

Profile of Canadian Agricultural Co-operatives (1998–2002)

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TABLE OF CONTENTS

Executive Summary	1
1. Introduction	2
2. Key events during the reporting period 1998–2002	2
3. Categories of agricultural co-operatives	3
4. Overall statistics	3
5. Farm supply revenues	9
6. Marketing revenues	11
7. Production and service co-operatives	19
8. Financial analysis	21
9. Conclusions	32
10. References	33

LIST OF TABLES

Table 1: Categories of agricultural co-operatives	3
Table 2: Number of agricultural co-operatives incorporated by region, 1998–2002	4
Table 3: Number of agricultural co-operatives incorporated by activity, 1998–2002	4
Table 4: Number of agricultural co-operatives reporting by activity, 1998–2002	4
Table 5: Number of agricultural co-operatives reporting by region, 1998–2002	5
Table 6: Number of active members in agricultural co-operatives reporting, 1998–2002	5
Table 7: Number of employees in agricultural co-operatives reporting by activity, 1998–2002	6
Table 8: Number of employees in agricultural co-operatives reporting by region, 1998–2002	6
Table 9: Total revenues of agricultural co-operatives reporting by activity (\$1M), 1998–2002	7
Table 10: Top 10 Canadian agricultural co-operatives in 2002	7
Table 11: Net value added (\$M) by agricultural co-operatives reporting, 1998–2002	8
Table 12: Net value added (\$) per dollar of revenue, 1998–2002	8
Table 13: Farm supply revenues (\$M) of agricultural co-operatives reporting by inputs, 1998–2002	10
Table 14: Farm supply revenues (\$M) of agricultural co-operatives reporting by region, 1998–2002	10
Table 15: Co-operative market share (%) in farm supply sales by co-operatives reporting, 1998–2002	11
Table 16: Marketing revenues (\$M) by agricultural co-operatives reporting by commodity, 1998–2002	12
Table 17: Marketing revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002	12
Table 18: Grains and oilseeds revenues (\$M) by agricultural co-operatives reporting, 1998–2002	13

Table 19: Top five grains and oilseeds co-operatives reporting, 2002 (in alphabetical order)	13
Table 20: Dairy revenues (\$M) by agricultural co-operatives reporting, 1998-2002	14
Table 21: Top five dairy co-operatives reporting, 2002 (in alphabetical order)	14
Table 22: Fruit and vegetable revenues (\$M) of agricultural co-operatives reporting, 1998–2002	15
Table 23: Top five fruit and vegetable co-operatives reporting, 2002 (in alphabetical order) ..	15
Table 24: Livestock revenues (\$M) of agricultural co-operatives reporting, 1998–2002	16
Table 25: Top five livestock co-operatives reporting, 2002 (in alphabetical order)	16
Table 26: Poultry and egg revenues (\$M) of agricultural co-operatives reporting, 1998–2002	16
Table 27: Top five poultry and egg co-operatives reporting, 2002 (in alphabetical order)	17
Table 28: Honey and maple revenues (\$M) of agricultural co-operatives reporting, 1998–2002	17
Table 29: Top five honey and maple co-operatives reporting, 2002 (in alphabetical order)	18
Table 30: Co-operative market share (%) in farm commodity sales by co-operatives reporting, 1998–2002	18
Table 31: Total revenues (\$M) of production and service co-operatives reporting by region, 1998–2002	19
Table 32: Summary of production co-operatives reporting by activity, 2002	20
Table 33: Summary of service co-operatives reporting by activity, 2002	20
Table 34: Summary of income statement (\$M) analysis of agricultural co-operatives reporting, 1998–2002	22
Table 35: Summary of income statement (\$M) analysis of agricultural marketing co-operatives reporting, 1998–2002	22
Table 36: Summary of income statement (\$M) analysis for farm supply co-operatives reporting, 1998–2002	23
Table 37: Summary of balance sheet (\$M) analysis of agricultural co-operatives reporting, 1998–2002	24
Table 38: Summary of balance sheet (\$M) analysis of agricultural marketing co-operatives reporting, 1998–2002	25
Table 39: Summary of balance sheet (\$M) analysis for farm supply co-operatives reporting, 1998-2002	25

LIST OF FIGURES

Figure 1: Total revenues (\$M) of agricultural co-operatives reporting by activity, 1998–2002 .	7
Figure 2: Components of total net value added by agricultural co-operatives reporting, 1998–2002	9
Figure 3: Number of production and service co-operatives reporting by region, 1998–2002 .	19
Figure 4: Current ratio of agricultural co-operatives reporting, 1998–2002	26
Figure 5: Debt-to-equity ratio of agricultural co-operatives reporting, 1998–2002	27

Figure 6: Long-term debt-to-equity ratio of agricultural co-operatives reporting, 1998–2002 .	27
Figure 7: Return-on-equity of agricultural co-operatives reporting, 1998–2002	28
Figure 8: Sources of debt in total debt of agricultural co-operatives reporting, 1998–2002 ...	29
Figure 9: Total debt by type of marketing co-operatives reporting, 1998-2002	29
Figure 10: Total debt by type of farm supply co-operatives reporting, 1998-2002	29
Figure 11: Trends in use of funds in agricultural co-operatives reporting, 1998–2002	30
Figure 12: Trends in use of funds in marketing co-operatives reporting, 1998–2002	31
Figure 13: Trends in use of funds in farm supply co-operatives reporting, 1998–2002	31

LIST OF APPENDICES

Appendix 1: Retail farm supply revenues by co-operatives reporting, 1998–2002	34
Appendix 2: Total farm expenses on farm supplies by co-operatives reporting, 1998–2002 ..	34
Appendix 3: Share (%) of the largest four agricultural co-operatives in farm commodity sales by agricultural co-operatives reporting, 1998–2002	34
Appendix 4: Grains and oilseeds revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002	34
Appendix 5: Fruit and vegetable revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002	35
Appendix 6: Livestock revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002	35
Appendix 7: Poultry and egg revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002	35
Appendix 8: Summary of income statement (\$M) analysis for agricultural co-operatives (not including SWP, Agricore and Agrifoods International), 1998–2002	36
Appendix 9: Summary of income statement (\$M) analysis for marketing co-operatives (not including SWP, Agricore and Agrifoods International), 1998–2002	36
Appendix 10: Summary of balance sheet (\$M) analysis for agricultural co-operatives (not including SWP, Agricore and Agrifoods International), 1998–2002	37
Appendix 11: Summary of balance sheet (\$M) analysis for marketing co-operatives (not including SWP, Agricore and Agrifoods International), 1998–2002	37
Appendix 12: Return-on-equity in agricultural co-operatives (not including SWP, Agricore and Agrifoods International), 1998–2002	38
Appendix 13: Definition of financial terms	39

Executive Summary

This report presents and discusses statistics for agricultural co-operatives from 1998 to 2002. The information in this report is obtained from the Canadian Annual Survey of Co-operatives, a voluntary survey conducted by the Co-operatives Secretariat, as well as from information provided by provincial governments.

The period between 1998 and 2002 witnessed structural changes in agricultural co-operatives and in the agri-food industry. Some of the large agricultural co-operatives went through a process of consolidation, reorganization and divestment of assets, and some have demutualized. A prolonged period of drought in Western Canada also affected the operation of agricultural co-operatives. These changes during the reporting period will have significant bearing on statistics presented in this report. Some of the highlights of this report are presented below:

- ▶ The number of agricultural co-operatives incorporated increased from 1,314 in 1998 to 1,331 in 2002.
- ▶ The number of agricultural co-operatives responding to the survey decreased from 980 in 1998 to 966 in 2002.
- ▶ In 2002, total active membership decreased to 389,677 from 458,643 in 1998. The majority of active memberships (67%) were reported by farm supply co-operatives.
- ▶ Agricultural co-operatives reported 35,000 employees in 2002 compared to more than 36,000 in 1998, representing a decrease of 3.8% over the period.
- ▶ Agricultural co-operatives reported total revenues of \$14 billion in 2002, which represents a decrease of more than 26% since 1998.
- ▶ Fertilizer and chemical sales represent the largest share of farm supply revenues reported by co-operatives, while dairy revenue represents the largest share of marketing revenues reported by agricultural co-operatives in 2002.
- ▶ Agricultural co-operatives had a net value added of \$1.2 billion in 2002. Agricultural marketing co-operatives had the greatest contribution to total net value added.
- ▶ Except for farm petroleum, co-operatives' market share in all other farm supply sales declined in 2002. Similarly, except for poultry and eggs, and maple and honey, the market share of agricultural co-operatives in all other farm commodity sales declined in 2002.
- ▶ In 2002, total assets decreased to \$5.7 billion from more than \$6.6 billion in 1998. Similarly, total equity decreased to \$2.2 billion in 2002 from \$2.5 billion in 1998.
- ▶ The proportion of debt is greater than the proportion of equity in the capital structure of agricultural co-operatives, particularly of marketing co-operatives.

1. Introduction

In Canada, agricultural co-operatives play an important role in processing and marketing farm products as well as providing agricultural supplies and services related to farm production and marketing. Like all co-operative organizations, agricultural co-operatives are owned, used and democratically controlled by their members.

This report provides an update of an earlier report entitled *Profile of Canadian Agricultural Co-operatives*, which presented and discussed statistics for agricultural co-operatives for 1986, 1991, 1996 and 2000. This report incorporates data for the period from 1998 to 2002. The first half of the report summarizes general statistics for agricultural co-operatives and the second half offers a summary of their income statements and balance sheets. Both sections offer information for agricultural co-operatives in aggregate and by category of activities (supply, marketing, production and services). The information in this report is derived from the Canadian Annual Survey of Co-operatives, a voluntary survey conducted by the Co-operatives Secretariat, as well as from information provided by provincial governments. The statistics for 2000 have been revised and updated for this report.

2. Key events during the reporting period 1998–2002

The reporting period between 1998 and 2002 witnessed significant changes affecting some of the largest agricultural co-operatives and the agri-food industry in Canada. In 1999, Alberta Wheat Pool merged with Manitoba Pool Elevators to become Agricore Co-operative. In 2001, Agricore Co-operative merged with United Grain Growers Limited (UGG) to become the private company Agricore United. In the process of consolidation, the agricultural co-operative sector had lost around 45,000 active members. In 2001, Agrifoods International Cooperative Ltd., a large dairy co-operative, sold most of its processing facilities to a private company. Although Agrifoods International remains in operation, it is at a much smaller scale than before the sale. Saskatchewan Wheat Pool (SWP), the largest of agricultural co-operatives, also divested its interest in three livestock operations in 2000. This divestiture reduced the assets and business volume of SWP.

A prolonged drought in Western Canada reduced cropped area in 2002, which adversely affected farm commodity marketing revenues and indirectly affected the demand for farm supplies. The structural changes within the large agricultural co-operatives and the overall farm commodity market conditions during the period of 1998 to 2002 will have significant bearing on the results discussed in this report.

3. Categories of agricultural co-operatives

Agricultural co-operatives can be broadly categorized as supply, marketing, production or service, according to the activity in which 50% or more of their total revenue is generated. Examples of these categories of agricultural co-operatives are listed in Table 1. In this report, production and service co-operatives are often combined into one category because their total revenues are small compared to those of supply and marketing co-operatives.

Table 1: Categories of agricultural co-operatives

Supply	Marketing	Production	Service
Agricultural supply	Dairy	Grazing	Soil conservation
Feed mill	Grains and oilseeds	Feeder financing	Seed cleaning
Farm petroleum	Fruits and vegetables	Farming	Farmers' market
	Cattle and hogs	Machinery	
	Poultry and eggs	Animal reproduction	
	Honey and maple		

The following section offers a general profile of agricultural co-operatives across Canada, such as the number of co-operatives incorporated and number responding to the survey, membership, employees, wages, total revenues, members' equity, market share and value-added. In this publication, "memberships" refers to total active memberships, "number of employees" refers to the sum of full- and part-time employees, "co-operatives incorporated" refers to the total number of co-operatives incorporated in a particular year, and "co-operatives reporting" refers to the total number of co-operatives that responded to the annual survey.

4. Overall statistics

4.1 Agricultural co-operatives incorporated and reporting

The total number of agricultural co-operatives incorporated in Canada increased between 1998 and 2002 (Table 2). However, the growth trend fluctuated somewhat. The number of incorporated agricultural co-operatives decreased until 2000, followed by an increase in 2001. Western Canada experienced the largest decrease in the number of agricultural co-operatives incorporated, while Québec reported the greatest increase. The number of farm supply co-operatives incorporated decreased, while the number of marketing as well as production and service co-operatives increased (Table 3).

The number of co-operatives incorporated includes inactive or co-operatives to be dissolved, tending to overestimate the number of active co-operatives. The number of agricultural co-operatives responding to the annual survey decreased between 1998 and 2002 (Table 4). A similar trend was observed for farm supply and marketing co-operatives. However, the number of production and service co-operatives that

responded to the annual survey increased. The number of agricultural co-operatives from Québec and Atlantic Canada that responded to the annual survey increased, but the number of agricultural co-operatives from Western Canada and Ontario decreased (Table 5). The proportion of co-operatives participating in the survey remained almost constant (ranging from 72% to 76% of total incorporated co-operatives) over the period.

Table 2: Number of agricultural co-operatives incorporated by region³, 1998–2002

	1998	1999	2000	2001	2002
Western Canada ¹	840	823	784	821	790
Ontario	120	119	112	128	132
Québec	222	220	235	253	265
Atlantic Canada ²	132	129	128	141	144
Total	1,314	1,291	1,259	1,343	1,331

¹ Western Canada includes the provinces of British Columbia, Alberta, Saskatchewan and Manitoba.

² Atlantic Canada includes the provinces of New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador.

³ Regional statistics were based on the headquarters location of the co-operatives.

Table 3: Number of agricultural co-operatives incorporated by activity, 1998–2002

	1998	1999	2000	2001	2002
Farm supply co-operatives	274	264	257	259	262
Agricultural marketing co-operatives	274	270	264	297	283
Production and service co-operatives	766	757	738	787	786
Total	1,314	1,291	1,259	1,343	1,331

Table 4: Number of agricultural co-operatives reporting by activity, 1998–2002

	1998	1999	2000	2001	2002
Farm supply co-operatives	254	248	244	238	226
Agricultural marketing co-operatives	168	156	164	156	156
Production and service co-operatives	558	544	555	588	584
Total	980	948	963	982	966

Table 5: Number of agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	645	629	624	635	610
Ontario	73	74	70	60	63
Québec	185	169	196	201	208
Atlantic Canada	77	76	73	86	85
Total	980	948	963	982	966

4.2 Memberships

Agricultural co-operatives reported a decline in total active members in 2002 from their 1998 level (Table 6). Memberships in farm supply co-operatives showed steady growth until 2001, followed by a decline. The number of active members in farm supply co-operatives accounts for more than half of the active membership in agricultural co-operatives. Marketing co-operatives as well as production and service co-operatives showed a decline in active membership between 1998 and 2002.

In 2002, marketing co-operatives represented only 22% of total active members in agricultural co-operatives compared to 35% of total active members in 1998. As mentioned in a preceding section of this report, the reasons for the decline in membership include the demutualization of Agricore Co-operative and divestiture by some large co-operatives.

Table 6: Number of active members in agricultural co-operatives reporting by activity, 1998–2002

	1998	1999	2000	2001	2002
Farm supply co-operatives	253,675	262,229	271,722	276,705	263,035
Agricultural marketing co-operatives	162,933	130,305	129,899	132,999	86,784
Production and service co-operatives	42,035	40,702	43,283	43,615	39,858
Total	458,643	433,236	444,904	453,319	389,677

4.3 Employment

Total employment, both full-time and part-time, showed steady growth until 2001 followed by a decline in 2002 (Table 7). In 2002, total employment in agricultural co-operatives remained lower than in 1998. Employment in agricultural marketing co-operatives represents approximately 80% of total employment by agricultural co-operatives. Agricultural marketing co-operatives are involved in the processing of farm commodities and they tend to employ more people than other types of co-operatives. The largest proportion of agricultural co-operative employment is found in Western Canada and Québec (Table 8). The demutualization of Agricore contributed the most to the employment decline in agricultural co-operatives.

Table 7: Number of employees in agricultural co-operatives reporting by activity, 1998–2002

	1998	1999	2000	2001	2002
Farm supply co-operatives	5,905	6,145	6,358	6,506	6,546
Agricultural marketing co-operatives	29,418	29,507	29,963	31,090	27,428
Production and service co-operatives	1,113	1,001	960	886	1,050
Total	36,436	36,653	37,281	38,482	35,024

Table 8: Number of employees in agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	16,504	16,241	16,471	15,663	11,265
Ontario	2,505	2,450	2,514	2,278	2,605
Québec	14,599	14,895	15,173	17,357	18,008
Atlantic Canada	2,828	3,067	3,123	3,184	3,146
Total	36,436	36,653	37,281	38,482	35,024

4.4 Total revenues

Agricultural co-operatives reported a total revenue of \$14 billion in 2002 compared to more than \$19 billion in 1998 (Figure 1). The decline in revenue was markedly visible in marketing co-operatives, where total revenue decreased by more than 34% in 2002 from the 1998 level. A number of factors contributed to the decline in agricultural co-operative revenues; the downsizing of Agrifoods International, the demutualization of Agricore, and a decline in the volume of business of SWP are the major factors.

Table 10 describes the ten largest agri-food co-operatives in 2002 and their respective revenues according to the Co-operative Secretariat's yearly publication "Top 50 Canadian Co-operatives." It also includes their 2001 ranking. Based on total revenue, SWP is the largest agricultural co-operative, followed by *La Coop Fédérée*.

Figure 1: Total revenues (\$M) of agricultural co-operatives reporting by activity, 1998–2002

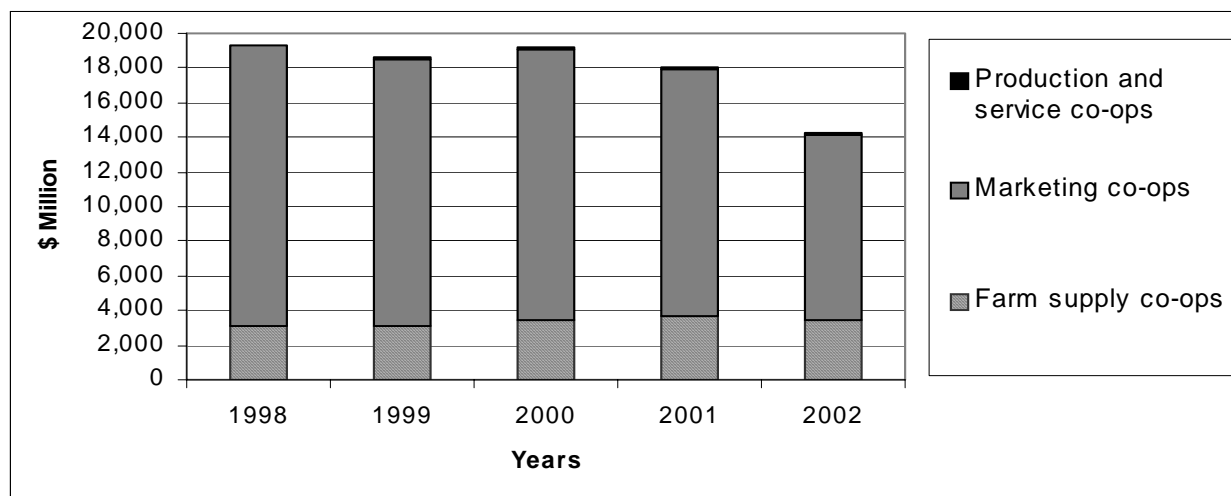


Table 9: Total revenues of agricultural co-operatives reporting by activity (\$1M), 1998-2002

	1998	1999	2000	2001	2002
Farm supply co-ops	3,050	3,108	3,425	3,696	3,484
Marketing co-ops	16,203	15,437	15,602	14,238	10,608
Production and service co-ops	109	112	113	113	111
Total Revenue	19,362	18,657	19,141	18,048	14,202

Table 10: Top 10 Canadian agricultural co-operatives in 2002

2002*	2001*	Name of Co-operatives	Revenues \$'000	Major Activities
1	1	Saskatchewan Wheat Pool	2,782,273	Grain marketing
2	2	La Coop Fédérée	2,482,779	Livestock and poultry processing
3	3	Agropur, coopérative agro-alimentaire	1,835,400	Dairy products
4	4	United Farmers of Alberta	844,057	Petroleum, farm supplies
5	5	Lilydale Co-operative Ltd.	528,786	Poultry products and hatchery
6	6	Western Co-operative Fertilizers Ltd.	371,662	Purchaser and distributor of fertilizer
7	8	Gay Lea Foods Co-op Ltd.	271,960	Dairy products
8	7	Nutrinor	263,978	Dairy products and farm supplies
9	10	Exceldor, coopérative avicole	238,880	Marketing of poultry products
10	11	Scotsburn Co-op Services Ltd.	223,678	Dairy products, farm supplies

* Ranking of agricultural co-operatives by total revenue, Co-operative Secretariat

* Source: Top 50 Canadian Co-operatives 2002, Co-operatives Secretariat

4.5 Value-added activities by agricultural co-operatives

According to Statistics Canada, value added (VA) measures the “value of economic production of goods and services. Economic production can be defined as any process which creates value or adds value to existing goods.” Gross value added (GVA) is the sum of net earnings before taxes (NEBT), wages (W), and interest paid on debt (I). Depreciation (DEP) is deducted from GVA to calculate Net Value Added (NVA). Therefore: **GVA = NEBT + W + I**; and **NVA = GVA - DEP**.

Co-operatives add value by collecting, processing and redistributing farm products and supplies. Value-added activities are means to increase co-operative revenues and may increase farmers’ income through increased patronage dividends. The NVA decreased from \$1.4 billion in 1998 to \$1.2 billion in 2002 (Table 11). Farm supply co-operatives showed an increase in NVA in 2002 from their 1998 level, whereas marketing co-operatives reported a decrease in NVA in 2002 from their 1998 level. Although the NVA of production and service co-operatives showed fluctuating trends, it decreased in 2002 from the 1998 level. The decrease in NVA is due, particularly in marketing co-operatives, to changes in employment and revenue associated with demutualization of co-operatives and overall market conditions.

The major contributor to NVA was wages and salaries, which accounted for approximately 80% of NVA (Figure 2). The share of net earnings before taxes on total NVA decreased to 13% in 2002 from 22% in 1998. The estimated NVA showed that by spending more on wages and salaries, agricultural co-operatives play an important role in local employment.

Table 11: Net value added (\$M) by agricultural co-operatives reporting, 1998–2002

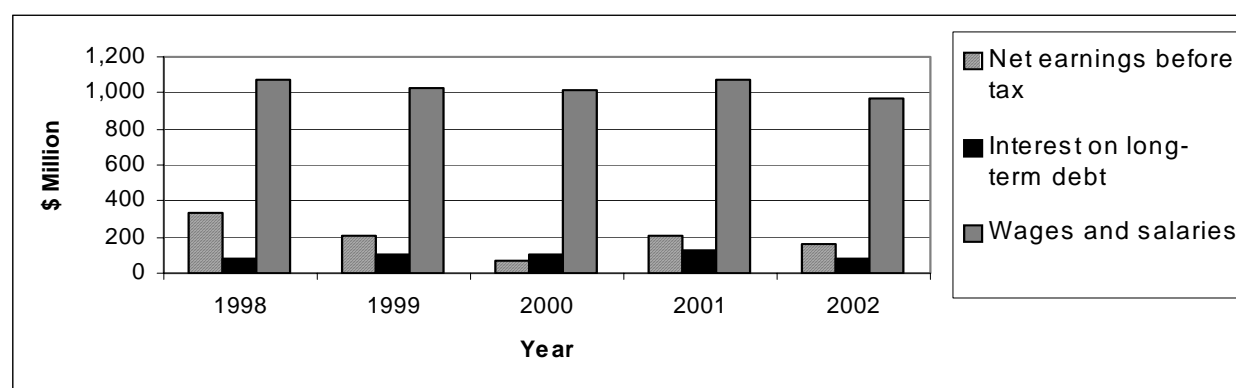
	1998	1999	2000	2001	2002
Farm supply co-operatives	311	298	285	339	337
Agricultural marketing co-operatives	1,151	1,025	875	1,046	848
Production and service co-operatives	27	28	21	28	24
Total NVA	1,489	1,351	1,181	1,412	1,208

Table 12: Net value added (\$) per dollar of revenue, 1998–2002

	1998	1999	2000	2001	2002
Farm supply co-operatives	0.10	0.09	0.08	0.09	0.09
Marketing co-operatives	0.07	0.06	0.05	0.07	0.07
Production and service co-operatives	0.24	0.24	0.18	0.24	0.21
All agricultural co-operatives	0.07	0.07	0.06	0.07	0.08

The estimated NVA per dollar of revenue showed a somewhat constant trend in farm supply co-operatives (Table 12). In marketing co-operatives, NVA per dollar declined steadily until 2000 followed by a return to the 1998 level. In production and service co-operatives, NVA per dollar of revenue showed a somewhat fluctuating trend. Production and service co-operatives showed the highest NVA per dollar of revenue, followed by farm supply co-operatives. The low level of NVA per dollar of revenue in marketing co-operatives can be attributed to a drop in net savings. Production and service co-operatives have lower total revenues than marketing and supply co-operatives, particularly due to the operational nature of providing services to producers, therefore, have higher NVAs per dollar of revenue than marketing and supply co-operatives.

Figure 2: Components of total net value added by agricultural co-operatives reporting 1998–2002



5. Farm supply revenues

Co-operatives that sell farm supplies allow farmers to access high quality farm inputs and specialized services for their farming operations at fair prices. Farm supply revenues at both wholesale and retail levels were calculated in the total farm supply revenues. Although the majority of farm supplies are provided by specialized farm supply co-operatives, other co-operatives, namely marketing and consumer co-operatives, also sell farm supplies, so farm supply revenues of all co-operatives were included. Since 2001, the Co-operatives Secretariat survey has distinguished between petroleum sales for farm and consumer use. Farm petroleum revenue for 2001 and 2002 is based on the actual figure reported by co-operatives; however, farm petroleum revenues for 1998 to 2000 were estimated based on a telephone survey of key co-operatives.

Co-operatives reported more than \$5 billion in total farm supply revenues in 2001 followed by a decrease to \$4.4 billion in 2002 (Table 13). The most significant drop in supply revenue was observed in fertilizer and chemical sales. Geographically, co-operatives from Western Canada reported the greatest drop in farm supply revenue in 2002 (Table 14). Farm petroleum and seed sale revenues also dropped in 2002 from the 2001 level, whereas feed sale revenues increased to more than \$1.2 billion in 2002 from \$930 million in 1998.

The demutualization of Agricore, which sold a significant proportion of farm supplies (especially fertilizer and chemicals) in 2001, is the main contributing factor for the significant decline in farm supply revenue in 2002. A prolonged drought in Western Canada also reduced cropped areas which adversely affected the demand for farm supplies in 2002.

Table 13: Farm supply revenues (\$M) of agricultural co-operatives reporting by inputs, 1998–2002

	1998	1999	2000	2001	2002
Feed sale	930	854	914	1,134	1,237
Fertilizer and chemical	1,931	1,984	1,897	2,174	1,535
Seed sale	205	169	123	101	87
Farm petroleum	750	811	1,094	1,266	1,203
Other farm Supplies	533	566	438	409	394
Total	4,349	4,384	4,466	5,084	4,456

Table 14: Farm supply revenues (\$M) of agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	2,832	2,883	3,065	3,586	2,880
Ontario	380	367	333	347	348
Québec	987	986	922	999	1,061
Atlantic Canada	150	147	146	153	167
Total	4,349	4,383	4,466	5,085	4,456

5.1 Market share in farm supply sales

The co-operative market share in farm supply sales is presented in Table 15. This market share is calculated by dividing retail co-operative revenues (Appendix 1) by total farm expenses in farm supplies by farmers (Appendix 2). Retail farm supply sales from consumer co-operatives were also included, but wholesale farm supply revenues were excluded to avoid double counting. Except for farm petroleum, the co-operative market share for feed, seed, and fertilizer and chemical sales declined in 2002 from the 1998 level. A significant decline in the co-operative market share was observed in fertilizer and chemical sales. As indicated previously, the demutualization of Agricore, which sold

a significant quantity of fertilizer and chemicals in 2001, was the main contributing factor for the decline in the co-operative market share in 2002. The 7% decline in farm supply sales (Appendix 1) by co-operatives in 2002 from the 1998 level did not keep pace with the 21% increase in total farm supply purchases made by farmers during the same period (Appendix 2).

Table 15: Co-operative market share (%) in farm supply sales by co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Seeds	22	17	11	8	6
Feed	14	13	14	15	13
Fertilizer and chemicals	39	40	36	38	23
Farm petroleum	30	31	32	41	43

6. Marketing revenues

Agricultural marketing co-operatives are designed to move farm products to market and influence price and other terms of trade while providing fair treatment to members. Agricultural co-operatives collect farm produce from their member producers and sell it either as a processed or semi-processed product or as a raw commodity in the market.

In 2002, agricultural co-operatives reported \$8.6 billion as marketing revenues compared to more than \$13.2 billion in 1998, a decline of approximately 34%. The most significant decline was observed in grains and oilseeds and in the dairy sector. Geographically, the greatest decline was observed in marketing revenues reported by agricultural co-operatives from Western Canada.

As indicated previously in this report, the structural changes that occurred within the large agricultural co-operatives and changes in the agri-food industry may have reduced the revenues of agricultural co-operatives. Except for the fruit and vegetable sector, the market concentration is fairly high, as shown in Appendix 3; the volume sold by the top four co-operatives in each sector represents the large majority of total sales.

Table 16: Marketing revenues (\$M) by agricultural co-operatives reporting by commodity, 1998–2002

	1998	1999	2000	2001	2002
Grains and oilseeds	6,504	5,866	5,470	4,214	1,843
Dairy	3,789	4,004	4,342	3,172	3,164
Livestock	1,464	1,677	1,554	1,870	1,838
Poultry and eggs	1,126	1,124	1,253	1,389	1,451
Fruit and vegetables	258	233	218	202	222
Honey and maple	57	60	73	77	86
Other marketing	89	86	72	62	64
Total	13,288	13,051	12,981	10,986	8,666

Table 17: Marketing revenues (\$M) of agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	8,779	8,583	8,238	5,504	3,032
Ontario	554	558	565	565	608
Québec	3,437	3,376	3,621	4,316	4,413
Atlantic Canada	518	534	558	601	616
Total	13,288	13,051	12,981	10,986	8,666

6.1 Grains and oilseeds revenues

Grains and oilseeds revenues include revenues from processing and marketing of wheat, barley, oat, and canola collected by agricultural co-operatives from their member producers. The number of agricultural co-operatives reporting grains and oilseeds revenue decreased to 38 in 2002 from 53 in 1998 (Table 18). Most of the agricultural co-operatives reporting grains and oilseeds revenues are located in Western Canada and Ontario (Appendix 4).

Agricultural co-operatives reported \$1.8 billion in grains and oilseeds revenues in 2002 compared to \$6.5 billion in 1998. A considerable drop in grains and oilseeds revenues was observed between 2001 and 2002. Geographically, agricultural co-operatives from Western Canada experienced the greatest decline in grains and oilseeds revenues (Appendix 4).

The demutualization of Agricore and a decline in the volume of business of SWP due to a prolonged drought in Western Canada were the main contributors to the decline in grains and oilseeds revenues in 2002. In 2002, the four co-operatives reporting the largest grains and oilseeds revenues accounted for nearly 93% of total grains and oilseeds revenues by agricultural co-operatives (Appendix 3). The top five grains and oilseeds co-operatives in 2002 are presented in alphabetical order in Table 19.

Table 18: Grains and oilseeds revenues (\$M) by agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	53	54	49	44	38
Grains revenues	4,663	4,127	2,844	2,392	1,180
Oilseeds revenues	1,842	1,739	2,626	1,822	663
Total	6,504	5,866	5,470	4,214	1,843

Table 19: Top five grains and oilseeds co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
Comax Coopérative Agricole	Québec
Hensall District Co-operative Ltd.	Ontario
Norfolk Co-operative Company Ltd.	Ontario
Orford Co-operatives Ltd.	Ontario
Saskatchewan Wheat Pool	Saskatchewan

6.2 Dairy revenues

Dairy revenues include revenues from fluid milk and milk products processed and marketed by agricultural co-operatives. The number of agricultural co-operatives reporting dairy revenues increased to 26 in 2002 from 23 in 1998. Most of the dairy co-operatives are located in Québec and Atlantic Canada.

Agricultural co-operatives reported steady growth in dairy revenues until 2000, followed by a decline (Table 20). A considerable drop in dairy revenue was observed between 2000 and 2001, particularly in agricultural co-operatives from Western Canada. The main reason for the drop in dairy revenue was the reorganization of Agrifoods International, a large dairy co-operative based in Western Canada, which sold most of its processing facilities to a private company. The four co-operatives with the largest dairy sales accounted for approximately 80% of total dairy revenues reported by agricultural co-operatives (Appendix 3).

Table 20: Dairy revenues (\$M) by agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	23	23	24	28	26
Western Canada	1,282	1,468	1,708	153	150
Ontario	229	246	259	302	312
Québec	1,835	1,842	1,914	2,228	2,206
Atlantic	443	448	460	489	496
Total	3,789	4,004	4,342	3,172	3,164

Table 21: Top five dairy co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
Agrinove coopérative agroalimentaire	Québec
Agropur coopérative agroalimentaire	Québec
Farmer's Co-operative Dairy Ltd.	Nova Scotia
Gay Lea Foods Co-operative Ltd.	Ontario
Scotsburn Co-operative Services Ltd.	Nova Scotia

6.3 Fruit and vegetable revenues

Fruit and vegetable revenues include revenues from the marketing and processing of fruits and vegetables collected by agricultural co-operatives from their member producers. In 2002, 55 agricultural co-operatives reported fruit and vegetable revenues, compared to 58 in 1998. Most of the fruit and vegetable co-operatives are located in Québec, but the agricultural co-operatives with the greatest fruit and vegetable revenues are located in Western Canada.

The total of fruit and vegetable revenues by co-operatives steadily decreased from \$258 million in 1998 to \$201 million in 2001, followed by a slight increase in 2002 (Table 22). However, fruit and vegetable revenues in 2002 remained lower than in 1998. Despite the decline in fruit and vegetable revenues reported by co-operatives from Western Canada in 2002, co-operatives from Western Canada represented the largest share of fruit and vegetable revenues reported by agricultural co-operatives (Appendix 5). Compared to other commodities, fruit and vegetable revenues by agricultural co-operatives is less concentrated. The top four agricultural co-operatives represented less than 50% of total fruit and vegetable sales by agricultural co-operatives for the period of 1998 to 2002 (Appendix 3).

Table 22: Fruit and vegetable revenues (\$M) of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	58	53	57	55	55
Fruit revenues	151	156	138	128	148
Vegetable revenues	107	77	80	73	74
Total	258	233	218	202	222

Table 23 Top five fruit and vegetable co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
B.C. Fruit Packer Co-operatives Ltd.	British Columbia
Okanagan North Growers Co-operative	British Columbia
Okanagan Similkameen Co-operative Growers Association	British Columbia
Red Hat Co-operatives Ltd.	Alberta
Sunfresh Co-operatives Growers	British Columbia

6.4 Livestock revenues

Livestock revenues include revenues from the marketing of cattle, sheep, hog and other animals either as a live animal or a processed product such as meat. Most of the agricultural co-operatives reporting livestock revenues are located in Québec; however, a number of agricultural co-operatives with the greatest livestock revenues are also located in Western Canada.

Total livestock revenues of co-operatives peaked at \$1.8 billion in 2001 followed by decline in 2002; however, revenues remained greater than in 1998 (Table 24). Within livestock revenues, cattle revenues steadily decreased to \$222 million in 2002 from \$663 million in 1998, while hog revenues more than doubled in 2002 compared to the 1998 level.

In 2000, SWP divested its interest in three livestock businesses which reduced the cattle revenues. The share of the four co-operatives reporting the largest livestock revenues declined to 86% in 2002 from more than 91% in 1998 (Appendix 3).

Table 24: Livestock revenues (\$M) of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	86	86	87	83	79
Cattle revenues	663	715	309	288	222
Hog revenues	801	962	1,244	1,581	1,616
Total	1,464	1,677	1,554	1,870	1,838

Table 25: Top five livestock co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
B.C.L.S. Producers Co-operative Association	British Columbia
La Coop Fédérée	Québec
Interlake Cattlemen's Co-operative Association	Manitoba
Manitoba Pork Marketing Ltd.	Manitoba
Saskatchewan Wheat Pool	Saskatchewan

6.5 Poultry and egg revenues

Poultry and egg revenues include revenue from the marketing and processing of poultry and eggs collected by agricultural co-operatives from their member producers. Most of the agricultural co-operatives reporting poultry and egg revenues are located in Québec; however, the largest poultry and egg co-operative is located in Western Canada.

Agricultural co-operatives reported \$1.4 billion in poultry and egg revenues in 2002 compared to \$1.1 billion in 1998 (Table 26), an increase of more than 28%.

Geographically, agricultural co-operatives from Québec reported the largest poultry and egg revenues, followed by agricultural co-operatives from Western Canada (Appendix 7). The top five poultry and egg co-operatives in 2002 are presented in alphabetical order in Table 27.

Table 26: Poultry and egg revenues (\$M) of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	15	13	14	14	15
Poultry revenues	1,102	1,100	1,227	1,369	1,429
Egg revenues	24	25	26	21	22
Total	1,126	1,124	1,253	1,389	1,451

Table 27: Top five poultry and egg co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
A.C.A. Co-operative Ltd.	Nova Scotia
La Coop Fédérée	Québec
Exceldor Coopérative Avicole	Québec
Granny's Poultry Cooperative Manitoba Limited	Manitoba
Lilydale Co-operative Ltd.	Alberta

6.6 Honey and maple revenues

Honey and maple revenues include revenues from the marketing and processing of honey and maple syrup by agricultural co-operatives. Although most of the honey and maple co-operatives are located in Québec, some large honey and maple co-operatives are located in Western Canada.

Agricultural co-operatives reported \$85 million in honey and maple revenues in 2002 compared to \$57 million in 1998, an increase of approximately 50% (Table 28). The increase in revenue is more apparent in agricultural co-operatives from Québec. The share of the four co-operatives reporting the largest honey and maple revenues declined to 97% in 2002 from 99% in 1998 (Appendix 3). The top five honey and maple co-operatives in 2002 are presented in alphabetical order in Table 29.

Table 28: Honey and maple revenues (\$M) of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Number of reporting co-operatives	9	8	10	12	12
Western Canada	25	31	25	24	34
Ontario	-	-	-	-	-
Québec	32	30	48	53	52
Atlantic Canada	0.21	0.18	0.13	0.19	0.20
Total	57	60	73	77	86

Table 29: Top five honey and maple co-operatives reporting, 2002 (in alphabetical order)

Names of Co-operatives	Province
Alberta Honey Producers Co-operative Ltd.	Alberta
Citadelle Coopérative de Producteurs de Sirop d'érable	Québec
Coopérative acéricole régionale des Appalaches	Québec
Manitoba Co-operative Honey Producers Ltd.	Manitoba
Regroupement Coopérative acéricole de Beauce	Québec

6.7 Co-operative market share in farm commodity sales

The market share of marketing sales by co-operatives were estimated using data provided by the Annual Survey of Canadian Co-operatives (Co-operatives Secretariat). Data on farm cash receipts used to measure an entire sector are obtained from Statistics Canada. Market shares for marketing sales by co-operatives are calculated at the farm gate level. Market share for grains and oilseeds sales by co-operatives is calculated by dividing the volume of grains and oilseeds handled by co-operatives by the total volume handled. All other market shares are based on farm cash receipts at farm gate level.

The market share declined in 2002 from 1998 for grains and oilseeds, dairy, livestock, and fruit and vegetables (Table 30). However, the market share in poultry and eggs, and honey and maple sales increased in 2002 from the 1998 level.

As indicated previously, some changes occurred within the large grains and oilseeds and dairy co-operatives, and the closing of some agricultural co-operatives reduced co-operative business volume in grains and oilseeds, dairy, livestock, and fruit and vegetables.

Table 30: Co-operative market share (%) in farm commodity sales by co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Poultry and egg	44	44	49	49	52
Dairy	64	66	59	42	42
Grains and oilseeds	51	49	47	45	30
Honey and maple	20	21	27	28	29
Livestock	20	19	11	14	15
Fruit and vegetable	17	12	6	8	6

7. Production and service co-operatives

Production co-operatives include co-operatives that manage grazing land, finance feeder cattle, and provide farm machinery services and other production related services (e.g., organic certification). Production co-operatives also include animal reproduction co-operatives, which offer natural and artificial insemination services, primarily for dairy cattle.

Service co-operatives include co-operatives that provide seed cleaning, soil conservation services and other agricultural services (e.g., education), and organize farmers' markets. Production and service co-operatives represent a large proportion of the total number of co-operatives (Table 3) operating in Canada. The majority of production and service co-operatives reporting are based in Western Canada (Figure 3).

Figure 3: Number of production and service co-operatives reporting by region, 1998–2002

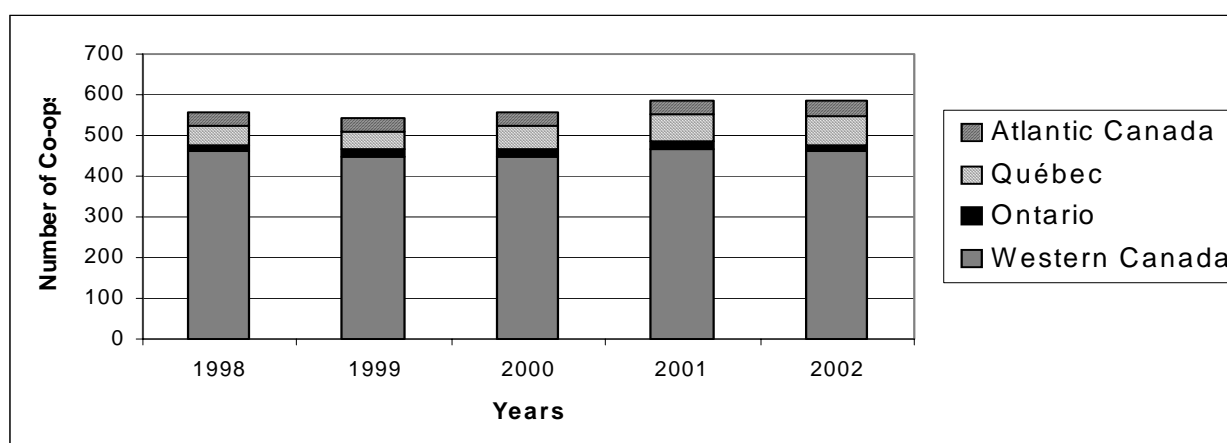


Table 31: Total revenues (\$M) of production and service co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	67	67	67	70	66
Ontario	4	5	5	6	7
Québec	27	30	31	34	35
Atlantic Canada	10	10	10	2	3
Total	109	112	113	113	111

7.1 Production co-operatives

In 2002, 411 production co-operatives responded to the survey, representing 13,405 active members, 646 total employees and total revenues of more than \$68 million. Feeder financing and animal reproduction co-operatives had the greatest total revenues (Table 32). Feeder financing co-operatives had the greatest active membership, total assets and number of employees.

Table 32: Summary of production co-operatives reporting by activity, 2002

	Animal reproduction	Grazing	Feeder financing	Farm production	Farm machinery	Tree farming
Number of reporting co-operatives	12	151	160	14	58	10
Number of active membership	826	2,311	8,354	76	1,555	198
Total employees	232	87	245	32	39	10
Total revenue (\$ million)	29.9	6.3	20.9	4.5	6.8	0.3
Total assets (\$ million)	15.4	13.6	262.9	11.4	11.0	0.6
Total equity (\$ million)	4.3	11.4	6.4	6.2	4.2	0.6
Total liability (\$ million)	11.2	2.2	256.6	5.2	6.9	0

7.2 Service co-operatives

In 2002, 173 service co-operatives responded to the survey, representing 26,453 active members, 404 total employees and total revenues of more than \$41 million (Table 33). Seed cleaning co-operatives had the greatest total revenues, number of employees and total memberships. Seed cleaning co-operatives also had the greatest total assets.

Table 33: Summary of service co-operatives reporting by activity, 2002

	Seed cleaning	Farmers' market	Soil conservation	Other service
Number of reporting co-operatives	87	42	5	39
Number of active membership	22,498	1,897	69	1,989
Total employees	263	23	2	116
Total revenue (\$ million)	30.1	0.9	0.1	10.6
Total assets (\$ million)	48.6	0.8	0.1	17.5
Total equity (\$ million)	37.7	0.5	0.0	6.9
Total liability (\$ million)	10.9	0.2	0.1	10.6

8. Financial analysis

This section presents summarized income statement and balance sheet information. It includes aggregate information for all agricultural co-operatives as well as for the largest categories such as farm supply and marketing co-operatives. Statistics are summarized for the period of 1998 to 2002.

In the balance sheet, member equity includes members' loans and share capital. Member equity represents the equity that belongs to members and is reimbursed subject to each co-operative's rules. Co-operative equity is considered as a co-operative's permanent equity capital, and it includes funded reserves, reserves and undistributed surplus. Definitions of financial terms are presented in Appendix 13.

8.1 Analysis of income statement

An income statement is a measure of revenues and expenses during a given accounting period. Summaries of income statement analysis are presented in Tables 34, 35 and 36. Total revenues declined to \$14 billion in 2002 from more than \$18 billion in 1998. A similar declining trend in sales revenue occurred for agricultural marketing co-operatives (Table 35), whereas farm supply co-operatives showed consistent growth in total sales (Table 36). Overall, agricultural co-operatives were able to generate an operating surplus in all the years from 1998 to 2002, except in 2000. A similar, but more pronounced trend, is observed in agricultural marketing co-operatives.

During the period of 2000 to 2002, financial difficulties in some large agricultural co-operatives resulted in the merger, downsizing and even demutualization of some co-operatives. When these three agricultural co-operatives, namely SWP, Agricore and Agrifoods International, are excluded from the analysis, somewhat different results are observed. Agricultural co-operatives as a whole, as well as marketing co-operatives, showed a stable and progressive increase in operating surplus (Appendices 8 and 9).

Table 34: Summary of income statement (\$M) analysis of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Marketing sales	13,287	13,051	12,982	10,999	8,667
Supply sales	5,139	5,106	5,597	6,514	5,460
Total sales	18,426	18,158	18,579	17,513	14,126
Cost of sale	16,471	16,359	16,883	15,485	12,486
Gross margin	1,955	1,799	1,696	2,029	1,640
Service revenue	802	410	384	422	302
Patronage income	40	40	40	43	48
Gross income	2,797	2,249	2,120	2,494	1,990
Depreciation	247	285	332	315	257
Salaries and wages	1,074	1,032	1,015	1,076	966
Interest on long-term debt	83	107	101	130	80
Total expenses	2,559	2,085	2,193	2,358	1,867
Net income from operations	238	164	-73	135	123
Non-operating revenues	94	49	138	70	40
Net saving	332	212	65	206	163
Patronage dividends paid				155	141

Table 35: Summary of income statement (\$M) analysis of agricultural marketing co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Marketing sales	12,896	12,668	12,609	10,641	8,299
Supply sales	2,529	2,438	2,680	3,267	2,133
Total sales	15,425	15,106	15,290	13,908	10,431
Cost of sale	13,939	13,745	14,002	12,343	9,244
Gross margin	1,486	1,360	1,287	1,565	1,188
Service revenue	706	312	255	290	162
Patronage income	1	0	1	1	1
Gross income	2,194	1,673	1,543	1,856	1,351
Depreciation	204	240	285	266	207
Salaries and wages	876	832	825	875	764
Interest on long-term debt	72	92	85	115	66
Total expenses	2,062	1,591	1,634	1,839	1,346
Net income from operations	132	82	-91	17	5
Non-operating revenues	70	19	57	40	13
Net saving	202	101	-34	56	18
Patronage dividends paid				68	75

Table 36: Summary of income statement (\$M) analysis for farm supply co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Marketing sales	368	356	348	343	357
Supply sales	2,597	2,660	2,907	3,237	3,317
Total sales	2,965	3,016	3,255	3,580	3,674
Cost of sale	2,505	2,584	2,830	3,116	3,198
Gross margin	460	432	426	464	476
Service revenue	27	26	53	51	54
Patronage income	38	40	39	42	47
Gross income	524	497	518	557	576
Depreciation	39	40	42	46	45
Salaries and wages	174	176	174	177	184
Interest on long-term debt	10	14	16	14	12
Total expenses	418	416	499	434	458
Net income from operations	106	82	18	122	118
Non-operating revenues	21	26	78	24	23
Net saving	127	108	96	147	141
Patronage dividends paid				86	66

8.2 Analysis of balance sheet

A balance sheet lists the assets and liabilities of a business together with a statement of equity. As the term “balance” implies, the dollar value of assets must equal the dollar value of liabilities plus equity. The balance sheet provides an important measure of the composition of assets and liabilities and can be used to document the financial position of a co-operative. The results of balance sheet analysis are presented in Tables 37, 38 and 39.

Total liabilities declined to \$3.4 billion in 2002 after showing steady growth during the 1998 to 2001 period (Table 37). A similar trend was observed in agricultural marketing co-operatives (Table 38). Conversely, farm supply co-operatives reported steady growth in total liabilities (Table 39). Total equity declined to \$2.2 billion from \$2.5 billion in 1998 in agricultural co-operatives, and a similar trend was observed in agricultural marketing co-operatives. Conversely, farm supply co-operatives reported steady growth in total equity throughout the reporting period. Within equity, the share of member equity is greater than the share of co-operative equity in agricultural co-operatives, including marketing and farm supply co-operatives.

In agricultural co-operatives total assets decreased to \$5.7 billion in 2002 from \$6.6 billion in 1998. A similar trend was observed in agricultural marketing co-operatives. Conversely, farm supply co-operatives reported a progressive growth in total assets throughout the period from 1998 to 2002. When SWP, Agricore and Agrifoods International were excluded from the analysis, somewhat different results were observed. Total liabilities, total equity and total assets all showed stable and progressive growth in agricultural co-operatives during the period of 1998 to 2002 (Appendix 10). A similar trend was observed in agricultural marketing co-operatives (Appendix 11).

Table 37: Summary of balance sheet (\$M) analysis of agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Current assets	3,528	3,568	3,476	3,607	2,820
Investments	438	458	415	370	344
Fixed assets	2,277	2,766	2,678	2,693	2,085
Other assets	402	448	356	449	466
Total assets	6,645	7,240	6,925	7,119	5,716
Current debt	2,591	2,925	2,700	2,715	2,022
Long-term debt	1,151	1,506	1,520	1,607	1,186
Deferred credit	356	224	211	242	229
Total liabilities	4,098	4,655	4,431	4,564	3,437
Member equity	1,500	1,538	1,371	1,412	1,412
Co-operative equity:					
Reserves	615	687	755	816	691
Undistributed surplus	432	361	368	327	176
Total equity	2,547	2,585	2,494	2,555	2,279
Debt-to-equity ratio	1.61	1.8	1.78	1.79	1.51
Long-term debt-to-equity ratio	0.59	0.67	0.69	0.72	0.62
Current ratio	1.36	1.22	1.29	1.33	1.39

Table 38: Summary of balance sheet (\$M) analysis of agricultural marketing co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Current assets	2,600	2,586	2,436	2,504	1,628
Investments	254	258	208	150	118
Fixed assets	1,893	2,357	2,258	2,266	1,643
Other assets	373	428	328	406	413
Total assets	5,121	5,629	5,229	5,325	3,802
Current debt	1,963	2,236	1,985	1,983	1,252
Long-term debt	1,018	1,369	1,357	1,442	982
Deferred credit	282	153	151	184	175
Total liabilities	3,264	3,759	3,494	3,610	2,410
Member equity	1,143	1,153	963	969	950
Co-operative equity:					
Reserves	417	477	524	579	449
Undistributed surplus	298	240	248	167	-7
Total equity	1,858	1,870	1,735	1,715	1,392
Debt-to-equity ratio	1.76	2.01	2.01	2.10	1.73
Long-term debt-to-equity ratio	0.70	0.81	0.87	0.95	0.83
Current ratio	1.32	1.16	1.23	1.26	1.30

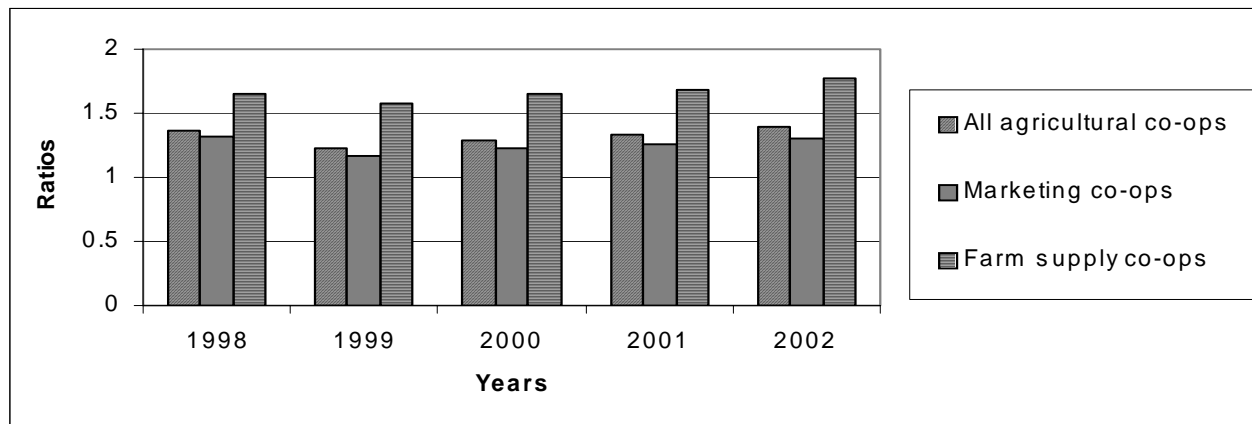
Table 39: Summary of balance sheet (\$M) analysis for farm supply co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Current assets	694	733	764	813	896
Investments	176	192	199	211	214
Fixed assets	334	360	367	372	386
Other assets	22	15	20	32	35
Total assets	1,226	1,300	1,350	1,428	1,531
Current debt	419	465	463	483	507
Long-term debt	116	125	146	131	166
Deferred credit	70	66	55	54	50
Total liabilities	606	656	664	667	723
Member equity	334	363	388	419	437
Co-operative equity:					
Reserves	180	192	211	219	221
Undistributed surplus	107	88	87	123	150
Total equity	620	644	686	761	808
Debt-to-equity ratio	0.98	1.02	0.97	0.88	0.90
Long-term debt-to-equity ratio	0.30	0.30	0.29	0.24	0.27
Current ratio	1.65	1.58	1.65	1.68	1.77

8.3 Financial ratio analysis

Ratio analysis can be used to monitor the financial strength of any kind of business, including agricultural co-operatives. Current ratios, debt-to-equity ratios, long-term debt-to-equity ratios and profitability ratios were calculated. The current ratio (Appendix 13), which measures the liquidity of a firm, is greater than one for all types of agricultural co-operatives during the period of 1998 to 2002 (Figure 4). Current ratios indicated that the agricultural co-operatives possessed sufficient short-term assets to cover short-term financial obligations as they became and become due.

Figure 4: Current ratio of agricultural co-operatives reporting, 1998–2002



The debt-to-equity ratio (Appendix 13), the most frequently used leverage ratio, gives an indication as to the degree of operating freedom a co-operative enjoys. Higher ratios can signal debt pressure which can cause a firm to forgo profitable growth opportunities. Overall, the debt-to-equity ratio remained greater than one throughout the reporting period of 1998 to 2002 (Figure 5). In marketing co-operatives, the debt-to-equity ratio remained greater than two for the period of 1999 to 2001 (Figure 5). Conversely, the debt-to-equity ratio remained less than one during most of the year for farm supply co-operatives.

The long-term debt-to-equity ratio (Appendix 13), which provides a clearer understanding of the debt pressure a co-operative may be facing, remained less than one for all types of agricultural co-operatives throughout the period of 1998 to 2002 (Figure 6).

When the three major co-operatives were excluded from analysis, debt-to-equity ratios greater than one but with smaller magnitude were obtained. A similar trend was observed for the long-term debt-to-equity ratio (Appendices 10 and 11).

Figure 5: Debt-to-equity ratio of agricultural co-operatives reporting, 1998–2002

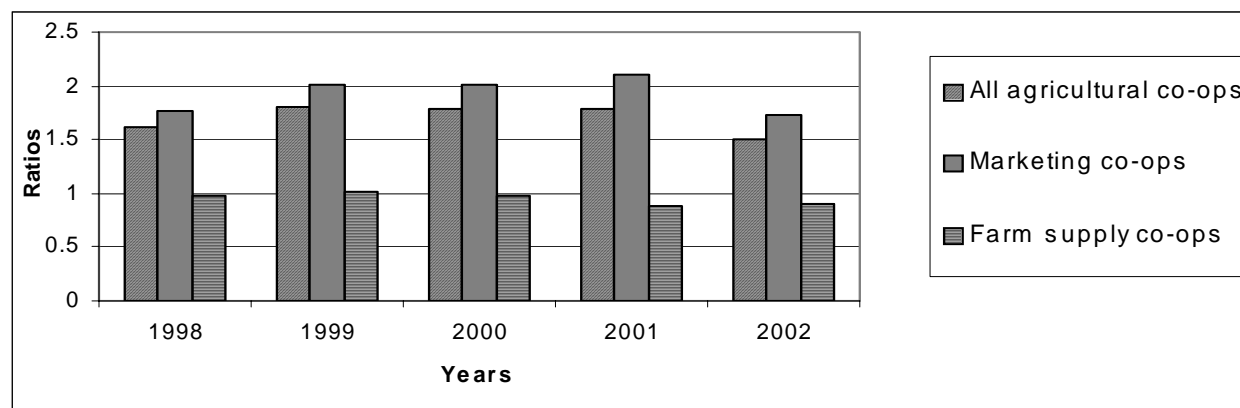
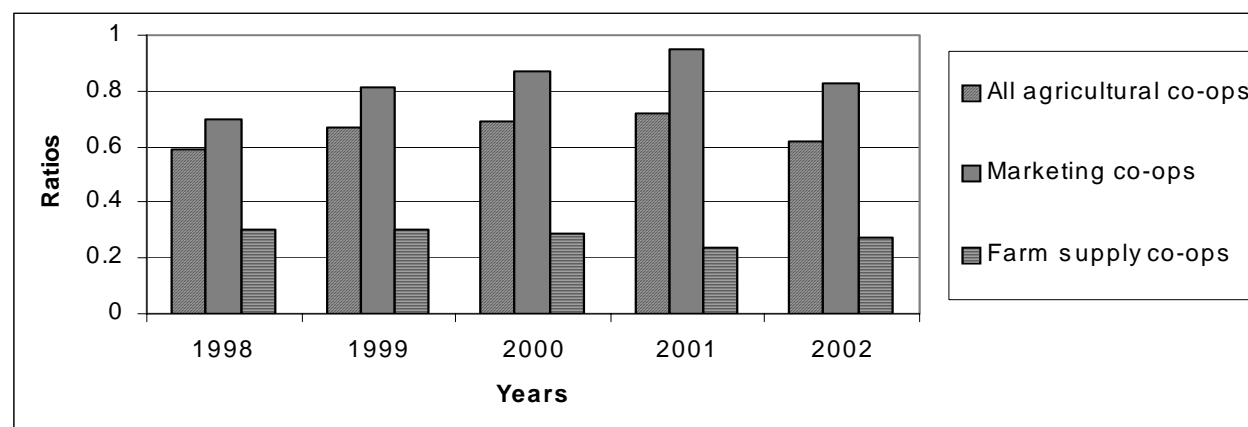
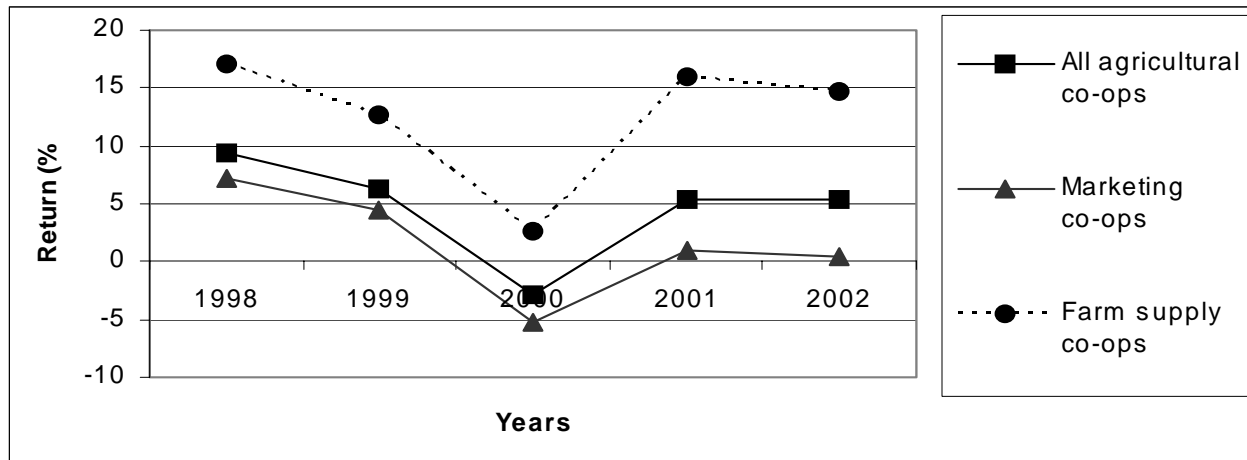


Figure 6: Long-term debt-to-equity ratio of agricultural co-operatives reporting, 1998–2002



The ability of a business to generate profit is the key performance indicator of businesses. Return-on-equity (ROE) is a commonly used profitability ratio. Agricultural co-operatives as a whole reported positive returns during the reporting period, except in the year 2000 (Figure 7); however, ROE declined in 2002 from the peak level in 1998. Following a negative ROE in 2000, ROE remained less than one per cent in agricultural marketing co-operatives for the rest of the period. When SWP, Agricore co-operative and Agrifoods International were excluded from the analysis, steady growth in ROE was observed in agricultural co-operatives, especially in marketing co-operatives (Appendix 12).

Figure 7: Return-on-equity of agricultural co-operatives reporting, 1998–2002



8.4 Sources and uses of capital of agricultural co-operatives reporting, 1998-2002

Debt represented the greatest share in the capital structure of agricultural co-operatives (Table 37) throughout the period of 1998 to 2002, especially of marketing co-operatives (Table 38). Conversely, equity dominated the capital structure of farm supply co-operatives (Table 39). Their debt structure was further analyzed by breaking down total liabilities. The amount of current debt was greater than the amount of long-term debt in agricultural co-operatives (Figure 8). A similar trend was observed in marketing co-operatives and farm supply co-operatives (Figures 9 and 10). When the three major co-operatives were excluded from the analysis, current debt showed progressive growth during the reporting period, while long-term debt showed a steady growth until 2001, followed by a decline in 2002 (Appendices 10 and 11). In both cases, current debt represented the greatest share in the debt structure of agricultural co-operatives.

Figure 8: Sources of debt in total debt of agricultural co-operatives reporting, 1998–2002

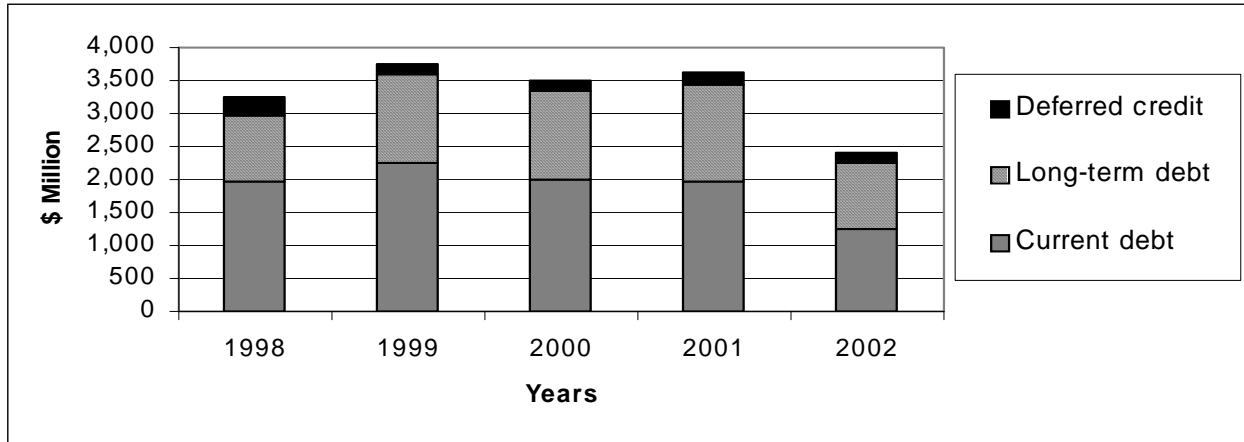


Figure 9: Total debt by type of marketing co-operatives reporting, 1998-2002

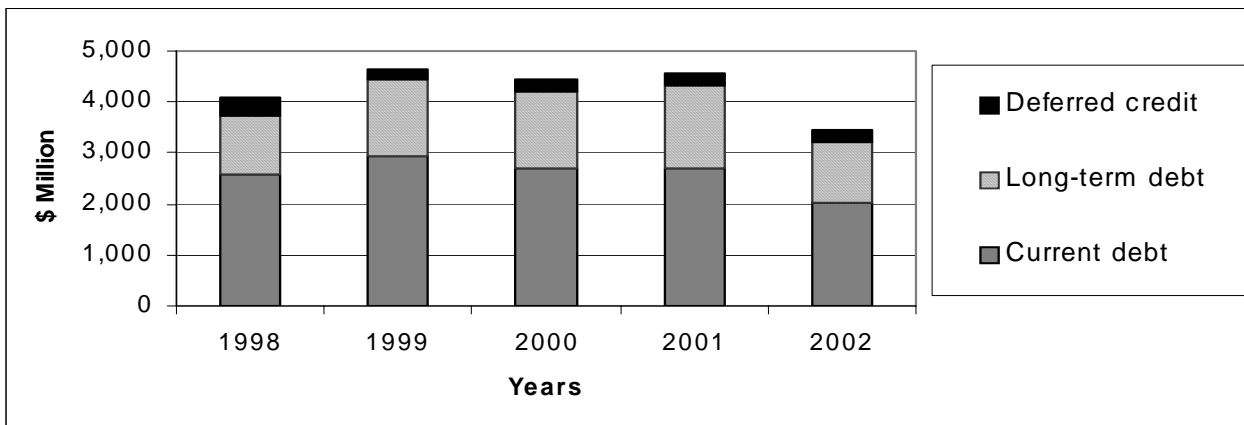
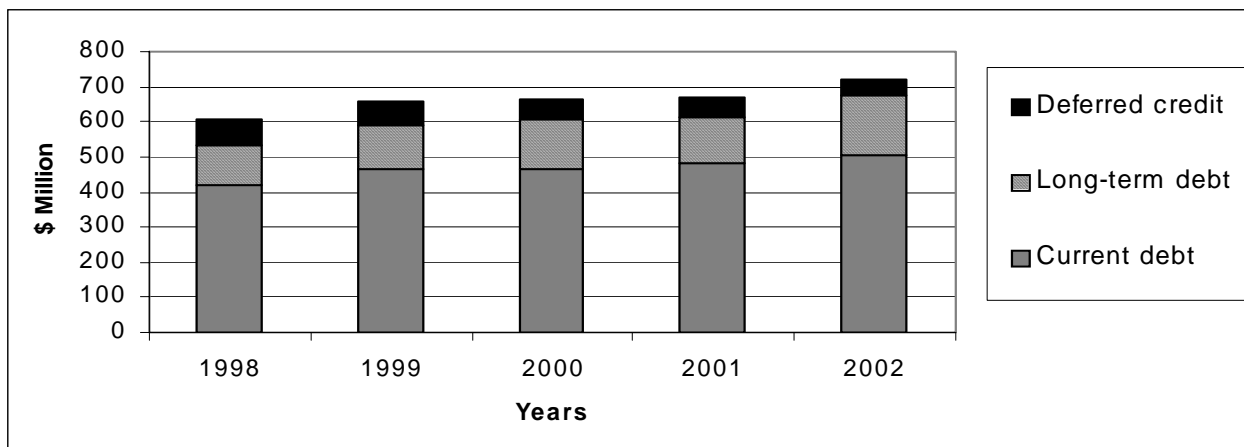


Figure 10: Total debt by type of farm supply co-operatives reporting, 1998-2002



In general, the share of current assets was greater than the share of fixed assets in agricultural co-operatives (Figure 11). In marketing co-operatives, current assets steadily declined during the period, and the amount of fixed assets was slightly greater than the amount of current assets in 2002 (Figure 12). Farm supply co-operatives showed steady growth in both current assets and fixed assets throughout the reporting period (Figure 13); however, current assets dominated the total asset structure. When SWP, Agricore and Agrifoods International were excluded from the analysis, both current assets and fixed assets showed steady growth, and current assets dominated the total asset structure in agricultural co-operatives throughout the reporting period.

The matching principle of finance suggests that longer term loans are usually best used for assets that have longer lives. Short-term loans are used to finance day-to-day operations for business. As ratio analysis and balance sheet analysis indicated, current debt and current asset dominated the total debt and total asset structure respectively. This instance seems to reflect the nature of the business co-operatives are in (e.g., carrying inventories of processed goods). Current ratios indicated that agricultural co-operatives possessed sufficient short-term assets to cover short-term liabilities.

Figure 11: Trends in use of funds of agricultural co-operatives reporting, 1998–2002

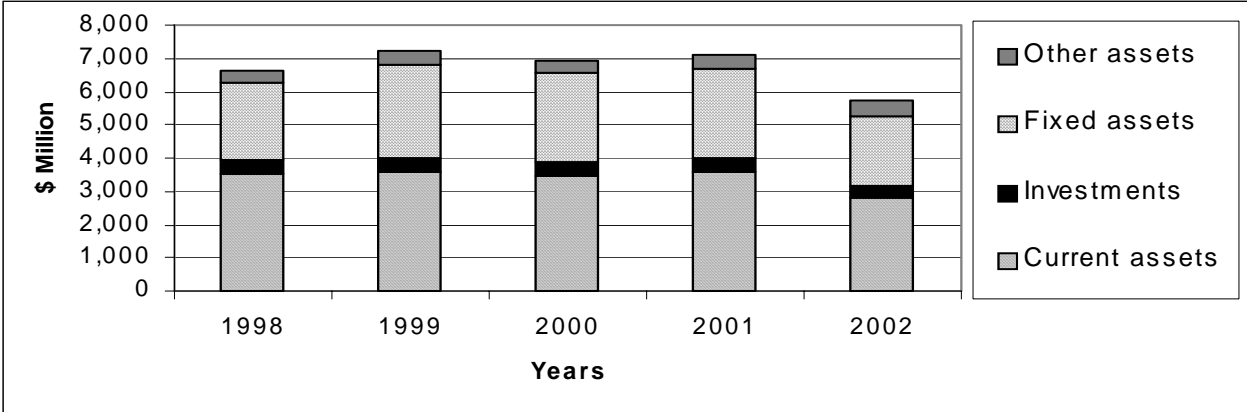


Figure 12: Trends in use of funds of marketing co-operatives reporting, 1998–2002

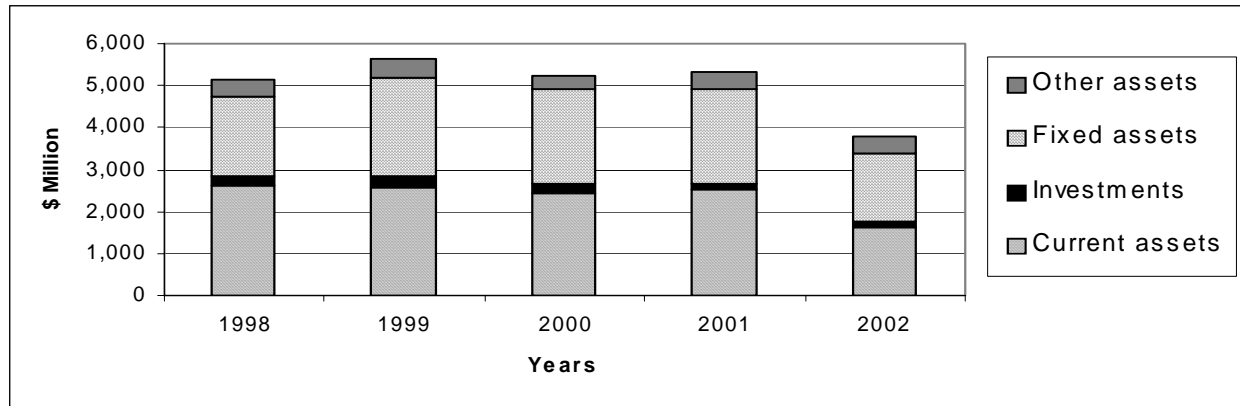
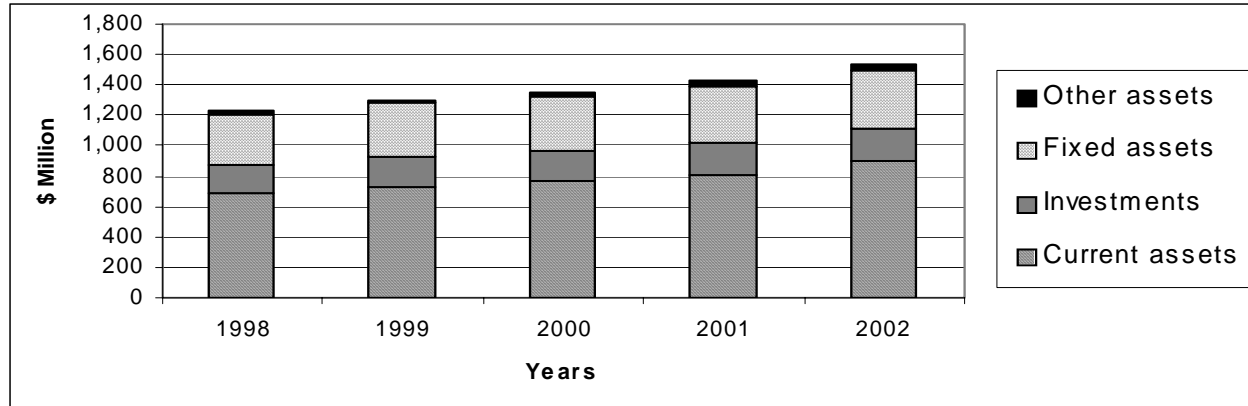


Figure 13: Trends in use of funds of farm supply co-operatives reporting, 1998–2002



9. Conclusions

For the period of 1998 to 2002, the numbers of agricultural co-operatives incorporated increased, particularly in Québec. Total active membership declined in 2002, particularly in marketing co-operatives, and in production and service co-operatives. Agricultural co-operatives employed fewer people in 2002 than they did in the period of 1998 to 2001. The decline in employment was more apparent in marketing co-operatives. Agricultural co-operatives reported total revenues of approximately \$14 billion in 2002, a decline of more than 26% from 1998. The decline in revenues is more apparent in marketing co-operatives. Conversely, total revenues increased in 2002 from the 1998 level in farm supply co-operatives. Saskatchewan Wheat Pool, *La Coop Fédérée* and *Agropur Coopérative agro-alimentaire* were the three agricultural co-operatives with the highest total revenue. Agricultural co-operatives had a net value added of \$1.2 billion in 2002 compared to \$1.4 billion in 1998.

Farm supply revenues increased to \$4.4 billion in 2002 from their 1998 level. Fertilizer and chemical sales represented the largest share of total farm supply revenue reported by co-operatives. Marketing revenues decreased to \$8.6 billion in 2002 from more than \$13.2 billion in 1998. Grains and oilseeds revenues represented the largest share of total marketing revenues until 2001; however, dairy revenues represented the largest share of total marketing revenue in 2002. Except for farm petroleum, the co-operative market share in farm supply sales declined in 2002 from the 1998 level. The agricultural co-operative market share in grains and oilseeds, dairy, livestock, and fruit and vegetables declined at the end of the reporting period. The exception to the decline was poultry and eggs and honey and maple.

Total assets, liabilities and equity declined in 2002 from the 1998 level in agricultural co-operatives, particularly in marketing co-operatives. However, farm supply co-operatives reported growth in total assets, liabilities and equity during the period of 1998 to 2002. Agricultural co-operatives, particularly marketing co-operatives, are highly leveraged compared to farm supply co-operatives. The analysis in this report is based on aggregate data obtained through the annual survey, and statistics are heavily affected by a small number of large co-operatives.

One must take precautions while drawing conclusions about overall agricultural co-operative sectors. In addition, it is mentioned in section 2 of this report that the period from 1998 to 2002 witnessed some structural changes in the co-operative sector of the agri-food industry. Some large agricultural co-operatives have demutualized or sold assets to address adverse financial situations. An unfavorable commodity market and a prolonged drought also contributed to lower business volume in co-operatives.

10. References

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Data sources

All numerical data were acquired through the Co-operatives Secretariat database, which contains the results of the Annual Survey of Canadian Co-operatives, as well as data received from provincial governments.

Appendix 1: Retail farm supply revenues⁴ by co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Feed	523	483	540	636	672
Fertilizer and chemicals	1,363	1,366	1,313	1,508	874
Seeds	186	150	103	80	64
Farm petroleum	486	516	596	801	770
Total	2,558	2,515	2,552	3,025	2,380

⁴ Excludes wholesale revenues

Appendix 2: Total farm expenses on farm supplies by co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Feed	3,858	3,609	3,789	4,343	5,101
Fertilizer and chemicals	3,439	3,401	3,617	3,924	3,791
Seeds	848	888	918	973	1,076
Farm petroleum	1,501	1,598	1,904	1,974	1,790
Total	9,646	9,496	10,227	11,214	11,757

Source: Statistics Canada, Catalogue No. 21-012-XIE

Appendix 3: Share (%) of the largest four agricultural co-operatives in farm commodity sales by agricultural co-operatives reporting, 1998–2002

	1998	1999	2000	2001	2002
Grains and oilseeds sales	95.3	95.9	96.3	95.2	93.3
Dairy sales	80.3	81.6	82.7	78.4	78.6
Livestock sales	91.3	81.5	87.5	89.3	86.4
Poultry and egg sales	93.9	94.1	93.9	93.1	93.0
Fruit and vegetable sales	49.5	40.3	38.6	45.0	47.3
Honey and maple sales	99.5	99.6	99.4	96.6	97.4

Appendix 4: Grains and oilseeds revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	6,201	5,582	5,213	3,956	1,595
Ontario	236	220	202	207	193
Québec	67	63	55	50	55
Atlantic	0	1	1	1	0
Total	6,504	5,866	5,470	4,214	1,843

Appendix 5: Fruit and vegetable revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	175	134	112	114	135
Ontario	41	48	53	42	44
Québec	21	27	29	29	28
Atlantic Canada	20	24	24	16	14
Total	258	233	218	202	222

Appendix 6: Livestock revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	620	864	602	611	444
Ontario	9	8	15	12	57
Québec	833	803	935	1,243	1,333
Atlantic Canada	2	2	2	4	4
Total	1,464	1,677	1,554	1,870	1,838

Appendix 7: Poultry and egg revenues (\$M) by agricultural co-operatives reporting by region, 1998–2002

	1998	1999	2000	2001	2002
Western Canada	430	455	544	586	614
Ontario	0	0	0	0	0
Québec	644	611	638	711	738
Atlantic Canada	52	59	71	91	99
Total	1,126	1,124	1,253	1,389	1,451

Appendix 8: Summary of income statement (\$M) analysis for agricultural co-operatives reporting (not including SWP, Agricore and Agrifoods International), 1998–2002

	1998	1999	2000	2001	2002
Marketing sales	6,629	6,711	6,920	6,789	6,906
Supply sales	3,581	3,641	3,972	4,429	4,480
Total sales	10,210	10,352	10,892	11,218	11,386
Cost of sale	8,782	8,950	9,548	9,610	9,794
Gross margin	1,429	1,402	1,344	1,608	1,592
Service revenue	139	143	170	171	175
Patronage income	40	40	40	43	48
Gross income	1,607	1,585	1,554	1,821	1,815
Depreciation	146	152	165	176	183
Salaries and wages	773	775	767	861	884
Interest on long-term debt	46	50	44	67	50
Total expenses	1,423	1,410	1,444	1,590	1,561
Net income from operations	184	175	111	231	254
Non-operating revenues	42	46	79	63	38
Net saving	226	220	190	295	292
Patronage dividends paid				155	141

Appendix 9: Summary of income statement (\$M) analysis for marketing co-operatives reporting (not including SWP, Agricore and Agrifoods International), 1998–2002

	1998	1999	2000	2001	2002
Marketing sales	6,238	6,327	6,548	6,431	6,538
Supply sales	971	973	1,055	1,181	1,153
Total sales	7,209	7,300	7,603	7,613	7,692
Cost of sale	6,249	6,336	6,668	6,468	6,551
Gross margin	960	964	935	1,145	1,140
Service revenue	43	45	42	38	35
Patronage income	1	0	1	1	1
Gross income	1,005	1,009	978	1,184	1,176
Depreciation	104	107	118	126	134
Salaries and wages	576	575	577	659	682
Interest on long-term debt	35	35	27	52	36
Total expenses	926	916	885	1,071	1,040
Net income from operations	78	93	93	113	136
Non-operating revenues	18	15	-3	33	11
Net saving	96	109	90	145	147
Patronage dividends paid				68	75

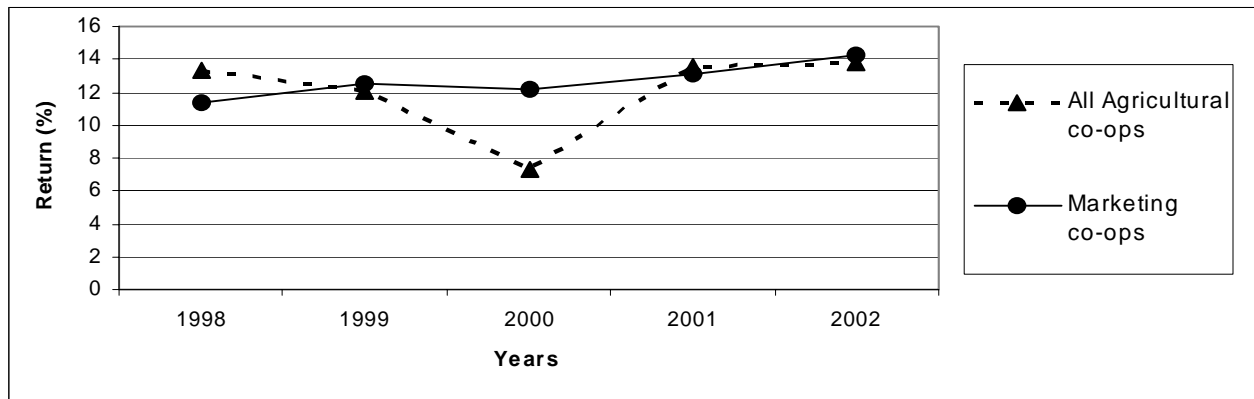
Appendix 10: Summary of balance sheet (\$M) analysis for agricultural co-operatives reporting (not including SWP, Agricore and Agrifoods International), 1998–2002

	1998	1999	2000	2001	2002
Current assets	1,897	1,999	2,203	2,335	2,421
Investments	328	343	311	329	334
Property and equipment	1,099	1,173	1,232	1,351	1,430
Other assets	185	186	195	226	255
Total assets	3,508	3,701	3,941	4,241	4,441
Current liabilities	1,369	1,497	1,626	1,639	1,714
Long-term debt	570	597	648	757	726
Deferred credit	192	150	149	143	163
Total liabilities	2,131	2,244	2,423	2,539	2,603
Member equity	704	757	808	892	954
Co-operative equity:					
Reserves	480	526	564	607	655
Undistributed surplus	193	174	146	203	229
Total equity	1,377	1,457	1,518	1,702	1,838
Debt-to-equity ratio	1.55	1.54	1.60	1.49	1.42
Long-term debt-to-equity ratio	0.55	0.51	0.53	0.53	0.48
Current ratio	1.39	1.34	1.35	1.42	1.41

Appendix 11: Summary of balance sheet (\$M) analysis for marketing co-operatives reporting (not including SWP, Agricore and Agrifoods International), 1998–2002

	1998	1999	2000	2001	2002
Current assets	969	1,017	1,163	1,232	1,230
Investments	144	143	104	109	107
Property and equipment	715	764	812	924	987
Other assets	156	166	167	182	203
Total assets	1,984	2,090	2,245	2,447	2,527
Current liabilities	741	808	911	907	944
Long-term debt	437	460	486	592	523
Deferred credit	118	80	89	86	109
Total liabilities	1,297	1,348	1,486	1,585	1,576
Member equity	346	372	400	450	492
Co-operative equity:					
Reserves	282	317	333	366	407
Undistributed surplus	59	53	25	46	52
Total equity	687	742	758	862	951
Debt-to-equity ratio	1.89	1.82	1.96	1.84	1.66
Long-term debt-to-equity ratio	0.81	0.73	0.76	0.79	0.66
Current ratio	1.31	1.26	1.28	1.36	1.30

Appendix 12: Return-on-equity of agricultural co-operatives reporting (not including SWP, Agricore and Agrifoods International), 1998–2002



Appendix 13: Definition of financial terms

- i. **Current ratio:** The current ratio is the most commonly used measure of liquidity. Liquidity ratios measure the ability to fulfill short-term commitments with liquid assets. The current ratio is obtained by dividing current assets by current liabilities.

$$\text{Current ratio} = \text{current assets} / \text{current liabilities}$$

- ii. **Debt-to-equity ratio:** The debt-to-equity ratio is the most commonly used leverage ratio. Leverage ratios measure the extent of a firm's total debt burden and indicate the sufficiency of the capital base of firms to pay off their debt in the event of liquidation. The debt-to-equity ratio is obtained by dividing total liabilities by total equity.

$$\text{Debt-to-equity ratio} = \text{total liabilities} / \text{total equity}$$

- iii. **Long-term debt-to-equity ratio:** A long-term debt-to-equity ratio provides a clearer understanding of the type of debt pressure a co-operative may be facing. The long-term debt-to-equity ratio is obtained by dividing total liabilities less current liabilities by total equity.

$$\text{Long-term debt-to-equity} = (\text{total liabilities} - \text{current liabilities}) / \text{total equity}$$

- iv. **Return-on-equity (ROE):** ROE is a commonly used profitability ratio. It measures the success of the firm in earning a net return on its operation. ROE is obtained by dividing pre-tax net operating income by total equity and multiplying by 100.

$$\text{ROE} = (\text{Pre-tax net operating income} / \text{total equity}) \times 100$$

- v. **Gross margin:** Gross margin is equal to total sales less cost of sales, where cost of sales is the amount paid to suppliers, including members.

- vi. **Gross income:** Gross income is equal to the gross margin plus service revenues and income from patronage incomes and rebates, where patronage incomes include patronage dividends from parent co-operatives.

- vii. **Net income from operations:** Net income from operations includes gross income less total expenses.

- viii. **Non-operating income:** Non-operating income includes extraordinary items (e.g., interest incomes and net income from subsidiaries other than co-operatives) plus government premiums and subsidies.

- ix. **Patronage dividends paid:** Patronage dividends paid is the amount of co-operative surplus allocated to member accounts.