
Agricultural Income <sup>4</sup>				
- total	(\$0.2B)	\$0.2B	\$0.2B	\$0.2B
- average	(\$6,224)	\$2,494	\$19,880	\$1,741
Non-agricultural Income <sup>4</sup>				
- total	\$1.3B	\$2.4B	\$0.1B	\$3.9B
- % of total	34.0%	62.6%	3.4%	100.0%
- average	\$39,025	\$29,180	\$11,559	\$30,207
Household Income <sup>4</sup>				
- total	\$1.1B	\$2.6B	\$0.4	\$4.1B
- % of total	27.0%	64.3%	8.7%	100.0%
- average	\$32,801	\$31,674	\$31,439	\$31,948

(1) Low income - positive but below Statistics Canada's low income cut-offs.

(2) Adequate income - at or above Statistics Canada's low income cut-offs.

(3) Components may not add exactly to totals.

(4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 4**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF NET AGRICULTURAL INCOME,  
HOUSEHOLDS ON FARMS WITH GROSS RECEIPTS ABOVE \$30,276**

	Negative Agricultural Incomes	Low <sup>1</sup> Agricultural Incomes	Adequate <sup>2</sup> Agricultural Incomes	Total <sup>3</sup>
<b>Farm Households</b>				
- number	17,450	64,490	81,805	163,780
- % of total	10.7%	39.4%	49.9%	100.0%
<b>Gross Agricultural Receipts<sup>4</sup></b>				
- total	\$1.8B	\$7.2B	\$11.8B	\$20.8B
- % of total	8.6%	34.7%	56.7%	100.0%
- average	\$102,198	\$111,847	\$144,110	\$126,934
<b>Net Farm Self-Employment Income<sup>4</sup></b>				
- total	(\$0.3B)	\$0.3B	\$2.3B	\$2.4B
- % of total	(11.8%)	13.6%	98.1%	100.0%
- average	(\$15,943)	\$5,005	\$28,371	\$14,445
<b>Agricultural Income<sup>4</sup></b>				
- total	(\$0.3B)	\$0.4B	\$3.0B	\$3.2B
- % of total	(7.9%)	13.3%	94.5%	100.0%
- average	(\$14,524)	\$6,645	\$37,246	\$19,678
<b>Non-agricultural Income<sup>4</sup></b>				
- total	\$0.4B	\$1.3B	\$0.9B	\$2.7B
- % of total	16.4%	50.0%	33.7%	100.0%
- average	\$24,904	\$20,559	\$10,921	\$16,199
<b>Household Income<sup>4</sup></b>				
- total	\$0.2B	\$1.8B	\$3.9	\$5.9B
- % of total	3.1%	29.9%	67.1%	100.0%
- average	\$10,382	\$27,204	\$48,167	\$35,877

- (1) Low income - positive but below Statistics Canada's low income cut-offs.
- (2) Adequate income - at or above Statistics Canada's low income cut-offs.
- (3) Components may not add exactly to totals.
- (4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 5**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF HOUSEHOLD INCOME,  
ALL FARM HOUSEHOLDS**

	Negative Household Incomes	Low <sup>1</sup> Household Incomes	Adequate <sup>2</sup> Household Incomes	Total <sup>3</sup>
Farm Households				
- number	8,775	47,500	236,135	292,445
- % of total	3.0%	16.2%	80.7%	100.0%
Gross Agricultural Receipts <sup>4</sup>				
- total	\$0.9B	\$3.0B	\$18.5	\$22.4B
- % of total	4.0%	13.5%	82.5%	100.0%
- average	\$101,706	\$63,783	\$78,245	\$76,602
Net Farm Self-Employment Income <sup>4</sup>				
- total	(\$0.2B)	\$0.1B	\$2.5B	\$2.4B
- % of total	(9.0%)	3.5%	105.5%	100.0%
- average	(\$24,602)	\$1,770	\$10,673	\$8,168
Agricultural Income <sup>4</sup>				
- total	(\$0.2B)	\$0.1B	\$3.5B	\$3.4B
- % of total	(5.8%)	3.8%	102.0%	100.0%
- average	(\$22,932)	\$2,772	\$14,888	\$11,787
Non-agricultural Income <sup>4</sup>				
- total	\$0.1B	\$0.3B	\$6.2B	\$6.5B
- % of total	0.8%	4.5%	94.7%	100.0%
- average	\$5,790	\$6,233	\$26,230	\$22,362
Household Income <sup>4</sup>				
- total	(\$0.2B)	\$0.4B	\$9.7B	\$10.0B
- % of total	(1.5%)	4.3%	97.2%	100.0%
- average	(\$17,142)	\$9,005	\$41,117	\$34,148

(1) Low income - positive but below Statistics Canada's low income cut-offs.

(2) Adequate income - at or above Statistics Canada's low income cut-offs.

(3) Components may not add exactly to totals.

(4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 6**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF HOUSEHOLD INCOME.  
HOUSEHOLDS ON FARMS WITH GROSS RECEIPTS BELOW \$30,277**

	Negative Household Incomes	Low <sup>1</sup> Household Incomes	Adequate <sup>2</sup> Household Incomes	Total <sup>3</sup>
Farm Households				
- number	2,635	20,440	105,580	128,665
- % of total	2.0%	15.9%	82.1%	100.0%
Gross Agricultural Receipts <sup>4</sup>				
- total	(\$0.04B)	\$0.3B	\$1.3B	\$1.6B
- % of total	2.4%	17.3%	80.4%	100.0%
- average	(\$14,416)	\$13,626	\$12,273	\$12,532
Net Farm Self-Employment Income <sup>4</sup>				
- total	(\$0.04B)	-	\$0.06	\$0.02B
- average	(\$15,931)	\$157	\$585	\$179
Agricultural Income <sup>4</sup>				
- total	(\$0.04B)	\$0.01B	\$0.25	\$0.22B
- average	(\$15,284)	\$702	\$2,366	\$1,741
Non-agricultural Income <sup>4</sup>				
- total	\$0.02B	\$0.15B	\$3.72B	\$3.9B
- % of total	0.4%	3.8%	95.8%	100.0%
- average	\$5,763	\$7,315	\$35,252	\$30,207
Household Income <sup>4</sup>				
- total	(\$0.03B)	\$0.16B	\$3.97B	\$4.1B
- % of total	(0.6%)	4.0%	96.6%	100.0%
- average	(\$9,521)	\$8,017	\$37,617	\$31,948

(1) Low income - positive but below Statistics Canada's low income cut-offs.

(2) Adequate income - at or above Statistics Canada's low income cut-offs.

(3) Components may not add exactly to totals.

(4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.



**TABLE 7**

**FARM INCOME IN CANADA IN 1985 BY LEVEL OF HOUSEHOLD INCOME,  
HOUSEHOLDS ON FARMS WITH GROSS RECEIPTS ABOVE \$30,276**

	Negative Household Incomes	Low <sup>1</sup> Household Incomes	Adequate <sup>2</sup> Household Incomes	Total <sup>3</sup>
<b>Farm Households</b>				
- number	6,135	27,065	130,545	163,780
- % of total	3.7%	16.5%	79.7%	100.0%
<b>Gross Agricultural Receipts<sup>4</sup></b>				
- total	\$0.9B	\$2.8B	\$17.2B	\$20.8B
- % of total	4.1%	13.2%	82.6%	100.0%
- average	\$139,210	\$101,649	\$131,603	\$126,934
<b>Net Farm Self-Employment Income<sup>4</sup></b>				
- total	(\$0.2B)	\$0.1B	\$2.5B	\$2.4B
- % of total	(7.3%)	3.4%	103.9%	100.0%
- average	(\$28,328)	\$2,986	\$18,832	\$14,445
<b>Agricultural Income<sup>4</sup></b>				
- total	(\$0.2B)	\$0.1B	\$3.3B	\$3.2B
- % of total	(5.0%)	3.6%	101.3%	100.0%
- average	(\$26,218)	\$4,333	\$25,015	\$19,678
<b>Non-agricultural Income<sup>4</sup></b>				
- total	\$0.04B	\$0.15B	\$2.47B	\$2.7B
- % of total	1.3%	5.5%	93.2%	100.0%
- average	\$5,801	\$5,417	\$18,933	\$16,199
<b>Household Income<sup>4</sup></b>				
- total	(\$0.13B)	\$0.26B	\$5.74B	\$5.9B
- % of total	(2.1%)	4.5%	97.6%	100.0%
- average	(\$20,416)	\$9,750	\$43,948	\$35,877

- (1) Low income - positive but below Statistics Canada's low income cut-offs.
- (2) Adequate income - at or above Statistics Canada's low income cut-offs.
- (3) Components may not add exactly to totals.
- (4) See definitions in Appendix 1.

Source: Statistics Canada, special tabulation.

**TABLE 8**

**FARM INCOME IN CANADA IN 1985 BY REGION**

Agricultural Income Levels	Atlantic	Quebec	Ontario	Prairies	B.C.	Canada
- thousands of farm households - (per cent of farm households in each region)						
Negative	1.7 (14.8%)	3.3 (7.9%)	14.7 (20.2%)	27.2 (18.4%)	4.4 (23.4%)	51.3 (17.5%)
Low <sup>1</sup>	7.5 (66.7%)	24.6 (59.4%)	37.4 (51.4%)	67.6 (45.6%)	10.9 (57.1%)	147.9 (50.6%)
Adequate <sup>2</sup>	2.1 (18.4%)	13.5 (32.6%)	20.6 (28.4%)	53.3 (36.0%)	3.7 (19.6%)	93.2 (31.9%)
Total	11.3 (100.0%)	41.4 (100.0%)	72.7 (100.0%)	148.1 (100.0%)	19.0 (100.0%)	292.4 (100.0%)
Household Income Levels						
Negative	0.1 (1.2%)	0.3 (0.8%)	1.8 (2.5%)	6.1 (4.1%)	0.4 (2.2%)	8.8 (3.0%)
Low <sup>1</sup>	1.8 (15.9%)	6.7 (16.1%)	9.4 (13.0%)	27.1 (18.3%)	2.5 (13.1%)	47.5 (16.2%)
Adequate <sup>2</sup>	9.3 (82.8%)	34.4 (83.1%)	61.4 (84.5%)	114.8 (77.6%)	16.1 (84.7%)	236.1 (80.7%)
Total	11.3 (100.0%)	41.4 (100.0%)	72.7 (100.0%)	148.1 (100.0%)	19.0 (100.0%)	292.4 (100.0%)
(per cent of farms in each region in large <sup>3</sup> category)						
	(39.1%)	(57.4%)	(50.8%)	(62.6%)	(31.6%)	(56.0%)

- (1) Low income - positive but below Statistics Canada's low income cut-offs.
- (2) Adequate income - at or above Statistics Canada's low income cut-offs.
- (3) Farms with gross agricultural receipts above \$30,276.

Source: Statistics Canada, special tabulation.

**TABLE 9**

**FARM INCOME IN CANADA IN 1985 BY FARM TYPE<sup>1</sup>**

Agricultural Income Levels	Dairy and Poultry	Livestock	Grain	Fruit and Vegetable	Other	All Types
- thousands of farm households - (per cent of farm households of each type)						
Negative	2.6 (6.4%)	18.1 (20.9%)	19.8 (17.9%)	2.2 (16.6%)	8.6 (20.8%)	51.3 (17.5%)
Low <sup>2</sup>	18.7 (46.1%)	47.8 (55.3%)	48.2 (43.5%)	7.7 (59.5%)	25.5 (61.2%)	147.9 (50.6%)
Adequate <sup>3</sup>	19.3 (47.6%)	20.6 (23.8%)	42.7 (38.6%)	3.1 (23.9%)	7.5 (18.0%)	93.2 (31.9%)
Total	40.6 (100.0%)	86.4 (100.0%)	110.7 (100.0%)	13.0 (100.0%)	41.7 (100.0%)	292.4 (100.0%)
<b>Household Income Levels</b>						
Negative	0.5 (1.3%)	2.7 (3.1%)	4.4 (4.0%)	0.2 (1.9%)	0.9 (2.2%)	8.8 (3.0%)
Low <sup>2</sup>	6.9 (16.9%)	15.8 (18.3%)	17.8 (16.1%)	1.5 (11.3%)	5.5 (13.1%)	47.5 (16.2%)
Adequate <sup>3</sup>	33.2 (81.7%)	67.9 (78.6%)	88.5 (79.9%)	11.3 (86.8%)	35.3 (84.7%)	236.1 (80.7%)
Total	40.6 (100.0%)	86.4 (100.0%)	110.7 (100.0%)	13.0 (100.0%)	41.7 (100.0%)	292.4 (100.0%)
(per cent of farms of each type in large <sup>3</sup> category)						
	(82.3%)	(47.8%)	(64.6%)	(36.5%)	(30.4%)	(56.0%)

- (1) A farm is classified as a particular type if 51% or more of its sales are of that commodity.
- (2) Low income - positive but below Statistics Canada's low income cut-offs.
- (3) Adequate income - at or above Statistics Canada's low income cut-offs.
- (4) Farms with gross agricultural receipts above \$30,276.

Source: Statistics Canada, special tabulation.

**TABLE 10**

**INCOME LEVELS OF FARM HOUSEHOLDS IN CANADA IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
ALL FARM HOUSEHOLDS**

Agricultural Income Levels	Total Canadian Net Farm Self-Employment Income		
	\$0	\$2.4 Billion <sup>1</sup>	\$4.8 Billion
- thousands of farm households - (per cent of farm households)			
Negative	142.7 (48.8%)	51.3 (17.5%)	38.4 (13.1%)
Low <sup>2</sup>	92.7 (31.7%)	147.9 (50.6%)	121.8 (41.6%)
Adequate <sup>3</sup>	57.0 (19.5%)	93.2 (31.9%)	132.2 (45.2%)
Total	292.4 (100.0%)	292.4 (100.0%)	292.4 (100.0%)
Household Income Levels			
Negative	30.7 (10.5%)	8.8 (3.0%)	5.3 (1.8%)
Low <sup>2</sup>	67.2 (23.0%)	47.5 (16.2%)	26.7 (9.1%)
Adequate <sup>3</sup>	194.5 (66.5%)	236.1 (80.7%)	260.4 (89.0%)
Total	292.4 (100.0%)	292.4 (100.0%)	292.4 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$3.6	\$11.8	\$20.0
Household Income	\$26.0	\$34.1	\$42.3

(1) Actual total net farm self-employment income in 1985.

(2) Low income - positive but below Statistics Canada's low income cut-offs.

(3) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.

**TABLE 11**

INCOME LEVELS OF FARM HOUSEHOLDS IN **CANADA** IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
HOUSEHOLDS ON SMALL FARMS<sup>1</sup>

Agricultural Income Levels	Total Canadian Net Farm Self-Employment Income		
	\$0	\$2.4 Billion <sup>2</sup>	\$4.8 Billion
- thousands of farm households - (per cent of households on small farms)			
Negative	77.8 (60.5%)	33.8 (26.3%)	29.6 (23.0%)
Low <sup>3</sup>	42.1 (32.7%)	83.4 (64.8%)	84.5 (65.7%)
Adequate <sup>4</sup>	8.7 (6.8%)	11.4 (8.9%)	14.6 (11.4%)
Total	128.7 (100.0%)	128.7 (100.0%)	128.7 (100.0%)
Household Income Levels			
Negative	4.1 (3.1%)	2.6 (2.0%)	2.2 (1.7%)
Low <sup>3</sup>	23.2 (18.0%)	20.4 (15.9%)	17.3 (13.5%)
Adequate <sup>4</sup>	101.4 (78.8%)	105.6 (82.1%)	109.2 (84.9%)
Total	128.7 (100.0%)	128.7 (100.0%)	128.7 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$0.4	\$1.7	\$3.1
Household Income	\$30.6	\$31.9	\$33.3

(1) Farms which had gross agricultural receipts below \$30,277 in 1985.

(2) Actual total net farm self-employment income in 1985.

(3) Low income - positive but below Statistics Canada's low income cut-offs.

(4) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.

**TABLE 12**

**INCOME LEVELS OF FARM HOUSEHOLDS IN CANADA IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
HOUSEHOLDS ON LARGE FARMS<sup>1</sup>**

Agricultural Income Levels	Total Canadian Net Farm Self-Employment Income		
	\$0	\$2.4 Billion <sup>2</sup>	\$4.8 Billion
- thousands of farm households - (per cent of households on large farms)			
Negative	64.9 (39.6%)	17.5 (10.7%)	8.8 (5.4%)
Low <sup>3</sup>	50.6 (30.9%)	64.5 (39.4%)	37.3 (22.8%)
Adequate <sup>4</sup>	48.3 (29.5%)	81.8 (49.9%)	117.6 (71.8%)
Total	163.8 (100.0%)	163.8 (100.0%)	163.8 (100.0%)
Household Income Levels			
Negative	26.7 (16.3%)	6.1 (3.7%)	3.1 (1.9%)
Low <sup>3</sup>	44.0 (26.9%)	27.1 (16.5%)	9.4 (5.7%)
Adequate <sup>4</sup>	93.1 (56.8%)	130.5 (79.7%)	151.2 (92.3%)
Total	163.8 (100.0%)	163.8 (100.0%)	163.8 (100.0%)
- thousands of dollars per household -			
Average Incomes			
Agricultural Income	\$6.1	\$19.7	\$33.2
Household Income	\$22.3	\$35.9	\$49.4

(1) Farms which had gross agricultural receipts above \$30,276 in 1985.

(2) Actual total net farm self-employment income in 1985.

(3) Low income - positive but below Statistics Canada's low income cut-offs.

(4) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.



**TABLE 13**

INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN **CANADA** IN 1985 WITH  
DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
ALL GRAIN FARM HOUSEHOLDS

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>1</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of grain farm households)			
Negative	56.4 (50.9%)	19.8 (17.9%)	13.8 (12.5%)
Low <sup>2</sup>	30.3 (27.3%)	48.2 (43.5%)	39.7 (35.9%)
Adequate <sup>3</sup>	24.1 (21.7%)	42.7 (38.6%)	57.1 (51.6%)
Total	110.7 (100.0%)	110.7 (100.0%)	110.7 (100.0%)
Household Income Levels			
Negative	17.1 (15.5%)	4.4 (4.0%)	2.7 (2.4%)
Low <sup>2</sup>	26.5 (23.9%)	17.8 (16.1%)	10.0 (9.1%)
Adequate <sup>3</sup>	67.1 (60.6%)	88.5 (79.9%)	98.0 (88.5%)
Total	110.7 (100.0%)	110.7 (100.0%)	110.7 (100.0%)
- thousands of dollars per household -			
Average Incomes			
Agricultural Income	\$2.8	\$13.8	\$21.3
Household Income	\$22.2	\$33.3	\$40.8

(1) Actual total net cash income from grain in 1985.

(2) Low income - positive but below Statistics Canada's low income cut-offs.

(3) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.

Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

TABLE 14

INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN CANADA IN 1985 WITH  
DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
HOUSEHOLDS ON SMALL GRAIN FARMS<sup>1</sup>

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>2</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of households on small grain farms)			
Negative	23.5 (59.9%)	10.8 (27.6%)	9.2 (23.5%)
Low <sup>3</sup>	12.1 (31.0%)	23.3 (59.5%)	23.5 (60.0%)
Adequate <sup>4</sup>	3.6 (9.1%)	5.1 (13.0%)	6.5 (16.5%)
Total	39.2 (100.0%)	39.2 (100.0%)	39.2 (100.0%)
Household Income Levels			
Negative	2.0 (5.2%)	1.2 (2.9%)	1.0 (2.5%)
Low <sup>3</sup>	8.1 (20.8%)	6.6 (17.0%)	5.4 (13.8%)
Adequate <sup>4</sup>	29.0 (74.1%)	31.4 (80.1%)	32.8 (83.7%)
Total	39.2 (100.0%)	39.2 (100.0%)	39.2 (100.0%)
- thousands of dollars per household -			
Average Incomes			
Agricultural Income	-	\$2.4	\$4.0
Household Income	\$27.4	\$29.7	\$31.3

(1) Farms which had gross agricultural receipts below \$30,277 in 1985.

(2) Actual total net cash income from grain in 1985.

(3) Low income - positive but below Statistics Canada's low income cut-offs.

(4) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.  
Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

**TABLE 15**

**INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN CANADA IN 1985 WITH  
DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
HOUSEHOLDS ON LARGE GRAIN FARMS<sup>1</sup>**

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>2</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of households on large grain farms)			
Negative	32.9 (46.0%)	9.0 (12.6%)	4.7 (6.5%)
Low <sup>3</sup>	18.1 (25.3%)	24.9 (34.7%)	16.2 (22.6%)
Adequate <sup>4</sup>	20.5 (28.7%)	37.6 (52.6%)	50.7 (70.8%)
Total	71.5 (100.0%)	71.5 (100.0%)	71.5 (100.0%)
Household Income Levels			
Negative	15.1 (21.1%)	3.2 (4.5%)	1.7 (2.4%)
Low <sup>3</sup>	18.4 (25.7%)	11.2 (15.7%)	4.6 (6.5%)
Adequate <sup>4</sup>	38.0 (53.2%)	57.1 (79.8%)	65.2 (91.1%)
Total	71.5 (100.0%)	71.5 (100.0%)	71.5 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$4.2	\$20.0	\$30.8
Household Income	\$19.4	\$35.2	\$46.0

- (1) Farms which had gross agricultural receipts above \$30,276 in 1985.
- (2) Actual total net cash income from grain in 1985.
- (3) Low income - positive but below Statistics Canada's low income cut-offs.
- (4) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.  
Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

**TABLE 16**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER OF  
FARM HOUSEHOLDS IN CANADA FROM 1986**

Gross Agricultural Receipts in 1985 Dollars	Total Canadian Net Farm Self-Employment Income, (in 1985 Dollars)		
	\$0	\$2.4 Billion <sup>1</sup>	\$4.8 Billion
- thousands of farm households - (per cent of farm households in each farm size)			
Below \$30,277	27.3 (21.2%)	23.1 (17.9%)	19.5 (15.1%)
Above \$30,276	70.7 (43.2%)	33.2 (20.3%)	12.5 (7.6%)
Total	98.0 (33.5%)	56.3 (19.2%)	32.0 (10.9%)

(1) Actual total net farm self-employment income in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 17**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER  
OF FARM HOUSEHOLDS IN CANADA FROM 1986 BY REGION**

Region	Total Canadian Net Farm Self-Employment Income, (in 1985 Dollars)		
	\$0	\$2.4 Billion <sup>1</sup>	\$4.8 Billion
- thousands of farm households - (per cent of farm households in each region)			
Atlantic	3.6 (32.1%)	1.9 (17.2%)	1.2 (10.7%)
Quebec	14.2 (34.3%)	7.0 (16.9%)	3.6 (8.8%)
Ontario	20.9 (28.7%)	11.2 (15.5%)	5.8 (8.0%)
Prairies	54.5 (36.8%)	33.2 (22.4%)	19.2 (13.0%)
British Columbia	4.7 (24.9%)	2.9 (15.3%)	2.2 (11.4%)
Canada	98.0 (33.5%)	56.3 (19.2%)	32.0 (10.9%)

(1) Actual total net farm self-employment income in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 18**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER OF FARM HOUSEHOLDS  
IN CANADA FROM 1986 BY FARM TYPE**

Total Canadian Net Farm Self-Employment Income, (in 1985 Dollars)			
Farm Type	\$0	\$2.4 Billion <sup>1</sup>	\$4.8 Billion
- thousands of farm households - (per cent of farm households of each type)			
Dairy and Poultry	17.3 (42.5%)	7.4 (18.3%)	2.6 (6.5%)
Livestock	30.5 (35.3%)	18.5 (21.4%)	10.8 (12.5%)
Grain	37.4 (33.8%)	22.2 (20.1%)	12.7 (11.5%)
Fruit and Vegetable	2.8 (21.4%)	1.7 (13.2%)	1.2 (9.1%)
Other	10.0 (24.1%)	6.4 (15.3%)	4.7 (11.3%)
Total	98.0 (33.5%)	56.3 (19.2%)	32.0 (10.9%)

(1) Actual total net farm self-employment income in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 19**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER  
OF GRAIN FARM HOUSEHOLDS IN CANADA FROM 1986**

Total Canadian Net Cash Income From Grain, (in 1985 Dollars)			
Gross Agricultural Receipts in 1985 Dollars	\$1.4 Billion	\$2.5 Billion <sup>1</sup>	\$3.3 Billion
- thousands of farm grain households - (per cent of grain farm households in each farm size)			
Below \$30,277	10.2 (25.9%)	7.8 (19.9%)	6.4 (16.3%)
Above \$30,276	33.5 (46.8%)	14.4 (20.2%)	6.3 (8.9%)
Total	43.7 (39.4%)	22.2 (20.1%)	12.7 (11.5%)

(1) Actual total net cash income from grain in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 20**

**INCOME LEVELS OF FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
ALL FARM HOUSEHOLDS**

Agricultural Income Levels	Total Saskatchewan Net Farm Self-Employment Income		
	\$0	\$0.7 Billion <sup>1</sup>	\$1.2 Billion
- thousands of farm households - (per cent of farm households)			
Negative	29.1 (46.0%)	9.7 (15.3%)	6.5 (10.2%)
Low <sup>2</sup>	18.8 (29.8%)	27.3 (43.1%)	21.7 (34.3%)
Adequate <sup>3</sup>	15.3 (24.2%)	26.3 (41.6%)	35.1 (55.4%)
Total	63.3 (100.0%)	63.3 (100.0%)	63.3 (100.0%)
<u>Household Income Levels</u>			
Negative	10.1 (16.0%)	2.6 (4.2%)	1.6 (2.5%)
Low <sup>2</sup>	16.9 (26.7%)	11.7 (18.5%)	6.7 (10.6%)
Adequate <sup>3</sup>	36.3 (57.3%)	49.0 (77.4%)	55.0 (86.9%)
Total	63.3 (100.0%)	63.3 (100.0%)	63.3 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$4.0	\$14.9	\$22.3
Household Income	\$19.8	\$30.6	\$38.1

(1) Actual total net farm self-employment income in 1985.

(2) Low income - positive but below Statistics Canada's low income cut-offs.

(3) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.



**TABLE 21**

INCOME LEVELS OF FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
HOUSEHOLDS ON SMALL FARMS<sup>1</sup>

Agricultural Income Levels	Total Saskatchewan Net Farm Self-Employment Income		
	\$0	\$0.7 Billion <sup>2</sup>	\$1.2 Billion
- thousands of farm households - (per cent of households on small farms)			
Negative	10.8 (53.7%)	4.8 (23.9%)	4.0 (20.0%)
Low <sup>3</sup>	7.2 (35.6%)	12.2 (60.4%)	12.0 (59.4%)
Adequate <sup>4</sup>	2.2 (10.8%)	3.2 (15.7%)	4.1 (20.5%)
Total	20.1 (100.0%)	20.1 (100.0%)	20.1 (100.0%)
Household Income Levels			
Negative	1.2 (6.1%)	0.7 (3.4%)	0.5 (2.6%)
Low <sup>3</sup>	5.1 (25.5%)	4.2 (20.7%)	3.5 (17.1%)
Adequate <sup>4</sup>	13.8 (68.4%)	15.3 (75.9%)	16.2 (80.2%)
Total	20.1 (100.0%)	20.1 (100.0%)	20.1 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$0.8	\$3.3	\$5.0
Household Income	\$23.2	\$25.7	\$27.4

(1) Farms which had gross agricultural receipts below \$30,277 in 1985.

(2) Actual total net farm self-employment income in 1985.

(3) Low Income - positive but below Statistics Canada's low income cut-offs.

(4) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.

**TABLE 22**

**INCOME LEVELS OF FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET FARM SELF-EMPLOYMENT INCOME,  
HOUSEHOLDS ON LARGE FARMS<sup>1</sup>**

Agricultural Income Levels	Total Saskatchewan Net Farm Self-Employment Income		
	\$0	\$0.7 Billion <sup>2</sup>	\$1.2 Billion
- thousands of farm households - (per cent of households on large farms)			
Negative	18.3 (42.4%)	4.9 (11.3%)	2.4 (5.7%)
Low <sup>3</sup>	11.7 (27.1%)	15.1 (35.0%)	9.8 (22.6%)
Adequate <sup>4</sup>	13.2 (30.5%)	23.2 (53.7%)	30.9 (71.7%)
Total	43.2 (100.0%)	43.2 (100.0%)	43.2 (100.0%)
Household Income Levels			
Negative	8.9 (20.6%)	2.0 (4.5%)	1.0 (2.4%)
Low <sup>3</sup>	11.8 (27.3%)	7.5 (17.4%)	3.3 (7.6%)
Adequate <sup>4</sup>	22.5 (52.1%)	33.7 (78.1%)	38.8 (90.0%)
Total	43.2 (100.0%)	43.2 (100.0%)	43.2 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$5.5	\$20.2	\$30.3
Household Income	\$18.2	\$33.0	\$43.0

- (1) Farms which had gross agricultural receipts above \$30,276 in 1985.
- (2) Actual total net farm self-employment income in 1985.
- (3) Low income - positive but below Statistics Canada's low income cut-offs.
- (4) Adequate income - at or above Statistics Canada's low income cut-offs.

Source: Statistics Canada, special tabulation.

**TABLE 23**

**INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
ALL GRAIN FARM HOUSEHOLDS**

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>1</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of grain farm households)			
Negative	21.6 (44.0%)	7.3 (14.9%)	4.8 (9.8%)
Low <sup>2</sup>	14.4 (29.2%)	20.1 (40.8%)	16.0 (32.5%)
Adequate <sup>3</sup>	13.2 (26.7%)	21.8 (44.4%)	28.4 (57.6%)
Total	49.2 (100.0%)	49.2 (100.0%)	49.2 (100.0%)
Household Income Levels			
Negative	7.5 (15.3%)	2.0 (4.0%)	1.2 (2.4%)
Low <sup>2</sup>	12.6 (25.6%)	8.5 (17.2%)	4.8 (9.7%)
Adequate <sup>3</sup>	29.1 (59.1%)	38.8 (78.8%)	43.2 (87.8%)
Total	49.2 (100.0%)	49.2 (100.0%)	49.2 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$5.2	\$15.9	\$23.2
Household Income	\$20.7	\$31.4	\$38.7

(1) Actual total net cash income from grain in 1985.

(2) Low income - positive but below Statistics Canada's low income cut-offs.

(3) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.  
Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

**TABLE 24**

**INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
HOUSEHOLDS ON SMALL GRAIN FARMS<sup>1</sup>**

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>2</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of households on small grain farms)			
Negative	7.7 (52.4%)	3.5 (23.8%)	2.9 (19.8%)
Low <sup>3</sup>	5.2 (35.3%)	8.6 (58.7%)	8.5 (57.6%)
Adequate <sup>4</sup>	1.8 (12.3%)	2.6 (17.4%)	3.3 (22.5%)
Total	14.7 (100.0%)	14.7 (100.0%)	14.7 (100.0%)
Household Income Levels			
Negative	0.9 (5.8%)	0.5 (3.3%)	0.4 (2.6%)
Low <sup>3</sup>	3.6 (24.4%)	2.8 (19.3%)	2.3 (15.7%)
Adequate <sup>4</sup>	10.3 (69.8%)	11.4 (77.4%)	12.0 (81.6%)
Total	14.7 (100.0%)	14.7 (100.0%)	14.7 (100.0%)
- thousands of dollars per household -			
<u>Average Incomes</u>			
Agricultural Income	\$1.1	\$3.7	\$5.5
Household Income	\$23.1	\$25.7	\$27.4

- (1) Farms which had gross agricultural receipts below \$30,277 in 1985.
- (2) Actual total net cash income from grain in 1985.
- (3) Low income - positive but below Statistics Canada's low income cut-offs.
- (4) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.  
Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

**TABLE 25**

INCOME LEVELS OF GRAIN FARM HOUSEHOLDS IN SASKATCHEWAN IN 1985  
WITH DIFFERENT LEVELS OF TOTAL NET CASH INCOME FROM GRAIN,  
HOUSEHOLDS ON LARGE GRAIN FARMS<sup>1</sup>

Agricultural Income Levels	Total Canadian Net Cash Income from Grain		
	\$1.4 Billion	\$2.5 Billion <sup>2</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of households on large grain farms)			
Negative	13.9 (40.4%)	3.8 (11.0%)	1.9 (5.6%)
Low <sup>3</sup>	9.2 (26.7%)	11.4 (33.1%)	7.5 (21.8%)
Adequate <sup>4</sup>	11.4 (32.9%)	19.3 (55.9%)	25.1 (72.6%)
Total	34.5 (100.0%)	34.5 (100.0%)	34.5 (100.0%)
Household Income Levels			
Negative	6.7 (19.3%)	1.5 (4.3%)	0.8 (2.3%)
Low <sup>3</sup>	9.0 (26.1%)	5.6 (16.3%)	2.5 (7.2%)
Adequate <sup>4</sup>	18.8 (54.6%)	27.4 (79.4%)	31.2 (90.5%)
Total	34.5 (100.0%)	34.5 (100.0%)	34.5 (100.0%)
- thousands of dollars per household -			
Average Incomes			
Agricultural Income	\$7.0	\$21.1	\$30.8
Household Income	\$20.0	\$33.8	\$43.5

- (1) Farms which had gross agricultural receipts above \$30,276 in 1985.
- (2) Actual total net cash income from grain in 1985.
- (3) Low income - positive but below Statistics Canada's low income cut-offs.
- (4) Adequate income - at or above Statistics Canada's low income cut-offs.

Sources: Statistics Canada, special tabulation.  
Agriculture Canada, Farm Income Financial Conditions and Government Expenditures,  
April, 1991

**TABLE 26**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER OF  
SASKATCHEWAN FARM HOUSEHOLDS FROM 1986**

Gross Agricultural Receipts in 1985 Dollars	Total Saskatchewan Net Farm Self-Employment Income, (in 1985 Dollars)		
	\$0	\$0.7 Billion <sup>1</sup>	\$1.2 Billion
	- thousands of farm households - (per cent of farm households in each farm size)		
Below \$30,277	6.4 (31.6%)	4.9 (24.1%)	4.0 (19.8%)
Above \$30,276	20.7 (47.9%)	9.5 (21.8%)	4.3 (10.0%)
Total	27.0 (42.7%)	14.3 (22.6%)	8.3 (13.1%)

(1) Actual total net farm self-employment income in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 27**

**ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE NUMBER OF  
SASKATCHEWAN FARM HOUSEHOLDS FROM 1986 BY FARM TYPE**

Farm Type	Total Saskatchewan Net Farm Self-Employment Income, (in 1985 Dollars)		
	\$0	\$0.7 Billion <sup>1</sup>	\$1.2 Billion
	- thousands of farm households - (per cent of farm households of each type)		
Dairy and Poultry	0.8 (61.6%)	0.4 (29.4%)	0.2 (13.1%)
Livestock	5.4 (51.9%)	3.0 (29.2%)	1.8 (17.2%)
Grain	20.1 (40.9%)	10.4 (21.2%)	6.0 (12.1%)
Other	0.8 (31.8%)	0.5 (19.3%)	0.3 (12.8%)
Total	27.0 (42.7%)	14.3 (22.6%)	8.3 (13.1)

(1) Actual total net farm self-employment income in 1985.

Source: Statistics Canada, special tabulation.



**TABLE 28**

ESTIMATED MAXIMUM DOWNWARD ADJUSTMENT IN THE  
NUMBER OF **SASKATCHEWAN** GRAIN FARM HOUSEHOLDS FROM 1986

Gross Agricultural Receipts in 1985 Dollars	Total Canadian Net Cash Income from Grain, (in 1985 Dollars)		
	\$1.4 Billion	\$2.5 Billion <sup>1</sup>	\$3.3 Billion
- thousands of grain farm households - (per cent of grain farm households in each farm size)			
Below \$30,277	4.4 (30.2%)	3.3 (22.6%)	2.7 (18.3%)
Above \$30,276	15.7 (45.4%)	7.1 (20.6%)	3.3 (9.5%)
Total	20.1 (40.9%)	10.4 (21.2%)	6.0 (12.1%)

(1) Actual total net cash income from grain in 1985.

Source: Statistics Canada, special tabulation.

**TABLE 29**

ESTIMATED RANGE OF THE DOWNWARD ADJUSTMENT IN THE NUMBER OF  
**SASKATCHEWAN** FARM HOUSEHOLDS FROM 1986 WITH TOTAL  
SASKATCHEWAN NET FARM SELF-EMPLOYMENT INCOME OF ZERO

Farm Type	Farm Size	Low End of Range	High End of Range
- thousands of farm households - (per cent of each category)			
All	All	16.4 (26.0%)	27.0 (42.7%)
Dairy and Poultry	All	0.6 (45.0%)	0.8 (61.6%)
Livestock	All	3.3 (32.2%)	5.4 (51.9%)
Grain	All	12.3 (25.0%)	20.1 (40.9%)
Other	All	0.4 (15.1%)	0.8 (31.8%)
All	Small <sup>1</sup>	2.0 (9.8%)	6.4 (31.6%)
All	Large <sup>2</sup>	14.4 (33.4%)	20.7 (47.9%)

(1) Gross agricultural receipts in 1985 below \$30,277.

(2) Gross agricultural receipts in 1985 above \$30,276.

**TABLE 30**

ESTIMATED RANGE OF THE RATES OF DOWNWARD ADJUSTMENT  
IN THE NUMBER OF **SASKATCHEWAN** FARM HOUSEHOLDS FROM 1986  
WITH TOTAL SASKATCHEWAN NET FARM SELF-EMPLOYMENT INCOME OF ZERO

Farm Type	Farm Size	Adjustment Over Ten Years	Adjustment Over Five Years
- thousands of farm households per year -			
All	All	1.6 to 2.7	3.3 to 5.4
Dairy and Poultry	All	0.1 to 0.1	0.1 to 0.2
Livestock	All	0.3 to 0.5	0.7 to 1.1
Grain	All	1.2 to 2.0	2.5 to 4.0
Other	All	- to 0.1	0.1 to 0.2
All	Small <sup>1</sup>	0.2 to 0.6	0.4 to 1.3
All	Large <sup>2</sup>	1.4 to 2.1	2.9 to 4.1

(1) Gross agricultural receipts in 1985 below \$30,277.

(2) Gross agricultural receipts in 1985 above \$30,276.

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