I. INTRODUCTION

The monitoring of the palay and corn situation in the country is being done on a monthly basis by the Bureau of Agricultural Statistics (BAS) to update the forecasts generated through the Palay and Corn Production Survey (PCPS). A computerized system was created called The Monthly Palay and Corn Situation Report System (MPCSRS) to address the need of providing these monthly updates to the Department of Agriculture (DA).

This manual serves as a data processing guide for the MPCSRS developed under the CSPro platform.

II. SYSTEM REQUIREMENTS

The following are the hardware specifications as well as the software to be used:

- Pentium III
- 64 MB or higher of RAM
- at least 100 MB disk space
- CD-ROM Drive
- Windows 98 or higher version operating system
- CSPro version 3.3
- MS ACCESS 2000
- Printer

This manual also contains the procedures on system installation, accessing the system, data entry, data cleaning & editing, and the generation of barangay master file.

III. SYSTEM INSTALLATION

The MPCSR system is contained in a CD. The steps in installing the system into the hard disk particularly in drive C are as follows:

1. Insert the CD in the CD drive.
2. Double click on the **MPCSRPALAY or MPCSRCORN** icon.
3. The set-up wizard will appear; click **Next** to begin installation.
4. Click **Install**.
5. Click on the "**Launch MPCSRPALAY or MPCSRCORN**" checkbox to uncheck the option.
6. Click **Finish** to complete installation of the system.

IV. ACCESSING THE MPCSR SYSTEM (MPCSRS)

The MPCSR system can be accessed through the following steps:

1. Double click the **MPCSRPALAY / MPCSRSCORN** icon.
2. The MPCSR-PALAY **Main Menu** will be displayed on the screen where the user can select the desired options to execute. (See Figure 1).

Figure 1. MPCSRPALAY Main Menu

The **MPCSR - PALAY / CORN Main Menu** is composed of the following options:

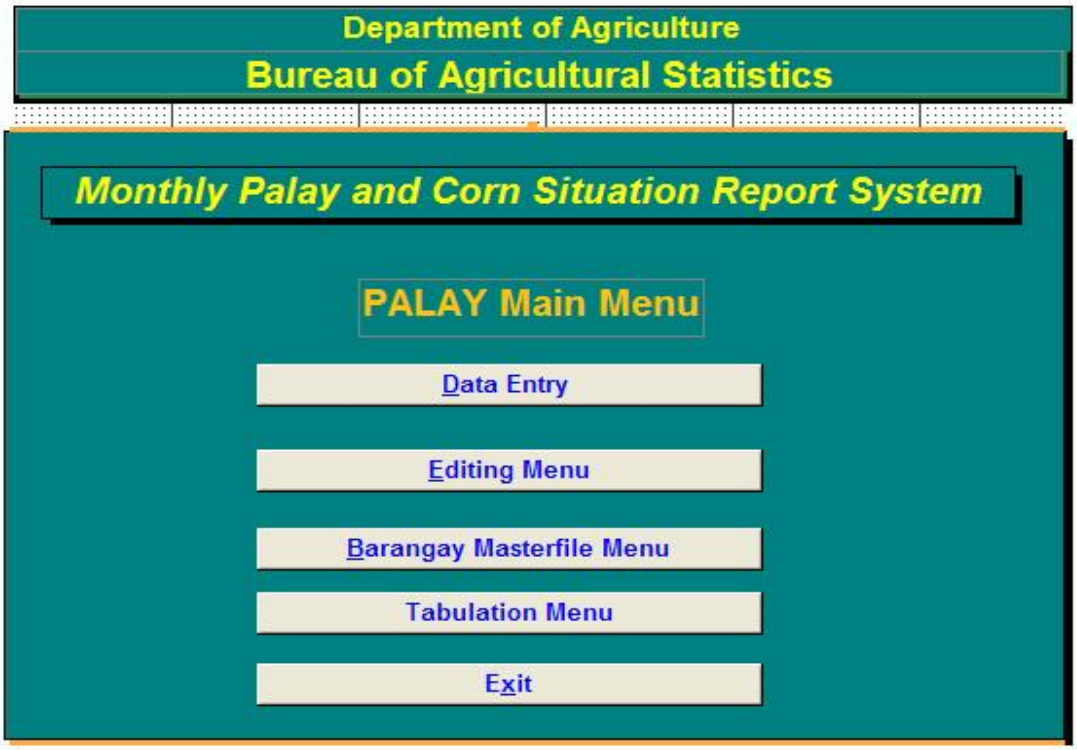


Figure 1. The Main Menu screen

[1] Data Entry

[2] Editing Menu

[3] Barangay Masterfile Menu

[4] Tabulation Menu

[5] Exit

V. DATA ENTRY

Data entry is the process of capturing data from the source document or from the survey questionnaire transforming into a machine-readable media. The contents of the questionnaire are inputted into the computer using a data entry application program developed in **CSPro**. The data entry program is composed of three (3) record types, where each record type represents a corresponding block in the questionnaire. These record types are:

RT 1 – Sample Particulars	(Block B)
RT 2 – Current Quarter Area/Production	(Block B.1)
RT 3 – Current Quarter's Planting Intentions	(Block B.2)

Steps for Data Entry:

1. Click the item **Data Entry / Update Data** from the **Main Menu.** The **Select Data File** screen will appear. (see **Figure 2**)

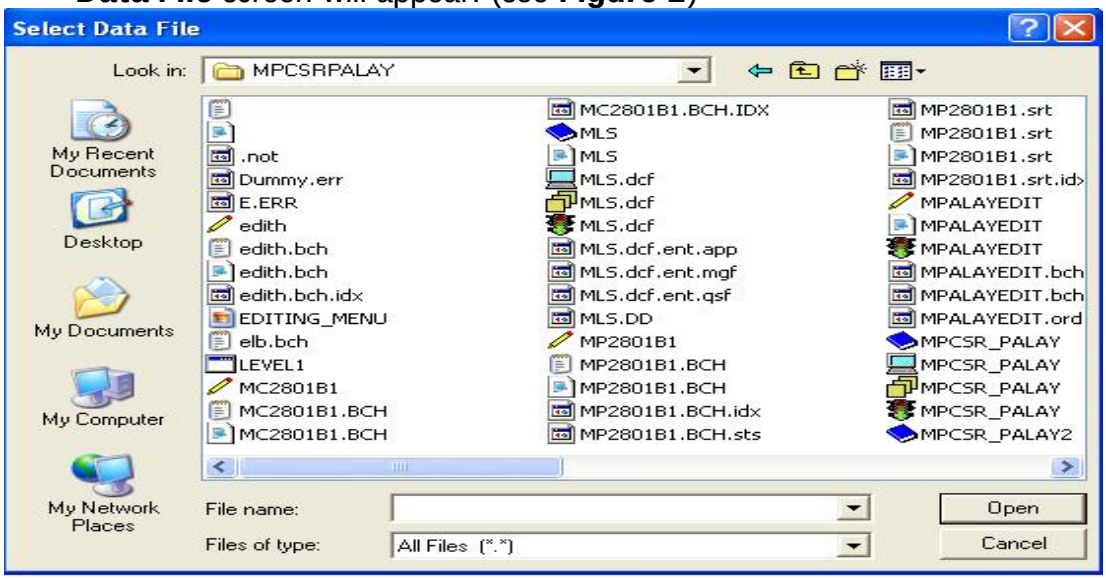


Figure 2. Select Data File screen

2. Enter the name of file to create on the box where the **File name** is located then click **Open**. Follow the File Naming Convention for this system as **MPpppmm.BCH**

For PALAY		**For Corn**
M – system of MPCSRS		M - system of MPCSRS
P – palay	or	C - corn
pp – province code		pp - province code
mm – month code		mm – month code

For demonstration purposes, the province code 28 will be used throughout the processes involved in this documentation.

3. Another screen will appear **(see Figure 3 below)** prompting the user for a response. This screen will appear only if the user is creating a new file, otherwise the user will choose an existing file listed on the screen.

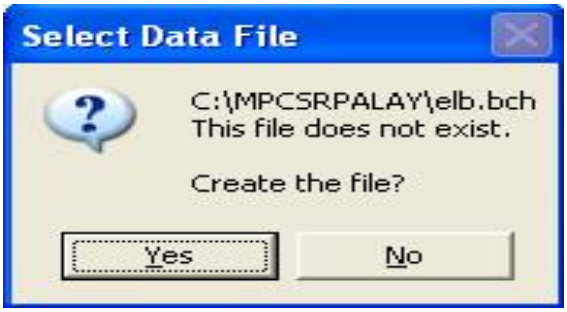


Figure 3: Select Data File screen

4. Click the **YES** box to invoke the screen illustrated below which will prompt the user to supply **user ID (see Figure 4)**

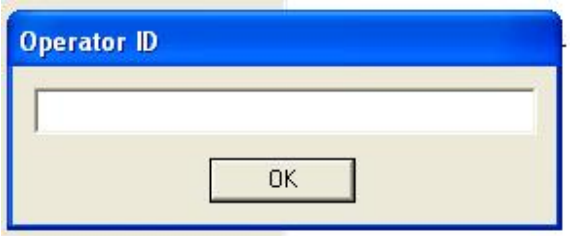


Figure 4. Operator ID screen

5. Enter operator ID, e.g. name, nickname, id code, etc.

6. Click the **Yes** box to create a new file. Thereafter, the **Questionnaire** screen will appear **(see Figure 5)**.

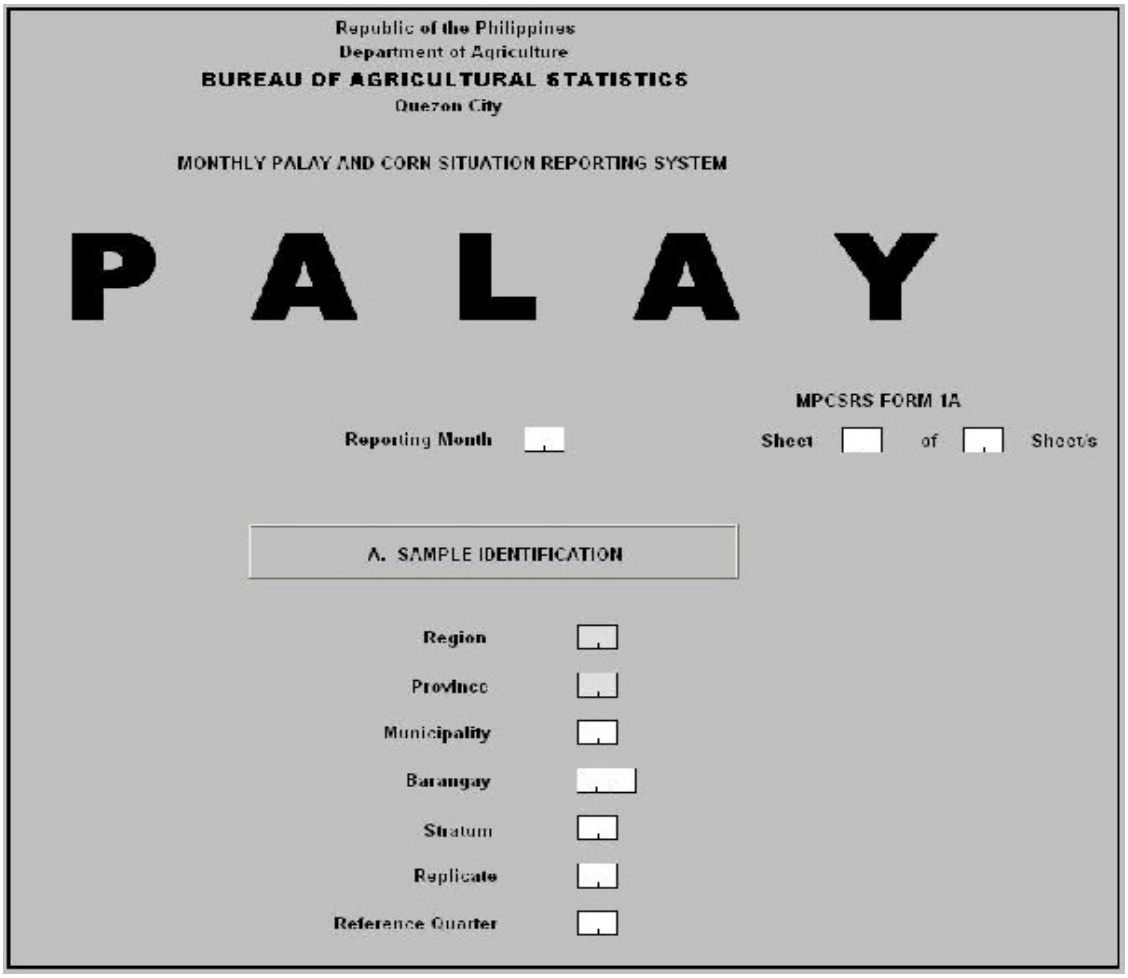


Figure 5. The Questionnaire screen No. 1

7. Enter data items for Questionnaire Screen No 1 on the corresponding boxes with the number of digits listed below:

- Reporting Month Code	xx	
- Sheet number	xx	
- Total number of sheets	xx	
- Region	xx	
- Province	xx	
- Municipality		xx
- Barangay	xxx	
- Stratum	xx	
- Replicate	xx	
- Reference Quarter		xx

8. As soon as the last data is entered, the Record Type 1 screen will appear. **(see Figure 6)**

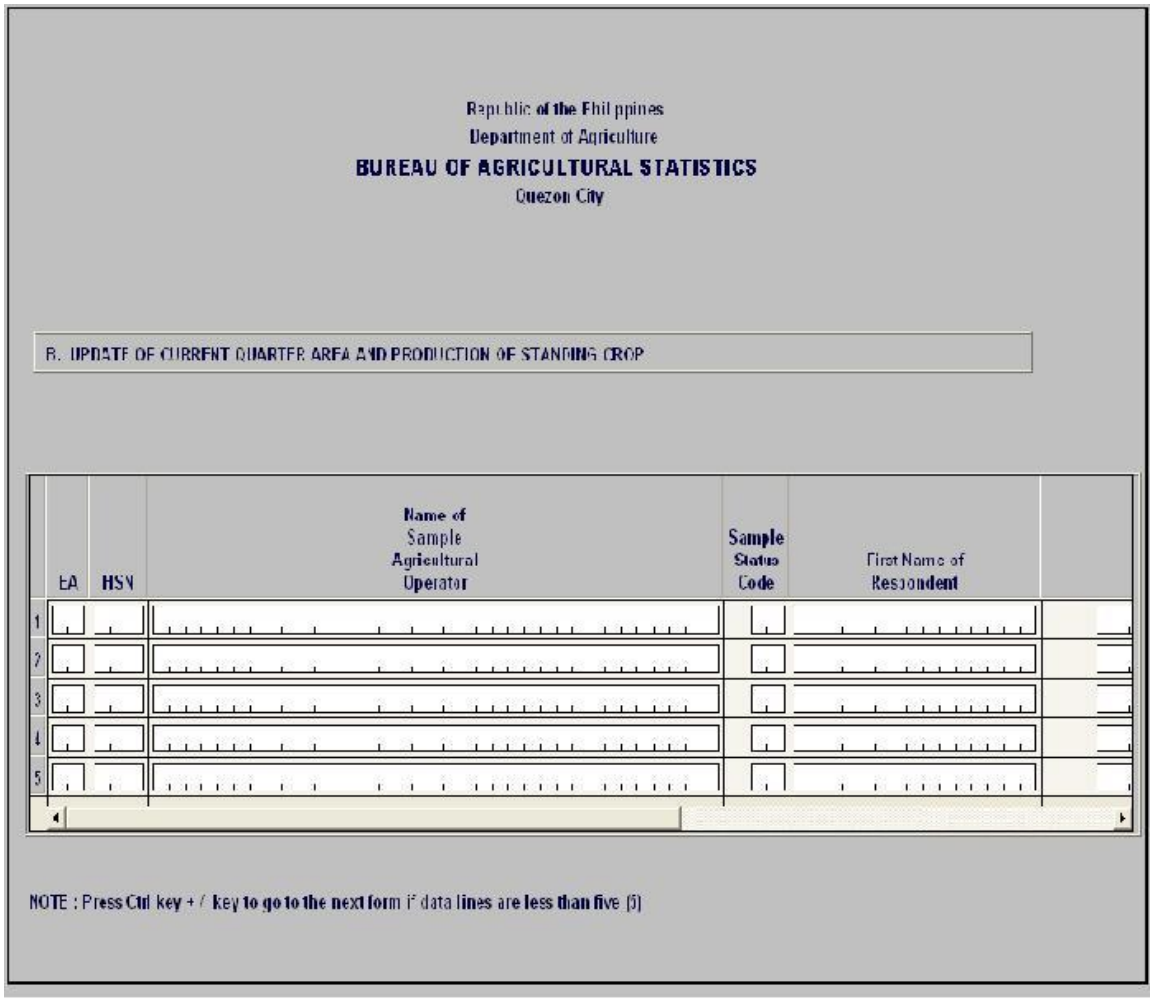


Figure 6. Record Type 1 screen

10. For Record Type 1, there are five (5) data lines where data items are to be entered for the first sheet of the questionnaire. Enter the two-digit (2) Enumeration Area (EA) code, followed by the three-digit (3) Household Serial Number (HSN) code. The EA and HSN are common to all the pages of the questionnaire. Type in the name of the Sample Agricultural Operator which follows the format – surname followed by the first name. These are separated by a comma. Likewise, enter the Status Code, the First Name of Respondent, and the Reason in Material Change in Area Production in their corresponding boxes. If data to be entered are less than five data lines, Press the Control key and the / (slash) key at the same time to go to the next data screen. **(see Figure 7).**

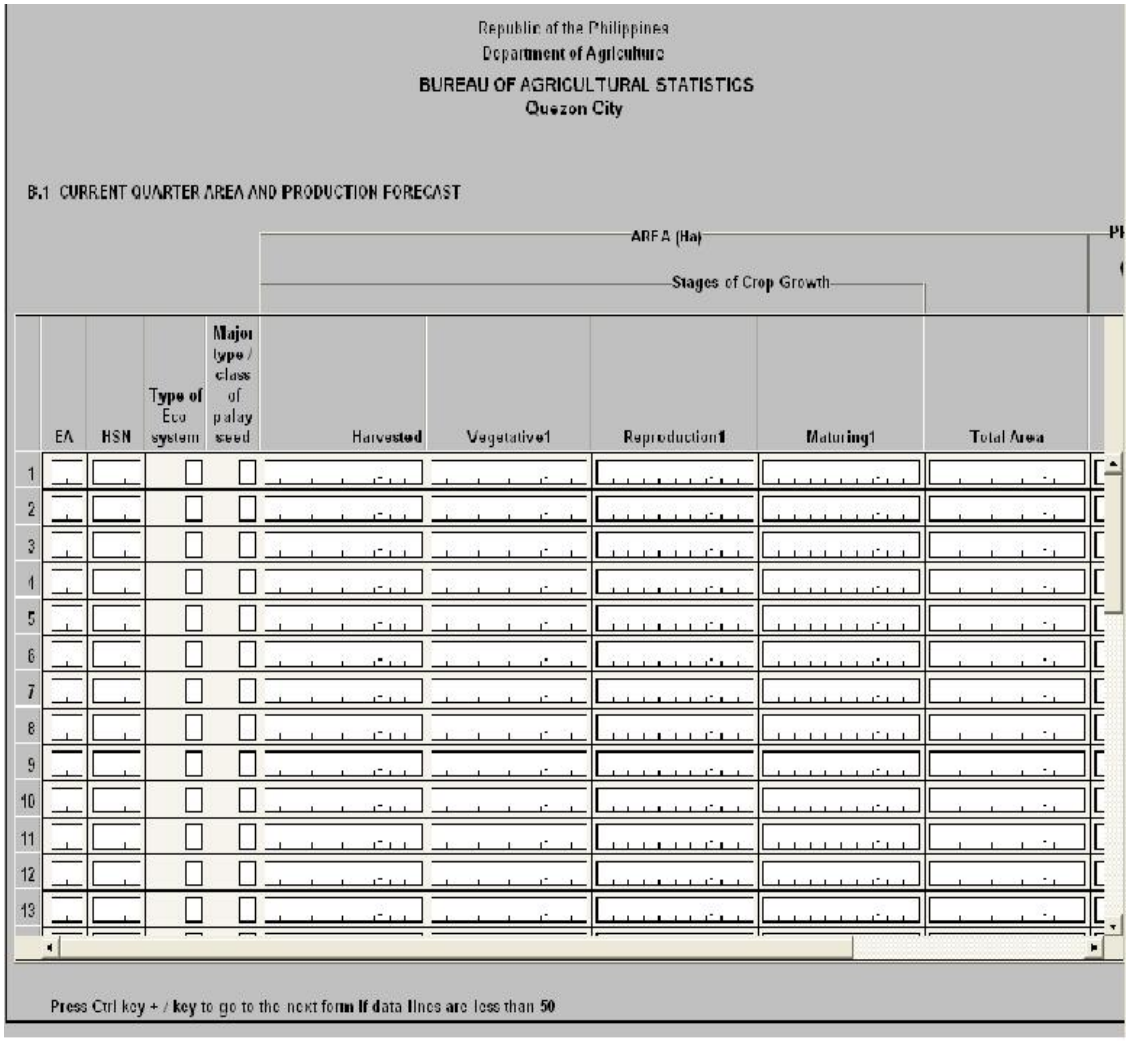


Figure 7. Record Type 2 screen

11. For Record Type 2, enter the EA and HSN codes, followed by the Type of Ecosystem code and the Major type/class of Palay seed. The boxes for the Area and Production entries are reflected with two (2) decimal places, therefore there is a need for the processor to be cautious in keying-in the data. If there are no more data to be entered, press the **Control key** and the ***/* (slash) key** at the same time to go to the next data screen. **(see Figure 8).**

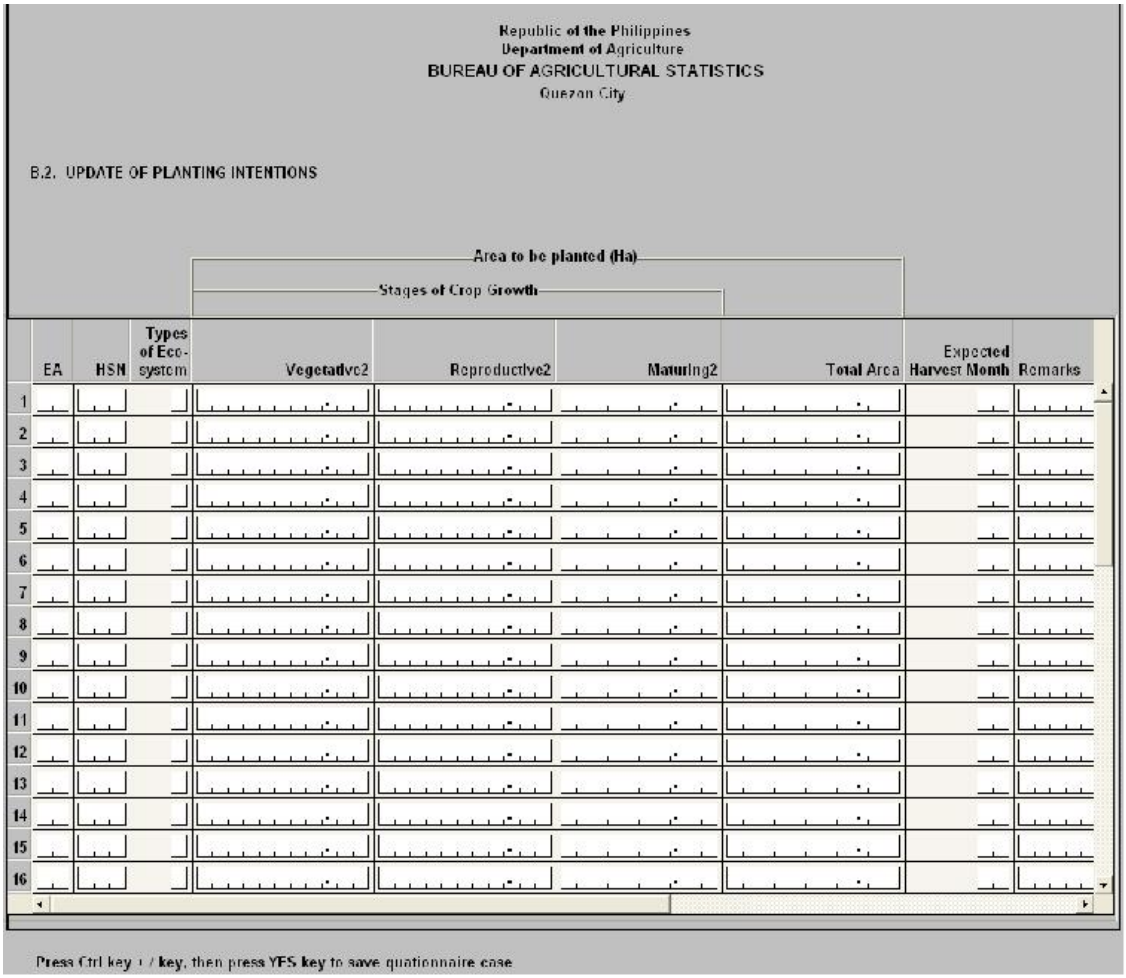


Figure 8. Record Type 3 screen

12. For Record Type 3, enter the same EA, HSN, and Ecosystem codes. The Area entries are, again, reflected in two decimal places. Key-in the remarks in the Remarks box. Again, if there are no more data to be entered, press the Control key and the / (slash) key at the same time to go to the next screen **(see Figure 9)**.

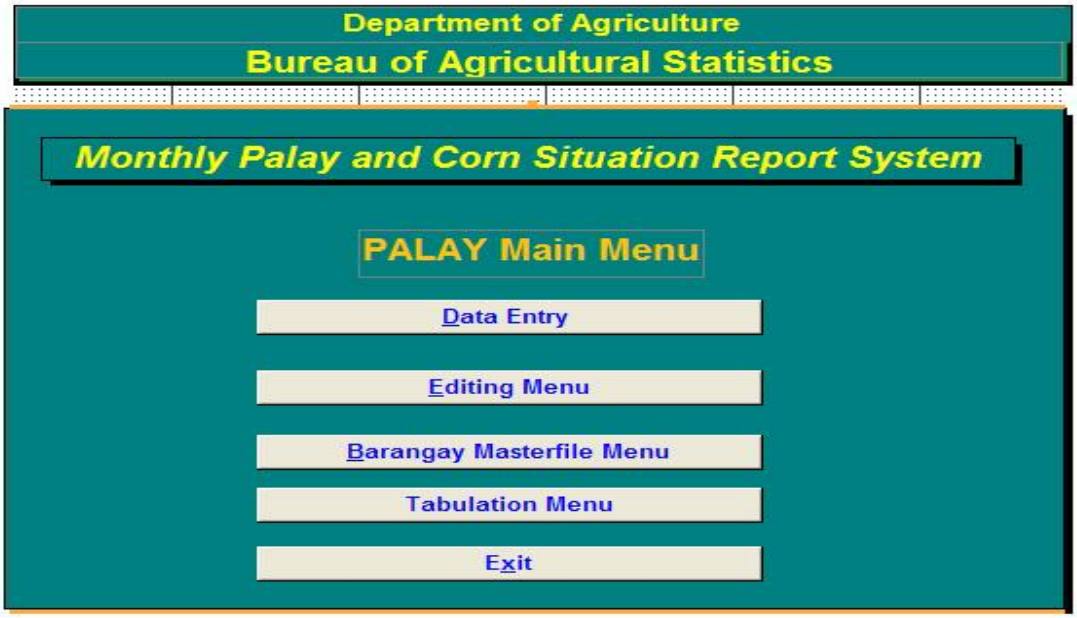
Figure 9. Acceptance of Questionnaire case screen

13. Click on the **Yes** box to accept the 'questionnaire' case. As soon as the case is accepted, a new questionnaire case will be accepted for data entry.

VI. FIRST LEVEL EDITING

Computerized editing is needed to ensure the cleanliness of data. This process runs the program that will automatically check erroneous variables. The program checks data items as to ranges, consistencies and other editing criteria. To run the program, follow the procedures below:

1. Click the item Editing Menu box at the Palay Main Menu. **(see Figure below)**



2. This will invoke the **Editing Menu screen (see Figure 10)**

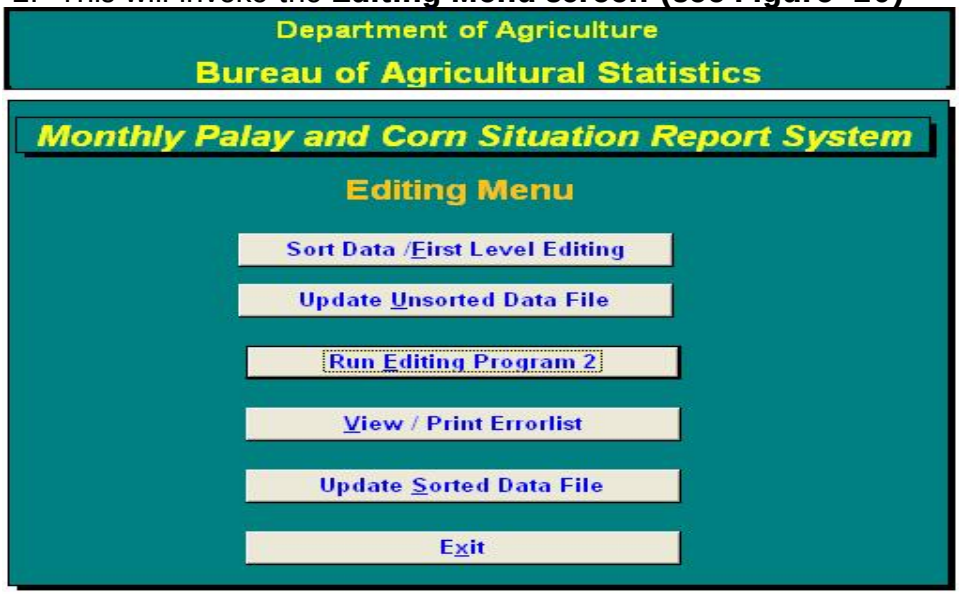


Figure 10. The Editing Menu screen

3. Click the item **SORT DATA / FIRST LEVEL EDITING** from the Editing Menu. The Sort Data screen will be displayed **(see Figure 11)**

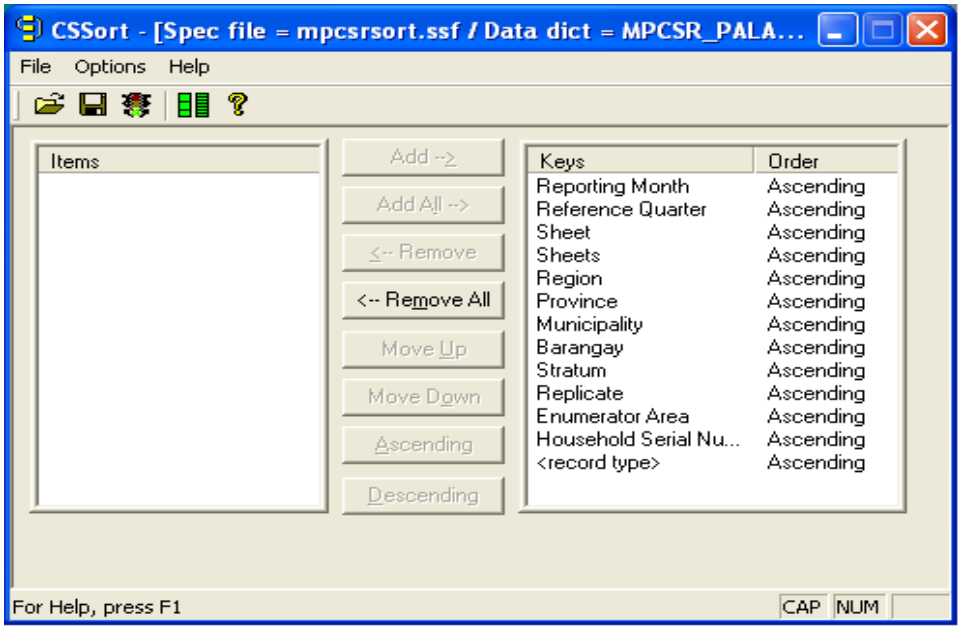


Figure 11. The Sort Data screen

4. This tool will allow the user to sort data files as described by the data dictionary. As can be seen in Figure 11, by default, all the items are residing in the second box listed under the headings ***Keys*** and ***Order***. The items are listed according to the order that they were defined during the data entry stage. This is the predetermined order that the MPCSR data is to be sorted. To run the program, simply click on this icon (see Figure 11)

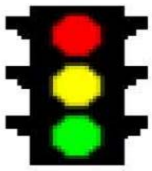


Figure 12. The Run Program icon

5. The running of **SORT** program will include the input and out put files. Enter the name of the batch file **(MP2802.BCH)** as input file and the sort file **(MP2802.SRT)** as the output file, then click **OK. (see Figure 13)**

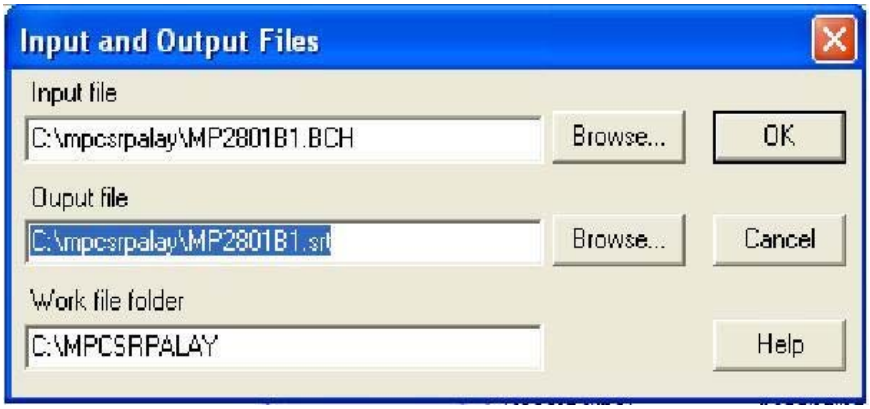


Figure 13. The Input and Output file screen

6. There is a First Level Editing being done when the sort program is ran. This editing concentrates on checking the consistency of Enumeration Area (EA) and Household Serial Number (HSN) of the questionnaire from page 1 to page 2. If the EA and HSN are not consistent, the screen below will appear **(see Figure 14)**.

Figure 14. The Sort Data with errors screen

7. Click the **OK** box to view the inconsistency of the EA and HSN in the questionnaire. The Text Viewer lists the identification number and at what level of the questionnaire the inconsistency is evident, as demonstrated in the screen below: **(see Figure 15)**.

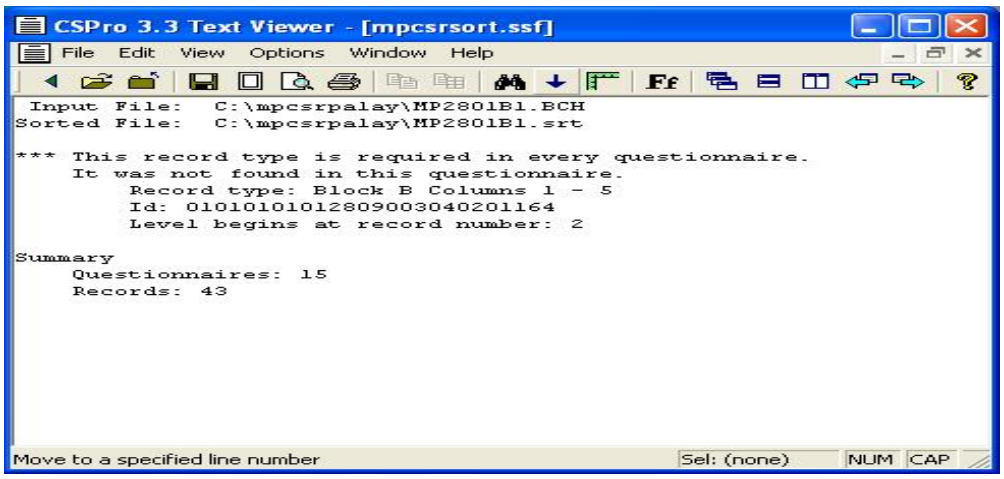


Figure 15: The Text Viewer screen

8. Minimize the **Text Viewer** screen by clicking on the **Minimize** box at the upper right hand corner of the screen. Click the **Updating of Unsorted File** from the Editing Menu. The **Select Data File** screen will appear prompting the user to click on the batch file to be corrected (Enter the letters **MP** at the File Name box invoking the list of file names starting with letters **MP)** Click the **.BCH** file. A screen **(Figure 16)** will appear with the list of cases on the box located at the left side.

Figure 16. Updating of Sorted File screen

9. The highlighted case is the first case in error. Click the **Modify** icon. (**Figure 16** below illustrates the **ADD, MODIFY,** and the **VERIFY** icons). The Data Entry screen will appear and the system is now ready for updating of cases in error.

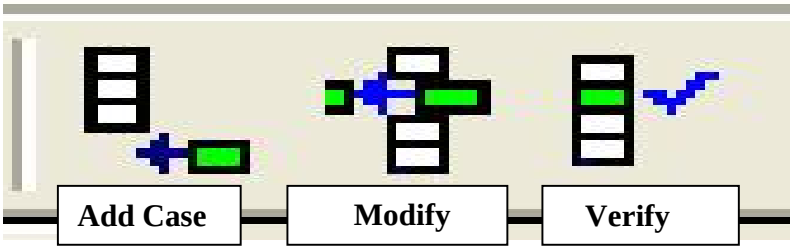


Figure 17: The Add, Modify and Verify icons

10. Restore the Text Viewer screen by clicking on it located at the task bar (at the bottom of the screen). The error list will be displayed and the user now have access to two windows. Click the Text Viewer screen to spot the identification number of the case and click on the other window to update the case based on the list of errors.

11. The Modify icon is clicked each time a case is to be corrected. Click **Close** at the conclusion of updating the last case. Repeat steps 3 to 5. At this point, the

screen below will be invoked **(see Figure 17)** prompting the user for an answer. Click **YES** to begin sorting the data.

Figure 18. The Replace Existing File screen

NOTE: Repeat the activities of sorting, validation and updating of data until the file is error-free.

12. if the EA and HSN consistency are already in place, the screen below **(Figure 18)** will appear which means the data are now sorted completely.

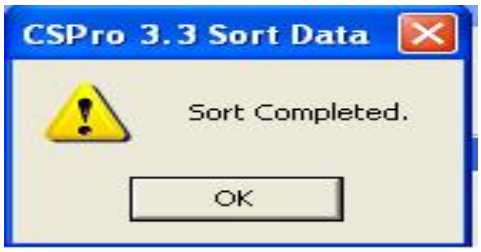


Figure 19. The Sort Completed screen

VII SECOND LEVEL EDITING

Editing of the MPCSR data consists of two (2) levels. The first level checks if the ID entered for one sample household is consistent with the ID indicated in the other records of said household. This level also checks if all records pertaining to a sample household have been encoded.

The second level of editing is the usual check on valid entries, ranges and consistencies between related items. This level is a more detailed edit because each data item is checked as to its validity and acceptability.

Only after completing the first level of editing can the user proceed with the second level editing. Unlike in the first level, a sorting activity is involved here where all records for a particular household are grouped together.

1. Click the item **Run Editing Program 2** of the Editing Menu (see Figure 10). This will invoke the MPALAYEDIT screen as shown below **(see Figure 20)**.

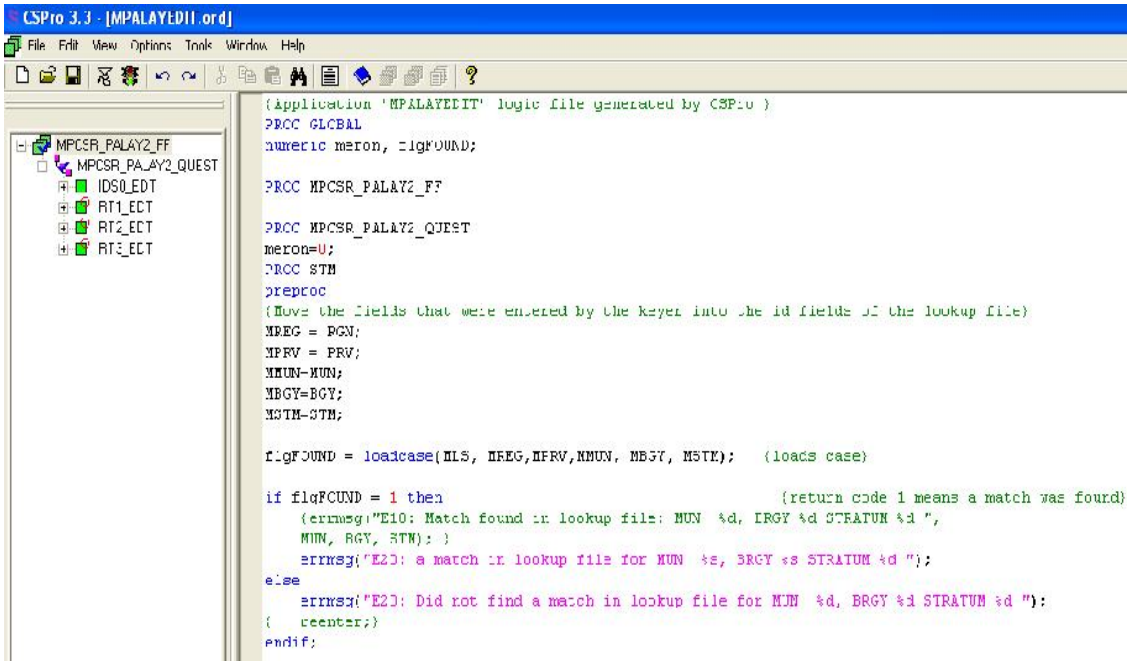


Figure 20. The MPALAYEDIT screen

2. Click the **RUN** icon (Figure 12). The **Define File Associations** screen will appear **(see Figure 21)**.

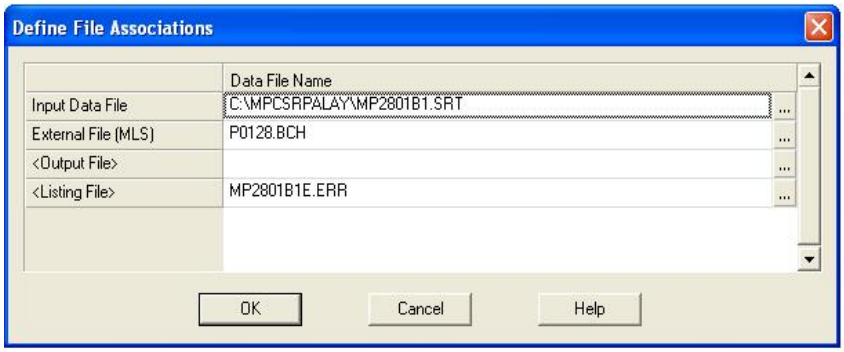


Figure 21. The Define File Associations

3. Enter the **Sorted** file name in the **Input Data File** box (**MP2802.SRT**), the **Masterlist** file (**P0128.BCH**) in the External File (MLS) box, and the **Error listing** file the **<Listing File>** box. Then click **OK**. The Text Viewer screen **(see Figure 21)** will appear which informs the user of the **CSPro Process Summary** and the **Process Messages**. The user can refer to this list in correcting the errors in the file. It can also be printed if desired. Just click **File** on the toolbox, and click **Print**.

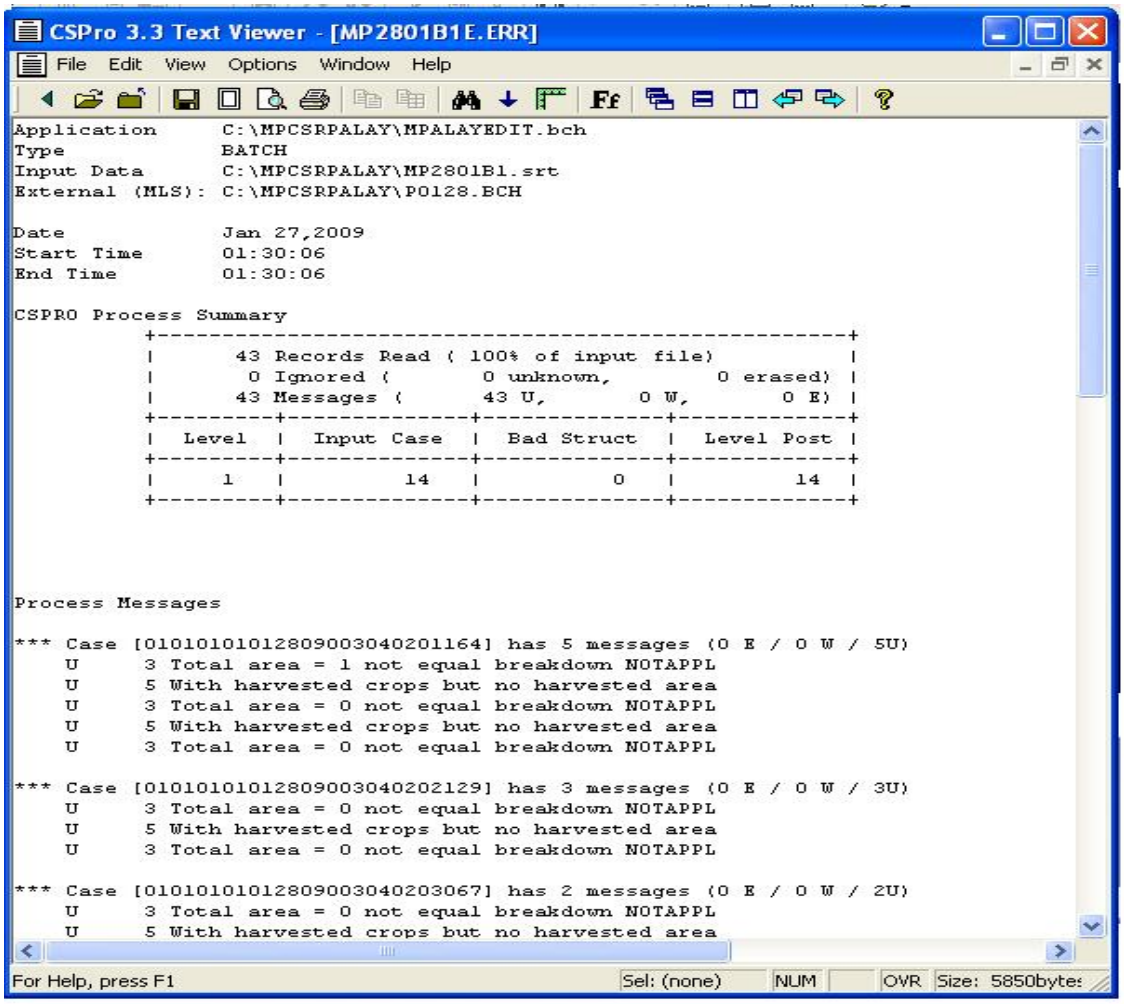


Figure 22. The Error listing screen

4. Minimize the window and close the Editing Program 2 screen. The **Editing Menu** will appear. Click **Update Sorted Data File**. The **Select Data File screen (Figure 2)** will be invoked. Enter the name of the sorted file (**MP2802.SRT / MC2802.SRT**) and click **Open**.

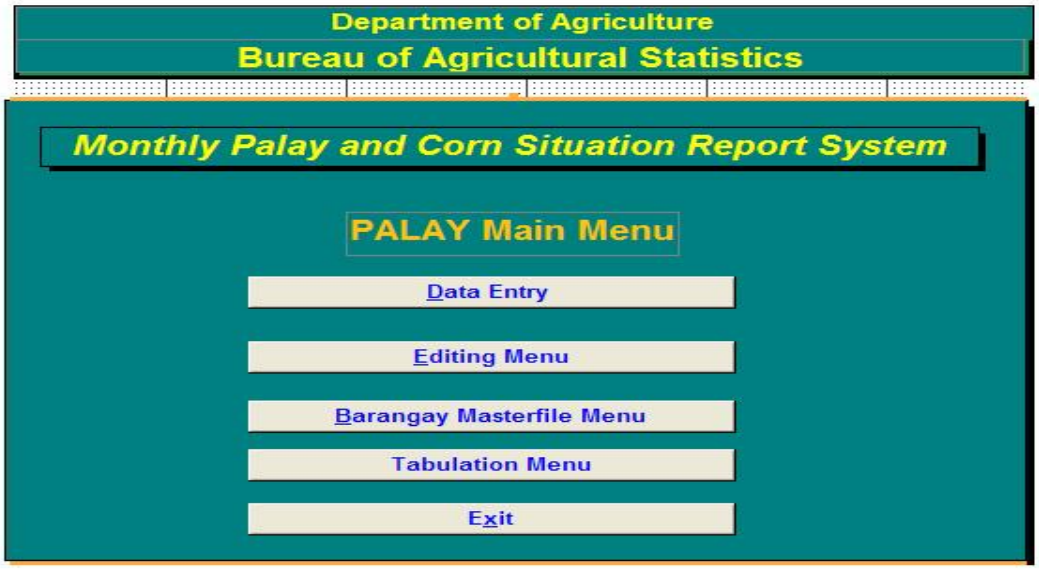
5. Edit the cases found in error. The **Modify** icon is clicked each time a case is to be edited. After editing the cases in error, click the **STOP** icon. Click the **Close** button at the right hand corner of the screen.

   NOTE: Repeat the activities of validation and updating of data until the sorted file is error-free

VIII. UPDATING OF THE BARANGAY MASTERFILE

The updating of the barangay masterfile is an activity critical to the system. A program that will automate the updating of the masterfile was developed for this purpose. Before running the program, all sample ID's should have been completed and corrected; and the consistencies of data items are checked. The steps in running the program are as follows:

1. At the PALAY MAIN MENU click on the **Barangay Masterfile Menu**



which will invoke the Barangay Masterfile Menu screen (see **Figure 23**)

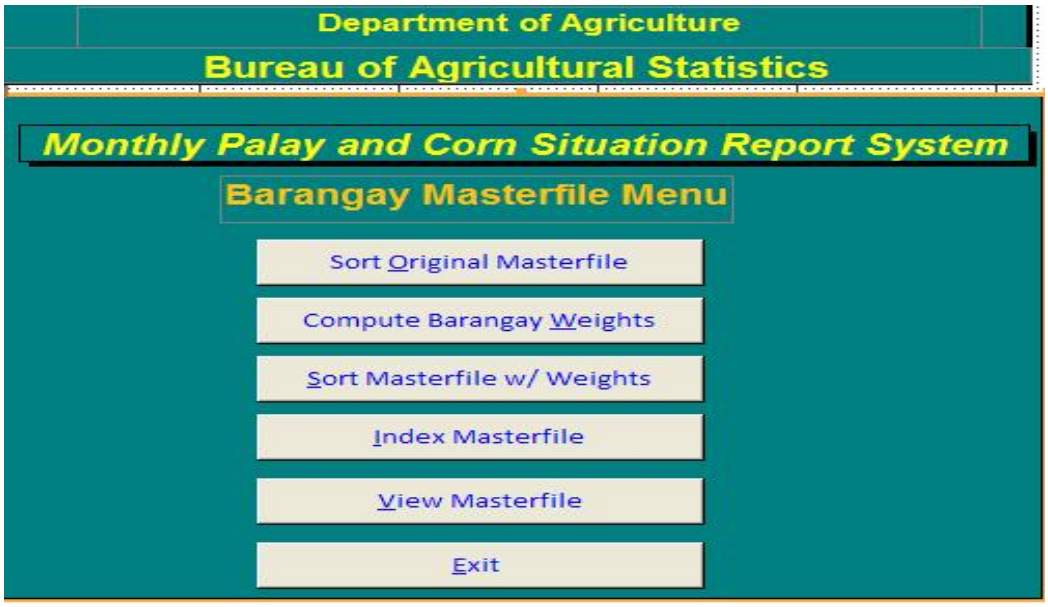


Figure 23. The Barangay Masterfile Menu screen

2. Click on the command button **Sort Original Masterfile**. The **SORT UTILITY screen** will be invoked (see Figure 24).

(For demonstration purposes, the regional code 05 and the provincial code 17 were used in the processes in this documentation)

Figure 24: The SORT UTILITY Screen

3. Enter the file name of the **input file** which is the batch file using the format illustrated below:

P	**- Palay**	**C**	**- Corn**
rr	**- region code**	**rr**	**- region code**
pp	**- province code**	**pp**	**- province code**
. bch	**- filename extension for both systems**		

4. Enter the name of the output file. Use the same file naming convention for the **output file** however the filename extention will be **.srt**.

5. Click on the command button **Compute Barangay Weights** at the Barangay Masterfile Menu to invoke the next screen (**see Figure 25**)

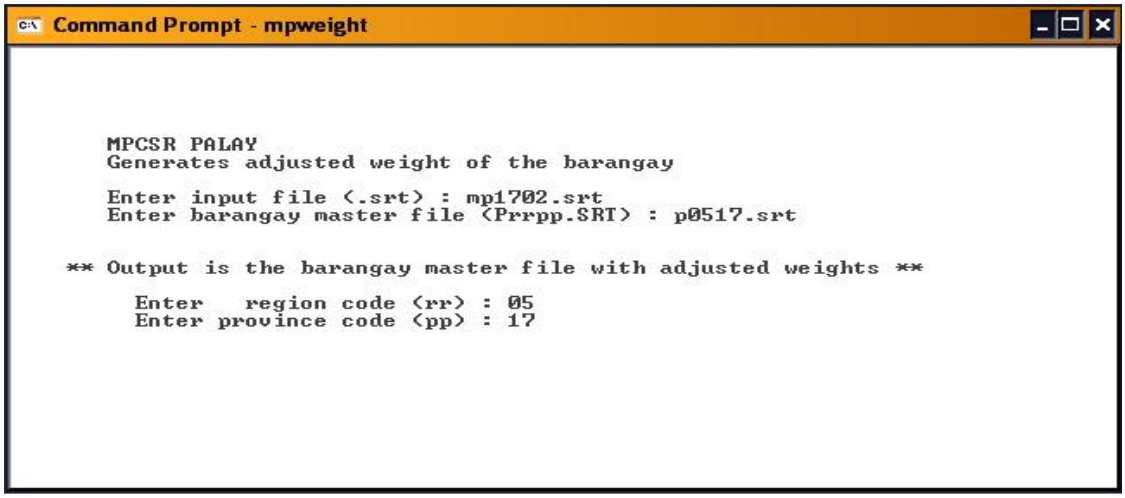


Figure 25: The Barangay Weights Generation screen

6. There are two (2) input files needed to run this program. First, enter the name of the input file which is the **sorted clean data file** (**MPrrmm.srt**) and enter the name of the second input file which is the **sorted barangay masterfile (Prrpp.srt)** .

7. The program will prompt the user to enter the region and province codes respectively but not the name of the output file because it will create the file name by itself using this format: **Prrpp.out or Crrpp.out (P0517.out or Crrpp.out)**. Close the program to go back to the Barangay Masterfile Menu.

8. Click on the command button **Sort Masterfile w/ Weights**. **Figure 26** screen will appear which will prompt the user to enter the region and province codes respectively. This program will sort the records of the masterfile with its adjusted barangay weights.

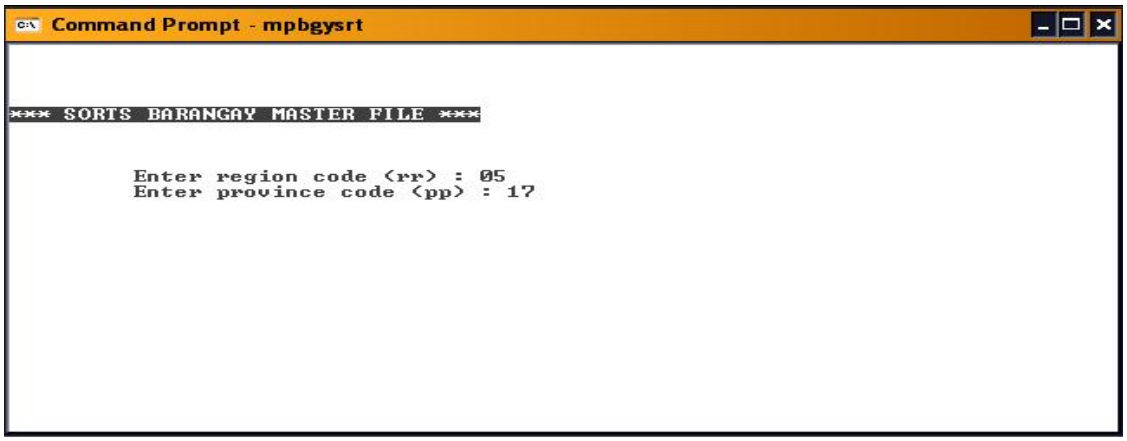


Figure 26: The Sort Masterfile with Weights screen

9. Again, the program itself will create the output file with the file name using this format: **PMLSrrpp.srt or CMLSrrpp.srt (PMLS0517.srt or CMLS0517.srt)**. Close the program to go back to the Barangay Masterfile Menu.

10. Click on the command button **Index Masterfile** in the Barangay Masterfile Menu. The screen below will appear (Figure 27).

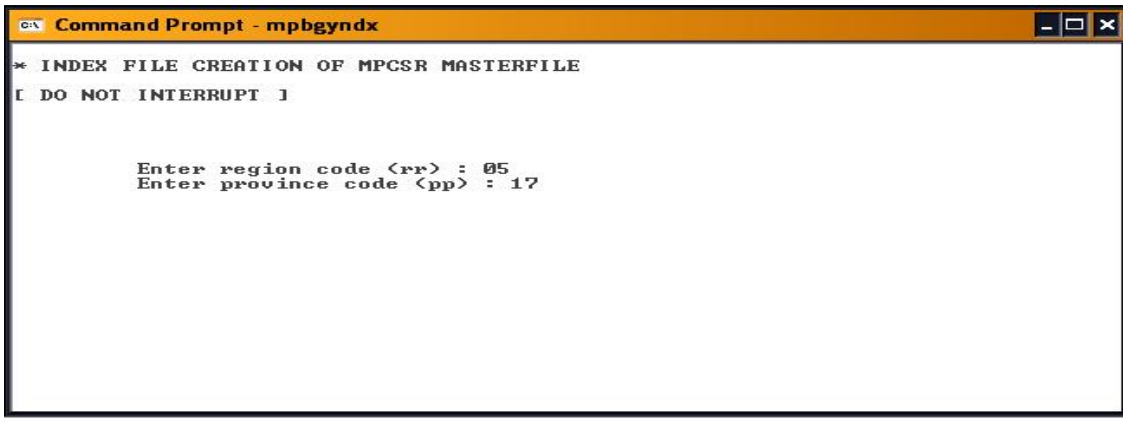


Figure 27: The Index Masterfile screen

11. Enter the region and province codes. Once again, the program itself will create the output file with the file name using this format: **PMLSrrpp.ndx or CMLSrrpp.ndx (PMLS0517.ndx or CMLS0517.ndx)**. Take note of the indexed file name as it will be used as input in the generation of tables. Close the program to go back to the **Barangay Masterfile Menu**.

12. Click on the command button **View Masterfile.** It is imperative that the user view the output files generated from the previous processes. There are three (3) output files that the user has to view:

12.1 the generated barangay master file (Prrpp.OUT)
12.2 the sorted master file (PMLSrrpp.SRT)
12.3 the print file after indexing the master file (PMLSrrpp.PRN)

If Prrpp.OUT or the PMLSrrpp.SRT is empty, the user has to go through the process of generating the master file again. If, on the other hand, the PMLSrrpp.PRN is empty, it means the barangay master file is clean and ready for tabulation purposes.

To view the files (Prrpp.OUT / PMLSrrpp.SRT), click on the command button **View Masterfile**, a Windows screen will appear (**see Figure 27**) informing the user that "Windows cannot open this file" precisely because the file to be opened is not associated with the program that is needed to open it. This program association is a

one-time process to be done for the user to view the table/s for the first time. This process will not be repeated once it has already been done. Follow the instructions below to do the process:

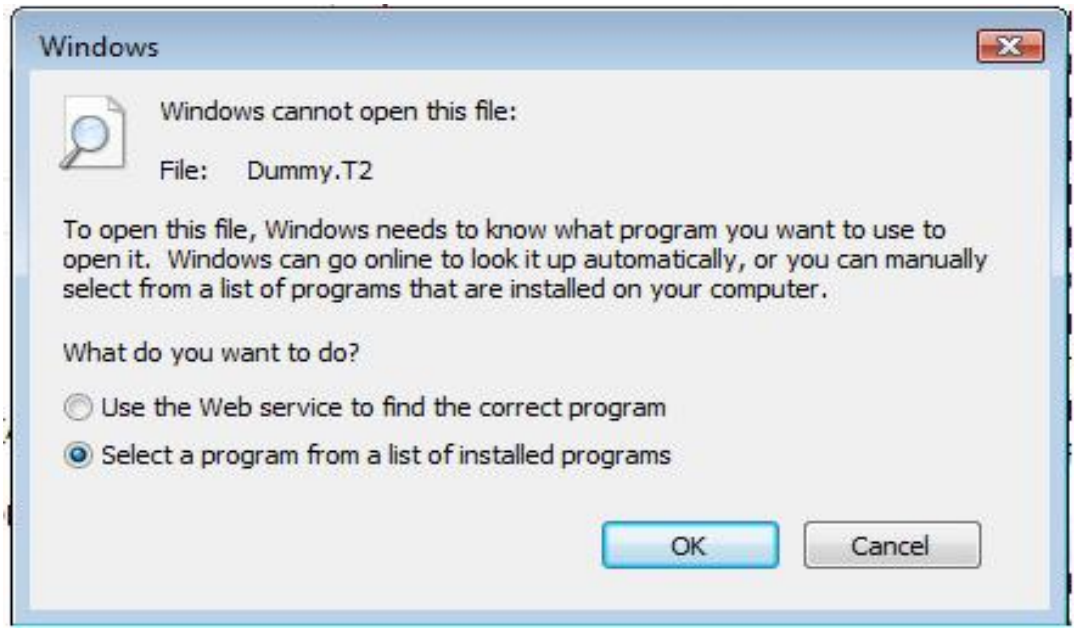


Figure 27: The Windows screen

a. Click on **Select a program from a list of installed programs** followed by clicking the **OK** box. Thereafter, the **Window Open With** screen (**see Figure 28**) will appear.

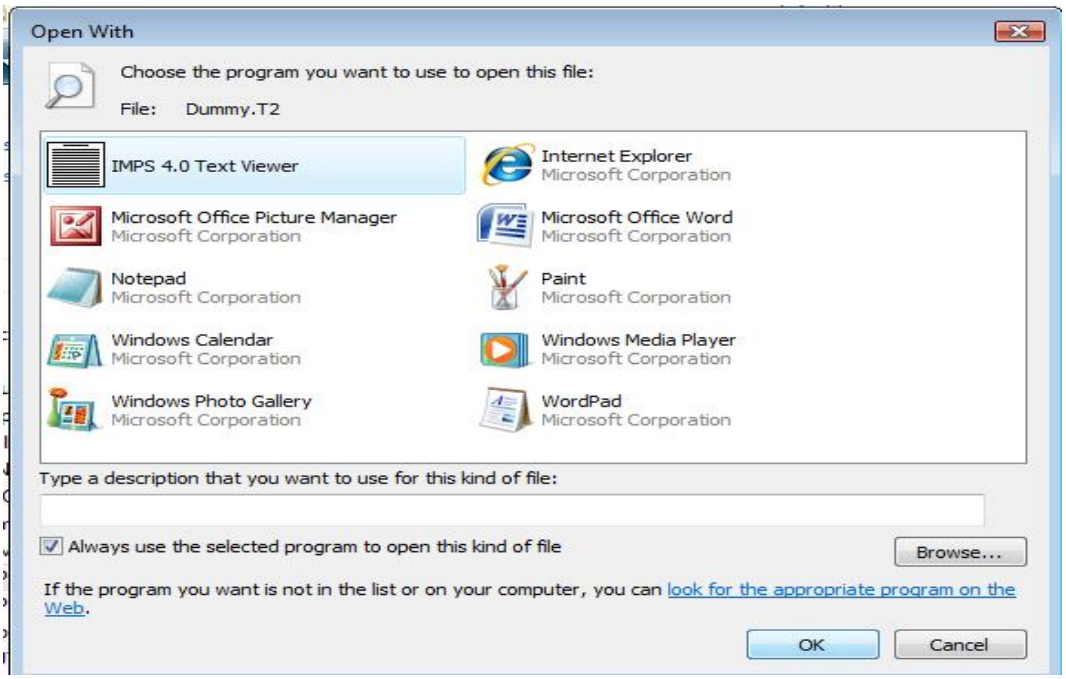


Figure 28: The Windows – Open With screen

b. Select the **IMPS 4.0 Text Viewer** and click on the box **"Always use the selected program to open this kind of file."** Click the **OK** box**.**

c. Click on the command button **View Tables.** A Windows screen will appear (**see Figure 29**) informing the user that "Windows cannot open this file" precisely because the file to be opened is not associated with the program that is needed to open it. This program association is a one-time process to be done for the user to view the table/s for the first time. This process will not be repeated once it has already been done. Follow the instructions below to do the process:

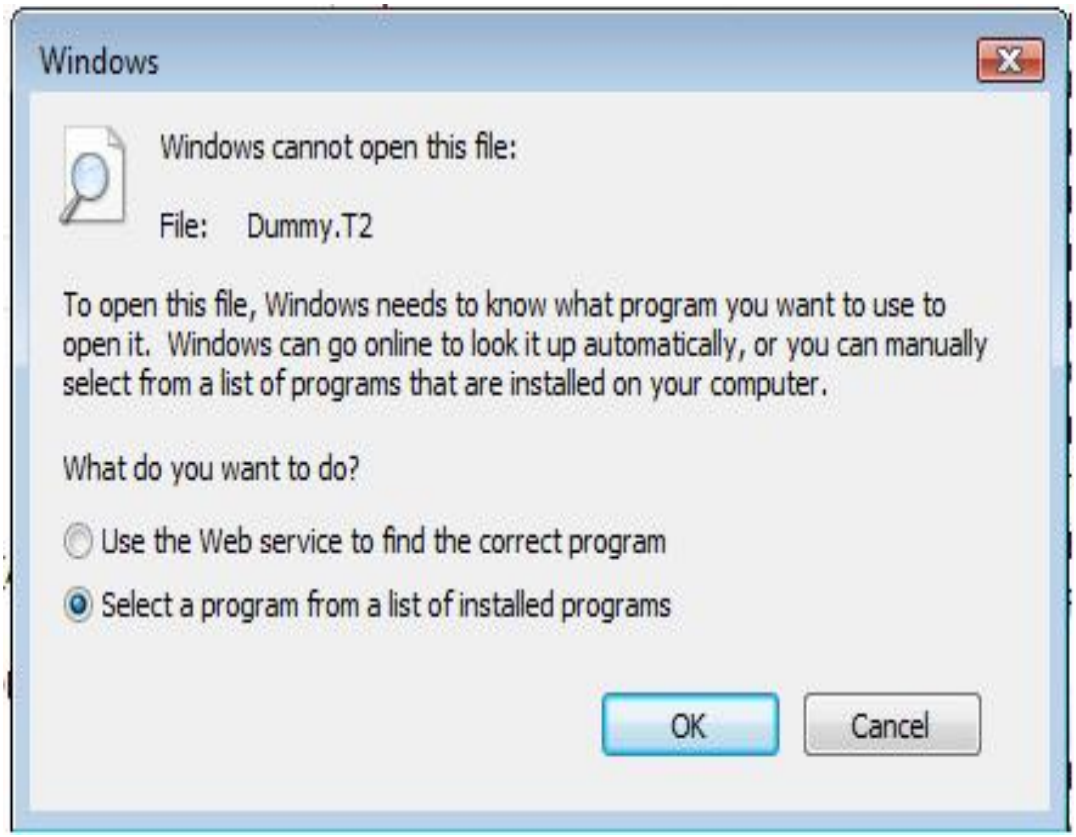


Figure 29: The Windows screen

d. Click on **Select a program from a list of installed programs** followed by clicking the **OK** box. Thereafter, the Window Open With screen (**see Figure 30**) will appear.

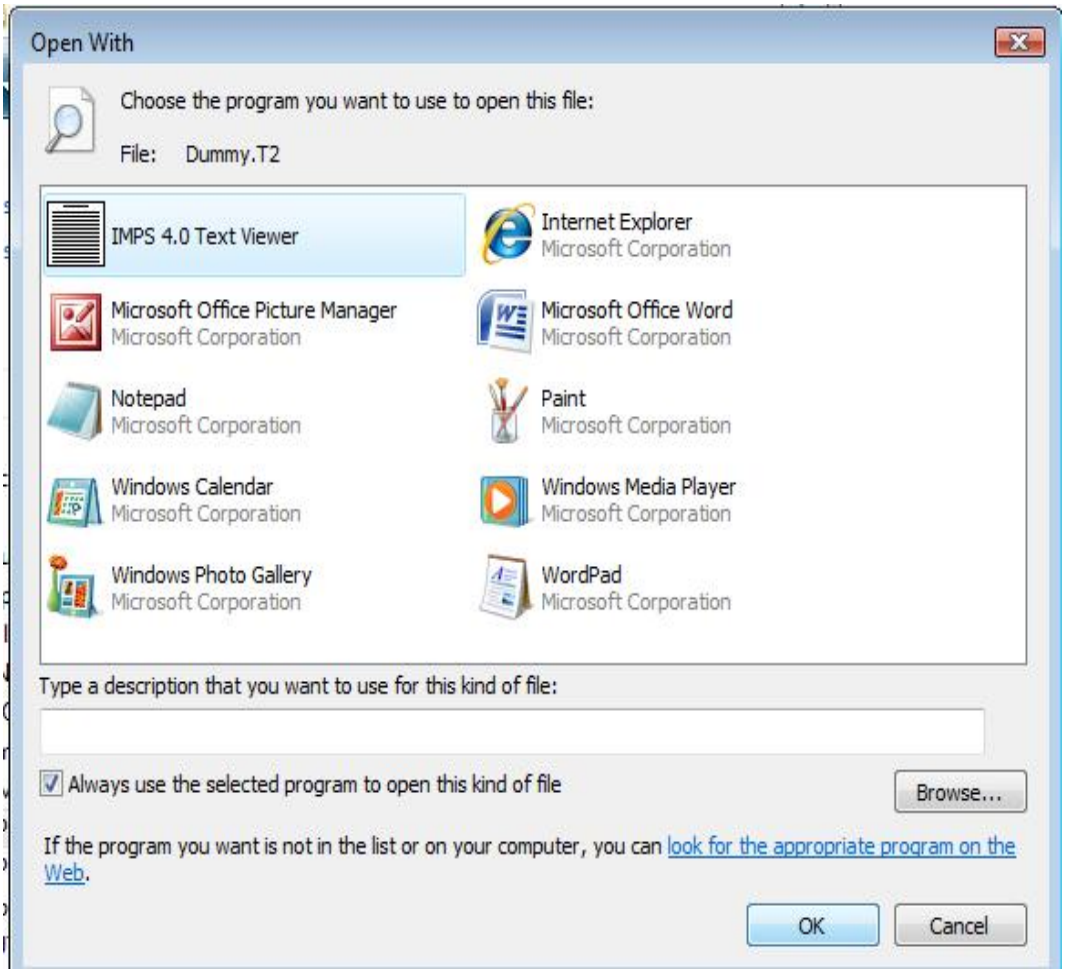


Figure 30: The Windows – Open With screen

e. Select the **IMPS 4.0 Text Viewer** and click on the box **"Always use the selected program to open this kind of file."** Click the **OK** box**.**

A dummy table will appear on the screen. Click on **FILE** invoking the **Select Data File screen (Figure 2)**. Enter the name of the file to be opened.

IX. TABLE GENERATION

It is necessary that the data file is thoroughly clean and error-free to be able to generate the outputs or tables. In the same manner, the masterfile should have been generated and computed with its correct barangay weights .

To be able to generate the output tables, follow the following procedures:

1. At the PALAY or CORN Main Menu, click the item **Tabulation Menu.** It will invoke the **Tabulation Menu** screen (see Figure 31).

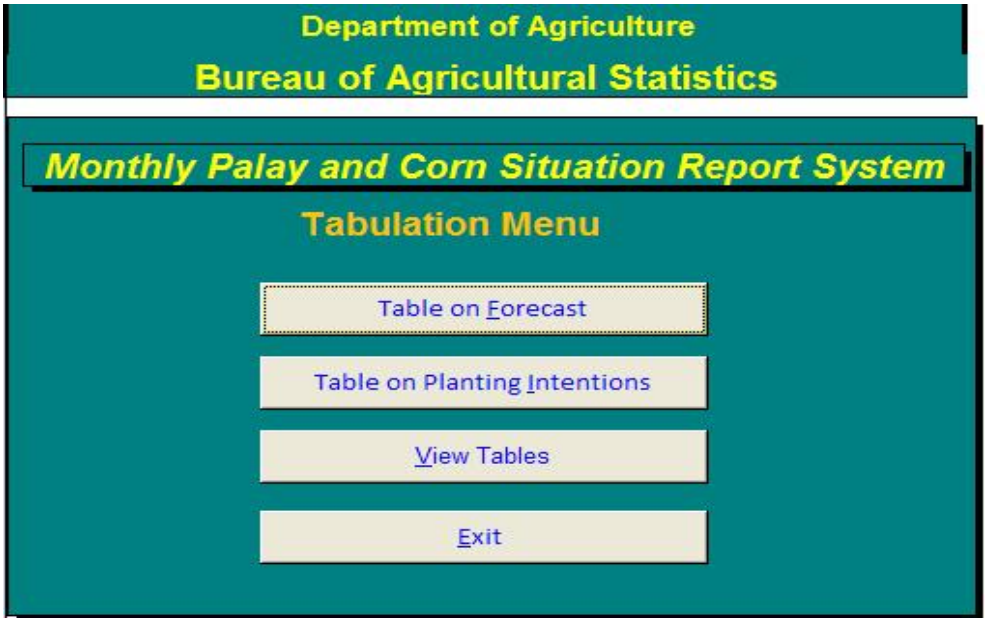


Figure 32. The Tabulation Menu screen

2. Click on the command button **Table on Forecast** to invoke the screen illustrated below (see **Figure 32**)

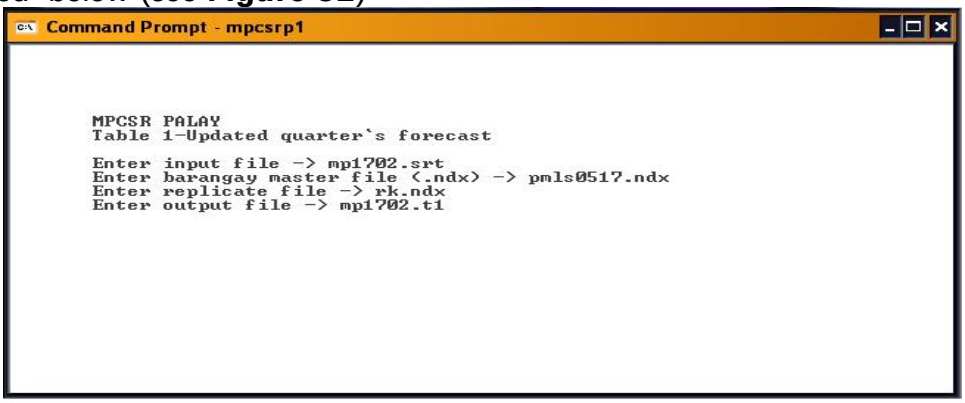


Figure 32: Table on Forecast screen

The input files required by this program are:

a. **sorted data file – MPppmm.srt** (**MP1702.srt or MC1702.srt**)
b. **indexed barangay master file** – **PMLSrrpp.ndx** (**PMLS0517.ndx**)
c. **replicate index file** (**RK.ndx**)

and the output file with this file name format

(**MP1702.t1 or MC1702.t1**)

MP	- monitoring of PALAY	**MC**	- monitoring of CORN
pp	- province	**pp**	- province
mm	- month	**mm**	- month
.t1	- table 1	**t1**	- table 1

3. Click on the command button **Table on Planting Intentions**. The screen below will appear (**Figure 33**)

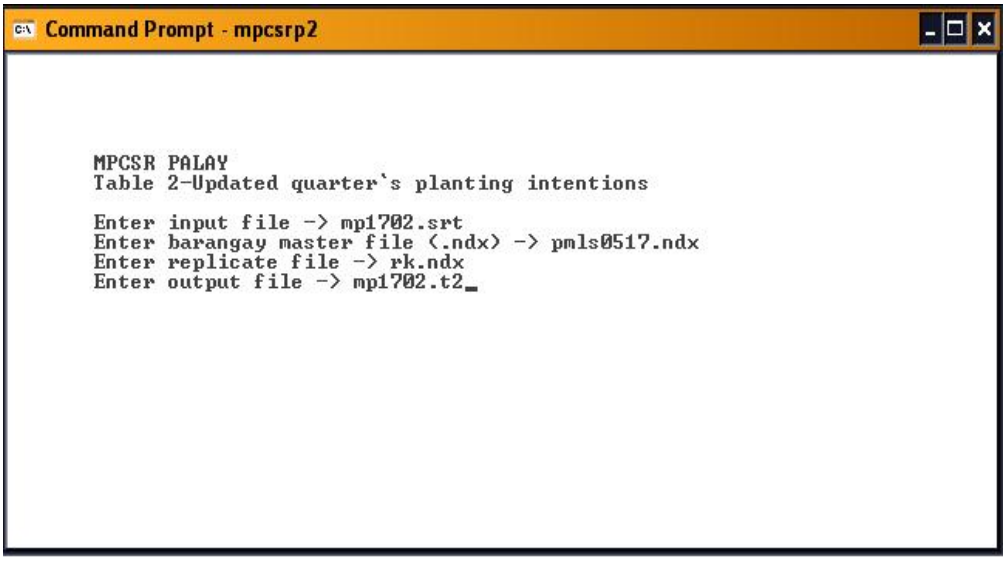


Figure 33: The Table on Planting Intentions screen

4. The input files required in this program are the same as in generating the quarterly forecast. The only difference is in the file name extension of the output file.

Below is the file naming convention for the output file

(**MP1702.t2 or MC1702.t2**)

MP	- monitoring of PALAY	**MC**	- monitoring of CORN
pp	- province	**pp**	- province
mm	- month	**mm**	- month
.t2	- table 2	**t2**	- table 2

5. Click on the command button **View Tables**. A dummy table will appear on the screen. Click on **FILE** invoking the **Select Data File screen (Figure 2)**. Enter the name of the file to be opened and the user may now view the table/s.

All output files are now ready to be converted and reformatted to MS-Excel files.

IX. CONVERTING THE OUTPUT TABLES FROM TEXT FORMAT TO EXCEL-ACCESSIBLE FORMAT

1. At **DOS prompt drive C:** type **CD\MPCSRPALAY2 or CD\MPCSRCORN2**
2. Type **IMPS**, then press enter
3. Type user password at the display of the IMPS logo
4. Select **U-Utilities**, then press enter
5. Select **E-Expand** data file, then press enter
6. Enter data file name to expand (**MP1702.T1/MC1702.T1**), press enter
7. Enter output file name with filename extension .PRN, then press enter
8. Enter the record length at 300

X. REFORMATTING THE CONVERTED OUTPUT TABLES IN MS-EXCEL

At this point, the user can now access the .PRN file in EXCEL. The tables maybe reformatted the way the user desires by following instructions below:

1. To open the PRN file in Excel, Click **File** then click **Open**.
2. At the "**Look in**" box, ensure that the **MPCSRPALAY2** / **MPCSRCORN2** directory is indicated.
3. At the **File name** box, type *.PRN. Press Enter and all files with this filename extension will be displayed.
4. Double click on the file to be opened.
5. The Text Import Wizard window will appear; click on **Delimited** and click **Next**.
6. Click **Tab** to uncheck the option.
7. Click **OTHER**. At the box beside it, type "**|**" or by pressing **Shift** and the backslash key "****" at the same time. Click **Next**.
8. Click **Finish**.
9. The user may now format the output as desired and set the **Page Setup**.

10. After page setting, click **File** then click **Save As**.
11. At **File name** box, remove the quotation marks and the ".**PRN**" from the filename.
12. At the **Save As Type** box, scroll down and look for **Microsoft Excel Worksheet**. Click on it.
13. Click **Save**.

XI. OTHER DIRECTIVES

1. The PPO shall provide ICTD- Central Office the following:

   a. Soft copies of files

a.1 raw data file	- MPppmm.bch	(MP1702.bch)
	- MCppmm.bch	(MC1702.bch)
a.2 clean data file (sorted file)	- MPppmm.srt	(MP1702.srt)
	- MCppmm.srt	(MC1702.srt)
a.3 barangay masterfile	- PMLSrrpp.srt	(PMLS0517.srt)
	- CMLSrrpp.srt	(CMLS0517.srt
a.4 output files (tables)	- MPrrpp.t1	(MP0517.t1)
	- MCrrpp.t1	(MC0517.t1)
	- MPrrpp.t2	(MP0517.t2)
	- MCrrpp.t2	(MC0517.t2)

2. Send files through mail to the Central Office or e-mail to sdos_bas@yahoo.com