

WORLD AGROFORESTRY CENTRE

DATA ENTRY QUICK START GUIDE

[Using CPro for Data Entry]

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Abstract

This is a quick start guide for using CPro software to do data entry for survey data. It covers the steps for Data Entry, Modifying and Adding new Cases, Comparing Data Files after double data entry and Exporting the Data File after data entry. Using a sample research questionnaire you will be able to learn the navigations and the screenshots will give a representation of the current step.

Pre-requisite for Data Entry

The minimum requirements for you to start data entry:

1. CSPro 4.0 or CSPro 4.1 (Download the most recent version from <http://www.census.gov/population/international/software/cspro/csprodownload.html>)
2. Data entry application – This is available in the form of a zipped file (“complete CAWT application.zip”) it will contain the files listed below and these need to be extracted onto your computer into a specified folder e.g. C:\CAWT
 - CSPro Binary file - .enc
 - Dictionary file - .dcf
 - Data entry file - .ent

STEPS TO BEGIN DATA ENTRY

Import note on Double Data Entry:

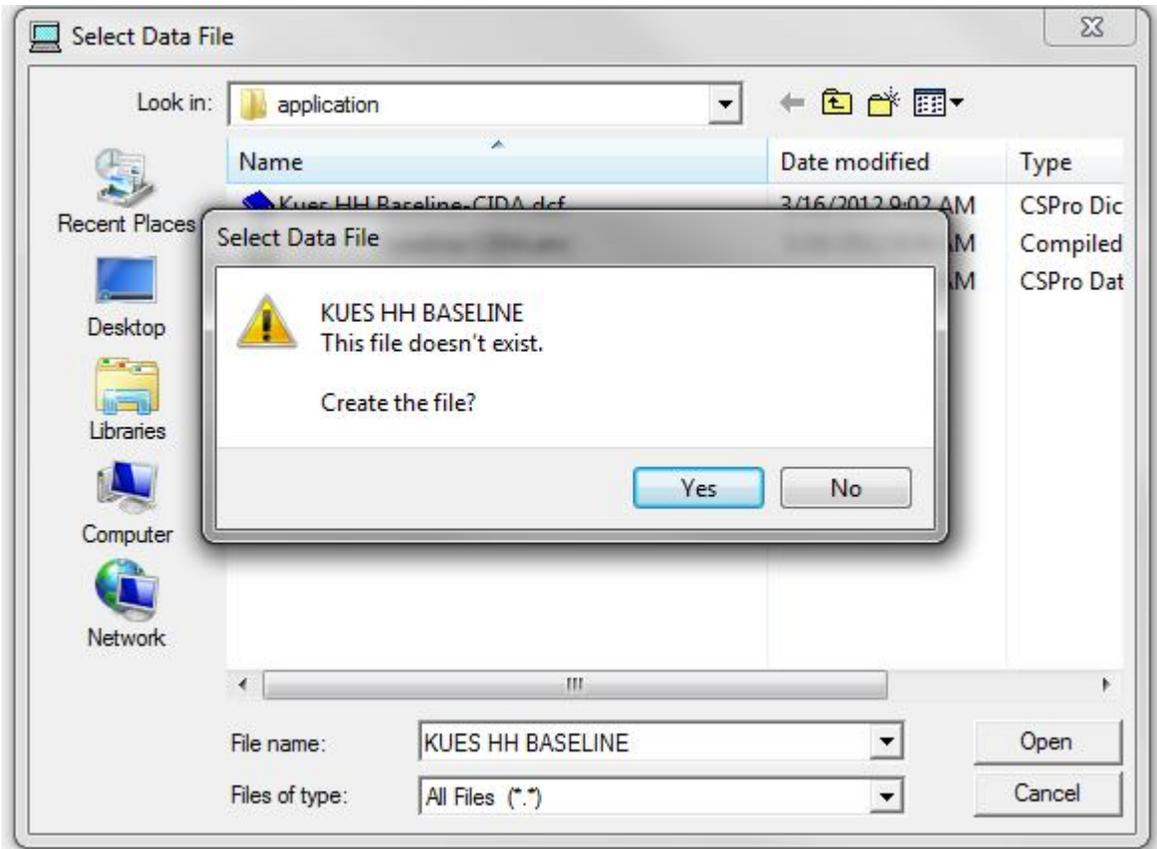
The same cases (surveys or questionnaires) are entered twice using the Data Entry Application, preferably by two different data entry persons and saved into two separate data files. This is referred to as ‘double data entry’ and its main purpose is in data cleaning.

To enter the survey data, follow these steps:

1. Double click on the CSPro Data Entry Application file in the folder in which you unzipped your template (“Kues HH Baseline-CIDA.enc”). It is the file that has a computer briefcase next to it.



2. The “Select Data File” window will open. To create a new file for data entry (called a “case” in CSPro), navigate to the folder in which you want to store the file (preferably the same folder that contains the CSPro applications) and type in a name for the file e.g. KUES HH BASELINE DATA (for the first person) and KUES HH BASELINE DATA1 (for the second person). Then click “Open.”
3. When you are asked if you want to “Create the file?” click “Yes.” As shown below.



IMPORTANT: Creating an input data file results in the creation of four associated files with a similar name (just different file type extensions) in the same folder. You will not need to use these files but you can find descriptions of their purposes below. If at any point you change the name of the input data file, however, you must also change the names of these four files.

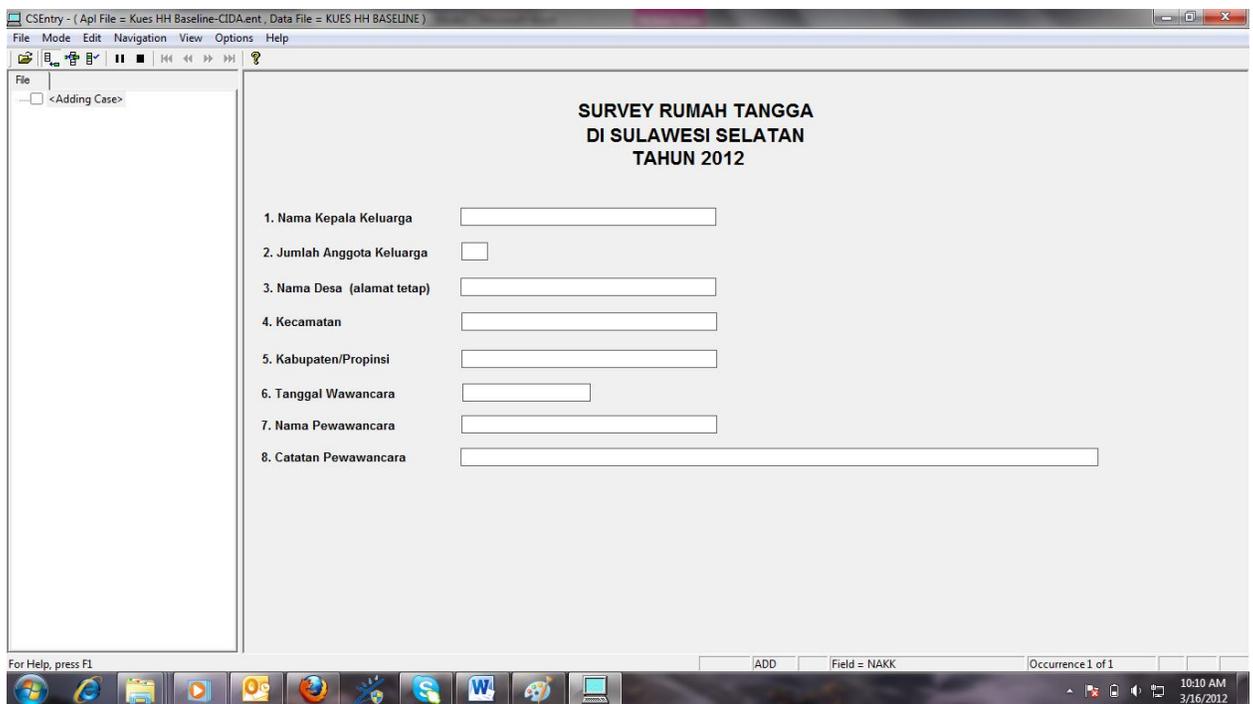
The Files Associated with the Input Data File (which you will not have to open directly) are the following:

1. **.idx:** The data file index stores the case Ids and their physical location in the data file.
2. **.sts:** The data file status file stores information about which cases are partially entered and the last field entered.
3. **.not:** The notes file stores all the notes entered by data entry operators for the corresponding data file.
4. **text file:** The text file is a .log file. This file stores operator statistics generated during data entry.

- The data entry screen will open and it will request for an 'Operator ID'. Type anything preferably your name. Click "OK"

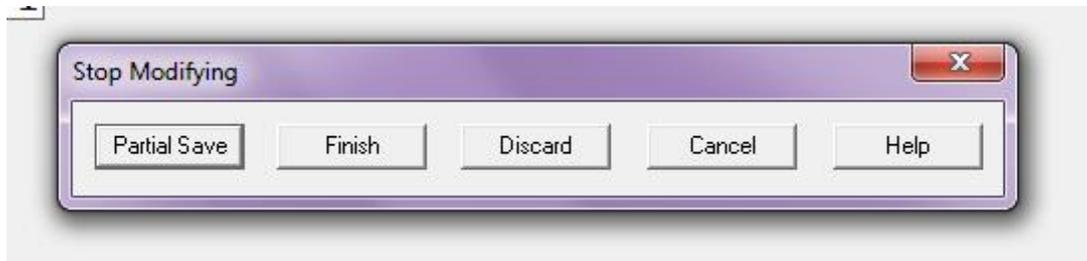


- The first form appears, ready for data entry.



- When you reach the last field on the first page and press "Enter" or "Tab", you are immediately brought to the next page of the survey. When you finish answering the last question of the entire survey, pressing "Enter" or "Tab" brings you to the next case or, if you are already in the last case, to a new case. To navigate between pages within a case, use the "Page Up" and "Page Down" keyboard keys.
- If you have to verify a response and wish to come back to a survey later, you can "partially save" a case. To save a partially entered survey you must at minimum enter the

survey number. To temporarily stop data entry, select “Stop” from the “Mode” menu, or click (stop) on the toolbar. The “Stop Adding” window will open; click “Partial Save.”



8. To resume data entry, select “Add” from the “Mode” menu, or click (add) on the toolbar to add a new entry.
9. When data entry is complete, from the “Mode” menu, select “Stop” or click (stop) on the toolbar and close the window. Your changes are saved automatically.
10. Zip or compress (using WinZip or WinRar) the folder and send it back for purposes of conducting data checks and exporting to data analysis softwares

Navigation

- Move forward – Enter, Tab, Right arrow or Down arrow
- Move backward – Shift-tab, Left arrow or Up arrow
- Change field – type new number to it
- Finish table entries – Ctrl-forward slash(/)
- Next form – pg dn (page down)
- Previous form –pg up (page up)

There are four modes of operation within Data Entry found on the toolbar.

- a. Add – Entering new cases. 
- b. Modify – Modifying previously entered cases. 
- c. Pause – Temporarily stop adding or modifying cases. 
- d. Stop – Stop adding or modifying cases. In this mode the data entry form is not visible.



Colors are used to indicate the status of each field.

- a. White- The cursor or mouse has not moved onto that field during data entry.

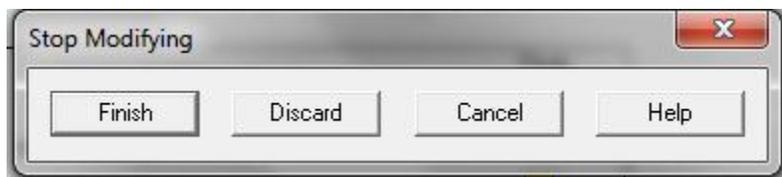
- b. **Green** - The cursor or mouse has passed through that field for data entry input. All fields in a survey must be green in order for a survey to be included in the poverty calculation.
- c. **Yellow** - The cursor or mouse has passed through that field for data entry input and you have moved backwards over the field.
- d. **Gray** - The field is protected and data entry cannot occur for this field.

Modifying Data and Adding new Cases

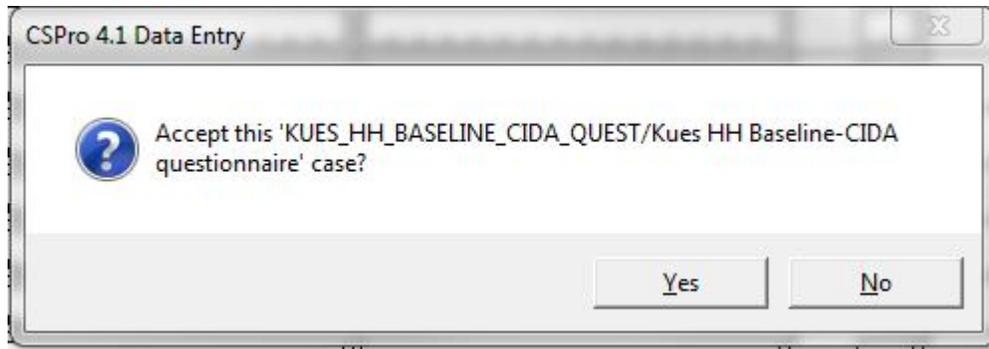
1. Open the Data Entry Application. (follow the steps above)
2. Select the Input Data File containing the data you wish to modify. (follow the steps above)
3. Double click on the survey number you wish to modify OR click the survey number once and from the “Mode” menu, select “Modify.”
4. The “Survey Number” field will be automatically selected. Press “Tab” or “Enter” to advance to the field you wish to modify. DO NOT mouse click on the field – you must use the “Tab” or “Enter” key to move from field to field. While you may be able to click and modify, doing so may cause errors in the program’s operation – it is a quirk of CSPro.
5. Make the edit and then press the “Enter” or “Tab” key until reaching the end of the survey or press “Enter” then click stop on the Menu bar. This step is crucial to ensuring that changes are recorded properly.



Then click on Finish (to accept the change) or Discard (to ignore the change) in the Stop Modifying message box.



If you click on Finish, press F8 to clear any pop up messages then accept the case in the next dialog box.



6. To add a new case to an existing Input Data File, open the file and from the “Mode” menu, select “Add Case.”

Compare Data Tool

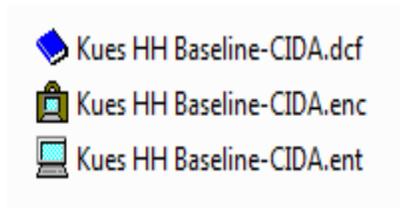
Before analyzing your data, you should go through a few quality checks. The first one involves comparing data. In order to reduce data entry error, it is recommended that each survey be entered by TWO different data processors.

While individuals can make errors easily (e.g. finger slips on the keyboard, entering “222” instead of “22”) it is unlikely that two people will make the same error. CSPro includes a “Compare Data” tool that allows you to compare the contents of two data files that contain the same cases (identified by Survey Number) and locate the differences.

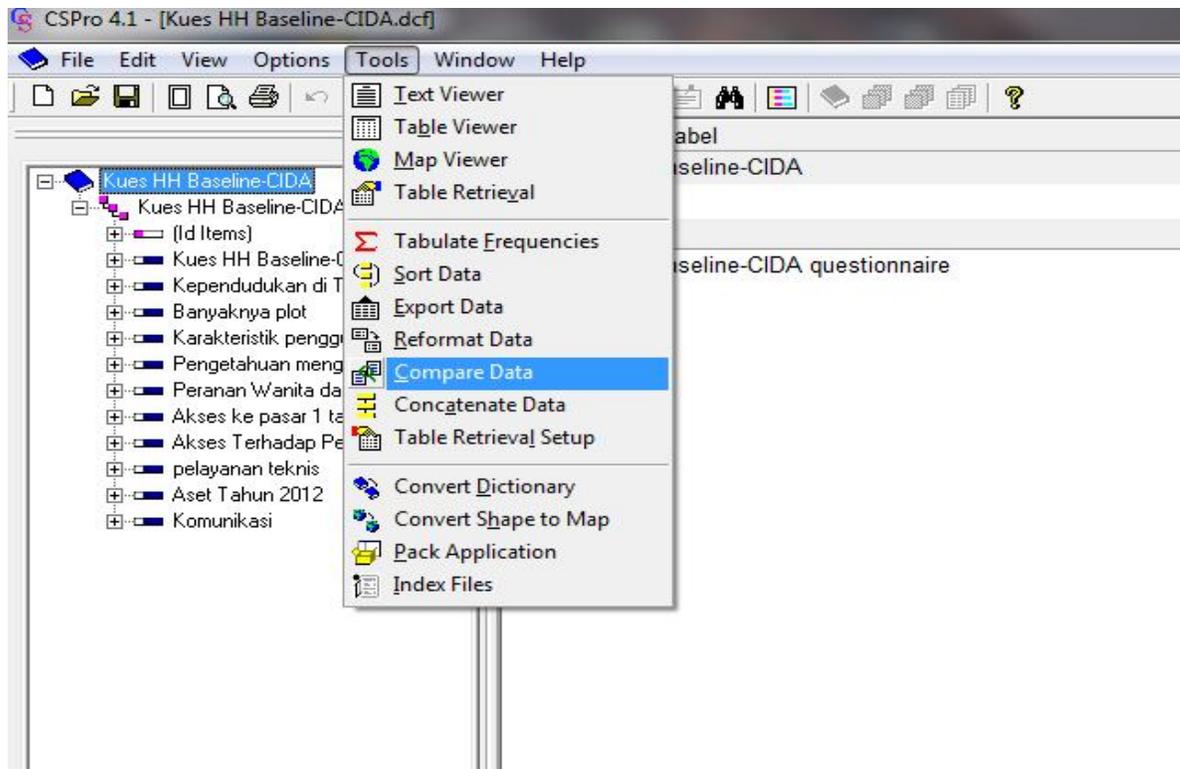
The same cases (surveys) are entered twice using the Data Entry Application, preferably by two different data processors, and saved to two separate data files.

Steps

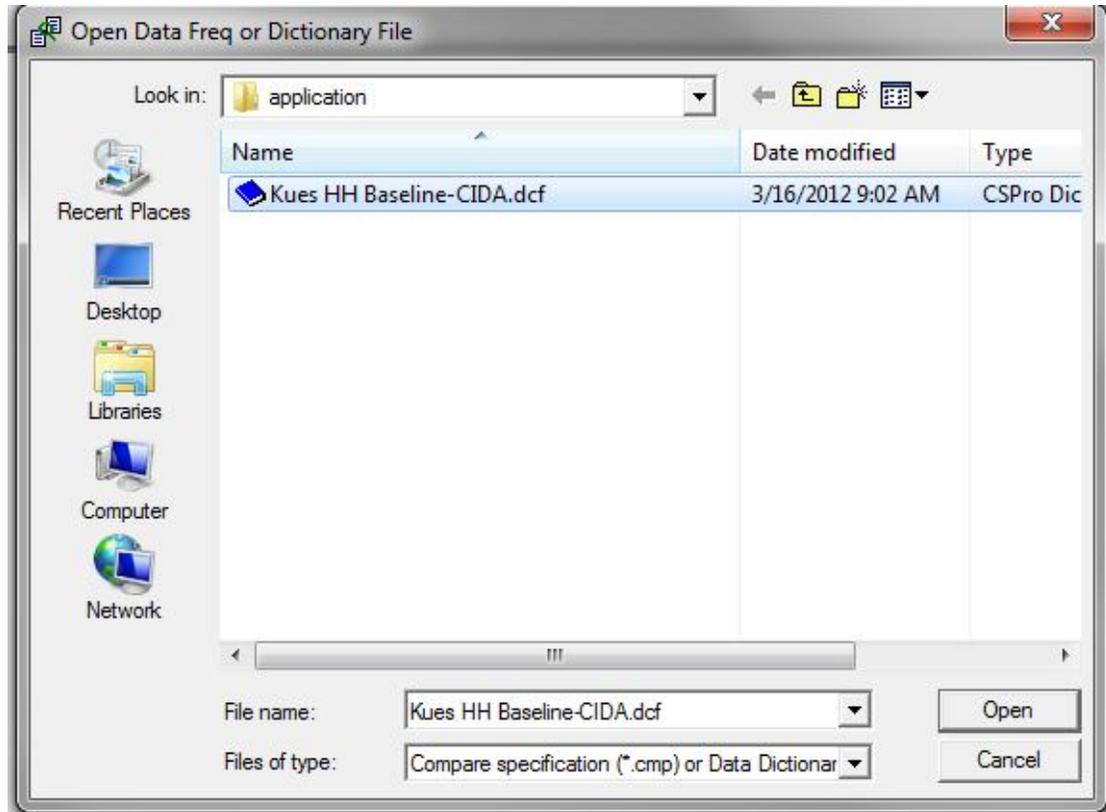
1. Open the Data Dictionary by double-clicking on the CSPro Data Entry Dictionary. It is the file with the book icon next to it in your data folder.



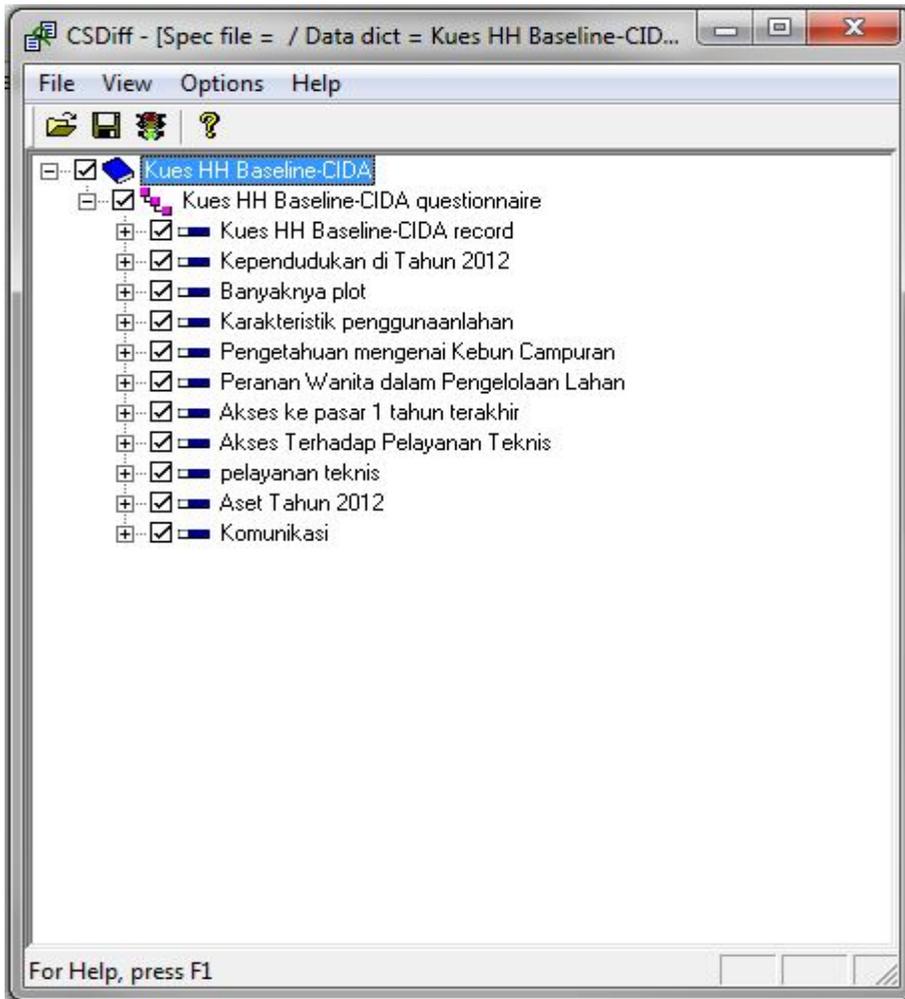
2. Select the “Tools” menu near the top of the screen, then “Compare Data.”



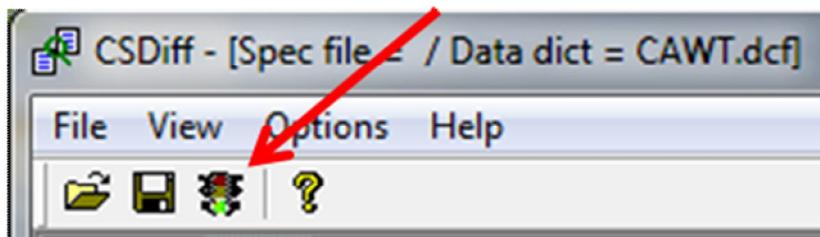
3. In the file menu, select the dictionary file and click "Open."



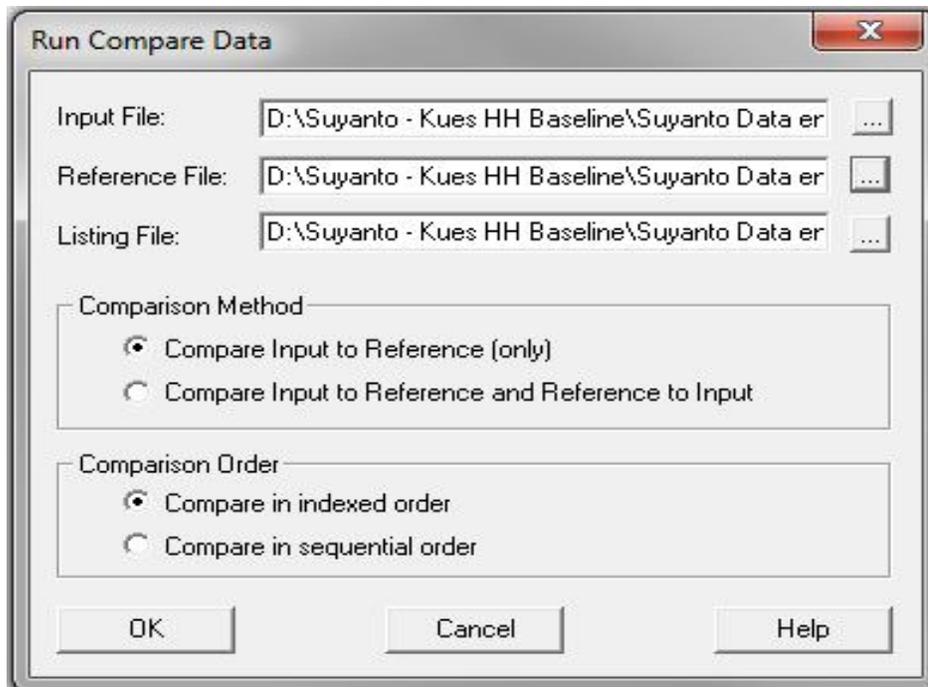
- In the “CSDiff” window, select the variables you wish to compare. If you want to compare all variables (likely), click on the box next to the dictionary icon to select all.



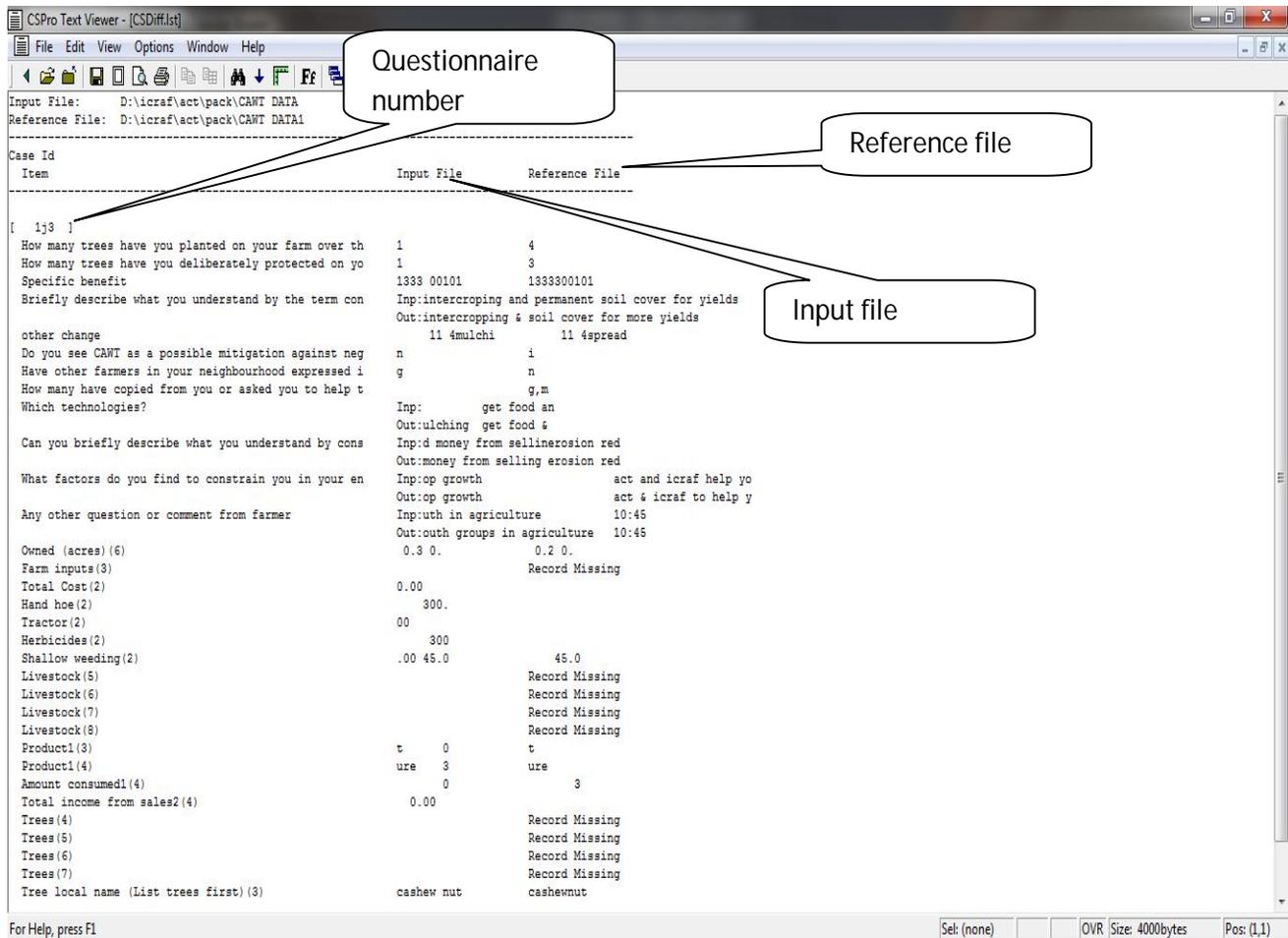
- Click on the stoplight icon in the toolbar. The “Run Compare Data” window will appear on the screen.



- In the ‘Run Compare Data’ Dialog box, click on the grey box to the right of “Input File:” In the file menu select the first data file (CAWT DATA) and click open. Click on the grey box to the right of “Reference File:” and select the second data file (CAWT DATA1) and click open. You can ignore the “Listing File:” As shown below:



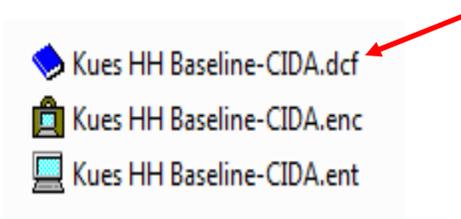
7. Select “Compare Input to Reference” as the Comparison Method and “Compare in indexed order” as the Comparison Order and click “OK.”
8. If the two data files are not the same, the differences will appear in the “Text Viewer” Window as shown below.



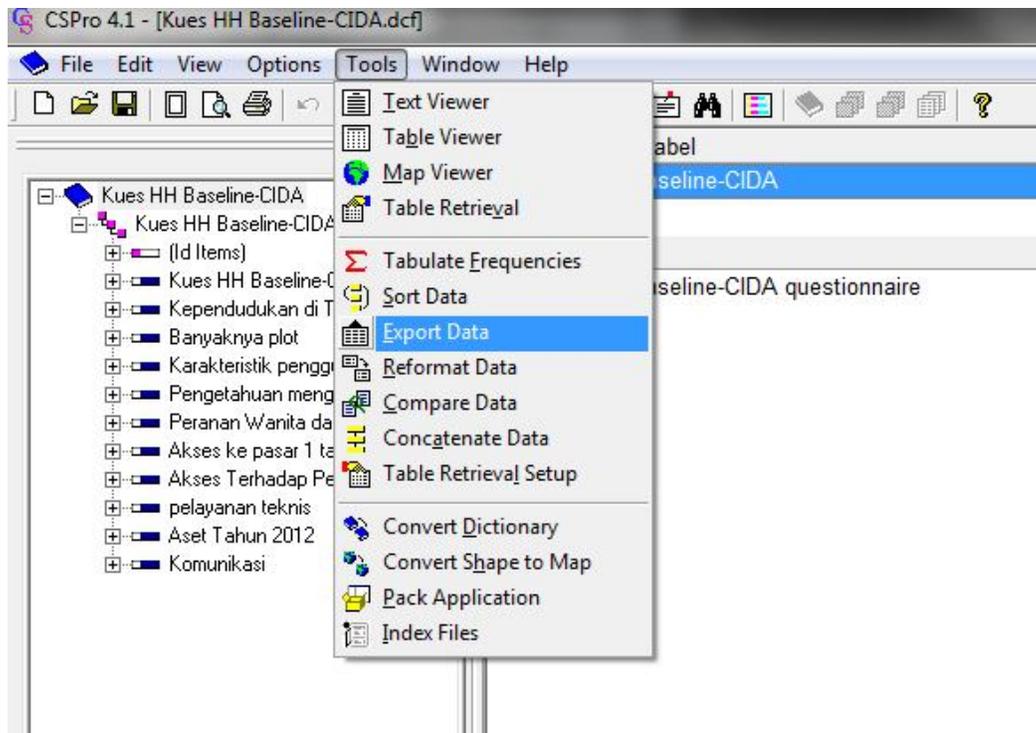
- Therefore to do the corrections follow the steps on “Modifying Data and Adding New Cases” above.

Exporting the Data File

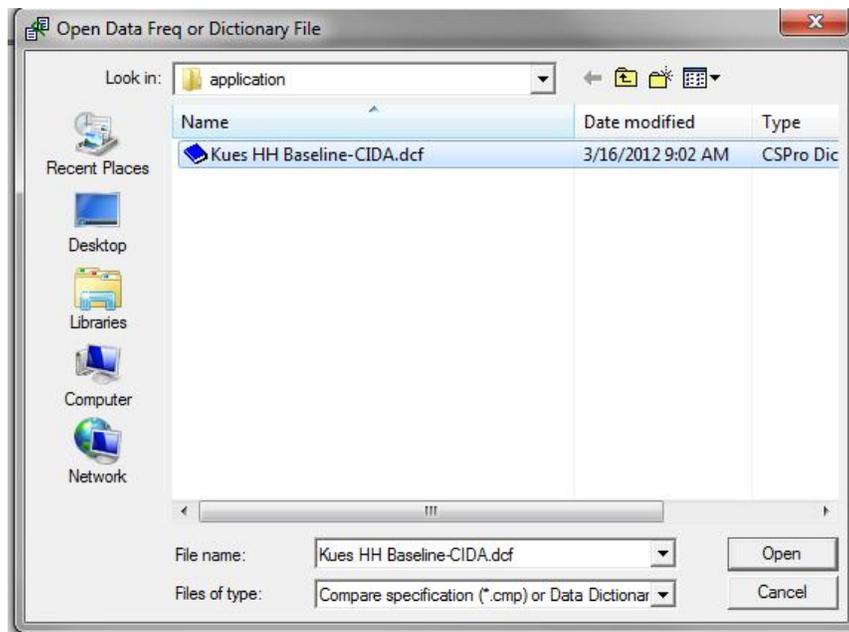
- Open the Data Dictionary by double-clicking on the CSPro Data Entry Dictionary. It is the file with the book icon next to it in your data folder.



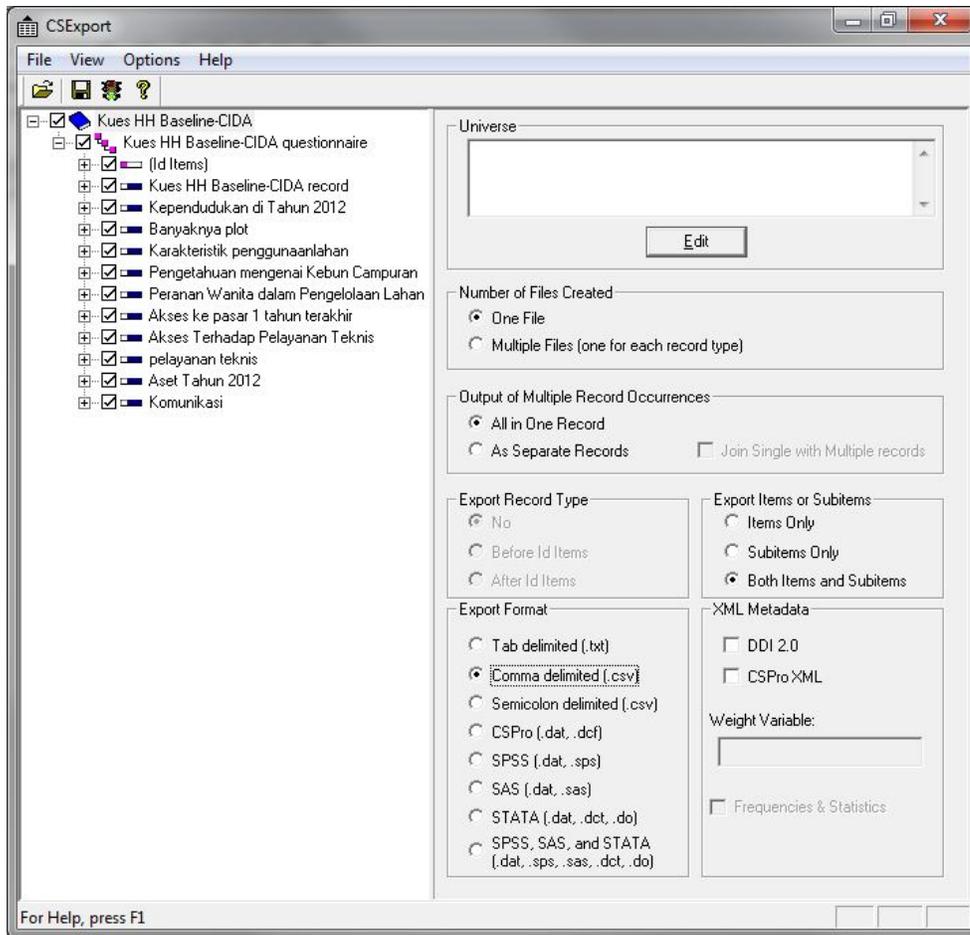
- Select the “Tools” menu near the top of the screen, then “Export Data.”



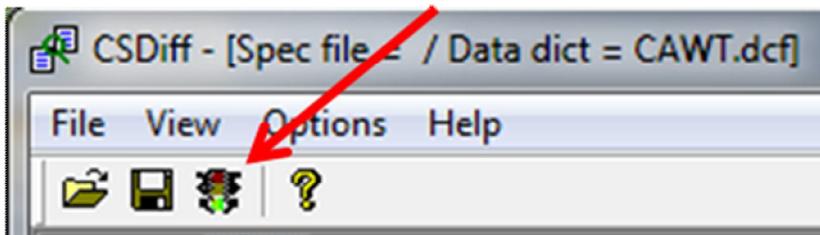
3. In the file menu, select the dictionary file and click “Open.”



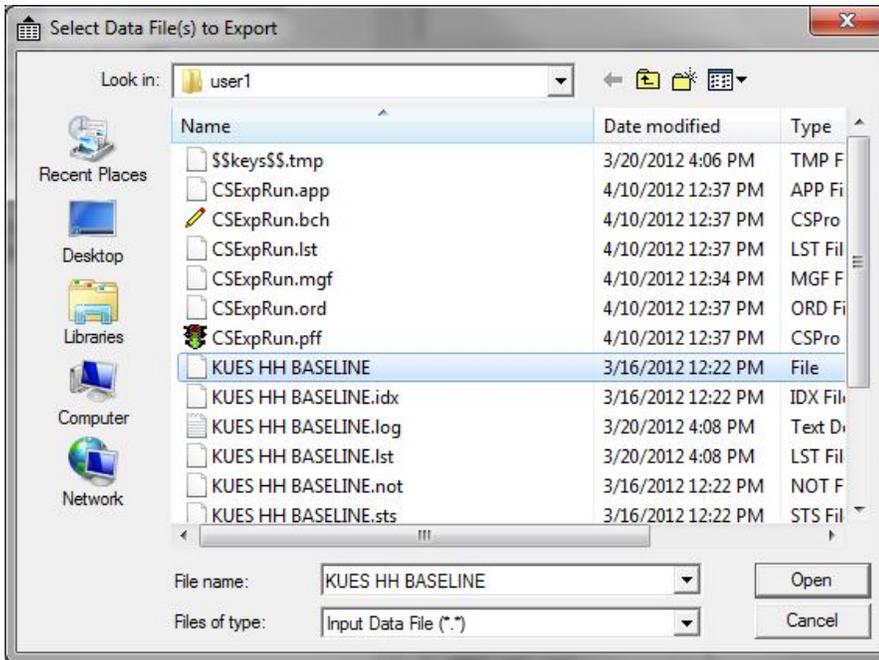
4. In the “CSExport” window, select the variables you wish to compare. If you want to export all variables (likely), click on the box next to the dictionary icon to select all.



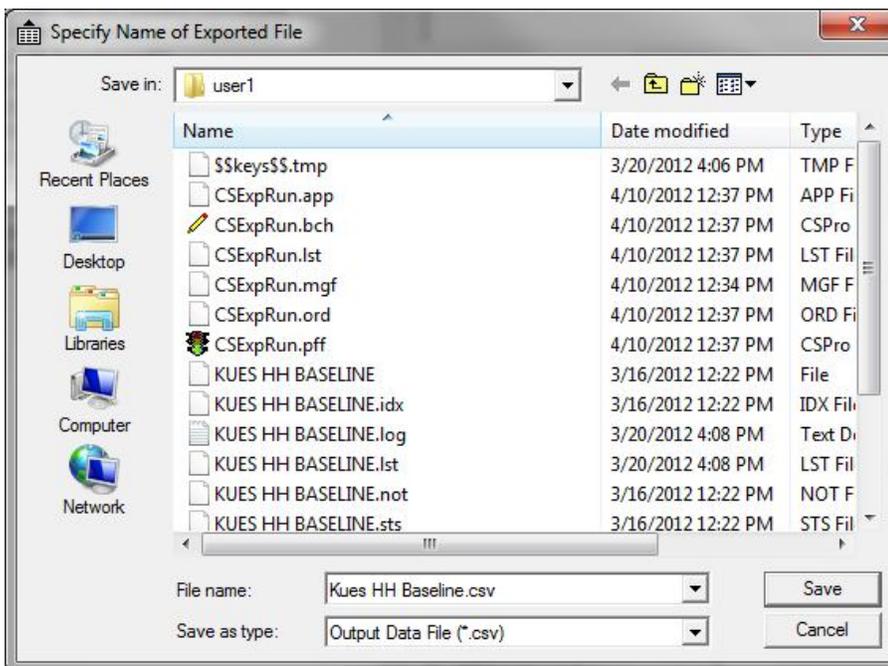
5. In the “Export Items or SubItems” subsection click on the radio button for Both Items and Subitems. Also in the “Export Format” subsection select the format you would like to export to. For Excel use the Comma Delimited (.csv).
6. Click on the stoplight icon in the toolbar. The “Run Export Data” window will appear on the screen.



7. Select the data file in the “Select Data File(s) to Export” dialog box (Make sure you select the correct data file).



8. Specify the name of the file you would like to export.



9. Click on Save.

References

CSPRO Data Entry User's Guide Version 4.1 (2011), retrieved on: 05/04/2012 from:
<http://www.census.gov/population/international/software/cspro/csprodocs.html>

U.S. Census Bureau website: <http://www.census.gov/ipc/www/cspro>