I.   INTRODUCTION

The Avian Population Survey is a major joint undertaking among three (3) agencies under the Department of Agriculture, the Bureau of Agricultural Statistics (BAS) and the Bureau of Animal Industry (BAI) and the Livestock Development Council (LDC). The survey aims to gather information on the number of birds (chicken, ducks, geese, turkeys, pet birds, etc.) recently being raised nationwide. The information gathered will serve as critical inputs to policy decisions in the event of the Avian Influenza outbreak. In connection to this survey, a customized data processing system is developed aptly titled the Avian Population Survey System (APSS).

To facilitate data processing and to orient the user of the APSS, it is necessary to provide the processors with detailed procedures, thus these guidelines. The procedures on data preparation, data entry, data validation, and the output table generation are the modules of the APSS.

This document contains the procedural steps of data processing that cover system installation, accessing the system, data entry, data validation and output table generation. It is highly recommended that these guidelines be **understood** and **STRICTLY** followed to be able to generate quality output tables.

II. DATA PREPARATION

Data preparation involves two activities namely, manual editing and coding. Manual editing is the checking of the responses to the Avian Population Survey (APS) questionnaire based on criteria like consistency with other data items, data ranges, acceptability and completeness. Coding, on the other hand is the assigning of numeric codes to data items like alphanumeric to facilitate encoding.   The purpose of this section is to provide instructions in editing and coding of the data from APS survey questionnaires.   The approach will be by block, by data item and by page.

Block A. BARANGAY IDENTIFICATION

a. Check the indicated region, province, municipality and barangay names. The names should be legibly written.   Check the indicated codes corresponding to region, province, municipality and barangay against the Philippine Standard Geographic Classification Code (PSGCC) that will be provided.
b. For each respondent's name indicated, there should be a corresponding respondent's designation. Use the following codes for designation:

01 – Barangay Chairman
02 – Barangay Official
03 – Municipal Agriculture Officer (MAO)
04 – Agricultural Technician (AT)
05 – Municipal Planning and Development Officer (MPDO)
06 – Cooperative Officer
07 – Market Administrator
08 – Farmer Leader
09 – Trader
10 – Municipal Veterinarian
11 – Municipal / Barangay Health Worker
12 – Livestock Grower
13 – Contract Grower
14 – Poultry Raiser
15 – Manager, Dressing Plants
16 – Manager, Abattoir
17 - Others

Block B. FARM INFORMATION

B1. On Backyard Farms

1. Indicate the code of the type of poultry in column 1 using the following codes:

    01   Native/Improved chicken, kaber,sassoo, ranged chicken
    02   Broiler
    03   Layer
    04   Game fowls
    05   Quail
    61   Mallard (Duck)
    62   Muscovy (Duck)
    07   Turkey
    08   Pet birds
    09   Geese
    10   Ostrich
    11   Peacock
    12   Dove/Pigeon
    13   Eagle
    14   Mayna
    15   Others

2. Check the date indicated in column 2, it must be in the format mm-dd-yyyy.
3. Check the number of birds in column 2, and accept the number of raisers in column 3. If there are number of birds in column 2, there must be corresponding entries in column 3. However see to it that the total inventories of birds per raiser in a barangay should not reach commercial level threshold. This can be checked this by dividing the number of birds in column 2 by the number of raisers in column 3. The number of birds per raiser should be within the folowing backyard threshold for each of the bird type.

Native/Improved Chicken Kaber, sassoo, ranged chicken	1 – 499
Broiler	1 – 999
Layer	1 – 499
Gamefowls	1 – 19
Quail	1 – 499
Ducks (Mallard, Muscovy)	1 – 99
Turkey	1 – 49
Geese	1 – 19
Ostrich	1 – 19
Pet Birds	1 - 49

B.2   On Commercial Farms

The following are the commercial threshold per raiser for each animal type:

Native/Improved Chicken Kaber, sassoo, ranged chicken	500 and more
Broiler	1000 and more
Layer	500 and more
Gamefowls	20 and more
Quail	500 and more
Ducks (Mallard, Muscovy)	100 and more
Turkey	50 and more
Geese	20 and more
Ostrich	20 and more
Pet Birds	50 and more

1. In column 1, indicate the code of the type of poultry farm using the following codes:

01	Native/Improved chicken, kaber,sassoo, ranged chicken
02	Broiler
03	Layer
04	Game fowls
05	Quail
61	Mallard
62	Muscovy
07	Turkey
08	Pet birds
09	Geese
10	Ostrich
11	Peacock (all others)

2. For each of the type of poultry farm, indicate the code of the poultry farm operation using:

01	Grand Parent farm
02	Parent stock farm
03	Grow-out farm
04	Contract growers
05	Hatchery farm
06	Layer farm
07	Game fowl farm

3. In column 3, check the name of farm if legibly written.
4. If a farm has a mother company, check the name of the mother company if legibly written.
5. Check the indicated address of the farm if legibly written.
6. Check the names and designation of the contact person in columns 6 and 7.
7. Check the number of houses indicated in column 8.
8. Check the maximum capacity per house indicated in column 9.
9. Check the total farm capacity in column 10.
10. Check the indicated date in column 11, it must be in the format as mm-dd-yyyy.
11. Check the inventory indicated in column 11.
12. Indicate the code of the reason for zero inventory and increase of more than 10 % of the inventory using the following codes:

    1 – Disposed / Newly Harvested
    2 – Temporarily closed
    3 – Allocation for mortality of 10 % capacity

III. SYSTEM INSTALLATION

The APSS is contained in a diskette consisting of the data entry application, sorting, editing and tabulation programs. The system must be installed into the hard disk so it could be easily accessed. To install the system, follow the steps below:

1. Insert the system diskette in drive A.
2. At **C:>** prompt type **a:install** then [ENTER].

   C:>**a:install [ENTER]**

3. Allow programs to be copied into the hard disk.
4. Remove diskette from drive A after installation is completed.
5. Store system diskette in a dry, cool and safe place.

IV.   ACCESSING THE SYSTEM

After installation, the system can now be accessed. To invoke the system, follow the steps below:

1. Log into the APSS sub-directory using the syntax as follows:

   C:>CD APSS [ENTER]

2. At the APSS sub-directory type the statement below:

   C:\APSS>apss then [ENTER]

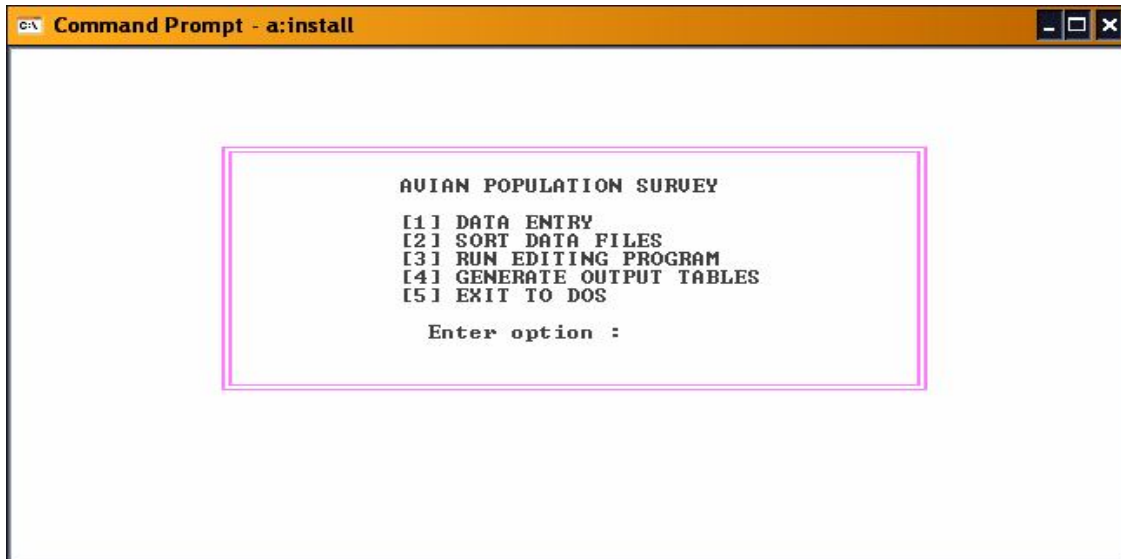3. The APSS batch program executes and displays the main menu. (See Figure 1).

Figure 1: APSS Main Menu

4. The user can select options from menu. Option 1 for data entry, option 2 for sorting the file, option 3 for validating the records in the file, option 4 to generate output tables and option 5 to exit from the system.

V.   DATA ENTRY

Data entry is also called data encoding. It is the inputting of data items from the questionnaire and transforms the data items into a machine readable media. A data entry application form is the tool used to capture the data items from the questionnaire. The procedures below are the steps in 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: **APSS.AP.**
   Enter batch file name: **AVpp.BCH.**

   where:

   AV – represents Avian Population Survey
   pp – province code

6. Press **F3** to do procedure.
7. Press **Y** to create batch.

8. Enter Operator's ID.
9. Highlight **'Add to Batch'** then press **[ENTER]** key.
10. In the **Batch Screen**, input the region and province codes and the year of survey.
11. Press **[ENTER]** to accept the batch.
13. In the questionnaire screen, input the municipality code, the barangay code and the name of municipality and barangay.
14. Enter information required in Record type 1 screen, that is, Identification
15. Enter information required in Record type 2, that is, Backyard Farm Information.
16. Enter information required for record type 3, that is, Commercial Farm
17. Press **F7** to save records.
18. Upon the termination of data entry, press **[ESC]**, Highlight **End Batch**, then press **[ENTER]**.
19. Press **[ESC]** until the main menu is reached.

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
F4   - delete current record or questionnaire. Record will be deleted if record screen is displayed. The questionnaire will be deleted it   the monitor displays the questionnaire screen.
F7   - save questionnaire or record.
*   - duplicate data field of previous record
F1   - HELP KEY

VI. SORTING DATA FILES

Sorting is the arranging of records in the order that can be manipulated easily. The records from the APS data files must be sorted in ascending order to facilitate the correction of errors. The record key to be ordered is the sample identification. This is done so that locating the questionnaires during error correction will be easier. To sort the APS file, the steps are as follows:

1. Select **option 2** from menu.
2. Enter the input file: **AVpp.BCH**.
3. Enter the output file: **AVpp.SRT**

VII. RUN EDITING PROGRAM

The purpose of an editing program is to automate the checking of data items in the record. The program checks the data items as to ranges, and consistencies. The erroneous data items are listed in an error list with the corresponding remarks or actions to be taken to correct it. The error list are then printed and the listing of errors serve as guide to editors in correcting the errors. To run the editing program, the steps below are undertaken.

1. Select **option 3** from main menu.
2. Enter the name of input file: **AVpp.SRT**
3. Enter the name of the Masterfile : **Brrpp.BCH**
4. Enter the name of the output file : **AVpp.ERR**
5. Enter edit number : **1st for first edit, 2nd for second edit, etc.**
6. Print the **AVpp.ERR** and correct errors. Refer to the questionnaire to verify the errors.
7. Correct erroneous records using **OPTION 1 – Data Entry** and the **Modify Batch** command.
    After modifying data file, press **ESC**.
    Highlight **'End Batch'**, then press [**ENTER].**

Useful 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

NOTE: Repeat the activities of sorting, editing and updating of data until the file is totally clean.

VIII. GENERATING OUTPUT TABLES

Upon producing a clean data file, the user will run the programs that will generate the output tables. To run these programs, follow the steps below:

Option [1] Generate table 1

1. Select option 4 from main menu.
2. Select option 1 from sub-menu.
3. Enter the input file name : **AVpp.SRT**
4. Enter the output file name : **AVpp1a.TBL**
5. Enter another output filename : **Avpp1b.TBL**

Option [2] Generate table 2

1. Select option 4 from main menu.
2. Select option 2 from sub-menu.
3. Enter the input file name : **AVpp.SRT**
4. Enter the output file name : **AVpp2a.TBL**
5. Enter another output file name : **Avpp2b.TBL**

Option [3] View Output Tables

1. Select option 4 from main menu.
2. Select option 3 from sub-menu.
3. Enter name of output table (Example : **Avpp1a.TBL**, etc.)
4. Table will be displayed.
5. Press **[ESC]** to go to the sub-menu.

IX. CONVERTING OUTPUT TABLES INTO EXCEL FORMAT

If the PPO desires to manipulate the APS output tables in Excel, he/she has the option of converting the tables into EXCEL format. The procedures in the conversion of tables are as follows:

1. At **C:\APSS**, invoke IMPS.
2. At the display of the IMPS logo, enter a password or press [ENTER].
3. At IMPS menu, select **Utilities**.
4. At IMPS Utilities Menu, select **E – Expand Data**
5. Enter the name of table to be expanded. **(Example : AVpp1a.TBL)**.
6. Enter the name of destination file. **(Example : AVpp1a.CSV)**.

7.   Enter the record length which is **300**.
8.   Access this file in EXCEL and manipulate the way you want.
9.   Save the file in EXCEL using the option **Save as …**

X.   TIMETABLE OF DATA PROCESSING

ACTIVITY	DATE
1. Survey Operation	July 1 – 30
2. Training of RPOs/PPOs	July 12 – July 29
3. Submission of accomplished questionnaire to POC	July 2 - 30
4. Coding and editing of information	July 15 - 30
5. Encoding and data cleaning	July 16 – August 25
6. Generation of output tables	August 26 - 30
7. Provincial validation	
8. Updating of data files based on adjustments made	September 1 – 5
9. Regional validation	
10. Updating of data files at the ROC	September 6 – 10
11. Submission of outputs and clean data files to C.O.	**September11 – 15**
12. Generation of national level output tables	September 26 - 30
13. Conversion of data files to GIS format	October 1 - 5
14. Conversion of output tables to GIS format	October 6 -10