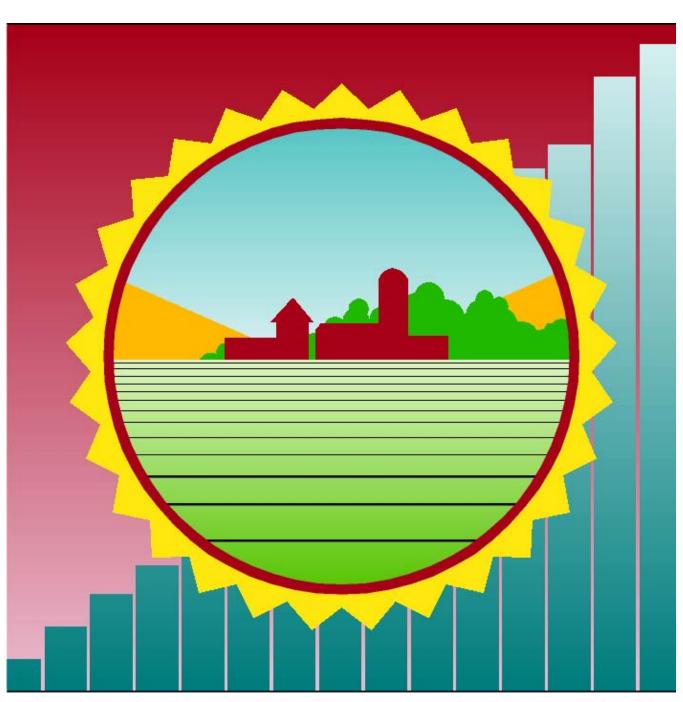


# **Extraction System of Agricultural Statistics (ESAS)**

Reference Manual – 2005

A Product of the Whole Farm Data Projects







# Extraction System of Agricultural Statistics (ESAS) 2005

# Reference Manual 21F0001XCB Version: 12.0

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### 1. Introduction

### Meeting users' needs

The Extraction System of Agricultural Statistics (ESAS) is a major component of the Whole Farm Data Base (WFDB). Both are the result of a joint venture by Agriculture and Agri-Food Canada and Statistics Canada. ESAS was developed to provide the most commonly requested disaggregated data, in an electronic format, to users of agricultural statistics. There are various potential users, from public sector policy-makers, to industry analysts and private sector decision-makers.

### Quick and easy access

The Whole Farm Data Project Group has developed an extensive series of tables featuring the most commonly requested disaggregated physical and financial data. The Extraction System of Agricultural Statistics (ESAS) is a menu-driven software which offers all of these data in both pre-established and custom tabulations.

### A guide to the extraction system and the Whole Farm Data Base

This manual was designed to familiarize users of ESAS with the structure and quality of its data, as well as with other WFDB products and services.

### 2. Extraction System of Agricultural Statistics

### 2.1 Background

Since the mid-1920s, the Agriculture Division of Statistics Canada has been publishing data series depicting provincial levels and trends within the agriculture industry. Although timely and reliable, these series have not always satisfied the growing demand for more disaggregated farm level data.

In 1991, Agriculture and Agri-Food Canada obtained the funding to launch the Farm Level Data Project (FLDP) and provide the data necessary for monitoring the financial position of farm businesses; assessing the impact of changing policies, programs and economic conditions on farms; and administering and evaluating agricultural programs.

To meet this goal, Agriculture Division of Statistics Canada and Agriculture and Agri-Food Canada launched the Whole Farm Data Base (WFDB), an essential component of the FLDP. As one product of the WFDB, the Extraction System of Agricultural Statistics (ESAS) was developed to combine all of the most commonly requested physical and financial agriculture data into an easy-to-use software. Although the WFDB is the source for custom requests, ESAS was designed to satisfy the most common user needs.

For more information on the WFDB, see the *Whole Farm Data Base – Reference Manual* (Statistics Canada catalogue no. 21F0005GPE) available free of charge from Agriculture Division. (See Section 3.4.) It is also available free of charge on the Internet no. 21F0005GIE at www.statcan.ca/cgi-bin/downpub/freepub.cgi.

### 2.2 Extraction system structure

The various limitations of the different data sources shaped the design of ESAS. For example, different sample sizes and the varying quality of responses resulted in different levels of disaggregation as well as different lists of estimated variables. ESAS is comprised of the components described in the following sections.

### 2.2.1 Data sources – variables and availability

There are several major data sources currently offered by ESAS which produce data annually, at the farm level: the Canadian Agricultural Income Stabilization and Taxation Data Program (CAIS/TDP), the June Crops Survey (JCS), the July Livestock Survey (JLS), and the Farm Financial Survey (FFS). ESAS is structured to provide data for farms with reported annual revenues of \$10,000 and more. Each has been targeted to provide the following components for the stated reference years:

### Canadian Agricultural Income Stabilization and Taxation Data Program¹- 1993 to 2003

- detailed revenues and expenses
- additions and disposals of assets<sup>2</sup>
- operator off-farm income and a summary of revenues and expenses (unincorporated only)3
- operator off-farm income and a summary of revenues and expenses (unincorporated and incorporated)<sup>4</sup>
- farm family off-farm income and a summary of revenues and expenses<sup>5</sup>
- June Crops Survey<sup>6</sup> 1993 to 2003
  - cropland acreages
- July Livestock Survey<sup>6</sup> 1993 to 2003
  - livestock inventories
- Farm Financial Survey<sup>7</sup> 1993 to 2003
  - assets and liabilities
  - capital

<sup>1.</sup> Since the 2003 reference year, the Canadian Agricultural Income Stabilization (CAIS) program is replacing the Net Income Stabilization Account (NISA).

The statistical series on additions and disposals of assets does not cover the unincorporated sector from 1996 to 1999. Series was discontinued after 1999 data.

<sup>3.</sup> Farm operators involved in a single farm operation.

<sup>4.</sup> Farm operators operating incorporated and unincorporated agricultural holdings. Data available since 1993.

<sup>5.</sup> Unincorporated sector only. Farm families involved in a single farm operation, 1993 to 2002 only.

<sup>6.</sup> The JCS did not cover Newfoundland and Labrador from 1993 to 1997. This province was excluded from the JLS in 1993 and 1994.

<sup>7.</sup> The FFS was originally collected by the Farm Credit Canada under the name "Farm Survey". The dates are for reference years 1993 to 2003. The FFS was conducted on a biennial basis from 1988 to 2000 and is conducted on an annual basis since 2002.

To maintain data quality and consistency, a specific series of agricultural variables was developed for each data source. These standard output formats were developed to provide thorough coverage of the agriculture sector on an annual basis (see **Appendix A**).

Most of the variables used from the June Crops, July Livestock and Farm Financial Surveys data sources were drawn directly from the survey questionnaires. (These variables are defined in the questionnaires and interviewer training manuals; both are available from Agriculture Division.) In contrast, the CAIS/TDP variables used in the standard outputs are predominantly custom aggregates of farm taxfiler data. (See Appendix B for descriptions.)

The sampling and methodology for each of these data sources are summarized in Appendix C.

### 2.2.2 Regional breakdowns

Each of the data sources available from ESAS has been structured to provide estimates based on regional breakdowns; these include all provinces and the Census Agricultural Regions (CARs) when applicable. These subprovincial geographic divisions are used by ESAS and the Census of Agriculture for disseminating agricultural statistics. In all provinces except Prince Edward Island and Saskatchewan, a CAR is made up of groups of adjacent census divisions. In Saskatchewan, census agricultural regions are groups of adjacent census consolidated subdivisions, but these groups do not necessarily respect census division boundaries. Census agricultural regions have not been defined for Prince Edward Island. In the Prairie provinces, census agricultural regions are commonly referred to as crop districts. All of the regional breakdowns used by ESAS are illustrated in the census maps (see Appendix D). Due to administrative data limitations, a small number of farms could not be classified into CARs. For this reason, the summation of all farms within each CAR for a province will not necessarily equal the actual province total. Census agricultural regions are not available for Newfoundland and Labrador in ESAS.

### 2.2.3 New farm classification system

Starting with the 2001 reference year, data for all data sources offered on the WFDB are compiled on the basis of the North American Industry Classification System (NAICS), which replaces the 1980 Standard Industrial Classification (SIC)<sup>8</sup>. Historical data series for all data sources have been reproduced based on NAICS in order to facilitate the transition between the SIC<sup>9</sup> and NAICS.

The NAICS is an industry classification system that was developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, NAICS is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis and the comparability of the three economies. NAICS is based on a production-oriented or supply-based conceptual framework. This means that producing units that use similar production processes are grouped together in NAICS. By grouping businesses that use similar production processes, data classified according to NAICS are more suitable for the analysis of production related issues such as productivity or industrial performance.

<sup>8.</sup> NAICS Canada replaces both the 1980 Standard Industrial Classification for Establishments (SIC-E) and the 1980 Standard Industrial Classification for Companies and Enterprises (SIC-C).

<sup>9.</sup> The SIC is a system developed by Statistics Canada for arranging producing units into industries.

The NAICS has a hierarchical structure and uses a six-digit numbering system. The first two digits designate the sector (the agriculture sector is part of 11—Agriculture, Forestry, Fishing and Hunting), the third digit represents the subsector, the fourth indicates the industry group, the fifth represents the industries, and the sixth digit designates national industries. (NAICS with Canadian detail is designated NAICS Canada.)

Canadian Agricultural Income Stabilization and Taxation Data Program (CAIS/TDP)

Starting with the 2001 reference year, the CAIS/TDP has adopted the North American Industry Classification System. The CAIS/TDP series based on the 1980 SIC-E published up to the 2001 reference year (preliminary data) have now been terminated. Previous years' data have been recalculated to the new classification system back to 1987. Each record has been revisited and the farm type has been reassigned according to the new classification.

Farm Financial Survey (FFS)

Reference year 2001 is the last year for which FFS data were released on an SIC basis. Data for 2001 and for previous years have been converted directly to NAICS.

Other Data Sources

Like for the FFS, all data series from the June Crops Survey (JCS) and the July Livestock Survey (JLS) have been converted directly to NAICS; reference year 2000 is the last year for which JCS and JLS data were produced on an SIC basis.

### 2.2.4 Farm types

For each data source, the primary farm type is based on a percentage of agricultural sales; that is, the commodity or commodity group that makes up 50%<sup>10</sup> or more of the sales. As noted above, the North American Industry Classification System (NAICS) acts now as the basis for classifying the farm types. The farm types are:

Oilseed and grain farming
Potato farming
Other vegetable and melon farming
Fruit and tree nut farming
Greenhouse, nursery and floriculture production
Other crop farming
Beef cattle ranching and farming
Dairy cattle and milk production
Hog and pig farming
Poultry and egg production
Other animal production

All farm types are fully defined in **Appendix E**.

<sup>10.</sup> The rule of 51% or more of the sales was used by the WFDB to determine the primary farm type on the SIC basis.

### 2.2.5 Revenue classes

Revenue refers to the total operating revenues, including all revenues from the sale of agricultural commodities as well as agriculture payments and subsidies. Sales from forest products and interfarm sales are also included.

ESAS uses Census of Agriculture standard revenue classes to produce estimates. The levels are:

\$10,000 - \$24,999 \$25,000 - \$49,999 \$50,000 - \$99,999 \$100,000 - \$249,999 \$250,000 - \$499,999 \$500,000 and more

### 2.3 Data quality

### 2.3.1 Sampling errors

All ESAS estimates are derived from samples, making them subject to sampling errors. Such errors occur when observations are based only on a sample and not on the population as a whole. The size and design of the sample, the variability of the characteristic of interest in the population, and the estimation method all affect data quality. In sample surveys, inference is made about the entire population based on data obtained from a part of the population; therefore, the results are likely to be different than if a complete census was taken under the same survey conditions. The most important feature of probability sampling is that the sampling error can be measured from the sample itself.

Each estimate released through ESAS is assigned a coefficient of variation (C.V.) to measure its quality. As an objective statistical measure obtained through random sampling of the variation between each estimate and its "true" value, the C.V. indicates the degree of confidence that should be placed on a particular estimate. The users must determine if an estimate with a significant C.V. is appropriate for use.

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

<u>C.V.</u>			Rating
5.00% 10.00% 15.00%	- 4.99% - 9.99% - 14.99% - 24.99% - 34.99%	-	Excellent Very good Good Acceptable Use with caution Too unreliable to be published

### 2.3.2 Non-sampling errors

Non-sampling errors can occur whether a sample is used or a complete census of the population is taken. Such errors can be introduced at various stages of data processing (such as coding, data entry, editing, weighting, or tabulation) and include errors introduced inadvertently by respondents. Such errors are reduced through extensive edits and data analysis; however, there are some limitations. In Saskatchewan, due to the unreliability of the CAIS/TDP Census Subdivision (CSD) breakdowns, Census Agricultural Regions (CARs) cannot be reliably determined. In addition, until the 1992 taxation year, the CAIS/TDP was unable to assign farm types to certain crop farms in Quebec; these farms were classified as "unspecified crop farms". This limitation has been addressed by subject-matter specialists. Since the 1993 taxation year, the "unspecified crop" revenues have been allocated to the crop type.

### 2.4 Confidentiality

Statistics Canada maintains a strict level of confidentiality. All tabulated data are subject to restrictions prior to release. Several computerized checks are performed on all data cells to prevent the publication or disclosure of any information deemed confidential.

For each of the tabulations produced by ESAS, the estimated number of farms is rounded to the base "5" and the estimates of the other variables within that table are adjusted by a variable factor. The estimated number of farm families is rounded to the base "10". With regard to the estimated number of farm operators, it is rounded to the base of "5" in the series of farm operators operating a single unincorporated agricultural holding and to the base of "10" in the series of farm operators incorporated or unincorporated agricultural holdings. If the degree of detail required to answer user requests creates confidentiality concerns, the affected data or the entire table will be suppressed.

This method preserves the confidentiality of the data, without jeopardizing the quality of the actual estimates.

### 3. Other products and services

To satisfy a variety of user needs, the WFDB offers an assortment of products and services as well as customized products. The WFDB Project Team is dedicated to offering users the data they need whether on paper or electronic format.

### 3.1 Farm and Off-Farm Income Statistics — Internet publications

The publication *Farm and Off-Farm Income Statistics* (21-019-XIE) is replaced by the three following publications:

### Statistics on Income of Farm Operators (21-206-XIE)

This publication provides information on sources and levels of farm and off-farm income for operators by province, type of farm (based on the North American Industry Classification System) and revenue class. Distributional tables on income of operators are also presented. This publication also includes data highlights and information on concepts, methods and data quality. A relevant article on the story emanating from the data is also featured.

Data from Canada Revenue Agency's income tax returns of farmers operating unincorporated and incorporated farms provide the statistical basis for this publication.

This publication will be available on Statistics Canada's website at www.statcan.ca/cgi-bin/downpub/freepub.cgi.

### Statistics on Income of Farm Families (21-207-XIE)

This publication provides information on sources and levels of farm and off-farm income for farm families by province, type of farm (based on the North American Industry Classification System) and farm typology (based on age of operator, dependence on farm revenues and income level). Distributional tables on income of farm families are also presented. This publication also includes data highlights and information on concepts, methods and data quality. A relevant article on the story emanating from the data is also featured.

Data from Canada Revenue Agency's income tax returns of farm families operating a single unincorporated farm provide the statistical basis for this publication.

This publication is available on Statistics Canada's website at www.statcan.ca/cgi-bin/downpub/freepub.cgi.

### Statistics on Revenues and Expenses of Farms (21-208-XIE)

This publication provides detailed financial information on farm-level revenues, expenses and net operating income by province, type of farm (based on the North American Industry Classification System) and revenue class. Information on financial performance indicators of farms by province and by type of farm are also presented. This publication also includes data highlights and information on concepts, methods and data quality. A relevant article on the story emanating from the data is also featured.

Data from Canada Revenue Agency's income tax returns of unincorporated and incorporated farms provide the statistical basis for this publication.

This publication will be available on Statistics Canada's website at www.statcan.ca/cgi-bin/downpub/freepub.cgi.

### 3.2 Farm Financial Survey (FFS) – Internet publication

This electronic publication (Statistics Canada catalogue no. 21F0008XIB) is available free of charge on the Internet. It provides detailed regional statistics on the financial structure of Canadian farms. The publication includes balance sheet data (assets and liabilities) of farms by region, financial structure by farm type and region, and by revenue class and region, and capital investments and capital sales by region. In addition to presenting highlights from 2002, it also includes historical data. Charts and text outlining concepts, methods and data highlights supplement the tables.

New editions will be published every year in December on Statistics Canada's website at www.statcan.ca/cgi-bin/downpub/freepub.cgi.

### 3.3 Customized requests

Although ESAS attempts to anticipate all of its users' needs, it is still a predetermined data set and it does not encompass all of the data available from the WFDB. For specialized needs, users may request customized tables. Criteria for customized data should be outlined before ordering – the components required must be determined, (for example, off-farm income, livestock inventories), the applicable data sources selected, and the appropriate variables for disaggregation chosen (such as farm type, revenue class, region). More information about the WFDB and the variables available for

custom tabulation can be found in the *Whole Farm Data Base – Reference Manual* (Statistics Canada catalogue no. 21F0005GPE). The document is also available free of charge on the Internet at www.statcan.ca/cgi-bin/downpub/freepub.cgi. Customized tables are available on paper or on diskette, CD-ROM or by e-mail.

Due to the highly disaggregative level of certain requests, some data will be suppressed to ensure data confidentiality.

The cost of customized WFDB products varies depending on the size and the complexity of the request.

### 3.4 Ordering WFDB products and services

To order WFDB products and services or for more information, please write to the:

Whole Farm Data Projects Section Agriculture Division Statistics Canada 12th Floor, Jean Talon Building Ottawa, Ontario K1A 0T6

Other ways to reach us:

toll-free: 1 800 465-1991 local call: (613) 951-5027 fax: (613) 951-3868

e-mail: agriculture@statcan.ca

## Appendix A Standard output formats

### **Standard output formats**

### Canadian Agricultural Income Stabilization and Taxation Data Program - 1993 to 2003

R000 Estimated number of farms

Operating revenues		Operating expenses	
R400	All wheat	R230	Fertilizer and lime
R401		R235	Pesticides
R402		R240	Seed and plants
	Canola (Rapeseed)		Non-specified greenhouse and nursery expenses
	Soybeans		Containers, twine and baling wire
R407			Other crop expenses
	Other and non-specified small grains		Total crop expenses
	Other and non-specified grains and oilseeds	112100	Total Grop expenses
		R245	Cattle purchases
K2005	Total grain and oilseed revenues	R246	
D440	Detetore	R247	The state of the s
R410	Potatoes	R248	33 1 3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3
R421			Other livestock purchases
	Vegetables (non-greenhouse)		Feed, supplements, straw and bedding
	Tobacco		Veterinary fees, medicine and breeding fees
	Greenhouse, nursery and floriculture products		Other livestock expenses
	Forage crops (including forage seed)		Total livestock expenses
	Other crops	KZIIU	Total livestock expenses
R2000	Total other crop revenues	R270	Small tools
D0000	T-4-1		Net fuel expenses, machinery, truck, auto
R2020	Total crop revenues		Repairs, licenses and insurance
D0040	0-#1-		Total machinery expenses
R2016		KZ 120	Total machinery expenses
R441		D2121	Salaries (including CPP, QPP, EI)
	Poultry and eggs	R2121	` ' ' '
	Sheep and goats		Insurance
	Dairy products and subsidies		
	Other livestock and products		Telephone (farm share) Net electricity (farm share)
R2025	Total livestock and product revenues		
D0044			Heating fuel (farm share) Custom work and machine rental
	Program payments and insurance proceeds		
	Custom work and machine rental		Net interest expenses
	Rental income		Net property tax
	Other forest products		Building and fence repairs
	Cash advances (net)		Marketing expenses
	Miscellaneous revenues		Miscellaneous farm expenses
R2030	Total other revenues	R2135	Total general expenses
R2040	Total operating revenues	R2140	Total operating expenses
R458	Quota sale income	R2500	Net operating income
	CCA recaptured		
	Inventory adjustments	R310	Clearing and improving land
	Non-applicable income	R316	Tile drainage
	Total income adjustments	R2141	Inventory adjustments
0-70			Capital cost allowance
R2050	Gross farm income for tax purposes	R331	Allowance on eligible capital property
. 12000	C. C.C. Tallin Moonie for tax purposco		Non-applicable expenses
			Other expense adjustments
			Total expense adjustments
		R2150	Total expenses for tax purposes

### Standard output formats - continued

# Canadian Agricultural Income Stabilization and Taxation Data Program – 1993 to 2003 – concluded

### Additions and disposals of assets1 - 1993 to 1999 taxation year2

R000 Estimated number of farms

Additions		Dispos	sals
S140 S141	Equipment Building	S240 S241	Equipment Building
S142	Land	S242	Land
S150	Quota	S250	Quota
S160	Other	S260	Other
S198	Total	S298	Total

### Off-farm income<sup>3</sup>

R000 Estimated number of individuals or farm families

T6010 Wages and salaries

T6020 Net business income
T6030 Net professional income
T6040 Net commission income
T6050 Net fishing income

T6060 Net off-farm self-employment income

T6070 Investment income

T6080 Pension income

T6090 Other off-farm income T6092 RRSP

T6095 Total other off-farm income

T6105 Total off-farm income (excluding T6091 taxable capital gains)<sup>4</sup>

T6091 Taxable capital gains

T6100 Total off-farm income (including T6091 taxable capital gains)

### Summary of farm operators' and farm families' revenues and expenses

R000 Estimated number of farms

R2005 Total grain and oilseed revenues

R2010 Total other crop revenues

R2015 Total crop revenues

R2025 Total livestock and product revenues

R2035 Total other fevenues

### R2040 Total operating revenues

R2105 Total crop expenses

R2110 Total livestock expenses

R2120 Total machinery expenses

R2135 Total general expenses

### R2140 Total operating expenses

### R2500 Net operating income

Net business portion.

All sectors covered to 1995. From 1996 to 1999, data series only covers incorporated sector and communal farming organizations. Series discontinued after 1999 data.

The statistical series on off-farm income for farm operators operating incorporated or unincorporated agricultural holdings starts in 1993.

<sup>4.</sup> Available in ESAS since the 1996 reference year.

### Standard output formats - continued

### June Crops Survey – 1993 to 2003

### Crops: land use

R000	Estimated number of farms			
C280	Total wheat		C217	Corn for fodder
C208	Oats		C220	Tame hay
C209	Barley		C218	Potatoes
C234	Canary seed		C227	Tobacco <sup>5</sup>
C235	Fababeans		C225	Other crops
C213	Mixed grains		C1030	Total other crop acreages
C282	Total rye			
C216	Corn for grain		C1050	Total crop acreages
C226	Buckwheat			
C215	Canola (Rapeseed)		C222	Seeded pasture
C228	Soybeans		C219	Summerfallow
C214	Flaxseed		C241	Other land
C224	Mustard seed			
C230	Sunflower seed		C1100	Total area of farms
C1010	Total grains and oilseeds			
	_			
C223	Dry peas			
C229	Beans (dry, white)			
C231	Lentils			
	Beans (dry, coloured)			
C1020	Total dry field peas and beans			

### July Livestock Survey - 1993 to 2003

### **Livestock inventories**

R000	Estimated number of farms		
C403	Bulls 1 year and over	C302	Ewes and wethers 1 year and over
C404	Dairy cows	C303	Lambs under 1 year - breeding
C405	Beef cows	C304	Lambs under 1 year – slaughter
C406	Dairy heifers 1 year and over	C301	Rams 1 year and over
C407	Beef heifers 1 year and over		•
C402	Slaughter/feeder heifers 1 year and over	C310	Total sheep and lambs
C408	Steers 1 year and over		
C409	Calves under 1 year	C335	Other livestock <sup>6</sup>
C410	Total cattle and calves		
		C1300	Poultry <sup>7</sup>
C605	Boars 6 months and over	C1301	Other fowl <sup>7</sup>
C606	Sows for breeding and bred gilts	C1302	Mammals <sup>7</sup>
C607	Pigs < 45 lb (< 20 kg)		
C608	Pigs 45-130 lb (20-60 kg)		
C609	Pigs > 130 lb (> 60 kg)		
C610	Total pigs		

Applicable after the 1993 reference year.
 Applicable for the 1994 reference year.
 Applicable after the 1994 reference year and before the 1998 reference year.
 Note: More information on these variables can be obtained from Agriculture Division of Statistics Canada.

### Standard output formats - continued

### Farm Financial Survey - 1993 to 2003

Assets		Liabilities
R000	Estimated number of farms	
Currer	nt assets	Current liabilities

F309 F658 F305 F306 F307 F661 F308 F659 <b>F3001</b>	Cash, bonds, savings, stocks, shares, RRSPs <sup>8</sup> Cash and short term investments <sup>9</sup> Accounts receivable Inputs Crops for sale <sup>8</sup> Crops for sale (including greenhouse and nursery) <sup>9</sup> Market livestock Other current assets <sup>9</sup> Total current assets	F401 F436	Federal government <sup>13</sup> Farm Credit Canada <sup>14,17</sup> Advance payments program <sup>14</sup> Provincial government Banks, trusts, etc. Caisses populaires and credit unions Machinery and supply companies Private individuals Others <sup>14</sup>
F3001	Total current assets	F409 <b>F441</b>	Total current liabilities

### Long-term assets

F301	Farm land and buildings owned		Federal government <sup>15</sup>
F302	Breeding and replacement livestock <sup>8</sup>	F481	Farm Credit Canada <sup>16,17</sup>
F662	Breeding, replacement and other livestock <sup>9</sup>	F483	Provincial Government
F303	Machinery and equipment <sup>11</sup>	F480	Banks, trusts, etc.
F317	Machinery and equipment <sup>12</sup>	F485	Caisses populaires and credit unions
F304	Quota	F487	Machinery and supply companies
F656	NISA <sup>10,18</sup>	F488	Private individuals
F673	Long-term investment <sup>9</sup>	F489	Others <sup>16</sup>
F663	Other long-term investment <sup>9</sup>	F4001	Total long-term liabilities
F3002	Total long-term assets		-

### F391 Other assets<sup>8</sup>

# F3003 Total farm assets

# F350 Non-farm assets<sup>8</sup>

### F4002 Total farm liabilities

F450 Non-farm liabilities<sup>8</sup>

### F4003 Total net worth

Long-term liabilities

<sup>8</sup> Applicable before the 1997 reference year.

<sup>9.</sup> Applicable after the 1995 reference year.

<sup>10.</sup> Net Income Stabilization Account, applicable after the 1993 reference year.

<sup>11.</sup> Applicable before the 1999 reference year.

<sup>12.</sup> Applicable after the 1997 reference year.

<sup>13.</sup> Applicable before the 1999 reference year. Current "Federal government" liabilities included Farm Credit Canada (FCC), Advance Payments Program (APP) and other federal programs such as Canada Mortgage and Housing Corporation (CMHC) and Business Development Bank of Canada (BDC) programs.

<sup>14.</sup> Starting with reference year 1999, FCC and APP liabilities are shown as separate categories, and the other federal liabilities are included in the "Others" category.

<sup>15.</sup> Applicable before the 1999 reference year. Long-term "Federal government" liabilities included Farm Credit Canada and other federal programs such as Canada Mortgage and Housing Corporation and Business Development Bank of Canada programs.

<sup>16.</sup> Starting with reference year 1999, FCC liabilities are shown as a separate category, and the other federal liabilities are included in the "Others" category.

<sup>17.</sup> For reference years prior to 1999, FCC liabilities are provided twice in the Standard Output Format: in a separate category and in "Federal government" liabilities.

<sup>18.</sup> The new Canadian Agricultural Income Stabilization (CAIS) program is replacing the Net Income Stabilization Account (NISA). Rules to wind down NISA accounts require producers to withdraw all their funds by March 31, 2009.

### Standard output formats - concluded

### Farm Financial Survey - 1993 to 2003 - concluded

### Capital

R000 Estimated number of farms

### Capital investments

F201	Farm real estate purchased
F202	Land improvements <sup>19</sup>
F203	House construction or major renovation
F212	Manure storage construction or major renovation <sup>20</sup>
F213	Pesticide, chemical or fuel storage construction or major renovation <sup>20</sup>
F204	Other building construction or major renovation <sup>20</sup>
F214	Environmental protection improvements <sup>19</sup>
F205	Breeding and replacement livestock
F206	Quota purchased
F264	Gross expenditures for machinery and equipment <sup>21</sup>
F217	Other farm assets
F2001	Total capital investments <sup>22</sup>

### Long-term capital borrowed F5501 Federal government<sup>26</sup>

F5001	Total long-term capital borrowed
F589	Others <sup>27</sup>
F588	Private individuals
F587	Machinery and supply companies
F585	Caisses populaires and credit unions
F580	Banks, trusts, etc.
F583	Provincial government
F581	Farm credit Canada <sup>27,28</sup>

### Capital sales

F233 Land and buildings
 F237 Machinery and equipment traded in<sup>21</sup>
 F234 Machinery and equipment sold outright
 F235 Quota sold
 F236 Breeding and replacement livestock
 F238 Other farm assets<sup>24</sup>
 F2002 Total capital sales<sup>25</sup>

F250 Total non-farm investments<sup>23</sup>

- 19. Prior to reference year 2001, "Land improvements" included "Environmental protection improvements".
- 20. Prior to reference year 2001, "Other building construction or major renovation" included "Manure storage construction or major renovation" and "Pesticide chemical or fuel storage construction or major renovation".
- 21. Applicable after the 1991 reference year.
- 22. After the 1991 reference year, includes gross expenditures (before trade-in) on farm machinery and equipment.
- 23. Applicable before the 1997 reference year.
- 24. Applicable after the 1995 reference year.
- 25. After the 1991 reference year, includes machinery and equipment traded in.
- 26. Applicable before the 1999 reference year. Amount of capital borrowed from "Federal government" included Farm Credit Canada and other federal agencies such as Canada Mortgage and Housing Corporation and Business Development Bank of Canada.
- 27. Starting with reference year 1999, the amount of capital borrowed from FCC is shown as a separate category, and the borrowings from other federal agencies are included in the "Others" category.
- 28. For reference years prior to 1999, borrowings from FCC are provided twice in the Standard Output Format: in a separate category and in the "Federal government" category.

### Appendix B Description of CAIS/TDP variables

### **Description of CAIS/TDP variables**

ESAS offers a wide range of physical and financial variables from several survey sources. Those variables available from the CAIS/TDP are listed in **Appendix A**.

The CAIS/TDP suggested variables are listed and described below and on the subsequent pages. All of the 4 digit codes signify aggregations and their contents are listed and described wherever necessary.

### Revenues

### R2040 Total operating revenues – includes:

### R2020 Total crop revenues – includes:

### R2005 Total grain and oilseed revenues – includes:

R400 All wheat – winter wheat, spring wheat, durum wheat, red spring wheat and utility wheat<sup>1</sup>

R401 Oats<sup>1</sup>

R402 Barley<sup>1</sup>

R405 Canola (Rapeseed)<sup>1</sup>

R406 Soybeans<sup>1</sup>

R407 Corn – grain corn and seed corn<sup>1</sup>

R423 Other and non-specified small grains – used when an aggregate amount or an amount for other small grains is reported<sup>1</sup>

R2002 Other and non-specified grains and oilseeds – rye, flaxseed, dry peas and beans (white beans, kidney beans, dry peas, dry lentils and dry pulses) and other and non-specified oilseeds <sup>1</sup>

### R2000 Total other crop revenues - includes:

R410 Potatoes – table potatoes, seed and processing potatoes

R421 fruits

R411 vegetables (non-greenhouse) – artichokes, asparagus, wax and green beans, table beets, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, garlic, horseradish, leeks, lettuce, onions, peas, peppers, pumpkins, radishes, rhubarb, edible rutabagas (turnips), spinach, squash, tomatoes, and vegetable seeds

R412 Tobacco – flue-cured, leaf and dark tobacco

<sup>1.</sup> Data for this variable are imputed to a greater extent for data years 1996 and beyond since the unincorporated source of electronically filed taxation data (EFILE) has no breakdown of grains and oilseeds available.

R2011 Greenhouse, nursery and floriculture products – includes:

- mushrooms
- Greenhouse and nursery products nursery, greenhouse or floriculture operations (Also included: ornamental plants, shrubs and trees; cut and field grown flowers; rooted cuttings; seeds and bulbs; and sod and turf farms)
- christmast trees
- R435 Forage crops (including forage seed) hay, alfalfa, clover and clover seed, alsike clover, timothy and fescue, as well as grass seed farming

R3009 Other crops – includes:

- ginseng
- other field crops sugar beets, hops, mangels and turnips (for livestock feed)
- Maple products maple syrups, maple sugar or maple taffy

### R2025 Total livestock and product revenues – includes:

R2016 Cattle - includes:

- livestock sold cattle steers (feeder and stocker), heifers, cows (dairy and beef), calves and bulls
- embryo transplants<sup>2</sup>
- R441 Swine also referred to as hogs, weaner pigs, gilts, feeders, sows, stags, boars, and pigs

R2017 Poultry and eggs – includes:

- livestock sold poultry chicks, pullets, hens, cockerels, capons, commercial broilers and roasters, turkeys, ducks, geese and other fowl
- eggs
- chicks from hatcheries and hatching eggs<sup>3</sup>
- R443 Sheep and goats sheep, goats, lambs, wool, and goat's milk

R2018 Dairy products and subsidies – includes:

- milk and cream for both fluid and industrial purposes
- dairy subsidies

R2019 Other livestock and products – includes:

- livestock sold other other livestock such as horses, ponies, dogs, etc.
- bees, honey bees, honey (natural and processed), and beeswax
- furs fur-bearing animals raised in captivity and/or fur pelts, includes fox ranching, chinchilla ranching, mink ranching, and rabbit farming
- PMU (pregnant mare's urine)
- aquaculture<sup>3</sup>
- artificial insemination, semen, stud service<sup>3</sup> and embryo transplants<sup>4</sup>

<sup>2.</sup> Prior to 1996, included also artificial insemination, semen and stud service. This variable is no longer available since 1997.

<sup>3.</sup> Only available since 1996 in the CAIS/TDP.

<sup>4.</sup> Embryo transplants are included since 1997.

### R2030 Total other revenues - includes:

- R3011 Program payments and insurance proceeds includes income from provincial stabilization programs, the now-terminated Gross Revenue Insurance Plan (GRIP), payments and other subsidies (such as hog incentive programs, acreage payments, assistance for clearing land and government grants), plus aggregate amounts reported for subsidies, patronage dividends and reimbursements. Program payments also include insurance proceeds from programs (private and government) for crops and livestock due to adverse weather conditions, disease or other reasons. Disaster assistance payments from federal and provincial programs are also included. Dairy subsidies are not included in program payments nor are Canadian Agricultural Income Stabilization (CAIS) withdrawals of unincorporated farms.
- R475 Custom work and machine rental custom work, contract work, machinery leasing or rental, hauling, custom trucking, harvesting, combining, crop dusting or spraying, seeding, drying, packing, cleaning and treating of seeds

### R2027 Rental income - includes:

- quota rental income (milk quota, tobacco quota, etc.)
- rental income: land and buildings
- other rental income surface rental of oil or natural gas properties, rightof-way or road rent

### R2021 Other forest products – includes:

- wood (incl. stumpage fees) logs, trees, wooden fence posts or any related forest products such as chips or slab wood less logging expenses
- R2004 Cash advances (Net) cash advances less cash advances repayment Note: this includes any Wheat Board Payments reported on statement.

### R2029 Miscellaneous revenues – includes:

- quota refund or levy refunds
- sand or gravel sand, gravel, soil or top soil
- CST
- patronage dividends (grain pools, payments from cooperatives, co-op proceeds, etc.)
- other farm income excluding rental income miscellaneous, other or sundry income
- profit share income (or share)
- inputs bought for resale sold agricultural commodities sold which were bought, but no agricultural process applied to them (fertilizers sold for resale, chemicals sold for resale, wood sold for resale, etc.)
- outputs bought for resale sold agricultural commodities bought in addition to what was grown or produced (grain, fruits, produce, vegetables or berries, etc.)
- horse racing income (<100%) relates to horse racing expenses on next page (used when any horse racing expenses reported)

less inputs bought for resale (see inputs bought for resale above) less outputs bought for resale (see outputs bought for resale above) less horse racing expense (<100%) (see horse racing income above)

### R2045 Total income adjustments – includes:

- R458 Quota sale income
- R469 Capital Cost Allowance (CCA) recaptured capital cost allowance recovered, recaptured from last year, etc.
- R2041 Inventory adjustments includes:
  - mandatory inventory adjustment<sup>5</sup>
  - optional inventory adjustment<sup>5</sup>

R2042 Non-applicable income – income not earned from the sale of farm products

### R2050 Gross farm income for tax purposes (R2040 + R2045)

### **Expenses**

### R2140 Total operating expenses - includes:

### R2105 Total crop expenses – includes:

- R230 Fertilizer and lime
- R235 Pesticides pesticides, herbicides, insecticides and fungicides or any other type of chemical such as sprays or dusts applied to crops or animals
- R240 Seed and plants also ornamental plants, rooted cuttings and bulbs
- R264 Non-specified greenhouse and nursery expenses used when an aggregate amount is reported for greenhouse and nursery (prior to 1990)
- R265 Containers, twine and baling wire bags, containers, twine, all types of materials used to package, contain or ship farm produce or products
- R2102 Other crop expenses includes:
  - irrigation any expense directly associated with irrigation on the farm including water rights
  - crop supplies used when an aggregate or a single amount is reported for "crop supplies"

### R2110 Total livestock expenses – includes:

R245 Cattle purchases – cattle, feeders, stockers, dairy or beef cows, bulls, and calves<sup>6</sup>

<sup>5.</sup> For definitions, please refer to Farming Income Tax Guide available from Canada Revenue Agency.

<sup>6.</sup> Data for this variable are imputed to a greater extent for data years 1996 and beyond since most of the data sources (traditional printed forms and electronic forms for unincorporated farms; General Index of Financial Information - GIFI - for corporations) have no breakdown of livestock purchased available.

- R246 Swine purchases hogs such as service boars, gilts, sows, and weaner pigs<sup>6</sup>
- R247 Poultry and egg purchases chicks, pullets, broilers, layer hens, ducks, geese, turkeys, and other fowl<sup>6</sup>
- R248 Sheep and lamb purchases sheep, lambs, and goats<sup>6</sup>
- R249 Other livestock purchases horses, ponies, minks, foxes, rabbits, ostriches, and bees (or colonies)<sup>6</sup>
- R250 Feed, supplements, straw and bedding hay, straw, feed grains such as oats, barley, and corn; supplements such as salt, minerals, vitamins, concentrates and milk replacer; and beddings items such as shavings, chips, and sawdust
- R255 Veterinary fees, medicine and breeding fees veterinary fees and medicine as well as breeding fees, stud service and semen, embryo transplants, disease testing, neutering or spaying

R2107 Other livestock expenses – includes:

- D.H.I.A. and animal grading Dairy Herd Improvement Association expenses and animal grading
- · dairy or livestock supplies

### R2120 Total machinery expenses – includes:

R270 Small tools

R2111 Net fuel expenses, machinery, truck, auto – includes:

- machinery and truck expenses gasoline, diesel and oil
- automobile expenses (Farm share) gasoline and oil less gasoline tax rebates

R2112 Repairs, licenses and insurance – includes:

- machinery and truck expenses repairs, licenses and insurance
- automobile expenses (Farm share) repairs, insurance and licenses/ permits

### R2135 Total general expenses – includes:

R2121 Salaries (including CPP, QPP, EI) – includes:

 salaries (including CPP, QPP, or EI) – wages and salaries paid to hire help together with the cost of their board. Also includes wages and salaries paid to children and spouses and all employee benefits

less salaries or wages paid to self

R2122 Rent – includes:

- rent (land, buildings and pasture)
- quota rental

<sup>6.</sup> Data for this variable are imputed to a greater extent for data years 1996 and beyond since most of the data sources (traditional printed forms and electronic forms for unincorporated farms; General Index of Financial Information - GIFI - for corporations) have no breakdown of livestock purchased available.

- R275 Insurance
- R285 Telephone (farm share)
- R2123 Net electricity (farm share) includes:
  - electricity (farm share) less electricity rebates
- R295 Heating fuel (farm share) natural gas, coal or oil to heat farm buildings, as well as curing fuel for tobacco and fuel for crop-drying or greenhouses
- R300 Custom work and machine rental harvesting, combining, baling, threshing, crop dusting and spraying, soil preparation, planting and cultivating, grain drying, seed cleaning and treating, sheep dipping and shearing, livestock spraying, soil testing, blacksmithing, animal boarding and grooming, slaughtering, butchering, cutting and wrapping; and rental or leasing of machinery used for purpose of generating farm income
- R2126 Net interest expenses includes interest paid on real estate mortgages, machinery loans, etc.

  less interest rebates
- R2127 Net property tax includes:
  - property taxes on agricultural land and buildings as well as farm share of principal dwelling, also school and municipal taxes less property tax or land rebates
- R2128 Building and fence repairs
- R2129 Marketing expenses includes:
  - freight and trucking transportation of agricultural products to market
  - selling costs commissions, auctioneering charges, or road side stands
  - marketing board fees e.g., Milk Marketing Board, Egg Marketing Board, also dairy levies, milk quota or quota penalties
- R2131 Miscellaneous farm expenses includes:
  - · accounting, legal, office, advertising, memberships, subscriptions
  - insurance program overpayment recapture
  - share expenses
  - sand, soil and gravel
  - other farm expenses miscellaneous or sundry
  - farm supplies e.g., oxygen and acetylene
  - stabilization levies or fees (government levies)
  - maple product expenses when aggregate reported
  - wood expenses when aggregate reported
  - · raising expenses when aggregate reported
  - expense for bad debts (incorporated farms only)
  - business use of home expense

less cost for saleable products consumed less personal or non-business expenses

# R2500 Net operating income - R2040 total operating revenues less R2140 total operating expenses

### R2145 Total expense adjustments – includes:

- R310 Clearing and improving land drilling or digging wells, removing stumps or rocks, etc.
- R316 Tile drainage
- R2141 Inventory adjustments includes:
  - mandatory inventory adjustment<sup>7</sup>
  - optional inventory adjustment<sup>7</sup>
- R330 Capital cost allowance applies to amount deducted for depreciable property
- R331 Allowance on eligible capital property all eligible capital expenditures to purchase intangible capital property for use in the farm business, e.g., milk quotas, tobacco quotas or other government rights for an unlimited period
- R350 Non-applicable expenses expenses not incurred in order to produce farm income
- R2142 Other expense adjustments includes:
  - · quota purchased
  - · capital tax

### R2150 Total expenses for tax purposes (R2140 + R2145)

### Additions and disposals of assets - 1993 to 1999 taxation years8

You will find below the more common depreciable properties a farming business may use. For a more complete list of these properties or to obtain the capital cost allowance rates for each classes, refer to the **Farming Income Tax Guide**.

### Equipment (S140 and S240)

- boats and component parts
- bee equipment
- grain or seed cleaners
- storage buildings
- drawn hay bailers and stookers
- tools over \$200
- silo and silo fillers, etc.
- aircraft acquired after May 25, 1976
- electric-generating equipment acquired before May 26, 1976 (not exceeding 15 Kw)
- automobiles (including passenger vehicles Class 10.1)
- tractors, trailers, trucks, wagons, and sleighs, etc.

<sup>7.</sup> For definitions, please refer to Farming Income Tax Guide available from Canada Revenue Agency.

<sup>8.</sup> All sectors covered to 1995. From 1996-1999, data series only covers incorporated sector and communal farming organizations. Series discontinued after 1999 data.

- computer hardware and systems software
- tools under \$200
- aircrafts acquired before May 26, 1976
- roads and other surface areas (paved or concrete)
- wind-energy conversion equipment

Before the 1996 taxation year, equipment includes classes 7 to 10, 12, 16, 17 and 34.

### Building (S141 and S241)

- buildings acquired after 1987
- dams
- · permanent piping
- buildings acquired between 1978 and 1988
- cement, steel, or stone docks
- cement or stone breakwaters
- wood breakwaters
- greenhouses
- fences all types
- wood, galvanized or portable buildings and component parts

Before the 1996 taxation year, building includes classes 1 to 6.

### Land (S142 and S242)

Before the 1996 taxation year, land includes class 55.

### Quota<sup>9</sup> (S150 and S250)

Before the 1996 taxation year, quota includes class 50.

### Other9 (S160 and S260)

Before the 1996 taxation year, other includes class 60.

Total (S198 and S298)

### Off-farm income<sup>10</sup>

### Total off-farm income - includes:

T6010<sup>11</sup> Wages and salaries – includes:

- employment income before deductions
- other employment income including tips and gratuities

T6020 Net business income

T6030 Net professional income

T6040 Net commission income

<sup>9.</sup> Agriculture Division of Statistics Canada created these classes.

<sup>10.</sup> The items that follow (except TCHIL, FAQUE, FABC, FABEN and some of the 4-digit codes) are all from the Canada Revenue Agency Taxation T1 General Taxation Form, which are defined in Your Guide: Federal and Provincial Tax Guide and Returns.

<sup>11.</sup> Starting with the 1999 data, the total of wages and salaries in the statistical series on off-farm family income includes taxexempt employment income earned on an Indian reserve. Starting in 2000, this change is also reflected in the off-farm operator income series.

### T6050 Net fishing income

### T6060 Net off-farm self-employment income

### T6070 Investment income – includes:

- taxable amount of dividends
- net rental income
- interest and other investment income
- net limited partnership income

### T6080 Pension income – includes:

- Old Age Security pension
- CPP and QPP benefits
- other pensions or superannuation
- net federal supplements

### T6090 Other off-farm income – includes:

- family allowance payments (applicable before 1993)
- Employment Insurance benefits<sup>12</sup>
- Taxable amount of support payments received
- other income
- Worker's compensation benefits
- social assistance payments
- TCHIL Canada Child Tax Benefit<sup>13</sup>
- FAQUE Quebec family allowance<sup>14</sup>
- FABC British Columbia family allowance<sup>15</sup>
- FABEN family allowance<sup>16</sup>

T6092 RRSP (registered retirement savings plan income)<sup>17</sup>

T6095 Total other off-farm income

### T6105 Total off-farm income (excluding taxable capital gains)

T6091 Taxable capital gains

### T6100 Total off-farm income (including taxable capital gains)

<sup>12.</sup> On July 1, 1996, the Unemployment Insurance program officially became known as the Employment Insurance program.

<sup>13.</sup> The Canada Child Tax Benefit (CCTB) program, which started in July 1998 in support of the National Child Benefit initiative, replaces the previous Child Tax Benefit (CTB) program. The CTB was introduced in January 1993, replacing a system of universal family allowances and child tax credits. These benefits were not included in the 1993 off-farm income estimates.

<sup>14.</sup> Applicable for the 1994 to 1996 reference years. These benefits were only included in the off-farm family income estimates.

<sup>15.</sup> Applicable for the 1996 reference year. These benefits were only included in the off-farm family income estimates.

<sup>16.</sup> Family allowances for Alberta, British Columbia, New Brunswick and Quebec are included under FABEN since 1997; provincial family allowances for Nova Scotia, Ontario and Saskatchewan, since 1998; and those for Newfoundland and Labrador, since 1999. Provincial family allowances are only included in the statistical series on off-farm family income.

<sup>17.</sup> Starting in 1999, only RRSP income of people aged 65 or older is included in the statistical series on off-farm family income. Starting in 2000, this change is also reflected in the off-farm operator income series.

### Appendix C Sample and methodology of the data sources

### Canadian Agriculture Income Stabilization and Taxation Data Program

### The Sample

The Canadian Agriculture Income Stabilization and Taxation Data Program (CAIS/TDP) samples unincorporated and incorporated taxfiler records annually to estimate a range of financial agricultural variables. Detailed income and expenses and off-farm income of operators and farm families compose the variables produced by the CAIS/TDP. For the taxation year 2003, this sample included almost 146,000 records<sup>1</sup> (133,000 unincorporated farms and 13,000 incorporated farms).

Starting with the 1990 taxation year, the sample includes both incorporated and unincorporated sectors in all of the provinces.

### The Methodology

CAIS/TDP data are compiled from two separate sources: the Self-Employment File for Agriculture (SEFA), from which a sample of unincorporated farm tax returns is randomly selected; and the CORTAX<sup>2</sup> (Corporation Tax Processing System) file, from which is selected a random sample of tax returns filed by incorporated operations classified as farms under the North American Industry Classification System (NAICS)<sup>3</sup> and that have sales exceeding \$25,000. In 2003, the sampling rates of the unincorporated sector varied from a complete census in Newfoundland and Labrador to about 27% in Quebec. In the incorporated sector, the sampling rates ranged from a complete census in the Atlantic provinces to about 39% in Ontario.

The source of data of the unincorporated sector is currently comprised of three different types of taxfiler returns: traditional printed forms, electronic forms (since 1992) and joint CAIS-CRA<sup>4</sup> tax returns (since 1997). Unincorporated farm data originating from printed forms are captured by CRA staff at several CRA regional taxation centres and forwarded to Statistics Canada in electronic format. CRA also supplies Statistics Canada with the electronically filed returns and data from the joint CAIS-CRA farming return throughout the year.

For the incorporated sector, Statistics Canada captured all of the financial data (i.e. detailed revenues, expenses, additions and disposals) from corporate farm taxation returns up to and including the 1999 data year. Starting with the 2000 taxation year, corporate farming data have been supplied electronically by CRA from a file termed General Index of Financial Information (GIFI).

Data from all sources (unincorporated, incorporated) are subjected to a series of customized editing and imputation procedures designed and updated annually by Statistics Canada. Top contributors for each province are verified for accuracy for all income and expense variables. Raw data are eventually expanded by the sampling "weight" (adjusted by partnership share if applicable), and aggregated to arrive at final estimates designed to represent the entire farm taxfiler population.

More information on the sample and methodology of the Canadian Agricultural Income Stabilization and Taxation Data Program is available in the publication Farm and Off-Farm Income Statistics (refer to Section 3.1 entitled Farm and Off-Farm Income Statistics — Internet publications).

<sup>1.</sup> Refers to the number of usable records with operating revenues equal to or greater than \$10,000.

<sup>2.</sup> Prior to reference year 2001, the source for incorporated operations was the CORPAC (corporate accounting and collections system) file.

<sup>3.</sup> Prior to the reference year 2001, operations were classified as farms under the Standard Industrial Classification (SIC).

<sup>4.</sup> CAIS: Canadian Agricultural Income Stabilization. CRA: Canada Revenue Agency.

**Note**: Since the 1993 taxation year, communal farming organizations have been in-scope for the Canadian Agricultural Income Stabilization and Taxation Data Program. A census of communal organizations that reported farming income on their T3 Trust Income Tax and Information Return is performed. Estimates with or without these organizations can be obtained.

### Canadian Agricultural Income Stabilization and Taxation Data Program - Off-farm income

There are three statistical series on off-farm income: farm operators operating incorporated or unincorporated agricultural holdings; farm operators operating single unincorporated agricultural holdings; and families operating single unincorporated agricultural holdings.

Items in total operators' off-farm income are estimated using the same approach as in the case of farm items except that the "weight" is not multiplied by the partnership share of the entity. However, the weight of entities involved in more than one farm is divided by the number of occurrences. These procedures also take into account corporations that do not provide the social insurance number of shareholders on their tax return. The calculated weighted off-farm income items are summed by domain to produce the total off-farm income items. These procedures take into account the possibility that the sampled records reporting farm income could include sales that should not be considered as agricultural sales.

The sample and methodology for estimates on off-farm family income differ somewhat from the rest of the CAIS/TDP because they are the result of a record linkage. CAIS/TDP tax records are linked with a family file to produce total estimates for farm families. The family file is created by the Small Area and Administrative Data Division (SAADD) within Statistics Canada. SAADD's family file (T1FF) combines individual taxation records in order to create groups modeled after Census families<sup>5</sup>.

The CAIS/TDP target family population (for off-farm family income statistics) is designed to include only those families operating single unincorporated agricultural holdings (single-farm families). The CAIS/TDP family sample is in effect a subsample of the regular CAIS/TDP sample.

More information on the sample and methodology of the CAIS/TDP off-farm family estimates is available from Agriculture Division of Statistics Canada (see Section 3.4).

### JUNE CROPS SURVEY

### The sample

The June Crops Survey (JCS) is one of a series of annual probability surveys conducted for the main field crops in Canada in order to collect and disseminate data on seeding intentions, acreage seeded and harvested, yields, production and inventories.

In 2003, a sample of approximately 39,900 farms was drawn. This survey includes the acreage that growers seeded with field crops at the beginning of the 2002-2003 crop year.

<sup>5.</sup> Census family refers to a married couple or a common-law couple with or without children at home; or a lone-parent of any marital status, with at least one child living at home. There is no restriction on the age of the children. Children must report a marital status other than "married" or "living common-law" and have no child living in the household. Previous to the 1998 data, children had to report "single" as their marital status. Starting with 2000 data, same-sex couples are also included.

### The methodology

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

Only the "list"-type frame is used for the June Crops Survey since 1996. In 1998, this "list"-type frame represented all agricultural holdings in Canada as enumerated in the Census of Agriculture, except for institutional farms, community pastures, farms on Indian reserves and farms in the territories. Prior to 1998, Newfoundland and Labrador was excluded from the frame. This frame is stratified into homogeneous groups according to census characteristics (for example: farm size, productive acreage and farm type) and also according to provincial geographic boundaries.

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

**Note:** The June Crops Survey data loaded on the WFDB and used for ESAS are survey indicators and may differ from the estimates released by the Crops Section. The estimates in the WFDB have not been adjusted to take into account administrative data and to reflect the results of the 1996 and 2001 Census of Agriculture.

### **JULY LIVESTOCK SURVEY**

### The sample

The July Livestock Survey (JLS) is a probability survey conducted each year. The farms surveyed are asked to report all animals within the agricultural holding, regardless of ownership. In 2003, a sample was drawn of approximately 26,600 farms. Data were collected by means of the "Computer-Assisted Telephone Interviews" (CATI) system.

### The methodology

Every five years, through the Census of Agriculture, information is gathered on all farms in Canada. Census farms include all agricultural holdings whose output is intended for sale, including feedlots, institutional farms, farms on Indian reserves, community pasture reserves, etc.

Only the "list"-type frame is used for the July Livestock Survey since 1996<sup>6</sup>. In 1998, this list represented all farms identified in the most recent Census, except for institutional farms, community pastures, farms on Indian reserves and farms in the territories. In 1993 and 1994, Newfoundland and Labrador was excluded from the frame.

The data collection process is conducted by CATI. With the CATI system, edit procedures can be carried out during the interview itself, thus lessening the need for telephone follow-up and reducing the respondent burden. Farmers must report their inventories as of July 1. The questionnaires are put through numerous edit and imputation procedures before the final estimates are produced.

<sup>6.</sup> The Area Frame Survey was conducted for the last time in 1995.

**Note:** Total estimates on cattle and calves, pigs, and sheep and lambs inventory that were obtained from the July Livestock Survey and that are part of the WFDB and of ESAS have been adjusted to take into account administrative data and to reflect the results of the 1996 and 2001 Census of Agriculture.

### **FARM FINANCIAL SURVEY**

### The sample

Before 1992, the Farm Financial Survey (FFS) was known as the Farm Credit Corporation (FCC) survey. The FCC survey was conducted in 1981, 1984, 1988 and 1990 (collecting data for 1980, 1983, 1987 and 1989). Beginning in 1992, the FFS sampled over 12,000 farms to collect annual detailed financial data. In 1993, however, due to budget constraints, the FFS reduced its sample to include only the Prairie provinces and British Columbia. Between 1994 and 2002, this survey has been conducted on a biennial basis only. In 2003, it was decided that this survey would be conducted on and annual basis. For 2004, the sample size was approximately 21,100 farms. While the relatively small sample size may constrain some disaggregations, it is capable of providing reliable financial agricultural data.

**Note:** The target population of the Farm Financial Survey (FFS) for the 1997 reference year excluded operations that reported less than \$10,000 in gross farm receipts on the Census or in the FFS. (The most recent Census is used as the universe for the FFS samples.) The 1991 to 1995 FFS data files have been adjusted to match the 1997 target population by excluding operations that reported less than \$10,000 in gross farm receipts on the Census. These exclusions have reduced the totals somewhat for those reference years.

### The methodology

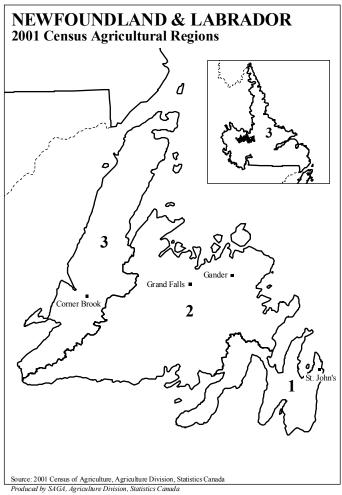
The Farm Financial Survey uses only a list frame since 1996 to estimate detailed financial variables. In past survey occasions, fiscal farms were added to the frame. For the FFS 2004, however, fiscal farms were not added. Instead, farms contacted by the 2003 Farm Update Survey (FUS) were the main source of additional farms. Completed survey questionnaires are subjected to several edit and imputation procedures before the actual estimates are finalized. Completed FFS questionnaires are subjected to several edit and imputation procedures before the actual estimates are finalized.

More information on the sample and methodology of the Farm Financial Survey is available in the publication *Farm Financial Survey* (see Section 3.2).

More detailed information on the methodology of the Canadian Agricultural Income and Stabilization and Taxation Data Program, the June Crops Survey, the July Livestock Survey and the Farm Financial Survey is available from Agriculture Division of Statistics Canada (see Section 3.4).

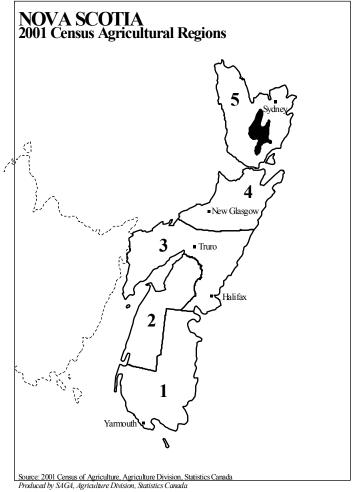
<sup>6.</sup> The Area Frame Survey was conducted for the last time in 1995.

### Appendix D Census maps



### **Newfoundland & Labrador**

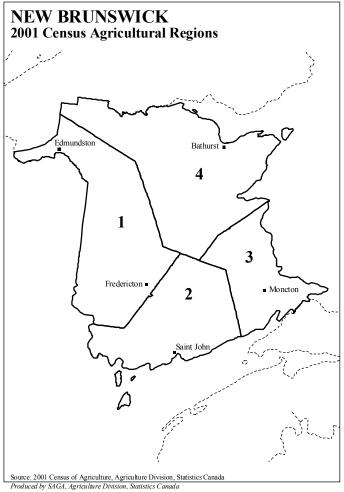
- 1
- 2
- Census Agricultural Region 1 Census Agricultural Region 2 Census Agricultural Region 3



### **Nova Scotia**

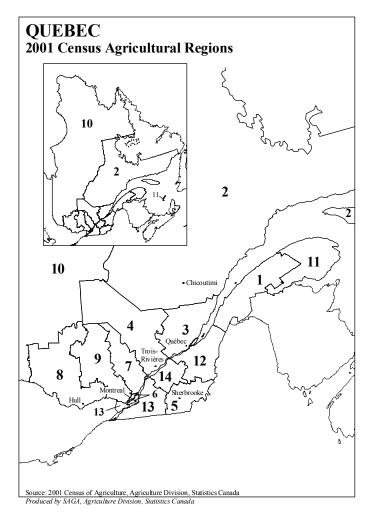
- Census Agricultural Region 1 Census Agricultural Region 2 Census Agricultural Region 3

- Census Agricultural Region 4 Census Agricultural Region 5



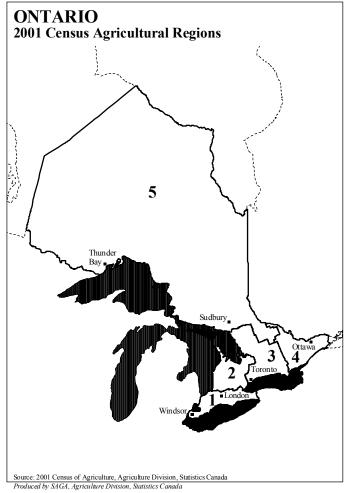
### **New Brunswick**

- Census Agricultural Region 1 Census Agricultural Region 2 Census Agricultural Region 3 Census Agricultural Region 4



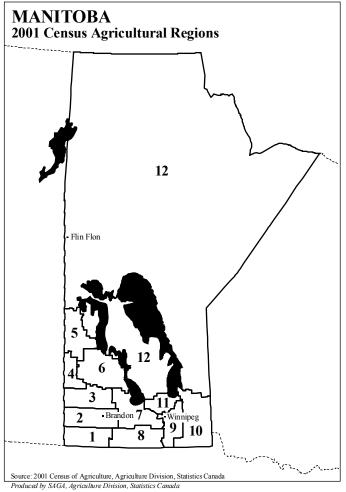
### Quebec

- 1 Bas-Saint-Laurent
- 2 Saguenay, Lac-Saint-Jean, Côte-Nord
- 3 Québec
- 4 Mauricie
- 5 Estrie
- 6 Montréal, Laval
- 7 Lanaudière
- 8 Outaouais
- 9 Laurentides
- 10 Abitibi-Témiscamingue, Nord-du-Québec
- 11 Gaspésie, Îles-de-la-Madeleine
- 12 Chaudière, Appalaches
- 13 Montérégie
- 14 Centre-du-Québec



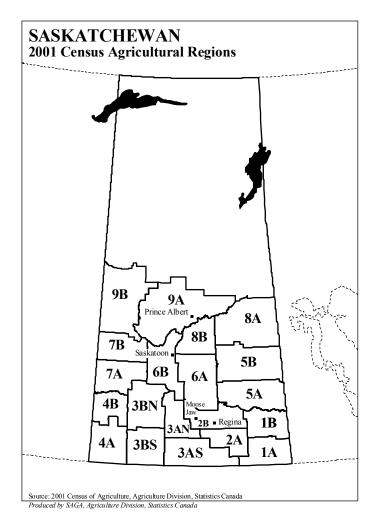
### Ontario

- Southern Ontario Region Western Ontario Region 1
- 2
- 3 Central Ontario Region
- 4
- Eastern Ontario Region Northern Ontario Region



### Manitoba

- 1 Census Agricultural Region 1
- 2 Census Agricultural Region 2
- 3 Census Agricultural Region 3
- 4 Census Agricultural Region 4
- 5 Census Agricultural Region 5
- 6 Census Agricultural Region 6
- Census Agricultural Region 7 7
- 8 Census Agricultural Region 8
- 9 Census Agricultural Region 9
- 10 Census Agricultural Region 10
- Census Agricultural Region 11 11
- 12 Census Agricultural Region 12



### Saskatchewan

1A	Census Agricultural Region 1A	5A	Census Agricultural Region 5A
1B	Census Agricultural Region 1B	5B	Census Agricultural Region 5B
2A	Census Agricultural Region 2A	6A	Census Agricultural Region 6A
2B	Census Agricultural Region 2B	6B	Census Agricultural Region 6B
3AN	Census Agricultural Region 3AN	7A	Census Agricultural Region 7A
3AS	Census Agricultural Region 3AS	7B	Census Agricultural Region 7B
3BN	Census Agricultural Region 3BN	8A	Census Agricultural Region 8A
3BS	Census Agricultural Region 3BS	8B	Census Agricultural Region 8B
4A	Census Agricultural Region 4A	9A	Census Agricultural Region 9A
4B	Census Agricultural Region 4B	9B	Census Agricultural Region 9B



### **Alberta**

- Census Agricultural Region 1 Census Agricultural Region 2 1
- 2
- Census Agricultural Region 3 3
- 4A Census Agricultural Region 4A 4B Census Agricultural Region 4B
- 5 Census Agricultural Region 5
- Census Agricultural Region 6 6
- 7 Census Agricultural Region 7



### **British Columbia**

- Vancouver Island, Coast Region Lower Mainland, Southwest Region 1
- 2 3 4 Thompson, Okanagan Region
- Kootenay Region Cariboo Region
- 5
- North Coast Region 6
- 7
- Nechako Region Peace River Region 8

### Appendix E Farm Types

Listed below are the 11 standard farm types that serve as a basis in the WFDB.

WFDB NAICS Codes	Farm Types
1111	Oilseed and grain farming
111211	Potato farming
111219	Other vegetable (except potato) and melon farming
1113	Fruit and tree nut farming
1114	Greenhouse, nursery and floriculture production
1119	Other crop farming
112110	Beef cattle ranching and farming, including feedlots
112120	Dairy cattle and milk production
112210	Hog and pig farming
1123	Poultry and egg production
112888	Other animal production

NAICS divides establishments in the agriculture sector in two subsectors: crop production and animal production.

### **Crop production (NAICS code 111)**

This subsector comprises establishments, such as farms, orchards, groves, greenhouses and nurseries, primarily engaged in growing crops, plants, vines, trees and their seeds (excluding those engaged in forestry operations). Industries have been created taking into account input factors, such as suitable land, climatic conditions, type of equipment, and the amount and type of labour required. The production process is typically completed when the raw product or commodity grown reaches the "farm gate" for market, that is, at the point of first sale or price determination. An establishment is classified to a NAICS industry or a national level industry within this subsector provided that fifty percent or more of the establishment's agricultural production consists of the crops of the industry. Establishments with fifty percent or more crop production and with no one product or family of products of an industry accounting for fifty percent of the production are treated as combination crop farms and classified to 11199, All other crop farming, except for establishments with fifty percent or more in the production of oilseeds and grain, which are classified to 11119, Other grain farming.

The WFDB standard farm types under the **Crop production** subsector are:

### Oilseed and grain farming (NAICS code 1111)

This industry group comprises establishments primarily engaged in growing oilseeds and grains. Establishments primarily engaged in producing seeds are classified in the appropriate crop industry.

### Potato farming (NAICS code 111211)

This Canadian industry comprises establishments primarily engaged in growing potatoes and seed potatoes, except sweet potatoes.

### Other vegetable (except potato) and melon farming (NAICS code 111219)

This Canadian industry comprises establishments, not classified to any other Canadian industry, primarily engaged in growing vegetables and melons. Establishments primarily engaged in producing vegetable and melon seeds, except seed potatoes, and vegetable and melon bedding plants are also included in this industry.

### Fruit and tree nut farming (NAICS code 1113)

This industry group comprises establishments primarily engaged in growing fruit and nuts.

### Greenhouse, nursery and floriculture production (NAICS code 1114)

This industry group comprises establishments primarily engaged in growing crops of any kind under cover, growing nursery crops and growing flowers. "Under cover" includes in greenhouses, cold frames, cloth houses, and lath houses. The crops grown are removed at various stages of maturity.

### Other crop farming (NAICS code 1119)

This industry group comprises establishments, not classified to any other industry group, primarily engaged in growing crops, such as tobacco, peanuts, sugarbeets, cotton, sugar cane, hay, agave, herbs and spices, mint, hops, and hay and grass seeds. Combination crop farming and the gathering of maple sap are included in this industry group.

### **Animal production (NAICS code 112)**

This subsector comprises establishments, such as ranches, farms and feedlots, primarily engaged in raising animals, producing animal products and fattening animals. Industries have been created taking into account input factors such as suitable grazing or pasture land, specialized buildings, type of equipment, and the amount and type of labour required. An establishment is classified to a NAICS industry or a national level industry within this subsector provided that fifty percent or more of the establishment's agricultural production consists of the products of that industry. Establishments with fifty percent or more animal production and with no one product or family of products of an industry accounting for fifty percent of the production are treated as combination animal farms and classified to 11299, All other animal production.

The WFDB standard farm types under the **Animal production** subsector are:

### Beef cattle ranching and farming, including feedlots (NAICS code 112110)

This Canadian industry comprises establishments primarily engaged in raising and fattening cattle. The raising of cattle for dairy herd replacements is also included in this industry.

Exclusion(s): Establishments primarily engaged in milking dairy cattle (Dairy cattle and milk production).

### Dairy cattle and milk production (NAICS code 112120)

This Canadian industry comprises establishments primarily engaged in milking dairy cattle.

Exclusion(s): Establishments primarily engaged in: raising, feeding or fattening cattle (Beef cattle ranching and farming, including feedlots); raising dairy herd replacements (Beef cattle ranching and farming, including feedlots); milking goats (Goat farming).

For farms involved in dairy cattle and milk production, the rule of fifty percent or more is altered slightly—only 40% or more of agricultural sales are derived from the sale of dairy products and 10% or more from raising and selling dairy cattle.

### Hog and pig farming (NAICS code 112210)

This Canadian industry group comprises establishments primarily engaged in raising hogs and pigs.

### Poultry and egg production (NAICS code 1123)

This industry group comprises establishments primarily engaged in breeding, hatching and raising poultry for meat or egg production.

### Other animal production (NAICS code 112888)

NAICS code 112888, which has been created by the Agriculture Division of Statistics Canada, is a combination of the two following industry groups: Sheep and goat farming (NAICS code 1124), and Other animal production (NAICS code 1129). The first industry group comprises establishments primarily engaged in raising sheep and goats, and feeding or fattening lambs. The second industry group comprises establishments, not classified to any other industry group, primarily engaged in raising animals, such as bees, horses and other equines, rabbits and other fur-bearing animals, llamas, deer, worms, crickets, laboratory animals and companion animals, for example dogs, cats, pet birds and other pets. The production of animal products, such as honey and other bee products, are also included. Establishments primarily engaged in raising a combination of animals, classified in other industries with no one predominating, are also included in this industry group.