

CORN PRODUCTION SURVEY

July 2008 Round



**DATA
PROCESSING
GUIDELINES**



Republic of the Philippines
Department of Agriculture
BUREAU OF AGRICULTURAL STATISTICS

I. INTRODUCTION

This document serves as a data processing manual for the Corn Production Survey (CPS) July 2008 Round. It contains the procedures on system installation, accessing the system, data entry, data cleaning, generation of barangay master file and output tables.

For July 2008 Round, the barangay master file will no longer be updated manually. The system was revised to include a program that will automatically update the barangay master file based on the clean and edited data file.

Furthermore, both survey and monitoring provinces will use one updated CPS system and perform the same data processing procedures in order to generate the provincial and barangay estimates.

II. UPDATED CPS SYSTEM INSTALLATION

The CPS updated system is contained in a CD. The steps in installing the updated 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 **cpsjuly** icon.
3. The set-up wizard will appear; click **Next** to begin installation.
4. Click **Install**.
5. Click on the "**Launch cpsjuly**" checkbox to uncheck the option.
6. Click **Finish** to complete installation of the CPS system.

III. ACCESSING THE UPDATED CPS SYSTEM

The CPS system can be accessed through the following steps:

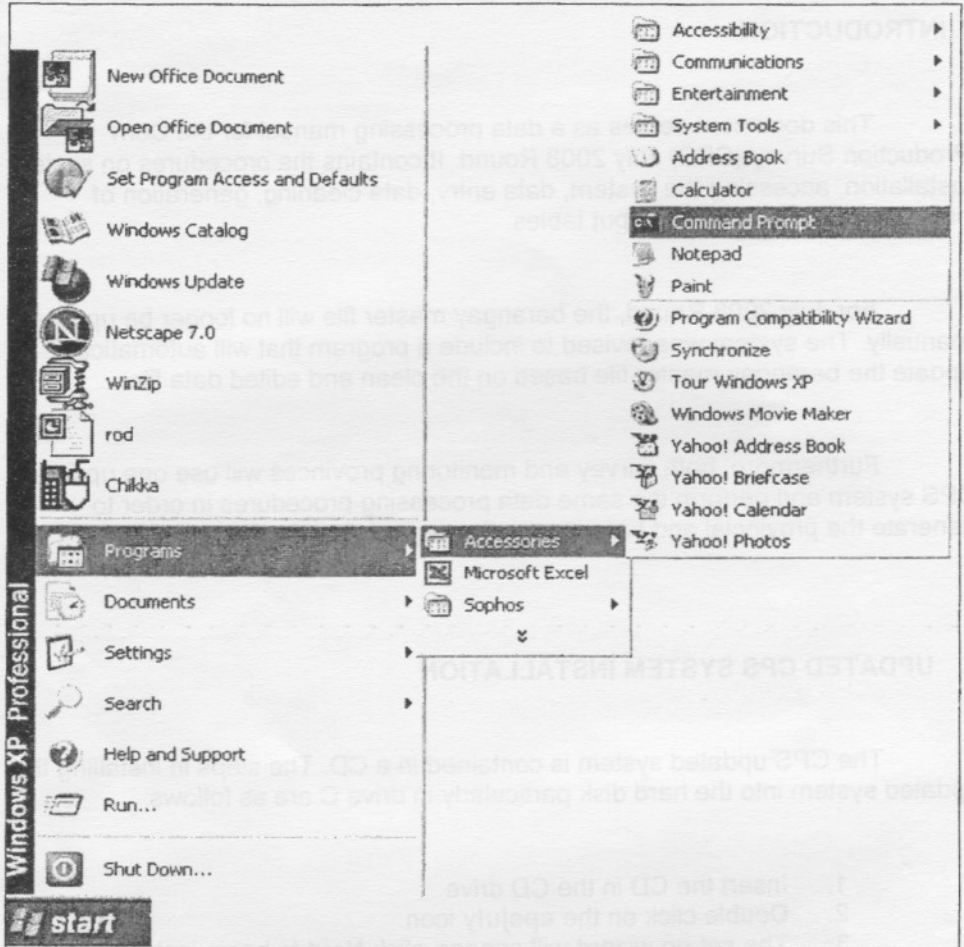


Figure 1: Accessing the DOS Command Prompt

3. At the display of the Command Prompt window, type the syntax "**cd cpsjuly**" then press Enter.

C:\Documents and....\>**cd cpsjuly** then [ENTER]

4. At **C:\CPSJULY>** prompt, invoke CORN.BAT by typing "**corn**" then press Enter.

C:\CPSJULY>corn then [ENTER]

5. The **CPS Main Menu** will be displayed on the DOS screen where the user can select the desired options to execute (See Figure 2).

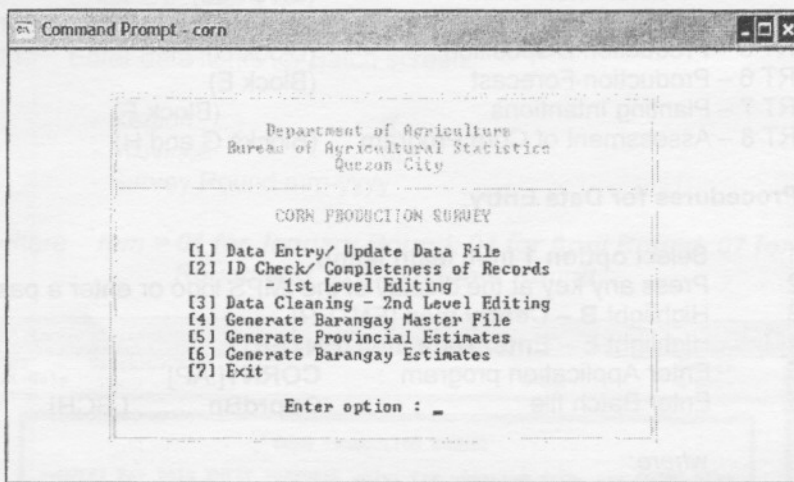


Figure 2. CPS Main Menu

The **CPS Main Menu** is composed of the following options:

- [1] Data Entry
- [2] ID Check/Completeness of Records – 1st Level Editing
- [3] Data Cleaning – 2nd Level Editing
- [4] Generate Barangay Master File
- [5] Generate Provincial Estimates
- [6] Generate Barangay Estimates
- [7] Exit

IV. DATA ENTRY

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

RT 1 – Sample Particulars	(Blocks A and B)
RT 2 – Area and Production	(Block C1)
RT 3 – Fertilizer Information	(Block C2)
RT 4 – Pesticides' Information	(Block C3)
RT 5 – Production Disposition	(Block D)
RT 6 – Production Forecast	(Block E)
RT 7 – Planting Intentions	(Block F)
RT 8 – Assessment of Corn Program	(Blocks G and H)

Procedures for Data Entry:

1. Select **option 1** from **Main Menu**.
2. Press any key at the display of the IMPS logo or enter a password.
3. Highlight **B – Centry** then [ENTER].
4. Highlight **E – Enter Data** then [ENTER].
5. Enter Application program : **CORN1**[.AP]
6. Enter Batch file : **CpprdBn** [.BCH]

where:

C – represents CORN raw data file

pp – Province code

rd – Survey round code: 01 for January, 04 for April, 07 for July, 10 for October

B – Represents a Batch file

n – Batch number

Command Prompt - corn

Integrated Microcomputer Processing System (3.0)
U.S. Bureau of the Census

Enter data

Application file: **CORN1** [.AP]

Batch file: **CB287B1** [.BCH]

ID check file: _____

CONCOR editing program: _____ [.EXE]

CONCOR lookup file: _____

Figure 3 : Enter Data Screen

7. Press **F3** to do procedure.
8. Press **Y** to create batch; else, press **N**.
9. Enter Operator's ID.
10. Highlight '**Add to Batch**' then press **[ENTER]** key.
11. Enter data items for Batch screen:

- Region rr
 - Province pp
 - Survey Round mm-yyyy

where **mm = 01 for January Round; 04 for April Round; 07 for July Round and 10 for October Round.**

Figure 4: Batch Screen

12. If the values entered are correct, press **Y**, else, press **N** and enter the correct values.
13. Enter data items for Questionnaire Screen:
 - Municipality Code xx
 - Barangay Code xxx
 - Stratum Code xx
 - Replicate xx
 - Household Weight 999999999 (assume 6 decimal places)
 - Questionnaire Number xx
 - Page Number xx

The household weight has 9 characters, 3 of which are whole numbers and the next 6 are assumed decimal places. For instance, a household weight of 1.000000 should be encoded as 001000000. A household weight of 0.123456 must be encoded as 000123456. A household weight of 3.456789 should be encoded as 003456789.

```

Command Prompt - corn
ADD Batch=C3707B1 B-Rec= 1 Quest= 1
F1=Help Q-Rec= 1

CORN PRODUCTION SURVEY

**NOTE: For DATA ENTRY PURPOSES only; for updating data, use CORN2.AP**

QUESTIONNAIRE

Municipality
Barangay
Stratum
Replicate
Household weight (6 decimal places)
Questionnaire No. of pages
  
```

Figure 5 : Questionnaire Screen

14. Enter data items for each record type.
15. Complete the inputting of all data items found in each page of the questionnaire before proceeding to the next page.

```

Command Prompt - corn
ADD Batch=C3707B1 B-Rec= 1 Quest= 1
F1=Help Q-Rec= 1

CORN PRODUCTION SURVEY

Record Type 1 ID: 0837-01-001-01-01-001000000-01-01
B. SAMPLE PARTICULARS EA-HSN: -

Name Status
Respondent's name Respondent's classification
Informant's name Designation
FARM INFORMATION
Total agric'l area CODE for WHITE YELLOW
Total corn area Type/s of corn
Did you harvest corn during the period?
IRRIGATED CORN - WHITE IRRIGATED CORN - YELLOW
Facility Yes/No Adequacy Facility Yes/No Adequacy
  
```

Figure 6 : Record Type 1 Screen

After the last field in Record Type 1 is filled-up, use the slash (/) key to go to the next household. Do not use the Enter key as it will not create another record for another household. After inputting the five (5) samples in each questionnaire for Record Type 1, press slash (/) and then TAB to go to the next record type which is record type 2. Do the same with the rest of the record types.

Command Prompt - corn

ADD Batch=C3707B1 B-Rec= 2 Quest= 1
F1=Help Q-Rec= 2

CORN PRODUCTION SURVEY

Record Type 2 ID: 0837-01-001-01-01-00100000-01-01
C1. AREA & PRODUCTION EA-NSN: -

Quarter** Corn type Characteristic* Month harvested

Area harvested

PRODUCTION

SHELLED: Total no. of units LU Weight/LU
MATURED: Total no. of ears Equivalent in shelled kg
GREEN: Total no. of ears

Month planted Area planted Seed type Seed Generation

Breeding method Trait of GMC VARIETY: Code Name

SEEDS USED: Total no. of units LU Weight/LU

**REFERENCE PERIOD: 1 - Jan-Mar 2 - Apr-June 3 - July-Sept 4 - Oct-Dec
* CHARACTERISTIC: 1 - Glutinous 2 - Nonglutinous 3 - Sweet

Figure 7 : Record Type 2 Screen

Press slash (/) to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3707B1 B-Rec= 3 Quest= 1
F1=Help Q-Rec= 3

CORN PRODUCTION SURVEY

Record Type 3 ID: 0837-01-001-01-01-00100000-01-01
C2. FERTILIZER INFORMATION EA-NSN: -

Quarter** Corn type Did you apply fertilizer...?

Area applied w/ fertilizer

MAJOR INORGANIC FERTILIZER APPLIED (E.G. UREA, AMMOSUL, AMMOPHOS, COMPLETE)

Code	Name	N	P	K	Quantity	Code	Name	N	P	K	Quantity

NEXT FORM -->

** REFERENCE PERIOD: 1- Jan-Mar 2- Apr-June 3- July-Sept 4- Oct-Dec

Figure 8 : Record Type 3 Screen

Command Prompt - corn

ADD Batch=C3787B1 B-Rec= 3 Quest= 1
F1=Help Q-Rec= 3

CORN PRODUCTION SURVEY

Record Type 3 (Continued)

OTHER INORGANIC INPUTS APPLIED

Code	Name	Quantity	Unit	Weight/unit	Volume/unit

ORGANIC INPUTS APPLIED

Code	Name	Quantity	Unit	Weight/unit	Volume/unit

Figure 9 : Additional form for Record Type 3 Screen

Press slash (/) to go to a new blank form and enter the information for the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3787B1 B-Rec= 4 Quest= 1
F1=Help Q-Rec= 4

CORN PRODUCTION SURVEY

Record Type 4 ID: 8837-B1-001-B1-B1-00100000-B1-01
C3. PESTICIDE INFORMATION Ea-ASN : -

Quarter** Corn type Did you apply pesticides...

Area applied w/ pesticides

Pesticide's Name	Code	Quantity	Unit	Weight/unit	Volume/unit

** REFERENCE PERIOD: 1- Jan-Mar 2- Apr-June 3- July-Sept 4- Oct-Dec

**/PESTICIDES: 1-Insecticide 3-Fungicide 5-Molluscicide
2-Herbicide 4-Rodenticide 6-Nematocide,etc.

Figure 10 : Record Type 4 Screen

Press slash "/" to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3787B1 B-Rec= 5 Quest= 1
F1=Help Q-Rec= 5

CORN PRODUCTION SURVEY

Record Type 5
D. CORN UTILIZATION & DISPOSITION ID: 0837-01-001-01-01-00100000-01-01
EA-HSN: -

Quarter**	Corn type	[1-White	2-Yellow]
Sold	SHELLED		
Home consumption			
Given to landowner			
Given to laborers			
For seeds			
Loan payment			
Irrigation fee			
For feeds			
Wastage/losses			

** REFERENCE PERIOD: 1- Jan-Mar 2- Apr-June 3- July-Sept 4- Oct-Dec

Figure 11 : Record Type 5 Screen

Press slash (/) to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3787B1 B-Rec= 6 Quest= 1
F1=Help Q-Rec= 6

CORN PRODUCTION SURVEY

Record Type 6
E. PRODUCTION FORECAST ID: 0837-01-001-01-01-00100000-01-01

ENUM. AREA HSN

Do you have any standing corn? Corn type [1-White 2-Yellow]

Month to be harvested Area to be harvested

QUANTITY TO BE PRODUCED

SHELLED: Total no. of units	LU	Weight/LU	kg
MATURED: Total no. of ears		Equivalent in shelled	
GREEN: Total no. of ears			

Month planted Seed type Generation of seeds

Area planted

Figure 12 : Record Type 6 Screen

Press slash (/) to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3707B1 B-Rec= 6 Quest= 1
F1=Help Q-Rec= 6

CORN PRODUCTION SURVEY

Record Type 7
F. PLANTING INTENTIONS ID: 0837-01-001-01-01-00100000-01-01

EA-HSN	Do you intend to plant corn?	Corn Type	Month to be Planted	Area to be Planted	Month to be Harvested
■ - ■■	■	■	■	■■■■■■■	■

Figure 13 : Record Type 7 Screen

Press slash (/) to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

Command Prompt - corn

ADD Batch=C3707B1 B-Rec= 6 Quest= 1
F1=Help Q-Rec= 6

CORN PRODUCTION SURVEY

Record Type 8 ID: 0837-01-001-01-01-00100000-01-01
EA-HSN ■■ - ■■

<p>G. ASSESSMENT OF CORN PRODUCTION</p> <p>Was your farm's production in the reference quarter the same, larger or smaller than your corn production in the same quarter of last year? ■</p> <p>Reason/s for change**</p> <p>■ ■ ■ ■ ■ ■ ■ ■</p>	<p>H. FARMER'S PARTICIPATION IN GMA</p> <p>Are you aware of the GMA Corn Program or any other gov't corn program? ■</p> <p>Have you availed of any benefits from GMA Corn Program or any other gov't program on corn? ■</p> <p>Program/s availed**</p> <p>■ ■ ■ ■ ■ ■ ■ ■</p>
---	--

** Responses can be keyed-in in any order

Figure 14 : Record Type 8 Screen

Press slash (/) to go to a new blank form and enter the information of the next household. Press TAB to go to the next record type.

After the last record for Record Type 8 is keyed-in, press **F7** to save and accept the questionnaire.

Useful Function Keys:

Arrow keys for navigation

- | | |
|---------|---|
| Tab | - go to the next record type |
| F5 | - choose next record type from menu |
| CTRL-F5 | - choose next record type (enter value) |
| F4 | - delete current record or questionnaire. Record will be deleted if record screen is displayed. Questionnaire will be deleted if monitor displays the questionnaire screen. |
| F7 | - save questionnaire |
| * | - duplicate data field of previous record |
| F1 | - help key |

16. Upon data entry termination, press ESC.
17. Highlight 'End Batch'; then press [ENTER].
18. Press ESC until Main Menu is reached.

If Data Entry module cannot be accessed, check the path using the syntax below:

1. At C:> type path then {ENTER}.

C:>path [ENTER]

2. Check if **IMPS3** is included in the **PATH** statement.
3. If not, open the autoexec.bat file and include IMPS3 in the path statement. To do this, at **C:>** prompt type the syntax below:

C:>edit autoexec.bat [ENTER]

At the display of the file, locate the statement **PATH**, then append at the end of the syntax **;C:\IMPS3** then **Alt F Save**, **Alt F Exit**. However, if the file is blank, type the syntax as follows:

PATH=%PATH%;C:\IMPS3;

Then press **Alt F Save** to save the file; then **Alt F Exit** to go back to the DOS prompt.

4. Reboot the computer.

V. EDITING

Manual editing is the ocular inspection of data items in the questionnaire for possible occurrence of errors while coding is the assigning of numeric codes to data items in the questionnaire. For guidelines on editing and coding, please refer to the CPS Manual on Coding and Editing Guidelines for January 2008 Round.

Computerized editing is the running of a program that will automatically check erroneous variables. The program validates data items as to ranges, consistencies and other editing criteria.

Editing of the CPS 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. There are records that are dependent with each other. For instance, a record on production (Record Type 2) should have corresponding records on disposition and assessment, Record Types 5 and 8, respectively.

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.

A. FIRST LEVEL EDITING

First level editing concentrates on checking the consistency of Enumeration Area (EA) and Household Serial (HSN) of the questionnaire from page 1 to 8. The error list is divided into 3 parts, namely (a) questionnaire ID in error; (b) error messages and (c) questionnaire in error (this pertains to the whole questionnaire). See illustration below.

1035-02-025-02-02-001000000-05-05-04-2008

→(a)→

RECORD TYPE= 3 OF EAHSN = 00149 NO MATCHING RT1
RECORD TYPE= 4 OF EAHSN = 00149 NO MATCHING RT1
RECORD TYPE= 6 OF EAHSN = 00149 NO MATCHING RT1
RECORD TYPE= 7 OF EAHSN = 00149 NO MATCHING RT
RECORD TYPE= 8 OF EAHSN = 00149 NO MATCHING RT1
STATUS 10; NO HARVEST BUT NO OTHER RECORDS
FOR EAHSN = 149

(b)

*** QUESTIONNAIRE IN ERROR ***

1-1035-02-025-02-02-001000000-05-05-04-2008-00125
 1-1035-02-025-02-02-001000000-05-05-04-2008-00131
 1-1035-02-025-02-02-001000000-05-05-04-2008-00137
 1-1035-02-025-02-02-001000000-05-05-04-2008-00143
 1-1035-02-025-02-02-001000000-05-05-04-2008- 149
 3-1035-02-025-02-02-001000000-05-05-04-2008-00125
 3-1035-02-025-02-02-001000000-05-05-04-2008-00143
 3-1035-02-025-02-02-001000000-05-05-04-2008-00149
 4-1035-02-025-02-02-001000000-05-05-04-2008-00125
 4-1035-02-025-02-02-001000000-05-05-04-2008-00143
 4-1035-02-025-02-02-001000000-05-05-04-2008-00149
 6-1035-02-025-02-02-001000000-05-05-04-2008-00143
 6-1035-02-025-02-02-001000000-05-05-04-2008-00149
 7-1035-02-025-02-02-001000000-05-05-04-2008-00143
 7-1035-02-025-02-02-001000000-05-05-04-2008-00149
 8-1035-02-025-02-02-001000000-05-05-04-2008-00143
 8-1035-02-025-02-02-001000000-05-05-04-2008-00149

(c)

Part (a) – identifies the questionnaire identification number with error

Part (b) – lists all the error messages

Part (c) – lists all records of the questionnaire from page 1 to 8. It must be noted that the first digit in the questionnaire list identifies the record type number. Remember that a record type number corresponds to a particular block in the questionnaire like record type 2 for Block C.1 (current production).

Two Types of Error in First Level Editing

1. Blocks' Inconsistency

Example: **RECORD TYPE= 6 OF EAHSN = 00149 NO MATCHING RT1**

This type of error can be easily identified using Part (C). Check all EAHSN of record types 1 and 6. The error may either be in record type 1 or 6. Using the example above, 149 in record type 1 must be changed to 00149 in order to correct the error.

2. Status Code Inconsistency

Example:

STATUS 10;NO HARVEST BUT NO OTHER RECORDS FOR EAHSN = 149
STATUS= 55 BUT W/ RECORDS FOR EAHSN =00020
STATUS 10 BUT NO OTHER RECORDS FOR EAHSN =00102
STATUS 10 BUT NO RTYPE 2 & 5 FOR EAHSN =00102

This type of error can be tricky. The error must be checked against the questionnaire itself. The EA-HSN must be checked and also the status code. In most cases the EA-HSN assigned for pages 2 to 8 are mixed-up. Be careful with encoding EA-HSN.

In the first level edit, the raw data as it was encoded is the input used in running the first editing program. The data entry application program that will be used is **RICE1.AP**. No sorting will be done prior to running the editing program.

Take note that all sample ID's must be corrected and completed before proceeding to the second level of editing.

The menu for the first level of editing is shown below.

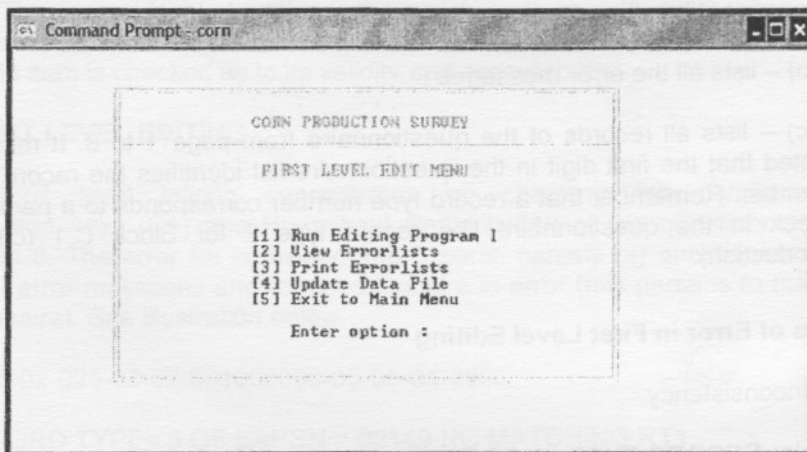


Figure 15. First Level Editing Menu

To run the first level editing program, follow the steps enumerated below.

1. Run Editing Program 1

1. Select **option 2** from the **Main Menu**.
2. Select **option 1** from the **First Level Edit Menu**.
3. Enter input file: **CpprdBn.BCH**
4. Enter output file: **CpprdBn.ERL**

Take note that the extension name of the error list for the first editing level is **.ERL**, to distinguish it from the error list that will be generated in the second level.

2. View Error lists

1. Select **option 2** from the **First Level Edit Menu**.
2. Enter filename to view: **CpprdBn.ERL**.
3. Press **[ESC]** after viewing the file.

3. Print Error lists

You may also opt to print the error list. The steps are as follows:

1. Select **option 3** from the **First Level Edit Menu**.
2. Press any key or enter a password at the display of the IMPS logo.
3. Press **U – Utilities**.
4. Press **P – Print**.
5. Set the printer on before entering the error list's filename.
6. Enter filename to print: **PpprdBn.ERL**
7. After printing, press **ESC** until the First Level Edit Menu is reached.

4. Update Data File

1. Select **option 4** from the **First Level Edit Menu**.
2. Press any key or enter a password at the display of the IMPS logo.
3. Press **B – Centry**.
4. Press **E – Enter Data**.
5. Enter application file : **CORN1[.AP]**
6. Enter batch file : **CpprdBn [BCH]**
7. Press **F3** to do procedure.
8. Enter Operator's ID.
9. Highlight **'Modify Batch'**, then press **[ENTER]**.
10. Proceed with updating the batch based on the corrections reflected in the error lists.

NOTE: Repeat the activities for editing level 1 until all sample ID's are corrected and completed.

B. SECOND LEVEL EDITING

Only after all sample ID's have been corrected and completed in the first level of editing can the data processor proceed with the second level. Unlike in the first level, a sorting activity is involved here where all records for a particular household are grouped together.

The figure below shows the menu for the second level of editing.

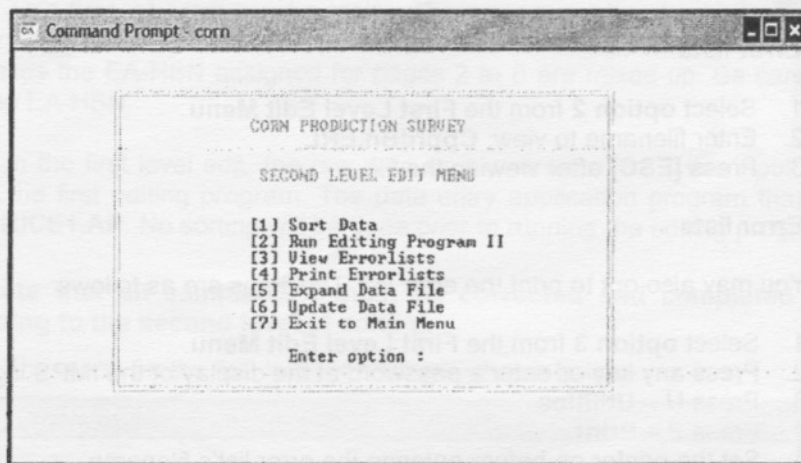


Figure 16. Second Level Edit Menu

To run the editing program at the second level, the procedures below must be followed.

1. Sort Data File

1. Select **option 3** from **Main Menu**
2. Select **option 1** from **Second Level Edit Menu**
3. Enter input file : **CpprdBn.BCH / PpprdBnE.BCH**
4. Enter output file : **CpprdBnE.SRT**

where C – means Corn data file

pp – Province code

rd – Survey round code: 01 for January,

04 for April,

07 for July, 10 for October

B – means a Batch file

N - Batch number

E – means an Edited data file to distinguish it from the data file resulting from the first level edit.

2. Run Editing Program 2

1. Select **OPTION 2** from **Second Level Edit Menu**.
2. Enter Input File Name – **CpprdBnE.SRT**.
3. Enter Barangay master File Name – **Crrpp.NDX**.
4. Enter Output File Name – **CpprdBn.ERR**.

3. View Error list

1. Select **option 3** from the **Second Level Edit Menu**.
2. Enter file name to view.
3. Press **ESC** after viewing the file.

4. Print Error list

Again, you may opt to print the error lists at this level. The steps in printing are provided below.

1. Select **option 4** from the **Second Level Edit Menu**.
2. Press any key or enter a password at the display of the IMPS logo.
3. Press **U – Utilities**.
4. Press **P – Print**.
5. Set the printer on before entering the error list's filename. The error lists from the second level is 150 characters long. So you need to set the pitch control to a compressed number so that printing will not be truncated.
6. Enter filename to print: **CpprdBn.ERR**
7. After printing the error list, press **ESC** until the Second Level Edit Menu is reached.

5. Expand Data File (Fixing Record Length of Data File)

1. Select **option 5** from the **Second Level Edit Menu**.
2. Press any key or enter a password at the display of the IMPS logo.
3. Press **U – Utilities**.
4. Press **E – Expand data file**.

5. Enter input file : CpprdBnE.SRT
6. Enter input file : CpprdBnE.BCH
7. Enter record length : 347
8. Press **ESC** until **Edit Menu** is reached.

6. Update Data File

1. Select **option 6** from the **Second Level Edit Menu**.
2. Press any key or enter a password at the display of the IMPS logo.
3. Press **B – Centry**.
4. Press **E – Enter Data**.
5. Enter application file : CORN2 [.AP]
6. Enter batch file : CpprdBnE [.BCH]
7. Press **F3** to do procedure.
8. Press **Y** to create **.BOP**; else, press **N**.
9. Enter **Operator's ID**.
10. Highlight **'Modify Batch'**, then press **[ENTER]**.

Proceed with updating the batch based on the corrections reflected in the error lists. Refer to Appendix 1 for the list of error messages and actions to be taken.

Function keys that can be used:

- | | |
|------------|---|
| F6 | - find questionnaire with error |
| F7 | - save changes made in questionnaire |
| F4 | - delete record/questionnaire |
| F3 | - insert record before current record (then F5 to choose record type) |
| CTRL+ F3 | - insert record after current record (then F5 to choose record type) |
| CTRL+ PgDn | - proceed to next questionnaire |
| CTRL+ PgUp | - get back to previous questionnaire |
| F1 | - help |

11. After modifying data file, press **ESC**.
12. Highlight **'End Batch'**; then press **[ENTER]**.
13. Press **ESC** until **Edit Menu** is reached.

The PPO may view the error list and then open the data file for updating at the same time so that printing of error lists can be avoided. This can be done by using 2 windows. One window displays the error lists while another window displays the data entry application program used in updating the data file. The operator will shift from one window to the other. This can be done by options 3 and 6 of the **Second Level Edit Menu**.

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

VI. GENERATION OF THE MASTER FILE OF BARANGAYS

Starting July 2008 round, the barangay master file will be automatically generated. A program will compute the barangay's adjusted weight based on the total and actual number of samples counted from the data file (CpprdBnE.SRT). It is important, therefore, that the data file is thoroughly clean and error-free. That is, all sample ID's have been completed and corrected; and consistencies of data items have been checked.

The figure below shows the menu in generating the barangay master file.

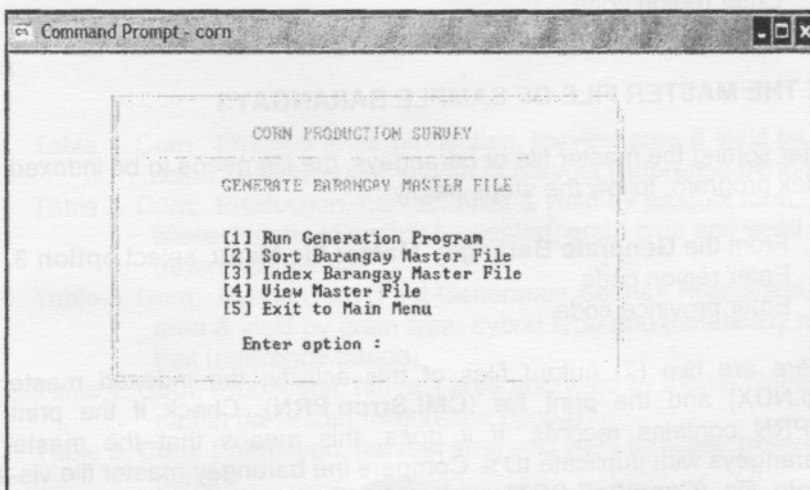


Figure 17. Menu for Generating Barangay Master file

A. RUN BARANGAY MASTER FILE GENERATION PROGRAM

1. Select **Option 4** from **Main Menu**.
2. Select **Option 1** from **Generate Barangay Master file Menu**
3. Enter input file: **CpprdBnE.SRT**
4. Enter barangay master file: **Crrpp.BCH**

*where C – Corn Production Survey
rr – Region Code
pp – province Code*

5. Enter region code.
6. Enter province code.

The output file of this activity is the master file of barangays whose adjusted weights have been computed based on the status code of the sample household. All sample households therefore must be encoded regardless of the status code. View and check the output file, **Crrpp.OUT** if it contains records. If the file is empty, the barangay master file is not generated. Do Section VI-A again.

B. SORT THE MASTER FILE OF SAMPLE BARANGAYS

1. From the **Generate Barangay Master file Menu**, select **Option 2**.
2. Enter region code.
3. Enter province code.

C. INDEX THE MASTER FILE OF SAMPLE BARANGAYS

After sorting the master file of barangays, the file needs to be indexed. To run the index program, follow the steps below:

1. From the **Generate Barangay Master file Menu**, select **option 3**.
2. Enter region code.
3. Enter province code.

There are two (2) output files of this activity, the indexed master file (**CMLSrpp.NDX**) and the print file (**CMLSrpp.PRN**). Check if the print file, **CMLSrpp.PRN** contains records. If it does, this means that the master file contains barangays with duplicate ID's. Compare the barangay master file vis-à-vis with the data file (**CpprdBnE.SRT**) and make the necessary corrections. The master file must contain barangays only with unique ID's.

D. VIEW THE MASTER FILE

1. Select **option 4** from **Generate Barangay Master file Menu**.
2. Enter filename to view: **Crrpp.OUT/ CMLSrpp.SRT/ CMLSrpp.PRN**

There are three output files that you can view from the process of generating the barangay master file. These are 1) the generated barangay master file (**Crrpp.OUT**), 2) the sorted generated barangay master file (**CMLSrpp.SRT**), and 3) the print file after indexing the master file (**CMLSrpp.PRN**). You should view these files in order to check if they contain records or not. If Crrpp.OUT or CMLSrpp.SRT is empty, you have to run the generation program again and then sort. On the other hand, if CMLSrpp.PRN is empty, it means the barangay master file is clean and ready for tabulation.

VII. GENERATE OUTPUT TABLES

It must be noted that before running any of the tabulation programs, ensure that the data file is totally clean and the master file of barangays has been generated. Otherwise, report generation will fail.

A. Provincial Estimates

The fourteen (14) output tables generated by the system are listed as follows:

- Table 1. Corn: Physical area, production, harvest area & yield by grain color, seed type and month of harvest (reference period)
- Table 2. Corn: Production, harvest Area & yield by product form, characteristic of variety harvested, grain type and seed type (reference period)
- Table 3. Corn: Hybrid Corn (First Generation Seeds): Production, harvest area & yield by grain type, hybrid type and genetically modified trait (reference period)
- Table 4. Corn: Production, harvest area and yield by month planted and month harvested, (reference period)
- Table 5. Corn: Production, harvest area and yield forecast, (reference period)
- Table 6. Corn: Planting intentions and expected harvest area, (reference period)

Table 7. Corn: Quantity of fertilizer applied by grain type, seed type, fertilizer type, (reference period)

Table 8. Palay: Quantity of pesticides applied by grain type, seed type, pesticide type, (reference period)

Table 9. Corn utilization and disposition of production (in kilograms), (reference period)

Table 10. Corn: Seed use by grain type and seed type, (reference period)

Table 11. Corn: Production, harvest area and yield by farm size, (reference period)

Table 12A. (Hybrid) Corn: Production, harvest area and yield by seed type and seed variety, (reference period)

Table 12B. (Modern OPV) Corn: Production, harvest area and yield by seed type and seed variety, (reference period)

Table 12C. (Farmers Produced) Corn: Production, harvest area and yield by seed type and seed variety, (reference period)

Table 12D. (Native) Corn: Production, harvest area and yield by seed type and seed variety, (reference period)

Table 13. Corn: Harvest area by reason of increase or decrease in production, (reference period)

Table 14. Corn: Awareness and availment of program benefits of farmers by seed type and by grain type, (reference period)

The steps below allow the user to generate the output tables:

1. Select **Option 5** from **Main Menu**.
2. Select **Option 1** from **Report Generation Menu**

Generate Output Tables 1 - 7

3. Generate Table 1.
 - Select **Option 1** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp01.TBL**

4. Generate Table 2.
 - Select **Option 2** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 -

Select **Option 1** from **Output Table Menu**

- Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp02.TBL**
5. Generate Table 3.
- Select **Option 3** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp03.TBL**
6. Generate Table 4.
- Select **Option 4** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp04.TBL**
7. Generate Table 5.
- Select **Option 5** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp05.TBL**
8. Generate Table 6.
- Select **Option 6** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp06.TBL**
9. Generate Table 7.
- Select **Option 7** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Fertilizer File Name: **F-FILE.BCH**
 - Enter Output File Name : **Cpp07.TBL**

- 10. Select Option 8 to view output tables.
 - Enter File Name of output table.
 - Press **[ESC]** to return to Output Table Menu.

Generating Tables 8 – 14.

- 11. Select **Option 2** from **Report Generation Menu**
- 12. Generate Table 8.
 - Select **Option 1** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp08.TBL**
- 13. Generate Table 9.
 - Select **Option 2** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp09.TBL**
- 14. Generate Table 10.
 - Select **Option 3** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name : **Cpp10.TBL**
- 15. Generate Table 11.
 - Select **Option 4** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**
 - Enter Output File Name: **Cpp11.TBL**
- 16. Generate Table 12.
 - Select **Option 5** from **Output Table Menu**.
 - Enter Input File Name : **CpprdBnE.SRT**
 - Enter Masterlist File Name: **CMLSrrpp.NDX**
 - Enter Replicate File Name: **RK.NDX**

- Enter barangay master file : **CMLSrppp.NDX**
 - Enter replicate file : **RK.NDX**
 - Enter output file without expansion : **Cpp01A.TBL**
 - Enter output file with expansion : **Cpp01B.TBL**
2. Generate Table 5 (Production Forecast)
- Select **option 6** from the **Main Menu**.
 - Select **option 2** from the **Barangay Estimate Menu**.
 - Enter input file : **CpprdBnE.SRT**
 - Enter barangay master file : **CMLSrppp.NDX**
 - Enter replicate file : **RK.NDX**
 - Enter output file with expansion : **Cpp05A.TBL**
 - Enter output file without expansion : **Cpp05B.TBL**
3. Generate Table 6 (Planting Intentions)
- Select **option 6** from the **Main Menu**.
 - Select **option 3** from the **Barangay Estimate Menu**.
 - Enter input file : **CpprdBnE.SRT**
 - Enter barangay master file : **CMLSrppp.NDX**
 - Enter replicate file : **RK.NDX**
 - Enter output file with expansion : **Cpp06A.TBL**
 - Enter output file without expansion : **Cpp06B.TBL**
4. Generate Table 9 (Production Disposition)
- Select **option 6** from the **Main Menu**.
 - Select **option 4** from the **Barangay Estimate Menu**.
 - Enter input file : **CpprdBnE.SRT**
 - Enter barangay master file : **CMLSrppp.NDX**
 - Enter replicate file : **RK.NDX**
 - Enter output file with expansion : **Cpp09A.TBL**
 - Enter output file without expansion : **Cpp09B.TBL**

VIII. GUIDELINES IN PRINTING THE OUTPUT TABLES IN MS EXCEL

The output tables are in text format. They need to be converted into EXCEL as these tables have long widths. Prior to exporting it to EXCEL, the output file must be expanded first. The steps below help you convert the output files into EXCEL format:

A. Converting Output Tables from Text Format to EXCEL-accessible Format

1. From the sub-directory **C:\CPSJULY>**, type **IMPS** then **[ENTER]**.
2. Press **[ENTER]** or type your password at the display of the IMPS logo.
3. From IMPS menu, select **U – Utilities** then press **[ENTER]**.
4. From IMPS Utilities, select **E- Expand** data file then press **[ENTER]**.
5. Enter the file name to expand, for example, **Cpp01.TBL**.
6. Enter the output file name, for example, **Cpp01.PRN**.
7. Enter the record length, that is, **260**.

Below is a summary of record lengths of the output tables that need to be fixed prior to importing in EXCEL.

Table No.	Record Length
1, 1a, 1b	260
2	610
3	400
4	275
5, 5a, 5b	355
6, 6a, 6b	300
7	275
8	420
9, 9a, 9b	300
10	80
11	145
12A-12D	210
13	300
14	230

B. Reformatting the Converted Output Table in MS EXCEL

At this point you can now access the **.PRN** file in EXCEL. You may reformat the output the way you want or print the output using EXCEL. The other output tables can be converted and printed using these instructions.

1. To open the **.PRN** file in EXCEL, click **File** then click **Open**.
2. At the **"Look in"** box, ensure that the **CPSJULY** directory is indicated.
3. At the **"File name"** box, type ***.PRN** then press Enter. All files with extension name of **.PRN** will be displayed in the window.

4. **Double click** on the file that you wish to open.
5. The Text Import Wizard window will appear; click on **Delimited**. Then click **Next**.
6. Click **Tab** to uncheck it.
7. Click **OTHER**. In the box beside it, type "|" by pressing **Shift** and the backslash "****" key at the same time. Click **Next**.
8. Click **Finish**.
9. At this point, you may now format the output and set **Page Setup**.
10. After page setting, click **File** then click **Save As**.
11. At the "**File name**" box, remove the quotation marks and ".PRN" from the filename.
12. At the "**Save as Type**" box, scroll down and look for **Microsoft Excel Worksheet**. If found, click on it.
13. Click **Save**.

IX. RUNNING PROGRAMS OUTSIDE THE MAIN MENU

In case you encounter problems in data cleaning or tabulation, you may run the program/s outside the CPS system by calling the specific program at DOS prompt, then note any message that will be prompted.

1. From the main menu, select **option 7** to exit from the system.
2. At DOS prompt or **C:\CPSJULY>** prompt, type the program name and press Enter.

Ex. **c:\cpsjuly>CORN1** then **[Enter]**

Refer to the list below for the names of the programs.

Program Name	Description
CORN1	Tabulation program for Table 1
CORN2	Tabulation program for Table 2
CORN3	Tabulation program for Table 3
CORN4	Tabulation program for Table 4
CORN5	Tabulation program for Table 5
CORN6	Tabulation program for Table 6
CORN7	Tabulation program for Table 7
CORN8	Tabulation program for Table 8
CORN9	Tabulation program for Table 9

CORN10	Tabulation program for Table 10
CORN11	Tabulation program for Table 11
CORN12	Tabulation program for Tables 12a-12d
CORN13	Tabulation program for Table 13
CORN14	Tabulation program for Table 14
CBRGY1	Tabulation program-Table 1 (by barangay)
CBRGY5	Tabulation program-Table 5 (by barangay)
CBRGY6	Tabulation program-Table 6 (by barangay)
CBRGY9	Tabulation program-Table 9 (by barangay)
PCPSED1	First level editing program
CPSED1	Second level editing program
CWEIGHTS	Generation program of barangay master file
CBGYSRT	Sort program for barangay master file
CBGYNDX	Indexing program for barangay master file
RCPSORT	Sort program for CPS data file

3. Take note of the message that will be displayed. For description of the message and its solution, see Appendix 2. Appendix 2 lists most frequently encountered problems and solutions.

X. OTHER DIRECTIVES

The PPO shall provide the ICTD, Central Office with the following:

1. **Soft copy of the raw data file - CpprdBn.BCH**
2. **Soft copy of the clean and sorted data file – CpprdBnE.SRT**
3. **Soft copy of the original master file of barangays – Crrpp.SRT**
4. **Soft copy of the generated output tables**

The required output/data files can be sent through e-mail or through mails in the form of diskettes (e-mail address – sdos_bas@yahoo.com). Submission shall be on or before the **Provincial Data Review**.

.....

Appendix 1

Second Level Edit Error Messages and Actions to be Taken Corn Production Survey

Error Message	Action to be Taken
1. Invalid province code	Check province code in the PSGC or master list
2. Barangay ID not found in barangay master file	Check ID against the list of the barangay master file. Correct the ID in the data file.
3. Name of sample farmer missing	This field item should be filled-up.
4. Respondent name missing	If sample status is 10-20 & 51, this field should be filled-up. If sample status is 52-55, this item may not be filled up.
5. Invalid respondent code	Check if code is from 1-3 only.
6. Invalid sample status	Check if code is 10/20 or 51-55.
7. Status is palay household but palay area = zeros	If sample status is 10, check that palay farm area has a value.
8. Non-palay household but palay area is filled-up	If sample status is 20, palay farm area should be zero. Else, check if sample farmer harvested palay or has any standing palay (Block E) or intend to plant palay (Block F). If so, change status to 10.
9. Informant's name missing	If sample status is 52-55, this item should be filled-up.
10. Informant designation invalid	If sample status is 52-55, check if code is between 1 and 2.
11. Palay farm area missing but total farm area not zeros	If sample status is 10, there should be an entry for palay farm area.

Error Message

12. Palay area > total farm area
13. Palay farm area not zeros but sample status not 10
14. Did not harvest palay but ecosystem is filled-up.
15. Harvested palay but ecosystem is blank
16. Invalid ecosystem
17. Invalid quarter code
18. Invalid month harvested
19. Invalid month planted
20. Area planted < area harvested
21. Area harvested > total farm area
22. Area planted > total farm area
23. Total no. of units missing
24. Local unit missing

Action to be Taken

Palay farm area should be < or = total farm area.

Check sample status.

Change code to 1-Yes.

Ecosystem should be filled-up.

Valid ecosystem codes are 1-3.

Quarter code will depend on the reference period.

Reference Period	Quarter
Jan-March	1
Apr-June	2
July-Sept	3
Oct-Dec	4

Check if the harvest month is within the reference period.

Check if planting month is within the planting season corresponding the reference period.

Area planted should be > or = area harvested.

Area harvested should be < or = total farm area.

Area planted should be < or = total farm area.

Check if this field has an entry.

Unit of measure must be filled-up.

.....

Error Message	Action to be Taken
25. Weight/LU missing	Weight per local unit must be filled up and should be in kilograms.
26. Invalid seed type/class	Valid codes are 1-3 for corn.
27. Invalid generation of seeds	For corn, if seed type is 1-2, seed generation can be 1 or 2. Native corn has no generation of seeds.
28. Invalid variety code	Check the list of corn varieties for the correct code.
29. Variety name missing	Check the list of corn varieties for the corresponding variety name.
30. Invalid breeding method (corn)	Valid codes are 1 and 2.
31. Invalid transgenic trait (corn)	Check assigned codes.
32. Quantity of seeds used missing	This field should be filled-up.
33. Unit of measure for seeds missing	This field should be filled-up.
34. Weight/LU for seeds missing	Weight/LU should be filled-up and in kilograms.
Seeding rate exceed level	Compute seeding rate = (total no. of units x weight/LU) / area planted. Below is the recommended seeding rate:- For corn, seeding rate is 20 kg/ha
36. Invalid irrigation facility	Check irrigation facility codes.
37. Column 14 missing	Valid responses are 0 and 1 only.
38. Adequacy of irrigation invalid	Valid codes are 1-3.

Error Message	Action to be Taken
39. Area fertilized missing	If Yes (code 1) to question on "did you apply fertilizer?", area fertilized should be filled-up.
40. Area fertilized < area harvested	Area harvested should be = or < area fertilized.
41. Invalid fertilizer code	Check assigned fertilizer code.
42. N-P-K missing	Check if the nitrogen, phosphorus & potassium contents are filled-up.
43. Quantity missing	Check that quantity of fertilizer or pesticide applied is filled-up.
44. Weight/volume per unit missing	If the fertilizer/pesticide is in solid form, weight/unit should be filled-up in kilograms. If the fertilizer/pesticide is in liquid form, volume/unit should be filled up in liters.
45. Area applied w/ pesticide < area harvested	Area harvested should be < or = area applied.
46. Name of pesticide missing	This field should be filled-up.
47. Invalid pesticide code	Each pesticide indicated should be classified. Classification codes are 1-7.
48. Total production not = total disposition	The sum of all types of disposition should equal total production. For corn, total disposition should equal total production by product form. For ears of matured corn, total disposition should be equal to the estimated equivalent in shelled corn.

Error Message

Action to be Taken

PRODUCTION FORECAST

49. Area to be harvested > area planted

For production forecast, area to be harvested should be = or < area planted.

50. Area to be harvested > total farm area

Area to be harvested should be = or < total farm area in RT 1

51. Area planted > total farm area

Area planted should be = or < total farm area in RT 1.

PLANTING INTENTIONS

52. Area to be planted > total farm area

Area to be planted should be = or < total farm area in RT 1.

ASSESSMENT ON PRODUCTION

53. Reason for change missing

This field should be filled up if the assessment is 2 or 3.

54. Invalid answer to "are you aware of the GMA Program...?"

Valid responses are 0 and 1.

55. Invalid answer to "have you availed of any benefits from GMA Program?"

Valid responses are 0 and 1.

56. GMA Program missing

This item should be filled-up if answer to "have you availed...?" is 1.

57. Invalid code for reason/s

Check assigned codes for reasons for change in production.

58. Invalid GMA program code

Check assigned codes for GMA programs.

Appendix 2

Frequently Encountered Problems and Solutions

Item/Message/Problem	Solution
1. RL: File status 92 on <Filename>	The indicated filename is incorrect or not found in the directory. Check the entered filename if correctly typed.
2. RL: File status 94 on <Unopened File>	The indicated filename is incorrect. Check the filename entered. The file may also be corrupted. This usually occurs in .NDX files. If the file is RK.NDX, copy the RK.NDX in the PPS or CPS directory whichever is installed in the computer or you may copy it from the system CD. If the filename in error is the barangay master file, generate the master file again by following the procedures discussed in Section VI.
3. Subscript out of range or subscript error	This occurs on different data items depending on the table being generated. Probable cause is the assignment of code. Check the data items expected from specific tables. Most common data items to be checked are survey month, quarter code, month of harvest, month of planting, seed type or class and generation of seeds. Check if these data items have valid codes.
4. No table generated	This error may be due to master file error or subscript error. Master file error means it was not generated, sorted and indexed. Make sure that the master file is generated, sorted and indexed. Subscript error is caused by one or two data items with error (see item 3).
5. Table 1 not generated	Check the following data items:- <ol style="list-style-type: none"> 1. Survey month of survey round- it should match the reference period, i.e. 01 for January Round, 04 for April Round, 07 for July Round, and 10 for October Round 2. Quarter code – should match the reference period, i.e. 1 – Jan-Mar, 2 – Apr-June, 3 – July-Sept, 4 – Oct-Dec 3. Corn type – valid codes are 1-2. Blank corn type is not accepted. 4. Month harvested – should fall within the reference period

Item/Message/Problem	Solution
	<p>5. Seed type and seed generation –a combination of these two data items will result to a different classification of seeds in the output table. See Table on Seed Type and Seed Generation Combination) for details.</p> <p>-Ensure that the barangay master file is generated, sorted and indexed.</p>
6. Table 2 not generated	<p>Check the following data items: -</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Month to be harvested 4. Seed type and seed generation <p>Ensure that the barangay master file is generated, sorted and indexed.</p>
7. Table 3 not generated	<p>Check the following data items:-</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Month to be planted 4. Month to be harvested <p>Ensure that the barangay master file is generated, sorted and indexed.</p>
8. Table 4 not generated	<p>Check the following data items:-</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Seed type and seed generation <p>Ensure that the barangay master file is generated, sorted and indexed.</p>
9. Table 5 not generated	<p>Check the following data items:-</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Seed type and seed generation 4. Month to be harvested <p>Ensure that the barangay master file is generated, sorted and indexed.</p>
10. Table 6 not generated	<p>Check the following data items:-</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Month to be harvested 4. Month to be planted <p>Ensure that the barangay master file is generated, sorted and indexed.</p>
11. Table 7 not generated	<p>Check the following data items:-</p> <ol style="list-style-type: none"> 1. Survey month of survey round 2. Corn type 3. Seed type and seed generation 4. Fertilizer code <p>Ensure that the barangay master file is generated, sorted and indexed.</p>

Item/Message/Problem	Solution
12. Invalid Bgy-Exp <Barangay Code>	The indicated barangay code is not found in the master file. Check the indicated code against the list of the barangay master file. Correct the ID in the data file and sort it again.

Table on Seed Type and Seed Generation Combination

Type /Class of Seed		Seed Generation	Table Output – Type of Seed
Name	Code	Code	
Hybrid	1	1	Hybrid
Modern OPV	2	1	Modern OPV
Native	3	No code	Native
Hybrid	1	2	Farmer's Seeds
Modern OPV	2	2	Farmer's Seeds