

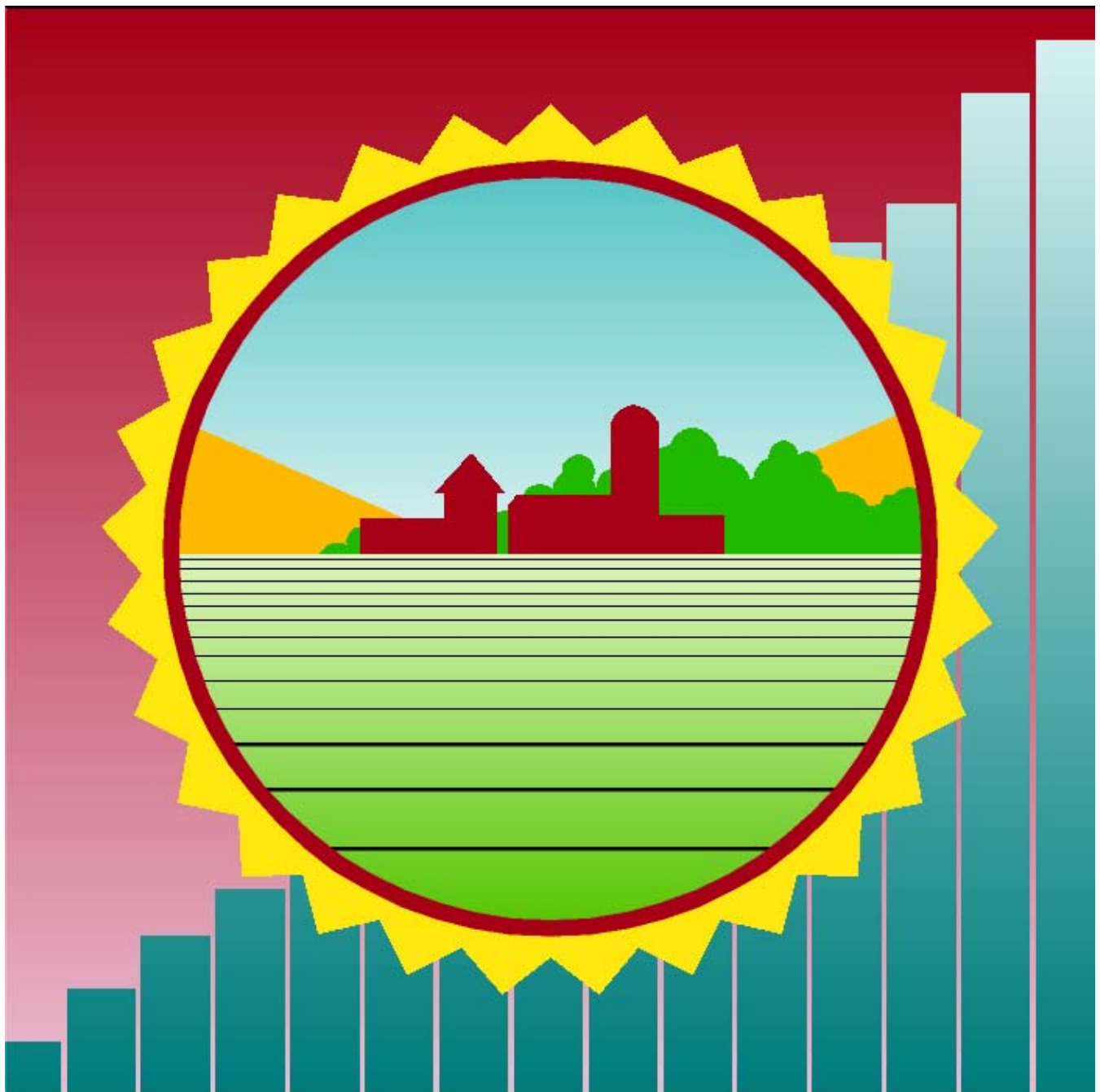


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Extraction System of Agricultural Statistics (ESAS)

User's Guide – 2006

A Product of the Whole Farm Data Projects



Statistics
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Statistique
Canada

Canada



Extraction System of Agricultural Statistics (ESAS) 2006

User's Guide

21F0001XCB

Version: 13.0

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Preface

Agriculture and Agri-Food Canada and Statistics Canada are pleased to provide you with this CD-ROM product available from the Whole Farm Data Projects (WFDP). The Extraction System of Agricultural Statistics (ESAS) provides users with an extensive collection of the most commonly requested physical and financial farm data, available in pre-established or custom formats.

This User's Guide and its accompanying CD-ROM were made possible by the efforts of numerous individuals within both Statistics Canada and Agriculture and Agri-Food Canada. Coordination and guidance were provided by Denis Chartrand, Paul Paradis and Jacques Lemieux from Agriculture Division of Statistics Canada and by Dave Culver of Agriculture and Agri-Food Canada. Michelle Desjardins and Linda Bonenfant from Statistics Canada contributed valuable technical expertise to develop this version of ESAS and Noreen Jones and Louise Larouche updated the documentation. Mélanie Lefebvre, Lina Di Piéto and Lucie Pilon also contributed to this project. The realization of this project would not have been possible without the contribution and guidance provided by the various provincial governments and farm organizations throughout Canada.

Introduction

The **Extraction System of Agricultural Statistics (ESAS)** is a computerized system that enables users to extract predetermined whole farm data estimates by region, farm type, and revenue class. This guide offers step-by-step instructions on how to install and use ESAS. A brief outline of the various options available is also included. ESAS is one in a series of products and services offered by the Whole Farm Data Projects. For more information about this project, consult the [Extraction System of Agricultural Statistics – Reference Manual](#).

This *User's guide* will help to:

- verify that you have the necessary hardware to install ESAS on your computer system;
- acquaint you with the capabilities of the extraction system;
- demonstrate how to use the various system features.

The **ESAS User's Guide** is both a training tool and a reference guide which will guide you through the system. Additional help can be found through an on-line Help menu which was developed in conjunction with this user's guide.

The guide covers a wide variety of topics in seven chapters:

Installation describes the minimum hardware required to run your version of ESAS. Once you have verified that your hardware meets the minimum requirements, you can move on to the easy-to-follow installation instructions.

Getting Started introduces you to the special features of ESAS, and explains how to start-up the system. Remember that help is only a keystroke away.

Tabulation Creation outlines the commands and options available on ESAS to select and extract variables in order to create pre-established or custom tabulations. Each of the five available selection criteria is described in a sub-section of the chapter.

Output and Display Options explains each of the output and display options, including reports, summary reports, and distributional tables. Attention is also given to on-screen display, printing, reorganizing the report, performing calculations including calculating percentage changes, creating graphs, as well as to the creation of disk files and print image files.

Quitting ESAS explains how you can exit ESAS completely or switch from the pre-established to the custom tabulation mode and back.

Tutorials show you how to operate ESAS with step-by-step examples. Some of the features described in the other chapters are demonstrated.

Glossary and Symbols lists and defines a selection of the most commonly used terms found within this guide and familiarizes you with standard symbols used by Statistics Canada.

1. Installation

Because of the volume of data in ESAS, the speed of the system will vary according to the CD-ROM reader and the available memory capacity of your computer system. The minimum hardware requirements and installation instructions for the ESAS CD-ROM are outlined below.

1.1 Hardware requirements

The minimum hardware necessary to run the ESAS CD-ROM are:

- IBM compatible computer Pentium I or better
- 32 Mb of RAM
- 30 Mb of free space on the hard drive (*maximum free hard disk space will enable you to extract more records when producing custom tables*)
- Microsoft Windows NT or higher
- CD-ROM reader drive with appropriate controller and interface cable
- Colour or monochrome monitor
- Mouse recommended
- Printer recommended

1.2 Installation instructions

To install ESAS:

- Insert the ESAS CD-ROM into your CD-ROM reader.
- Click on **Start** and **Run**. In the Browse window, select from the CD-ROM the directory **ESAS2006**, and the file **SETUP.EXE**. Click on **OK** and **OK** again in the Run Window or type **X:\ESAS2006\SETUP.EXE**, where **X** is your compact disc drive letter, then choose **OK**.
- After reading the **Welcome** screen, click on **OK**. Type your name and the information concerning your organization on the second screen and click on **OK**. On the third screen, click on **OK** to continue or on **Change** to go back to the previous screen.
- Destination: The next screen lets you select the drive and directory in which to install ESAS. The default directory is **C:\ESAS2006**. Click on **OK** to continue or click on **Change** if you want to select a different directory (*it is important to select the new directory on that screen instead of the next one, even if it is possible to do so*). In the next screen, click on the large button that looks like a **monitor**.

- When the message **Installation is complete** appears, click on **OK** to terminate the installation.
- Upon completion of the installation, it is advisable to re-start Windows to allow this change to take effect.

Warning!

In order to update ESAS, you will have to reinstall it by following the steps listed on the previous page.

To make sure that you are using the latest version, it would be preferable to delete the directories created during previous installations.

Note: We suggest that you use only the last version of ESAS because the data from previous versions may have been revised.

2. Getting started

This chapter will show you how to:

- start ESAS,
- access on-line HELP,
- choose the best tabulation option,
- use the special features (such as hot keys),
- access the manuals on-line, and
- exit ESAS.

2.1 Starting ESAS

To start ESAS:

1. Ensure that both your computer and the CD-ROM drive are turned on and that the CD-ROM disc is in the drive.
2. From the **Start** menu, select **Programs, Statistics_Statistique Canada** and the **ESAS_SESA 2006** item that was created during the installation.


A standard Statistics Canada screen will appear offering you a choice of either English or French texts. This will be followed by two screens outlining the *Limited Use Data Product Licence Agreement*. This agreement includes all the rules and regulations regarding the use of this Statistics Canada data product. First-time users should read it carefully before indicating their compliance. If you have any questions or require any additional information about this agreement, a telephone number is provided.

3. When first installing ESAS, in the **CD-ROM reader drive** window, click on **Select**. From the **Select Directory** window, click on **Select** or **Cancel** to go back to the previous screen, and then click on **Select** or **Continue**. If ESAS cannot find the Acrobat Reader, then in the **Software Acrobat Reader** window, select the working language to start the installation of the software.
4. If ESAS cannot find the data base files, you will be prompted to provide the necessary information. When ESAS recognizes the data base files, the presentation screen will appear. Press **Continue** to access ESAS.

2.2 Accessing on-line HELP

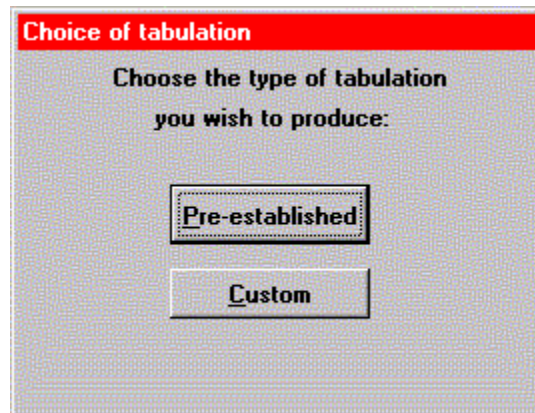
The on-line HELP function consists of a series of screens designed to provide you with important background information and practical guidance wherever necessary.

1. To activate the HELP function, press **F1 : HELP**.
2. To exit the HELP function and return to your activity, you can either click on the upper right **close box** of the help window or click once on the question mark and then on **Close**, or press **Esc**.

 close box

2.3 Primary options

The Extraction System of Agricultural Statistics (ESAS) was developed to serve you in two unique ways. Using standard output formats, ESAS compiles pre-established tables featuring the disaggregated physical and financial data that is characteristic of the Whole Farm Data Base (WFDB). If the pre-established tables do not satisfy your particular needs, ESAS provides you with the option of creating a custom tabulation. This option allows you to rapidly look at specific data by enabling you to select only the variables you require. Custom tabulation allows you to produce tables by combining the available data types or data variables such as years, regions, farm types, and revenue classes.



Click on the type of tabulation you wish to produce.

2.4 Menu bar

Once you have determined your tabulation requirements, the system will display the main menu bar along the top of the screen with a status box listing the current selections.



The menu bar controls the search, display and output selections of the system. The same menu bar is used for both pre-established and custom tabulations.

It can be accessed in a number of ways. You can simply click on the menu item you wish to access. Otherwise, press the **Alt** key to activate the first function on the menu bar and then use the left and right arrow keys (←→) followed by the **ENTER** key. You can access a specific menu function by pressing the **Alt** key plus the underlined letter of the desired menu item (for example, **Alt Y** will activate the **Year** function).

2.5 Drop-down menus

Drop-down menus are selection boxes which appear when you choose an item from the main menu bar. Each menu lists the options available for that particular menu choice. Choosing an item from the drop-down menu may initiate a subsequent drop-down menu and another choice.

Specific items in each drop-down menu can be selected by clicking on them with your mouse, moving to them with the up and down arrow keys (↑↓), or by using hot keys (described in section 2.6).

2.6 Hot keys

ESAS has been designed with a number of hot keys for quick and easy access to the main menu bar, the drop-down menus, and the various screens. The hot keys are either letters or numbers and are easily identified because they are underlined.

The hot keys for the main menu bar are:

<u>D</u> ata (D)	<u>Y</u> ear (Y)	<u>P</u> rovince (P)	<u>F</u> arm Type (F)	<u>R</u> evenue Class (R)	<u>O</u> utput (O)	<u>Q</u> uit (Q)	<u>M</u> anuals (M)
---------------------	---------------------	-------------------------	--------------------------	------------------------------	-----------------------	---------------------	------------------------

2.7 Manuals

In addition to the HELP function, you now have access to the *ESAS Reference Manual* and the *ESAS User's Guide* directly from ESAS. Select the desired document from the **Manuals** function on the menu bar by clicking on the function itself or by pressing **Alt M**.

Then click on **Reference Manual** or press the hot key **R** to access the *ESAS Reference Manual*. Click on **User's Guide** or press the hot key **U** to access the *ESAS User's Guide*.

The [ESAS Reference Manual](#) is designed to familiarize users of ESAS with the structure and quality of its data, as well as with other WFDB products and services.

The *ESAS User's Guide* is both a training tool and a reference guide which will guide you through the system with its many chapters and tutorials.

In order to have access to these manuals online, you must have the Acrobat Reader software on your computer.

2.8 Quitting ESAS

To leave the system:

1. Select the **QUIT** option on the menu bar.
2. From the drop-down menu select **Yes**.
3. Press **ENTER**.
4. You will be prompted to confirm this choice with the message **Are you sure?** and the options to select **Yes** or **Cancel**.

3. Tabulation creation

By combining the variables offered, you can create a large variety of pre-established and custom tables.

3.1 Pre-established tabulation

A status box on the screen will keep track of all of your current selections:

Pre-established : Current selections	
Type of data	
Reference year	
Province	
Census agricultural region	
Farm type	Total of farm types
Revenue class	Total of revenue classes

3.1.1 Data

ESAS contains many types of data. When **Data** is selected, a drop-down menu (for pre-established tables) or a window (for custom tables), similar to the one below, appears listing the available types of data.

TYPE OF DATA
Revenues & Expenses (Unincorporated + Incorporated)
Revenues & Expenses (Unincorporated)
Off-Farm Income (Unincorporated)
Off-Farm Income (Unincorporated + Incorporated)
Additions & Disposals (Unincorporated + Incorporated)
Revenues & Expenses (Farm families)
Off-Farm Income (Farm families)
Crops
Livestock
Assets & Liabilities
Capital
PRESS <ESC> TO CLOSE POPUP

3.1.2 Year

For some types of data, ESAS can provide data as far back as 1994. A message will appear indicating if data are not available for a chosen year. The years and provinces for which data are not available are listed below by type of data.

Unavailable data		
Type of data	Year	Province
Additions & Disposals	2000 to 2004	All
Farm families	2004	All
Crops	1994 to 1997	Newfoundland and Labrador
Livestock	1994	Newfoundland and Labrador
Assets & Liabilities, Capital	1994, 1996, 1998, 2000	All

3.1.3 Province

The Province drop-down menu lists 11 options: data for the ten provinces and a total. Information for all provinces, except Newfoundland and Labrador and Prince Edward Island, is available at the **Census Agricultural Regions (CARs)** level. This more detailed breakdown is indicated by an arrow after the province. A message will appear indicating when data are not available for a chosen province or region. The breakdowns for each of the provinces are:

- Nova Scotia**
- a Total of regions
 - b Census Agricultural Region 1
 - c Census Agricultural Region 2
 - d Census Agricultural Region 3
 - e Census Agricultural Region 4
 - f Census Agricultural Region 5
- New Brunswick**
- a Total of regions
 - b Census Agricultural Region 1
 - c Census Agricultural Region 2
 - d Census Agricultural Region 3
 - e Census Agricultural Region 4
- Québec**
- a Total of regions
 - b Bas-Saint-Laurent
 - c Saguenay, Lac-Saint-Jean, Côte-Nord
 - d Québec

- e Mauricie
 - f Estrie
 - g Montréal, Laval
 - h Lanaudière
 - i Outaouais
 - j Laurentides
 - k Abitibi-Témiscamingue, Nord-du-Québec
 - l Gaspésie, Îles-de-la-Madeleine
 - m Chaudière, Appalaches
 - n Montérégie
 - o Centre-du-Québec
- Ontario**
- a Total of regions
 - b Southern Ontario Region
 - c Western Ontario Region
 - d Central Ontario Region
 - e Eastern Ontario Region
 - f Northern Ontario Region
- Manitoba**
- a Total of regions
 - b Census Agricultural Region 1
 - c Census Agricultural Region 2
 - d Census Agricultural Region 3
 - e Census Agricultural Region 4
 - f Census Agricultural Region 5
 - g Census Agricultural Region 6
 - h Census Agricultural Region 7
 - i Census Agricultural Region 8
 - j Census Agricultural Region 9
 - k Census Agricultural Region 10
 - l Census Agricultural Region 11
 - m Census Agricultural Region 12
- Saskatchewan**
- a Total of regions
 - b Census Agricultural Region 1A
 - c Census Agricultural Region 1B
 - d Census Agricultural Region 2A
 - e Census Agricultural Region 2B
 - f Census Agricultural Region 3AN
 - g Census Agricultural Region 3AS
 - h Census Agricultural Region 3BN
 - i Census Agricultural Region 3BS
 - j Census Agricultural Region 4A
 - k Census Agricultural Region 4B
 - l Census Agricultural Region 5A
 - m Census Agricultural Region 5B
 - n Census Agricultural Region 6A
 - o Census Agricultural Region 6B
 - p Census Agricultural Region 7A
 - q Census Agricultural Region 7B
 - r Census Agricultural Region 8A
 - s Census Agricultural Region 8B
 - t Census Agricultural Region 9A
 - u Census Agricultural Region 9B

- Alberta**
- a Total of regions
 - b Census Agricultural Region 1
 - c Census Agricultural Region 2
 - d Census Agricultural Region 3
 - e Census Agricultural Region 4A
 - f Census Agricultural Region 4B
 - g Census Agricultural Region 5
 - h Census Agricultural Region 6
 - i Census Agricultural Region 7

- British Columbia**
- a Total of regions
 - b Vancouver Island-Coast Region
 - c Lower Mainland-Southwest Region
 - d Thompson-Okanagan Region
 - e Kootenay Region
 - f Cariboo Region
 - g North Coast Region
 - h Nechako Region
 - i Peace River Region

3.1.4 Farm type

ESAS offers a selection of 11 farm types to choose from:

- Oilseed and grain farming
- Potato farming
- Other vegetable (except potato) and melon farming
- Fruit and tree nut farming
- Greenhouse, nursery and floriculture production
- Other crop farming
- Beef cattle ranching and farming, including feedlots
- Dairy cattle and milk production
- Hog and pig farming
- Poultry and egg production
- Other animal production

You also have the option of selecting **Total of farm types**.

3.1.5 Revenue Class

ESAS provides data for farms with reported revenues of **\$10,000 and over**. These farms are divided using standard revenue classes. Revenue includes the sales of agricultural commodities plus agricultural payments and subsidies.

The revenue levels used by the Census of Agriculture are:

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

You also have the option of selecting **Total of revenue classes** for the sum of all revenue classes.

3.2 Custom tabulation

The advantage of using "Custom tabulation" is that for all the pre-established variables described in the preceding sections, you can make multiple selections and choose variables in specific combinations to meet your needs.

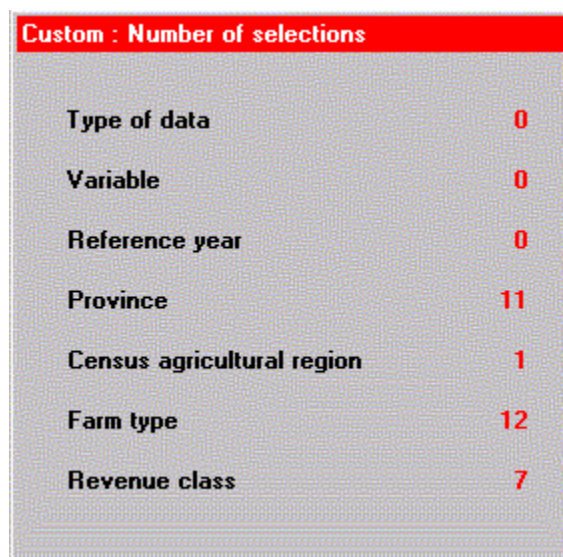
3.2.1 Multiple selections

The main menu options available for **Custom** tabulation are identical to those for **Pre-established** tabulation. Using the same selection criteria, you can choose multiple items for disaggregation. To do this:

1. click on the chosen menu item or move your cursor to the menu item and press **ENTER**.
2. A window will appear listing all of the separate variables offered for that particular menu choice. If you wish to choose all of the items, press **Esc** to exit the window or click outside of the window.

The same procedure applies when a selection initiates a second window.

A status box in the middle of the screen will keep track of the number of selections for each of the menu functions.



Custom : Number of selections	
Type of data	0
Variable	0
Reference year	0
Province	11
Census agricultural region	1
Farm type	12
Revenue class	7

4. Output and display options

This chapter describes the output and display options available for pre-established tables and custom tabulations.

When you select **Output** on the main menu bar, a window appears showing the available output and display options.

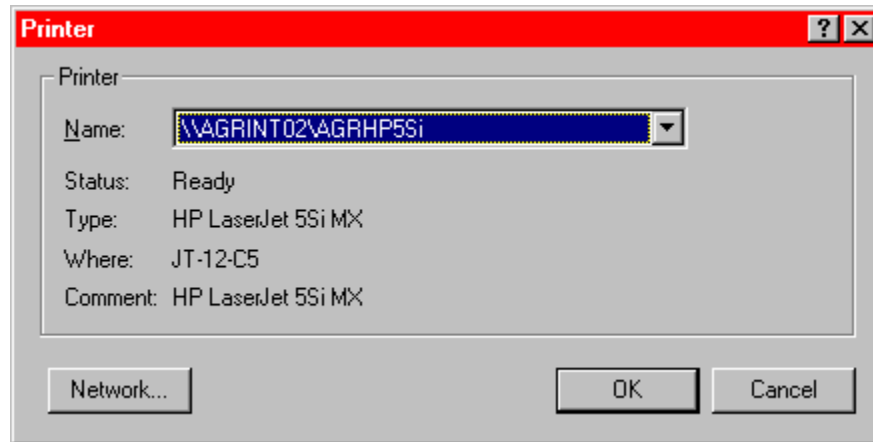
4.1 Pre-established tabulation

Once you have made selections for each of the items listed in the status box, you are ready to produce either:

- a report,
- a **summary report**¹, or
- a **distributional table**².

The availability of the output formats varies according to the type of data selected.

This is where the **Print Setup** option will appear which will let you select a printer if you don't want to use the default printer in your Windows environment.



Once you have chosen a compatible printer, printing an ESAS report is as simple as pressing a button.

1. This output is only available for "Revenues and Expenses".
2. This output is only available for "Revenues and Expenses" and for "Off-Farm Income of Farm Operators".

4.1.1 Types of reports

I Revenues and expenses (unincorporated and incorporated sectors)

If you select **Revenues and Expenses** all three types of reports are available.

(a) Report

Statement of revenues and expenses

Both pages of this report are headed with a list of your selection criteria as it appeared in the status box. A detailed breakdown of farm revenues and expenses for the selected criteria is presented. The estimates are shown in the following format:

Total Estimate (\$)	C.V.	Estimated # of farms reporting	C.V.	Average per farm reporting	Average per farm
---------------------	------	--------------------------------	------	----------------------------	------------------

(b) Summary report

Summary of revenues and expenses

A summary report is also available for revenues and expenses. It combines subtotals from the **Statement of Revenues and Expenses** with a calculation of *NET OPERATING INCOME* (before depreciation).

(c) Distributional table

Distribution of net operating income

This table presents a series of breakdowns using the revenue classes and predetermined levels of net farm operating income.

The net operating income levels used for disaggregation purposes are:

- \$ 0 or less
- \$ 1 to \$ 9,999
- \$10,000 to \$ 24,999
- \$25,000 to \$ 49,999
- \$50,000 and over.

The distributional table provides the following calculations:

- **Average revenue per revenue class in the following categories:**

- \$ 10,000 to \$ 24,999
- \$ 25,000 to \$ 49,999
- \$ 50,000 to \$ 99,999
- \$ 100,000 and over.

- **Breakdown of the number of farms in each revenue class by net operating income**
- **Total operating expenses per \$ of farm revenue**
- **Total operating expenses (less interest) per \$ of farm revenue**

II Off-farm income of farm operators (unincorporated sector)

The **Report** and the **Distributional Table** are available when you select off-farm income of farm operators.

(a) Report

Summary of the off-farm income and the statement of revenues and expenses for farm operators.

The report is a breakdown of the elements that make up off-farm income. In addition, summary totals of revenues and expenses are presented for comparison purposes. The estimates are presented in the following format:

Total Estimate	C.V.	Average per farm
----------------	------	------------------

(b) Distributional table

Distribution of total income of operators involved in a single operation, unincorporated sector.

This table makes use of the same net operating levels and predetermined revenue classes used in the *Distribution of Net Operating Incomes* table ([section 4.1.1 I \(c\)](#), page 18). In this case, average off-farm incomes are compared to average net operating incomes.

III Off-farm income (unincorporated and incorporated sectors)

This selection is available in the report format only.

(a) Report

Summary of the off-farm income (unincorporated and incorporated sectors).

The report is a breakdown of the elements that make up off-farm income and is presented in the following format:

Total Estimate	C.V.	Average per farm
----------------	------	------------------

IV Additions and disposals (unincorporated and incorporated sectors)

This selection is available in the report format only.

(a) Report

Additions and disposals of depreciable assets

This report is a breakdown of the additions and disposals of assets by classes determined by Canada Customs and Revenue Agency, presented in the same report format.

V Off-farm income of farm families (unincorporated sector)

This selection is available in the report format only.

(a) Report

Summary of the off-farm income and the statement of revenues and expenses for farm families involved in a single operation, unincorporated sector.

This report is identical in format to that described for the report for *Off-Farm Income of Farm Operators* (section 4.1.1 II (a), page 19). The elements of off-farm income as well as summary totals of revenues and expenses are presented for single farm families.

VI Crops

This section is available in the report format only.

(a) Report

Physical characteristics

The report provides the following details about land use for a number of crops:

Total Estimate (acres)	C.V.	Estimated # of farms reporting	C.V.	Average per farm reporting	Average per farm
-------------------------------	-------------	---------------------------------------	-------------	-----------------------------------	-------------------------

VII Livestock

Similar to crops, livestock data are available in the report format only.

(a) Report

Physical characteristics

The report provides the following details for various animal categories.

Total Estimate (# of animals)	C.V.	Estimated # of farms reporting	C.V.	Average per farm reporting	Average per farm
--------------------------------------	-------------	---------------------------------------	-------------	-----------------------------------	-------------------------

VIII Assets and liabilities

These data are available in the report format only:

(a) Report

Financial characteristics

The report provides details on current, long-term, other, and non-farm assets and liabilities, in the following format:

Total Estimate (\$)	C.V.	Estimated # of farms reporting	C.V.	Average per farm reporting	Average per farm
---------------------	------	--------------------------------	------	----------------------------	------------------

A calculation of *TOTAL NET WORTH* is included.

IX Capital

This selection is available in the report format only.

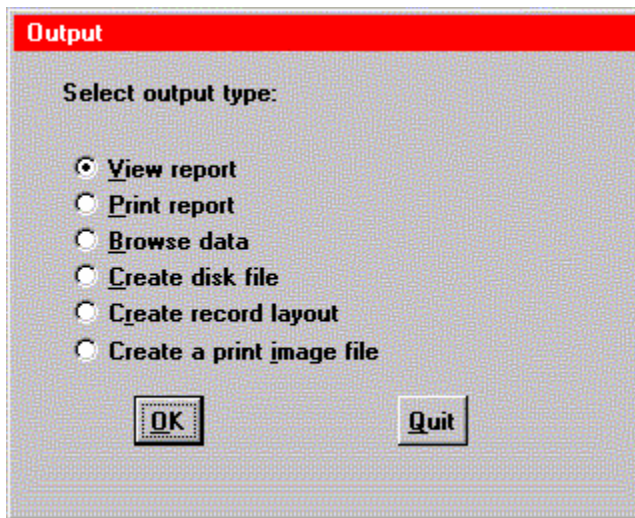
(a) Report

Financial characteristics

Information on capital investments, sales and long-term capital borrowed is available in the same level of detail as for Assets and Liabilities.

4.1.2 Types of output

Once you have chosen an output option and the system has processed your selection, a screen will appear offering these options:



I Viewing

The **View report** option of ESAS allows you to see your report on-screen exactly as it would appear if printed. This lets you verify that you made the correct selections before printing.

In the **View report** screen you can use all of the Windows options such as minimize, maximize and resize a window.

You can move easily across the screen by using the [“Print Preview”](#) options described on the next page or by using the scroll bars.



From left to right, the first button lets you return to the first page of the report.
 The second button lets you display the preceding page.
 The third button lets you choose a page by specifying a page number.
 The fourth button lets you move to the next page.
 The fifth button lets you view the last page of the report.
 The sixth button lets you select a percentage for viewing.
 The next button lets you exit from the **View report**.
 The last button lets you print the viewed report.

There are several ways to exit the **View report** screen: press **Esc**; click on the close box on the right-hand side of the “Print Preview” screen; or click once on the Report Generator and then on **Close**.

II Printing

If you select **Print report**, the report is automatically sent to the printer you selected earlier. From the **Output** drop-down menu, you can verify your printer selection by choosing **Print Setup**.

III Browsing

The **Browse data** option allows you to move more easily through the data than the **View report** option, although reports do not appear on-screen in their final format. The **Browse data** option has several useful features:

- **title locks** allows you to scroll the data while maintaining the identifying titles,
- you can manoeuvre throughout the report and return to where you first began,
- you can maximize or restore the size of the window by using the maximize and the restore buttons,



maximize



restore

- columns can be compressed and expanded,
- rows can be compressed and expanded.

Using the **Browse data** option is quick and simple.

In order to:

Zoom in or out



Click on:

the maximize button in the upper right corner of the window or on the restore button

Scroll up, down, left and right

the scroll arrows on the scroll bars

Scroll quickly

the scroll box on the vertical and horizontal scroll bars

Compress or expand a column

the line at the edge of the title column and drag it to the desired width

In order to:

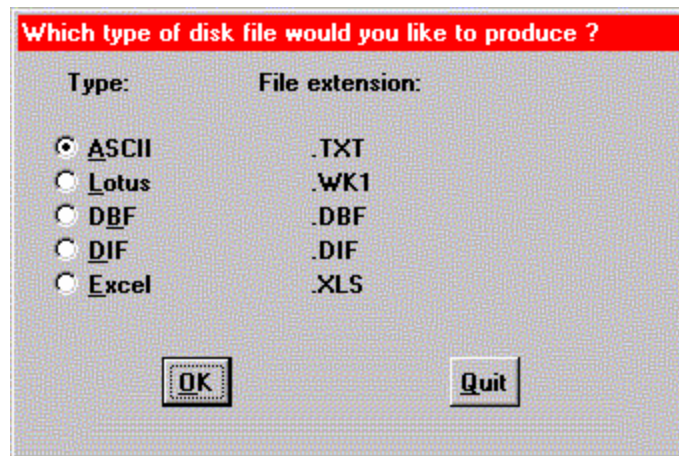
Compress or expand a row

Click on:

the line at the edge of the first data row and drag it to the desired width.

Exit the **browse data** window**ESC.****IV Creating a disk file**

With ESAS, you can export any of the tables into a variety of formats. To do this, choose the **Create disk file** option. A screen will appear which asks:



Once you have made a selection, a screen ([see next page](#)) will ask you to provide a file name. It will indicate in which directory the file will be saved. You can change the directory by pressing the arrow at the end of the "Save in:" field.

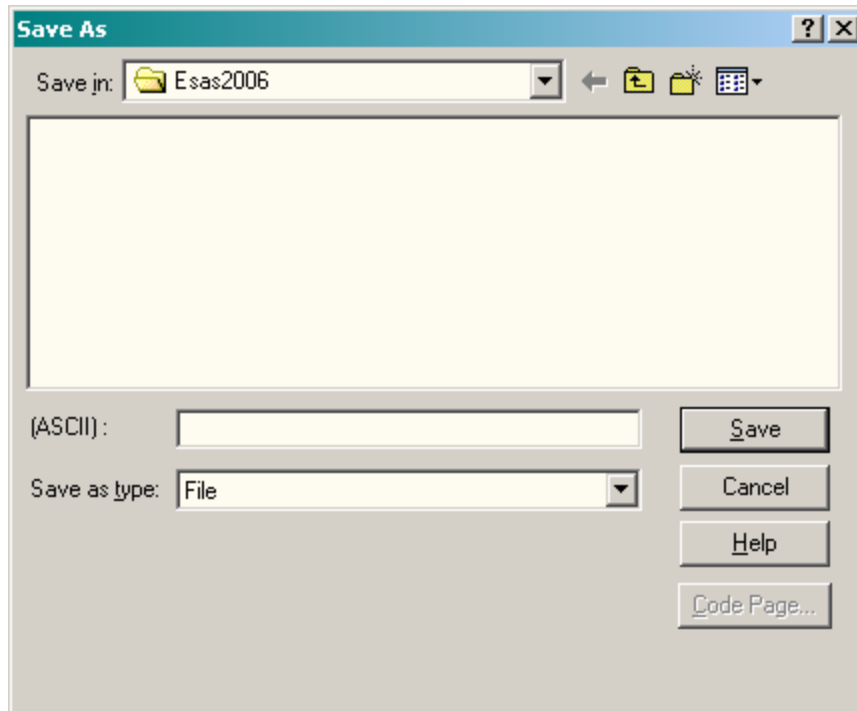
After providing this information, you can save your file. You can review the record layout of your file by either viewing it on-screen or printing it. These choices are available on the [Output](#) screen.

Note: Once a Lotus or Excel file has been created, it may be necessary to enlarge the column widths in order to view the various field codes. Also, Lotus and Excel will read the estimates as labels; therefore, if you need to use the estimates in calculations it is first necessary to convert them to values.

In Lotus, the function **@VALUE** (cell address) can be used to do this.

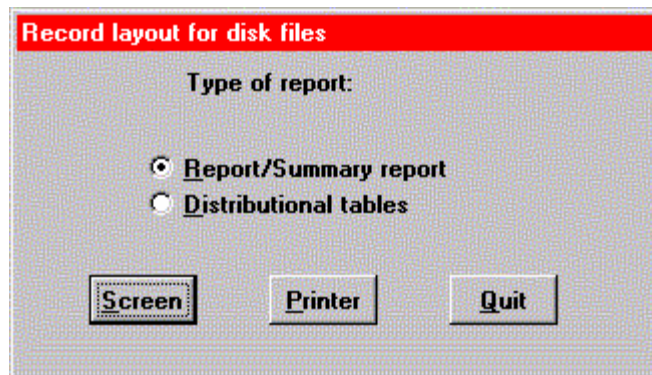
In Excel, do the following:

- 1 Select a blank cell that you know has the General number format.
If you aren't sure of the cell format, click **Cells** on the **Format** menu, and then click the **Number** tab. In the **Category** box, click **General**, and then click **OK**.
- 2 In the cell, type **1** and then press ENTER.
- 3 Click the cell, and then click **Copy**.
- 4 Select the range of cells that contain the "text" numbers.
- 5 On the **Edit** menu, click **Paste Special**, click **Multiply**, and then click **OK**.



V Creating a record layout

Create record layout gives you the position, length, type and description of the variables presented in the disk file. By selecting this option, you can view the record layout of a report or distributional table on the screen or you can print it.



VI Creating a print image file

If you do not wish to print your report directly from ESAS, you can take advantage of the **Create a print image file** option. This feature allows you to create an image file of your chosen report on disk which can later be used to print your file from DOS. Since the image file will contain specific control characters for the chosen printer, you should ensure that the correct printer has been chosen before you create an image file (see [Print Setup](#) on the next page). Once you have chosen **Create a print image file**, a screen similar to the one in section [IV Creating a Disk File](#) will ask you to provide a file name. It will indicate in which directory the file will be saved. You can change the directory by pressing the arrow at the end of the "Save in:" field.

After providing this information, you can save your file. The newly created Print Image file will have the extension **.PRT**.

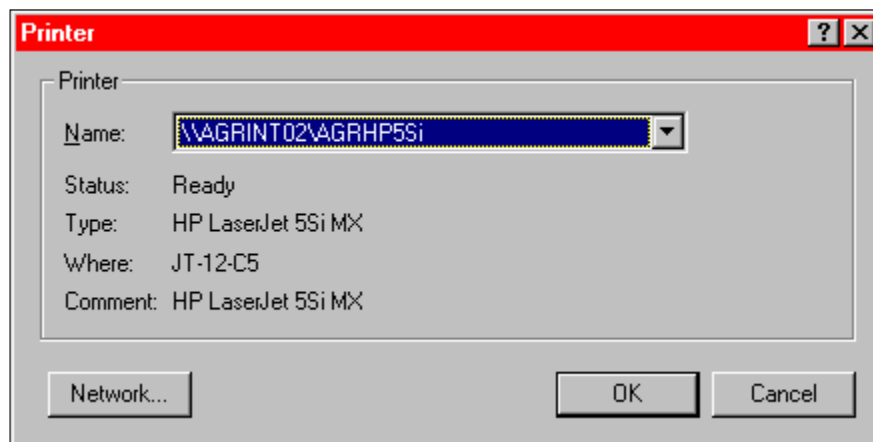
4.2 Custom tabulation

When creating custom tabulations, you can select more than one item offered in the main menu options, or you can limit your selections to only the variables that you need. For example, you might choose to extract a few elements among those that make up operating revenues and expenses, and off-farm income of farm operators and tabulate these data by province, by farm type or by multiple revenue class. Once you have determined all of the criteria for your custom tabulation, your selections will be produced by ESAS in a report form.

After making your selections for each of the items shown in the status box, you are ready to choose one of the following options:

- **Select or**
- **Reset selections.**

This is where the **Print Setup** option will appear which will let you select a printer if you don't want to use the default printer in your Windows environment.



Once you have chosen a compatible printer, printing an ESAS report is as simple as pressing a button.

4.2.1 Report

Summary tabulation of the extraction system of agricultural statistics (ESAS)

This report describes:

Data type
Data variable description
Year
Province
CAR (Census Agricultural Region)
Type of farm

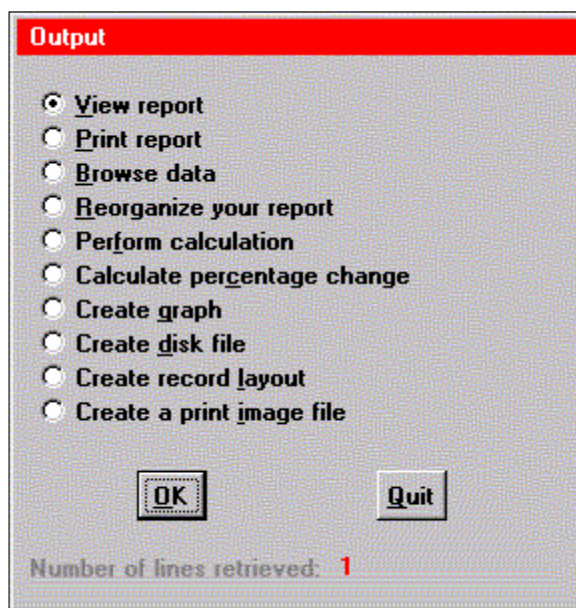
Revenue class
Total estimate + C.V.
Estimated number of reporting* + C.V.
Average per reporting*

A footnote applicable only to off-farm income has been included on all custom tabulation reports.

* Farms, families or operators depending on the type of report selected.

4.2.2 Types of output

Once you have chosen **Select**, ESAS offers you the following options in the window:



I Viewing

The **View report** option allows you to see your report on-screen exactly as it would appear if printed. This lets you verify that the correct selections were chosen before printing.

In the **View report** screen you can use all of the Windows options such as minimize, maximize and resize the screen.

You can move easily across the screen by using the "Print Preview" options described in the **Viewing** section of the pre-established tables ([section 4.1.2 I](#), page 21) or by using the scroll bars.

II Printing

If you select **Print report**, the report is automatically sent to the printer you selected earlier. From the **Output** drop-down menu, you can verify your printer selection by choosing **Print Setup**.

III Browsing

All of the **Browse data** commands apply to both the pre-established and custom tabulation options. However, an additional option has been included in order to decode the data.

Because custom tabulations contain a wide range of data, we used codes to simplify their presentation. By using the option **Column definitions**, each data cell can be easily decoded. This option can be accessed by using the hot key **Alt C** or your mouse.

For more details, please refer to the section **Browsing** under Pre-established Tabulation ([section 4.1.2 III](#), page 22).

IV Reorganizing your report

The **Reorganize your report** option allows you to create a report that better meets your needs. Here are the options available under **Reorganize your report**:

- **Select the variables for your report**
- **Modify the sort for your report.**

Select the variables for your report

ESAS allows you to select the variables you want to include in your custom tabulation report and to give the report a title. To do so, choose **Select the variables for your report**. The **Selection of variables** screen, as shown on the next page, will then appear.

You can modify your custom tabulation report by choosing the variables you require from the ones available. The selected variables will appear in the column below the title **Selected variables that will appear on the report**. You can further modify your selection by deleting some or all of the selected variables. You can add or delete a variable by clicking on it twice or scrolling to it and then pressing **ENTER**, or by scrolling to the variable and pressing **Add** or **Delete**.

At the bottom of the **Selection of variables** screen, you can choose **OK** to proceed with the selection of the variables chosen; or **Cancel**, to return to the previous screen.

ESAS stores the variables you have selected in its memory during your work session.

Selection of variables

List of variables to choose from :

- Year
- Province
- CAR
- Farm type
- Revenue class
- Variable description
- Total estimate
- C.V. of total estimate

Selected variables that will appear on the report :

Buttons: Add, Delete, Delete all

Title of report

OK Cancel

To extract every variables, make NO selection

Modify the sort of your report

Modify the sort of your report allows you to sort the contents of your custom tabulation report. From the List of variables for the sort column that appears on the screen, you can choose the ones that will be used to sort the contents of your report. You can add variables, delete some or delete all of them.

Sort report

List of variables for the sort :

- Type of data
- Variable sequence
- Year
- Province
- CAR
- Farm type
- Revenue class

The report will be sorted by :

Buttons: Add, Delete, Delete all

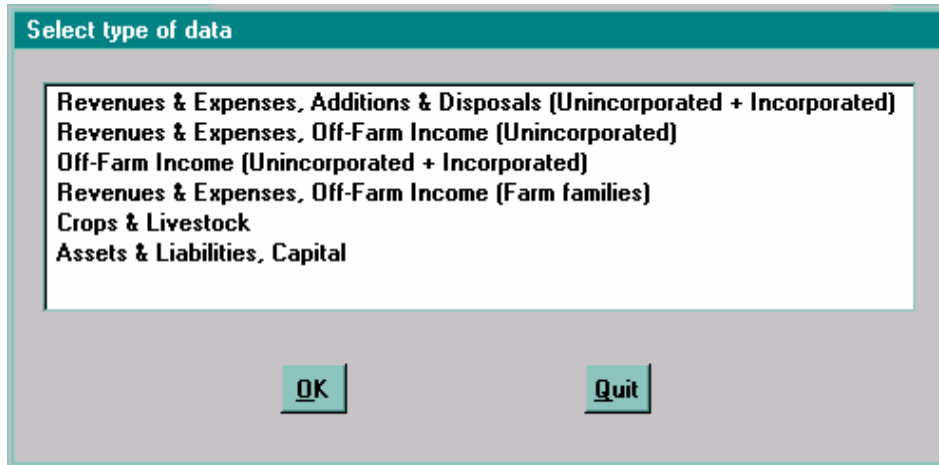
OK Cancel

After choosing your variables, select **OK**. To cancel your selection, choose **Cancel**.

ESAS stores in its memory during your work session the variables you have selected for sorting the contents of your report.

V Performing a calculation

Perform calculation allows you to create new variables. If more than one type of data has been selected, the **Select type of data** screen will appear to allow you to choose the type of data for which you wish to perform calculations.



Only the types of data you have selected will be highlighted. If you selected only one type of data, the **Select type of data** screen will not appear and the **Perform calculation** screen (see next page) will appear.

List of variables to be selected from

This list displays all the variables that have been selected for a type of data. To perform a calculation, click twice on the desired variable and its code will appear in the **Calculation** box.

Operators

You can carry out basic mathematical operations by selecting the desired operator. By clicking twice on the symbol, it will appear in the **Calculation** box.

Decimal

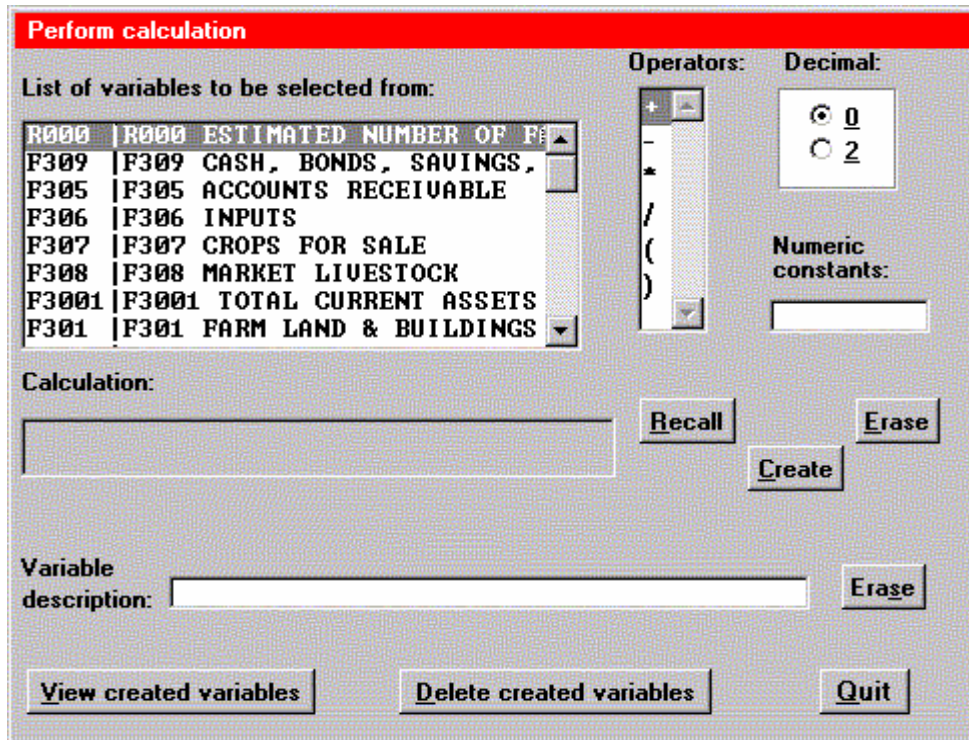
This option allows you to choose the number of decimal points for the variables created. You can choose between **0** or **2** decimals by clicking once on your preferred option.

Numeric constants

If you want to do such mathematical operations as calculate percentages, you can use **Numeric constants**. Click once on the designated box to bring the cursor to this point. Type in the figure to be used in the calculation selected. Press **ENTER** and the figure will appear in the **Calculation** box. If your constant has 12 figures, it will automatically be placed in the **Calculation** box.

Calculation

The mathematical operation you have completed will appear in the **Calculation** box. You have three options: **Recall**, **Erase** or **Create** new variables.



Use **Recall** to bring into the **Calculation** box the mathematical operations of the variable which you have created or deleted. You can create a new variable by selecting one of the variables already created which will appear in a pop-up window. To create your new variable, click twice on your choice so that it appears in the **Calculation** box.

Variable description

Variable description allows you to name the new variable. It is important to identify the variable before selecting the **Create** option so that it is easier to read the report.

View created variables

The **View created variables** option will give you a list of the variables created and the mathematical operations selected for each.

Delete created variables

You can use **Delete created variables** to eliminate the variables you have created. The code and description of each new variable will be displayed. Select the variable or variables you want to delete and click on **Delete created variables**.

ESAS stores in its memory during your work session all of the mathematical operations for the variables you have created.

VI Calculating a percentage change

Calculate percentage change allows you to calculate year-over-year percentage changes. If more than one type of data has been selected, the **Select type of data** screen will appear (the same screen as for **Perform a Calculation**, see above) to allow you to choose the type of data for which you wish to calculate percentage changes.

Only the types of data you selected will be highlighted. If you selected only one type of data, the screen **Select type of data** will not appear and the **Calculate percentage change** screen will appear.

List of variables to be selected from

This list displays all the variables that have been selected for a type of data. To calculate a percentage change, click twice on the desired variable and its code will appear in the **Selected variables** box. You can select more than one variable.

Year compared to year

To calculate a percentage change, you must select two reference years. From the left box under **Year compared to Year**, click twice on the year you want to select. (The year selected from this box must be more recent than the year to be selected from the right box.) The selected year will appear in the box underneath. Repeat the same action to select a year from the right box.

Selected variables

The codes of the selected variables will appear in this box. Three options are available: **Erase**, **Create** or **Quit**.

Use **Create** once you have selected at least one variable and two years of comparison. The **Erase** option will allow you to delete the variables selected.

View calculated percentage change

The **View calculated percentage change** option will give you a list of the variables created (i.e., variables for which a percentage change is calculated) and their description.

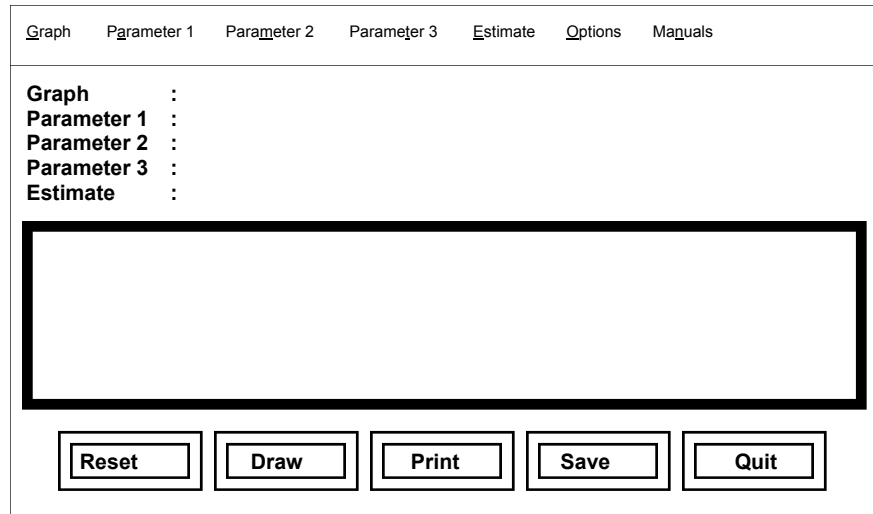
Delete calculated percentage change

You can use **Delete calculated percentage change** to eliminate the variables you have created. The code and description of each variable created will be displayed. Select the variable or variables you want to delete and click on **Delete calculated percentage change**.

ESAS will store in its memory until your next selection all percentage changes you have created.

VII Creating a graph

By choosing the **Create graph** option, you can view, print or save your data in a linear or a bar graph, or as a pie chart. Once you have chosen this option, the system will display the menu bar as well as a status box listing the current selections. Depending on the variables and type of graph selected, the options displayed on the menu bar of the screen shown below will not always be available. The options available will be highlighted.



Here are the options offered:

Graph

This option allows you to select a linear graph, a horizontal or vertical bar graph or a pie chart.

Parameter 1

You can use this option to select a variable for the X axis or the label for a pie chart.

Parameter 2

You can use this option to select a variable for the Y axis or piece of the pie chart.

Parameter 3

With this option you can select a variable for a third dimension (the Z axis) of linear or bar graphs. This option will only be available if just one variable is selected for **Parameter 2**.

Estimate

Here are the possible choices under **Estimate**:

- Total estimates
- Average per reporting (farm, operator or farm family)
- Average per farm

Options

Here are the available **Options**:

- **Graph title**: you can give the graph a title and a subtitle
- **X axis title**: you can give the X axis a title
- **Y axis title**: you can give the Y axis a title
- **Y axis segmentation**: you can segment the Y axis into minimum and maximum values

- **Fonts (%)**: this option allows you to change the font size for the graph. Depending on the graphic card in your computer and the screen size you have, you will have to increase or decrease the font size to improve the quality of the graph on the screen. The value by default is 100%.
Current font (%): a window will give you the percentage of the font size currently used.
Change font (%): you can choose a font size – between 50 and 120%.
- **Fill Pattern**: this option should be used especially when you have a monochrome monitor or black and white printer
- **Background color**: you can choose a background color among 11 pre-established colors
- **Print Setup**: this option allows you to select a printer or to verify your current selection

If you choose **Draw**, the **Grouping** screen (see next page) will appear only if you have to make more than one selection for at least one of the variables. You must make only one selection for each of the remaining variables.

You can either **Reset** your selection, **Draw**, **Print** or **Save** the graph or **Quit**.

Reset

The **Reset** option allows you to make another selection.

Draw

Use **Draw** to see the graph on the screen in a print format. With this option, you can ensure that you have selected the correct options before producing an output of the graph on paper.

Print

If you select **Print**, the graph on the screen will be automatically sent to the printer you selected earlier. You can verify your choice of printer by selecting **Print Setup** in the **Options** item of the menu bar.

Save

If you do not wish to print your graph directly from ESAS, you can take advantage of the **Save** option. This feature allows you to create an image file of your chosen graph on disk which can later be used to print your file from DOS. Since the image file will contain specific control characters for the chosen printer, you should ensure that the correct printer has been chosen before you create an image file (see **Print Setup**, section 4.2, page 25). Once you have chosen **Save**, a screen similar to the one in section **IV Creating a Disk File** (p. 23) will ask you to provide a file name. It will indicate in which directory the file will be saved. You can change the directory by pressing the arrow at the end of the "Save in:" field.

After providing this information, you can save your file. The newly created image file will have the extension **.PRT**.

Quit

If you select **Quit**, a message will appear asking you to verify this selection before exiting the **Create a Graph** option.

Grouping

Select the grouping variables for which the graph will be plotted :

Year	Province / CAR	Farm Type	Revenue Class
2000	Total of provinces	Total of farm types	Total of revenue classes
2001			\$ 10,000 - \$ 24,999 \$ 25,000 - \$ 49,999 \$ 50,000 - \$ 99,999 \$100,000 - \$249,999 \$250,000 - \$499,999 \$500,000 and over

VIII Creating a disk file

With ESAS, you can export any of the tables into a variety of formats. To do this, choose the **Create disk file** option.

For more details, please refer to the section [Creating a Disk File](#) under Pre-established Tabulation (section 4.1.2 IV, page 23).

IX Creating a record layout

Create record layout gives you the position, length, type and description of the variables presented in the disk file. By selecting this option, you can view the record layout on the screen or print it.

X Creating a print image file

If you do not wish to print your report directly from ESAS, you can take advantage of the **Create a print image file** option. This feature allows you to create on disk an image file of your chosen report which can later be used to print your file from DOS.

For more details, please refer to the section [Creating a Print Image File](#) under Pre-established Tabulation (section 4.1.2 VI, page 24).

5. Quitting ESAS

The last function offered on the main menu bar is **Quit**. It allows you to:

- **quit the system** and
- **switch to either custom or pre-established tabulation.**

To quit the system, select **Yes** from the menu. A message will appear asking you to verify this selection.

ESAS also allows you to switch from pre-established to custom tabulation and back without restarting the system. If you wish to switch options, select either **Pre-established** or **Custom** and the system will change to your selection.

6. Tutorials

Now that you are familiar with the many features of ESAS, you are ready to put your knowledge to work with these easy to follow step-by-step tutorials.

6.1 Pre-established tabulation tutorial

This tutorial will show you how you can:

- select criteria for a pre-established tabulation,
- choose the **summary report** format to output your tabulation,
- view and browse your report, and
- export your data in a Lotus file.

Step 1

Once you have installed ESAS, start the system by selecting **ESAS_SESA 2006** from the **Start, Programs, Statistics_Statistique Canada** group created when you installed ESAS; the screen prompts for choice of language, choose either English or French. The ESAS Licence Agreement screen appears. To go to the next screen, scroll through the Licence Agreement and click on **Accept**. At the **Welcome** screen, click on **Continue**.

Step 2

ESAS will ask you to choose either **Pre-established** tabulations or **Custom** tabulations. Select **Pre-established** by clicking on it or scroll to it and press **ENTER**.

Step 3

The main menu bar and status box will appear. You are now ready to select your criteria. Click on **Data** with your mouse or press **Alt D** on your keyboard.

From the window that will appear, select **Revenues & Expenses** by clicking on it with your mouse or by scrolling to it and pressing **ENTER**. *You will note that this selection will now appear in the status box in the middle of the screen.*

Step 4

Select the **Year** function by clicking on it or press **Alt Y**.

A window will appear listing the years that are available. Select **2001** by clicking on it or scroll to it and press **ENTER**.

Step 5

Select the **Province** function by clicking on it or press **Alt P**.

The ten provinces and a total for all the provinces will be listed in the window. To select **Quebec**, click on it or press **Q**. From the next window select **Total of regions** by clicking on it or press **A**.

Step 6

Select the **Farm Type** function from the main menu bar by clicking on it or press **Alt F**.

From the window listing the various farm types, select **Dairy Cattle and Milk Production** by clicking on it or by scrolling to it and pressing **ENTER**.

Step 7

The final variable to be selected is the **Revenue Class**. Click on it or press **Alt R**.

Select the revenue class **\$50,000 - \$99,999** by clicking on it or by scrolling to it and pressing **ENTER**.

Step 8

At this point you should review all of your selections. The status box should look like this:

Pre-established : Current selections	
Type of data	Revenues & Expenses (Unincorporated + Incorporated)
Reference year	2001
Province	Québec
Census agricultural region	Total of regions
Farm type	Dairy Cattle and Milk Production
Revenue class	\$ 50,000 - \$ 99,999

Step 9

Once you have determined that all of the correct selections have been made, select **Output** by clicking on it or press **Alt O**.

Choose the **Summary Report** by clicking on it or press **S**. The following message will appear on the screen:

Please wait ... Searching the database ...

Step 10

When the system has located all of the selected records, you will be prompted to select an output type.

In order to ensure that the base has retrieved the correct data, you should first choose to **View report**. Either click on this selection followed by **OK** or scroll to the selection and press **ENTER** and click on **OK**.

Verify your selection criteria on the new screen. The record content can be checked by using the scroll bars to scroll across the screen and back. To check the data or variables on the lower half of the report, move the scroll box in the scroll bars. There are many ways to exit the view screen: click on the button with a door in the screen "Print Preview"; click on the close box in the upper right corner; or press **Esc**. The system will return to the output type menu.

Step 11

You are now ready to **Browse data**. Select this option in the same way you selected **View report**. The screen that will appear contains all of your data but in a different format than that of the final output.

Click on the final record at the bottom of the report or use the down arrow key to scroll to the bottom of the report. Go to the **Avg. per farm** column by clicking on the scroll arrow in the bottom right corner of the horizontal scroll bar or press the **Tab** key.

Exit the **Browse data** option by holding the left mouse button on the icon in the upper left corner and select **Next**, or press **Esc**.

Step 12

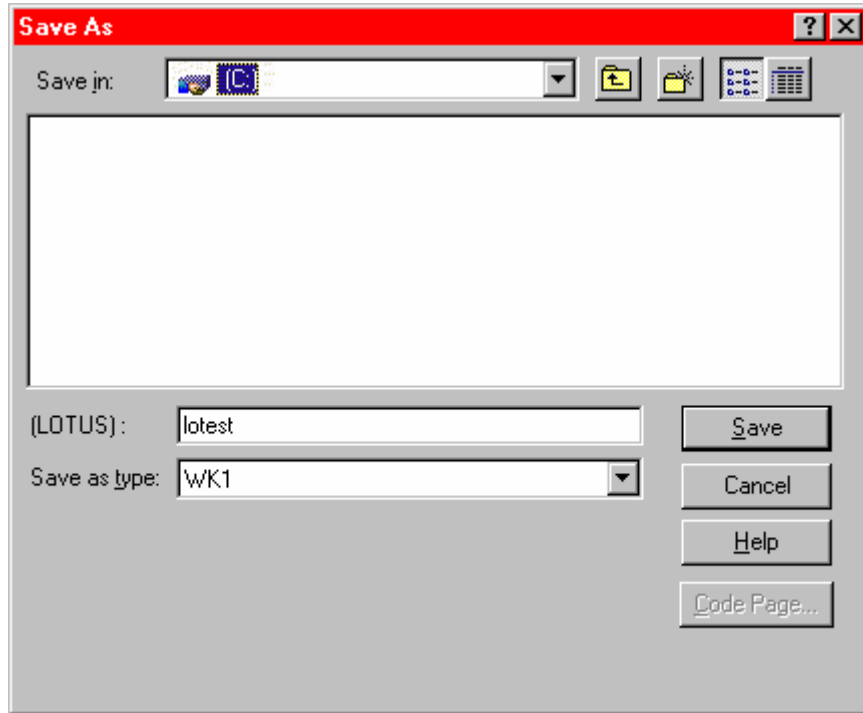
Now that you have returned to the output selection screen, it is possible to create a Lotus file from your selected data.

Select **Create disk file** by clicking on it with your mouse and then click on **OK** or press **C** and then **O**.

From the selection screen that appears, choose to create a Lotus file then click on **Lotus** and on **OK** or use the hot keys **L** and **O**.

Step 13

The next [screen](#) will prompt you to name your Lotus file and indicate the drive you want to save it on. Name this file **Lotest** and save it on your **C:** by clicking on the **Save** button.



The following message appears:

LOTUS file has been saved... Press any key to continue

Press any key as prompted. Click on **Quit** to exit the **Create a disk file** and click on **Quit** again to exit the **Output** screen.

Congratulations! You have now completed the **Pre-established Tabulation Tutorial**. During this exercise you:

- **selected a pre-established tabulation,**
- **manoeuvred throughout the system using a mouse, arrow keys, and hot keys,**
- **viewed and browsed a report, and**
- **saved a report as a Lotus file.**

6.2 Custom tabulation tutorial

This tutorial will allow you to:

- make multiple selections from the available selection criteria,
- view and browse your extracted data,
- perform a calculation,
- calculate a percentage change,
- reorganize your custom tabulation report,
- print a hard copy version of your chosen custom tabulation report, and
- create and view a graph.

If you are entering this tutorial directly from the previous one, select the **Custom** option from the **Quit** function of the menu bar and go directly to [step 3](#).

Step 1

Once you have installed ESAS, start the system by selecting **ESAS_SESA 2006** from the **Start, Programs, Statistics_Statistique Canada** group created when you installed ESAS; the screen prompts for choice of language, choose either English or French. The ESAS Licence Agreement screen appears. To go to the next screen, scroll through the Licence Agreement and click on **Accept**. At the **Welcome** screen, click on **Continue**.

Step 2

You will be prompted to choose either **Pre-established** tabulations or **Custom** tabulations. Select **Custom** by clicking on it or scroll to it and press **ENTER**.

Step 3

The main menu bar and status box will appear (see [Section 3.2.1](#), page 16). You are now ready to select your data. Click on **Data** with your mouse or press **Alt D** on your keyboard.

Step 4

From the window, select **Revenues & Expenses** by clicking on it or scroll to it and press **ENTER**. A window will appear listing all of the data variables available from this selection. Select **R000 Estimated number of farms** by clicking on it or press **ENTER**. Continue to scroll the list and select the following data variables:

R400 All Wheat,
R405 Canola (Rapeseed),

R2005 Total Grains & Oilseeds,
R2040 Total Operating Revenues,
R2105 Total Crop Expenses, and
R2140 Total Operating Expenses.

Exit this window by clicking outside of it or press **Esc**.

Step 5

You are now in the data selection window. Select **Crops** as described in [Step 4](#). A window will appear listing all of the available data variables for this data type. Select the following data variables using the same method as described in [Step 4](#):

C1010 Total Grains & Oilseeds, and
C1100 Total Area of Farms.

Exit this window by clicking outside of it or press **Esc**. Exit the **Data** window in the same manner.

Step 6

To continue, access the **Year** function by clicking on it or press **Alt Y**. From the years listed in the window, select **1994, 1995** and **1996** by clicking on them or scroll to them and press **ENTER**.

Exit this option by clicking outside of the window or press **Esc**.

Step 7

Access the next function by clicking on **Province** or by pressing **Alt P**. Select **Saskatchewan** by clicking on it or scroll to it and press **ENTER**. A window will appear listing all of the Census Agricultural Regions (CARs) found in Saskatchewan, including the option **Total of regions** at the top of the list. Select this option by clicking on it or scroll to it and press **ENTER**.

Exit this option by clicking outside of the window or by pressing **Esc** twice.

Step 8

Select **Farm Type** by clicking on this function or by pressing **Alt F**. From the subsequent list, select **Oilseed & Grain** by clicking on it or by scrolling to it and pressing **ENTER**.

Exit this function by clicking outside of the window or by pressing **Esc**.

Step 9

The final variable to be selected is the **Revenue Class**. Access this function by clicking on it or by pressing **Alt R**. Select **Total of revenue classes** by clicking on it or scroll to it and press **ENTER**.

Exit this function by clicking outside of the window or by pressing **Esc**.

Step 10

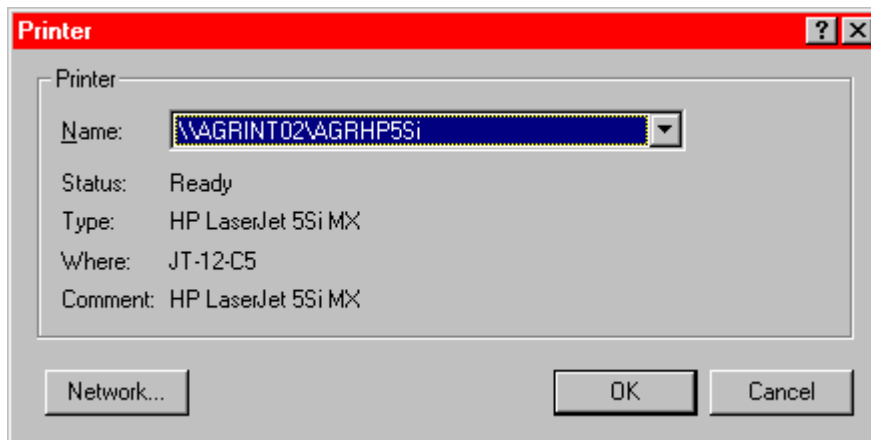
At this point you should review all of your selections. The status box should look like this:

Custom : Number of selections	
Type of data	2
Variable	9
Reference year	3
Province	1
Census agricultural region	1
Farm type	1
Revenue class	1

Step 11

Once you have determined that all of the correct selections have been made, you must select **Output** by clicking on it or by pressing **Alt O**. Because custom tabulations can only be output in one report format, the window that appears is slightly different from that for the pre-established tabulations.

Before you ask ESAS to extract your data, you need to select a printer with the **Printer Setup** if you want to use a printer that is not the default printer in your Windows environment. Choose the desired printer by pressing the down arrow at the end of the field "Name:" and click on **OK**.



Step 12

Select once again the **Output** function to produce a report. Click on the **Select** option or scroll to it and press **ENTER**. The following message will appear:

Retrieving in progress: *Type of data* *Year*

Step 13

Once the system has located all of the records you selected for the extraction, you will be prompted to select an output type.

In order to ensure that the base has retrieved the correct data, select **View report**. Either click on this selection followed by **OK** or move to the selection and press **ENTER** and then move to **OK** and press **ENTER** again.

The **View report** screen will appear. Verify that **Total of classes** was selected by scrolling to the right until you reach the **Revenue Class**.

There are many ways to exit the view screen: click on the button with a door in the screen "[Print Preview](#)"; click on the close box in the upper right corner; or press **Esc**. The system will bring you back to the output type menu.

Step 14

You are now ready to **Browse data**. Select this option the same way that you selected **View report** in **Step 13**. The screen that will appear contains all your data but they appear in a different format than that of the final output. Most of the data contained within the Browse format have been encoded due to space constraints. Use the **Column definitions** option to decode and understand the data as you browse.

Click on the final record at the bottom of the report or use your down arrow key to scroll to the bottom of the report. You will decode this record.

Step 15

There are columns labelled **Prov.**, **CAR**, **F.T.**, **R.C.**, **C.V.** and **T.D.** The applicable **province**, **census agricultural region**, **farm type**, **revenue class** and **type of data** have each been assigned a numeric code. These items can all be easily decoded online by simply clicking on the **Column definitions** option which can be found in the upper left hand corner of the screen, or press **Alt C** and access the applicable drop-down menu. For example: the province and CAR have been defined by number **47** and **0** respectively. From the menu for Column definitions choose **Province**. You will see that a window will appear listing the provinces and that number 47 corresponds to **Saskatchewan**. By selecting Saskatchewan, another window will appear listing the CARs within that province and you will see that 0 corresponds to **Total of regions**.

Use this method to decode each of the variables.

Exit this menu by clicking outside of the window or press **Esc**.

Exit the **Browse data** option by holding the left mouse button on the icon in the upper left corner and select **Next**, or press **Esc**.

Step 16

Now that you have viewed and browsed your report, it is time to print it. Select **Print report** from the **Output** destination screen. ESAS will print your report on the printer you selected. The following message will appear:

Please wait... Printing report...

and

Report has been printed... Press any key to continue

Step 17

You will now add new variables to your custom tabulation report and reorganize your report.

In the Output screen, select **Perform calculation**. The **Select type of data** screen will appear. From the listed options, select **Revenues and Expenses, Additions and Disposals** by clicking on it and then clicking on **OK** or use the down arrow key and then press **ENTER** twice. The **Perform calculation** screen will appear (see an example in [Step 19](#)).

You will create the following two variables in **Steps 18, 19 and 20**:

- 1) Percentage of total grain and oilseed revenues generated by wheat **(R400 / R2005)*100**
- 2) Percentage of total grain and oilseed revenues generated by canola **(R405 / R2005)*100**

Step 18

Creating the first variable: **(R400 / R2005)*100**.

Select the symbol "(" by clicking on it twice. Do the same thing to select the variable **R400 All wheat**, the "/" operator, the variable **R2005 Total, grains and oilseeds** and the symbols ")" and "*". To complete the process, scroll to the box **Numeric constants**, type **100** and then press **ENTER**.

Note that the symbols and variable codes will appear in the **Calculation** box as shown in [Step 19](#).

Step 19

Before you ask ESAS to create the new variable, you should name it. Click on the box **Variable description** or scroll to it. Type **Share of revenues generated by wheat**. Click on **Create** or scroll to it and press **ENTER**. The following messages will appear:

Please wait for message indicating end of calculation

and

End of calculation... Press any key to continue

The code **X1001** and the description of the **Share of revenues generated by wheat** variable will be displayed in the column entitled **List of variables to be selected from** which appears at the left of the screen.

Perform calculation

List of variables to be selected from:

R000	R000	ESTIMATED NUMBER OF Ff
R400	R400	ALL WHEAT
R405	R405	CANOLA<RAPESEED>
R2005	R2005	TOTAL GRAINS & OILSEI
R2040	R2040	TOTAL OPERATING REVEI
R2105	R2105	TOTAL CROP EXPENSES
R2140	R2140	TOTAL OPERATING EXPEI

Operators: +, -, *, /, (,)

Decimal: 0, 2

Numeric constants: []

Calculation: (R400 /R2005)*100

Variable description: SHARE OF REVENUES GENERATED BY WHEAT

Buttons: Recall, Erase, Create, Erase, View created variables, Delete created variables, Quit

Step 20

Creating the second variable : $(R405 / R2005)*100$.

Create the variable **X1002 - Share of revenues generated by canola** by using the method described in [Steps 18](#) and [19](#).

Do not delete the new variables X1001 - Share of revenues generated by wheat - and X1002 - Share of revenues generated by canola - because you will use them in Step 29.

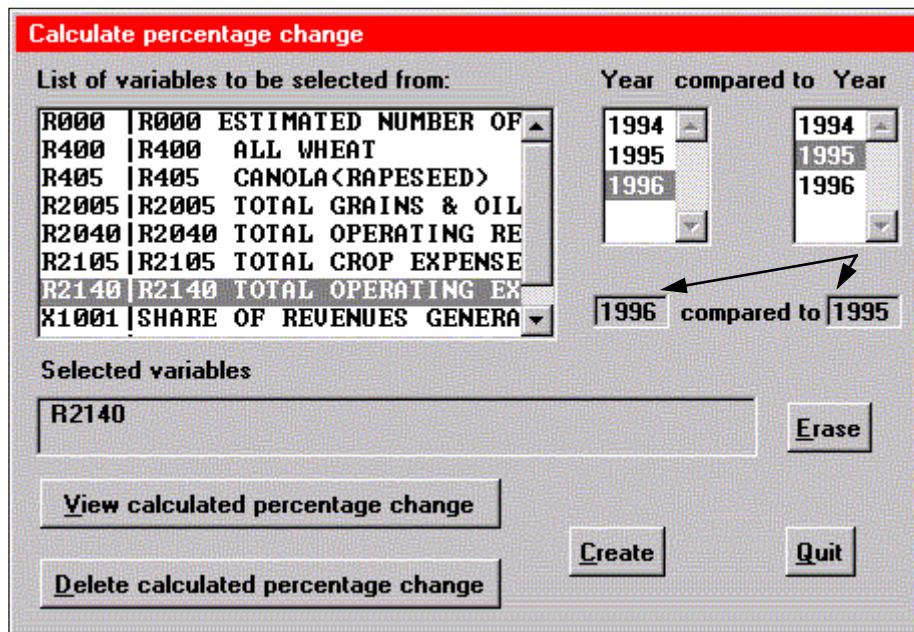
To return to the type of data menu, click on **Quit** or scroll to it and press **ENTER**. Click on **Quit** again. The system will bring you back to the Output options screen.

Step 21

You will now calculate a year-over-year percentage change between **1995** and **1996** for **Total operating expenses (R2140)**. Select **Calculate percentage change** from the **Output** screen and then click on **OK**. The **Select type of data** screen will appear. From the listed options, select **Revenues and Expenses, Additions and Disposals** by clicking on it and then clicking on **OK** or use the down arrow key and then press **ENTER** twice. The **Calculate percentage change** screen will appear.

Select **R2140** in the box labelled **List of variables to be selected from** by clicking on it twice or scroll to it and press **ENTER**. Note that the variable is now displayed in the **Selected variables** box.

Select **1996** in the first box of **Year compared to Year** by clicking on it twice. Select **1995** in the second box in the same manner. Note that both years are now displayed in the boxes as shown in the screen below.



Click on **Create** or scroll to it and press **ENTER**. The following messages will appear:

Please wait for message indicating end of calculating percentage changes...

and

End of calculating percentage changes... Press any key to continue

Press any key and the system will bring you back to the **Calculate percentage change** screen. To return to the type of data menu, click on **Quit** or scroll to it and press **ENTER**. Click on **Quit** again. The system will bring you back to the Output options screen.

Step 22

You can now **Reorganize your report**. Select this option on the **Output** screen. Choose **Select the variables for your report** on the screen that appears and then click on **OK**. The **Selection of variables** pop-up will appear.

Step 23

From the column entitled **List of variables to choose from** displayed at the left of the screen, select **Year**, **Farm type**, **Variable description** and **Total estimate** by clicking twice on each variable. Note that these variables will appear at the right of the screen (see the screen in [Step 24](#)).

Step 24

You need to give your report a title and a subtitle. On the first line of the **Title of report** box, type **Share of revenues generated by wheat and canola**. Type **Saskatchewan, 1994 to 1996** on the second line and press **OK**.

The following message will appear:

Specific variables have been selected... Press any key to continue

Press any key and the system will bring you back to the **Reorganize your report** screen.

Selection of variables

List of variables to choose from :

- Year
- Province
- CAR
- Farm type
- Revenue class
- Variable description
- Total estimate
- C.V. of total estimate

Selected variables that will appear on the report :

- Year
- Farm type
- Variable description
- Total estimate

Title of report:

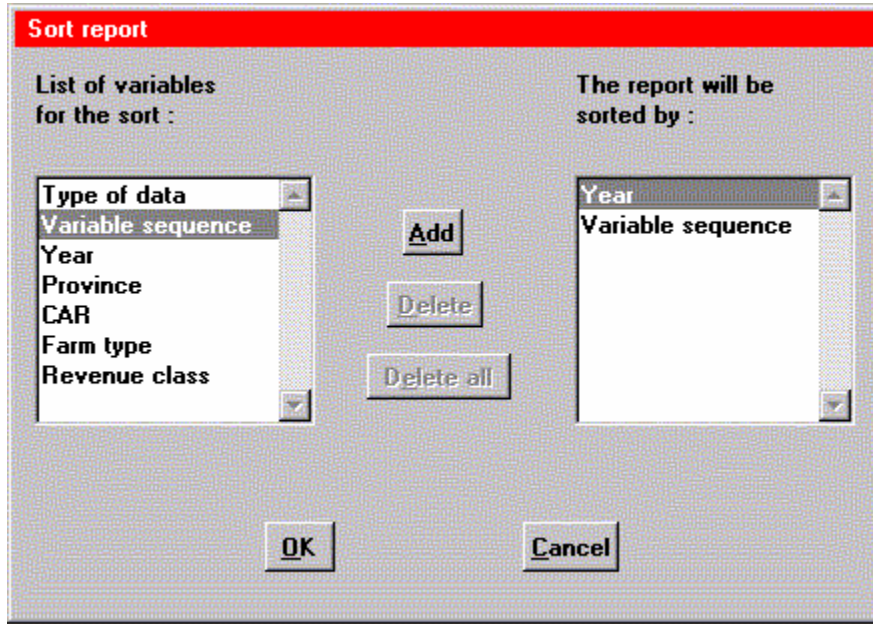
report:

OK **Cancel**

To extract every variables, make IIO selection

Step 25

Select **Modify the sort of your report** and then click on **OK**. The **Sort report** window will appear (see screen below). Select **Year** and **Variable sequence** under **List of variables for the sort** by clicking twice on each one of the variables. Select **OK**.



The following message will appear:

The report has been sorted... Press any key to continue

Press any key and the system will bring you back to the **Reorganize your report** screen. To return to the output type menu, click on **Quit**.

Step 26

You can now **View the report** by following the method outlined in **Step 13**. The screen that appears will display the elements you selected in **Step 23**: **Year**, **Farm type**, **Variable description** and **Total estimate**. Note that the content of the report is sorted according to the variables selected in **Step 25**: **Year** and **Variable sequence**.

When you are finished Viewing the report, press **Esc** to exit this screen and return to the **Output** screen.

Step 27

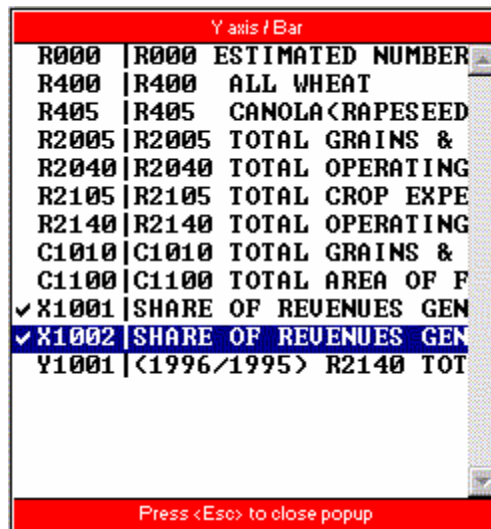
The last exercise shows you how to create and view a graph. Select **Create graph** in the **Output** screen. The menu bar and status box (described in [section 4.2.2 VII](#), page 32) will appear and you can begin selecting your criteria. Begin with the **Graph** option by clicking on it or you can activate the first option on the menu bar by pressing the **Alt** key followed by **ENTER**. You can access the other options on the menu bar by pressing **Alt**, using the left and right arrow keys (←→), and then pressing **ENTER**. Select **Bar** and then **Vertical** by clicking on it. Note that your choice is immediately displayed in the status box and that the **Parameter 1** and **Parameter 2** options are highlighted.

Step 28

Select **Parameter 1** from the menu bar. Select **Year** by clicking on it or scroll to it and press **ENTER**. Do not make any other selection because the three listed years - **1994**, **1995** and **1996** - have already been selected. To return to the previous screen, click outside the window or press **Esc**.

Step 29

Select **Parameter 2**, then select **X1001** and **X1002** from the variables listed as shown in the screen displayed below. To return to the previous screen, click outside the window or press **Esc**.



Step 30

Now choose **Estimate**. From the types of estimates offered, select **Total estimates**. You are now ready to **Draw** your graph by clicking on this option or scroll to it and press **ENTER**. The following message will appear on the screen:

Please wait... graph preparation in progress

The graph appears on the screen.

Step 31

Try the other options offered or exit the **Graph** screen by clicking on **Quit**. You will be prompted to confirm this choice with the message **Are you sure?** and the options to select **Yes** or **Cancel**. Select **Yes** to return to the Output options screen.

Click on **Quit** to exit the **Output** screen.

Congratulations! You have completed the **Custom Tabulation Tutorial**. During this exercise, you have:

- made multiple selections to create a custom tabulation report,
- viewed a custom tabulation report,
- browsed and decoded a custom tabulation report,
- performed a calculation,
- calculated a percentage change,
- selected variables for a custom tabulation report,
- sorted the contents of your custom tabulation report,
- printed a custom tabulation report, and
- created and viewed a graph.

7. Glossary and symbols

7.1 Glossary of commonly used terms

ASCII – American Standard Code for Information Interchange. This is an unformatted file that contains only text. Files of this type often have a **.TXT** extension.

Criteria – variables chosen to create tabulations in ESAS.

Custom tabulation – an option of the ESAS system whereby the user can customize the tabulation content by choosing any combination from the available variables.

DBF – file extension used to denote database files. These files can be used in both dBase and Foxpro softwares.

DIF – extension used to denote Data Interchange Format. File format where columns become fields and rows become records. These files are used by VisiCalc.

Disaggregation – separation or break-down of data to provide increased detail.

Distributional tables – output option of the ESAS system (see 4.1.1 for description).

Drop-down menu – menu which appears to be dropped from the top line of the menu bar allowing the selection of a subcommand.

DOS – common micro computer operating system used to allocate memory, organize files, etc.

Excel – is a spreadsheet software. Fields in the database will become columns in the spreadsheet and records become rows. Spreadsheet files created in Excel are given the extension **.XLS**.

Export – transforming and saving ESAS created tabulations into formats for use in other computer applications.

Hot key – can be a letter or a number which allows the user quick and easy access to commands and functions. The hot key is underlined.

Image file – is a file of a chosen report created for later printing. It can be identified by the extension **.PRT**.

Installation – this is the process that initiates the program which will allow ESAS to operate on your computer system.

Lotus – is a spreadsheet software. Fields in the database will become columns in Lotus and records will become rows. Lotus files can be identified by the extension **.WK?**, depending on the software version in use.

Menu bar – the bar across the top of the screen which lists the primary options of the system.

Pop-up menu – box listing options that appears on the screen after a selection is made from the menu bar.

Pre-established tabulation – is an option of the ESAS system whereby a user selects a tabulation using preset variables.

Record – a one-row collection of information about one item in a table, eg. variable name, province, estimate, number of farms, C.V.

Report – output option offered by the ESAS system (see 4.1.1 for description).

Screen – what appears on the monitor during an ESAS session, including the menu bar, the status box and the actual data windows.

Select – command prompting you to choose a menu item by highlighting it and pressing **ENTER** or by pressing the applicable hot key.

Status box – box that appears in the middle of the screen describing the current conditions of the programs, i.e. current tabulation selections.

Summary report – output option offered by the ESAS system (see 4.1.1 for description).

Text file – a file on disk in ASCII format.

Window – operating environment used by ESAS that allows easy access and manoeuvrability throughout the system.

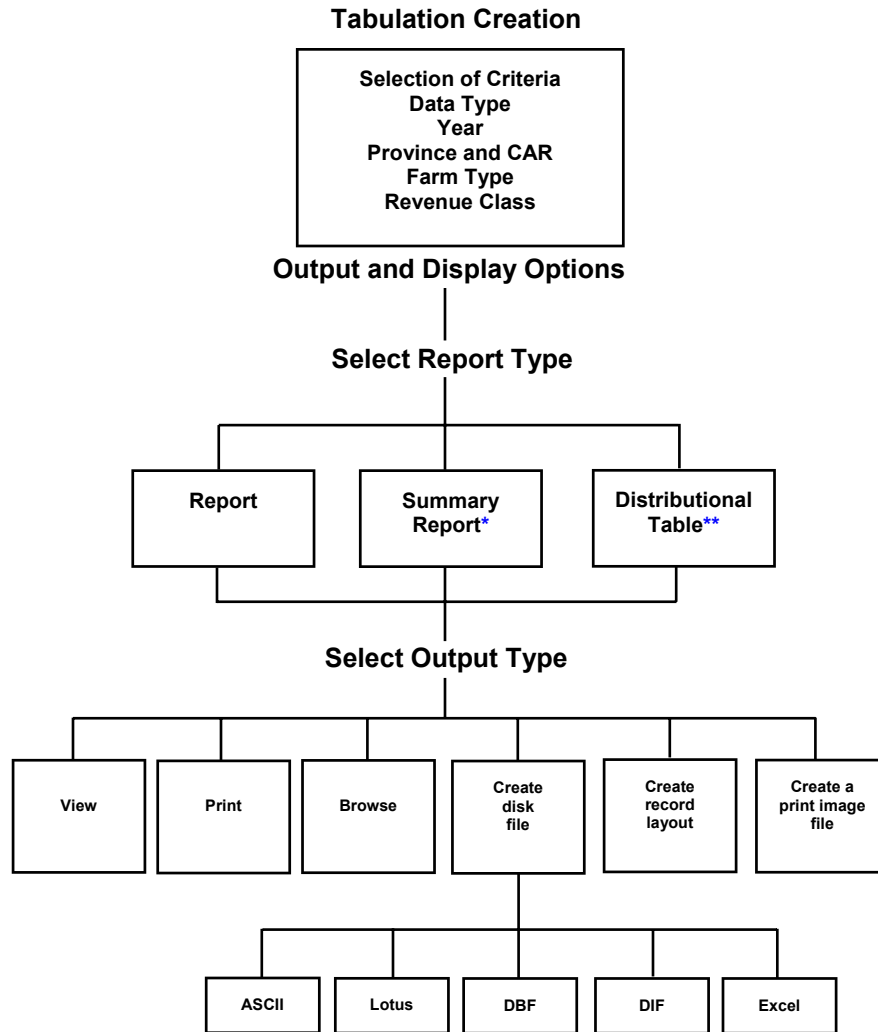
7.2 Symbols used within ESAS tabulations

In some cases the following symbols have replaced data within ESAS tabulations. These are standard Statistics Canada symbols that are used in all catalogued publications. They are defined below:

- nil or zero
- x data suppressed because of quality or to meet secrecy requirements of the *Statistics Act*
- .. figures not available
- ... figures not appropriate or not applicable
- amount too small to be expressed

Appendix A

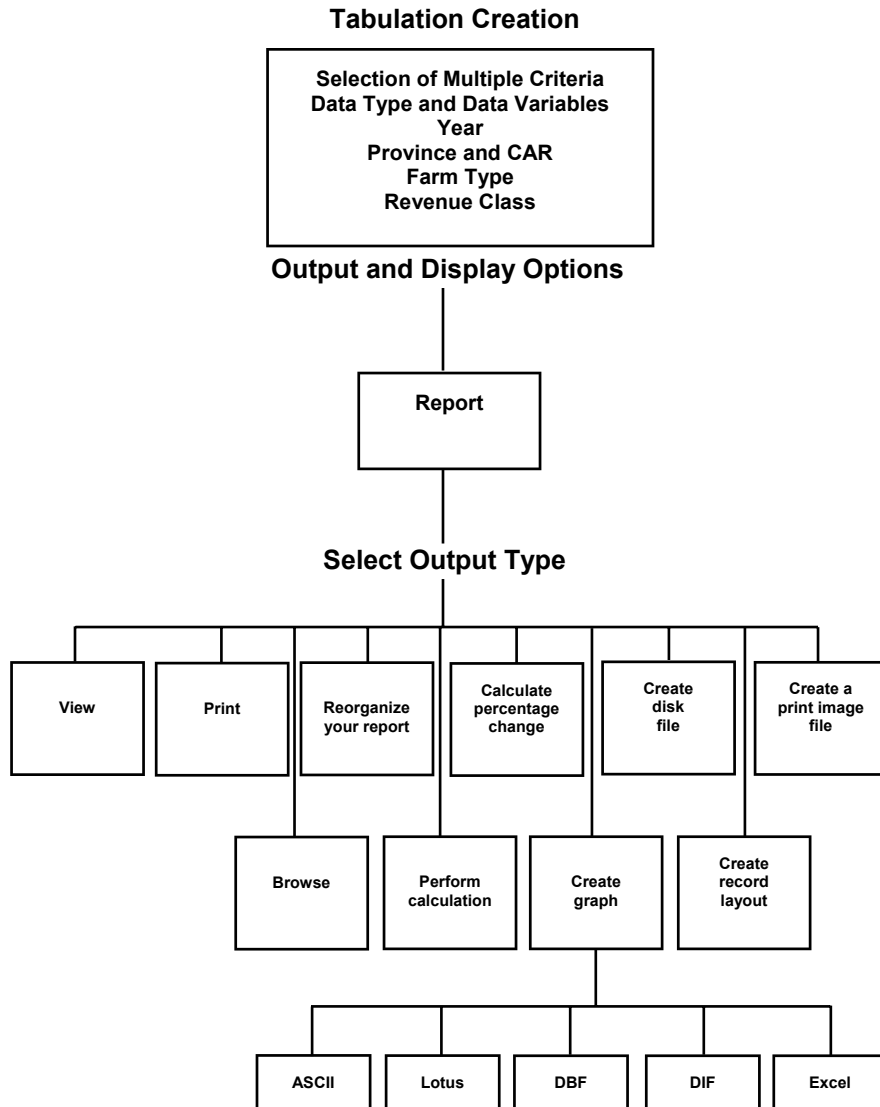
Figure 1 Summary of Available Options for Pre-established Tabulations



* This output is only available for "Revenues and Expenses".

** This output is only available for "Revenues and Expenses" and for "Off-Farm Income of Farm Operators".

Figure 2 Summary of Available Options for Custom Tabulations



Appendix B

ESAS Codes for Custom Tabulations

Provinces and Census Agricultural Region (CAR) Codes

Code	Province	Code	CAR
0	Total provinces	0	Total of regions
10	Newfoundland and Labrador	0	Total of regions
11	P.E.I.	0	Total of regions
12	Nova Scotia	0	Total of regions
		1	CAR 1
		2	CAR 2
		3	CAR 3
		4	CAR 4
		5	CAR 5
13	New Brunswick	0	Total of regions
		1	CAR 1
		2	CAR 2
		3	CAR 3
		4	CAR 4
24	Quebec	0	Total of regions
		1	Bas-Saint-Laurent
		2	Saguenay, Lac-Saint-Jean, Côte-Nord
		3	Québec
		4	Mauricie
		5	Etrie
		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	Montréal
		14	Centre-du-Québec
35	Ontario	0	Total of regions
		1	Southern Ontario
		2	Western Ontario
		3	Central Ontario
		4	Eastern Ontario
		5	Northern Ontario

46	Manitoba	0	Total of regions
		1	CAR 1
		2	CAR 2
		3	CAR 3
		4	CAR 4
		5	CAR 5
		6	CAR 6
		7	CAR 7
		8	CAR 8
		9	CAR 9
		10	CAR 10
		11	CAR 11
		12	CAR 12
47	Saskatchewan	0	Total of regions
		10	CAR 1A
		11	CAR 1B
		20	CAR 2A
		21	CAR 2B
		30	CAR 3AN
		31	CAR 3AS
		32	CAR 3BN
		33	CAR 3BS
		40	CAR 4A
		41	CAR 4B
		50	CAR 5A
		51	CAR 5B
		60	CAR 6A
		61	CAR 6B
		70	CAR 7A
		71	CAR 7B
		80	CAR 8A
		81	CAR 8B
90	CAR 9A		
91	CAR 9B		
48	Alberta	0	Total of regions
		10	CAR 1
		20	CAR 2
		30	CAR 3
		40	CAR 4A
		41	CAR 4B
		50	CAR 5
		60	CAR 6
70	CAR 7		
59	British Columbia	0	Total of regions
		1	Vancouver Island-Coast Region
		2	Lower Mainland-Southwest Region
		3	Thompson-Okanagan Region
		4	Kootenay Region
		5	Cariboo Region
		6	North Coast Region
		7	Nechako Region
		8	Peace River Region

Farm Type Codes

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

Revenue Class Codes

Code Revenue Class

0	Total of revenue classes
2	\$ 10,000 - \$ 24,999
3	\$ 25,000 - \$ 49,999
4	\$ 50,000 - \$ 99,999
5	\$ 100,000 - \$ 249,999
6	\$ 250,000 - \$ 499,999
7	\$ 500,000 and over

Type of Data

Code Type of Data

11	Revenues and Expenses (Unincorporated and Incorporated Sectors)
12	Off-Farm Income (Unincorporated Sector)
13	Additions and Disposals (Unincorporated and Incorporated Sectors)
14	Revenues and Expenses (Unincorporated Sector)
16	Off-Farm Income (Unincorporated and Incorporated Sector)
17	Revenues and Expenses (Farm families)
18	Off-Farm Income (Farm families)
21	Crops
22	Livestock
31	Assets and Liabilities
32	Capital

Rating the C.V.

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

<u>C.V.</u>	<u>Rating</u>
0.00% to 4.99%	Excellent
5.00% to 9.99%	Very Good
10.00% to 14.99%	Good
15.00% to 24.99%	Acceptable
25.00% to 34.99%	Use with caution
>=35.00%	Too unreliable to be published