

Tonga Agricultural Census - 2015

DATA ENTRY MANUAL

1. GENERAL GUIDELINES FOR DATA ENTRY

The data entry for the Tonga Agricultural Census (TNAC) will be carried out using the software package CPro. CPro is an interactive data entry system that can check for acceptable codes for questions, follow skips and filters in the questionnaire and check the consistency of data as they are entered. The TNAC questionnaires will be entered by cluster, with each cluster being assigned to one data entry operator. The data for each cluster will be entered into a separate data file for that cluster on the hard disk of the computer, rather than into one large data file. This is to protect against a major loss of data due to hardware or software failure.

During data entry it is important to remember that speed of data entry is not important but accuracy of entry is important. CPro is like a computer-aided office editor. It will not allow any values to be entered that it thinks are out of range. It will skip to the next question that it believes is the next to be entered. It will present a new screen when it thinks a new screen is necessary. CPro does these things according to the data entered. It cannot check everything that the operator enters. If an operator enters a value that was not recorded on the questionnaire, but is a value that is within range, CPro will go to the next field that this value demands. Each operator must review what they have entered as they are entering data to ensure that mistakes do not take place.

Because CPro will control which question is the next to be entered, it is important for the operator to watch the screen, to see which field CPro expects to be entered next. Operators should not enter data with their heads down, only reading the questionnaire. This will lead to many errors in the data entered if the operator miss keyed any data or if there are any mistakes in the responses recorded on the questionnaire. At a minimum, the operator should look at the screen every time a page is turned in the questionnaire.

Data are recorded on the questionnaire in two ways: (1) typed answers or (2) numbers are written in boxes.

If during data entry the operator finds that there are data in the questionnaire which she/he has not been asked by CPro to enter or she/he finds that CPro is demanding an answer to a question that was not asked in the survey, then the operator should review all of the data entered to ensure that she/he has not entered the wrong value in one of the questions.

When reviewing the data entered check question by question whether the data entered is the same as the response written on the questionnaire. Do not look at just the last few questions, but look back over the whole page and the preceding page to ensure that no typing error was made in an earlier question.

If there was no mistake by the operator in entering data then she/he should ask the data entry supervisor to resolve the mistake. If the supervisor is unable to resolve the mistake then the problem should be shown to the senior survey staff for resolution.

During data entry, messages may be produced which will require attention and correction to the data entered. Operators should read the message carefully before attempting to resolve the problem. Resolve the problem in the same way as before, reviewing the data entered first to check that no entry error was made. If no entry error occurred then ask the supervisor to resolve the problem.

The system will allow for '**partial save**' which enables data entry operators to take a short break but it is **highly recommended** and advisable to complete the questionnaire currently being entered before taking a break.

With regards to naming convention, all data filenames should have a standard naming format which will be:

TNAC_XXXX_YYY.dat where

XXXX = Village number

YYY = Census block number

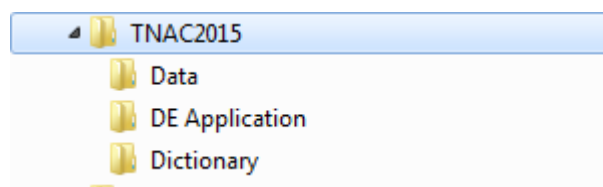
During data entry keep all questionnaires in a tidy pile. It is expected that all questionnaires will be batched by EAs which are then stored in an area easily accessible to the data entry operators. For easy reference, these could be stored by Village numbers and by EA numbers and this helps during the editing stage when there is a need to refer back to the questionnaires to verify information.

Please note that you need to keep a register of the work done. You will be given a sheet to record the dates, EA Number you punched, start time etc. Please record the information correctly as this will help the supervisor in assigning EAs for entry.

Note: Before data entry, make sure the questionnaires are sorted by Household Number

2. DATA ENTRY PROCESS

In the computers, there is a folder in the C:\ drive called 'TNAC2015' and within the folders are folders as shown below:



DE Applications – contains the data entry screen files

Data – where you are going to save your data files

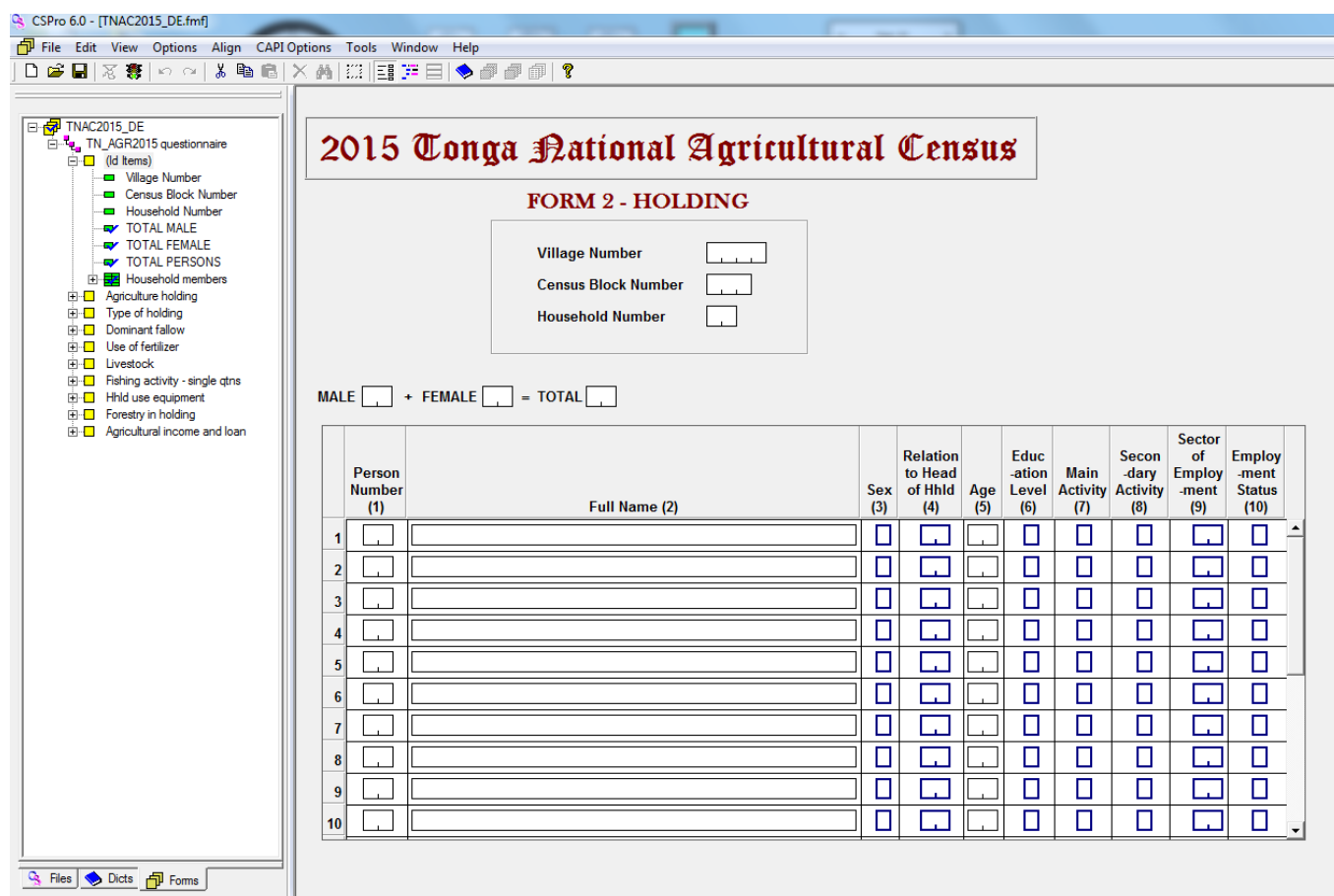
Dictionary – contains the dictionary files



To begin data entry, please click on the icon on the desktop.

The following screen will show up. This is the main data entry screen for the Tonga Agricultural Census.

Figure 1.



CSPro 6.0 - [TNAC2015_DE.fmf]

File Edit View Options Align CAPI Options Tools Window Help

2015 Tonga National Agricultural Census

FORM 2 - HOLDING

Village Number

Census Block Number

Household Number

MALE + FEMALE = TOTAL

Person Number (1)	Full Name (2)	Sex (3)	Relation to Head of Hhld (4)	Age (5)	Education Level (6)	Main Activity (7)	Secondary Activity (8)	Sector of Employment (9)	Employment Status (10)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

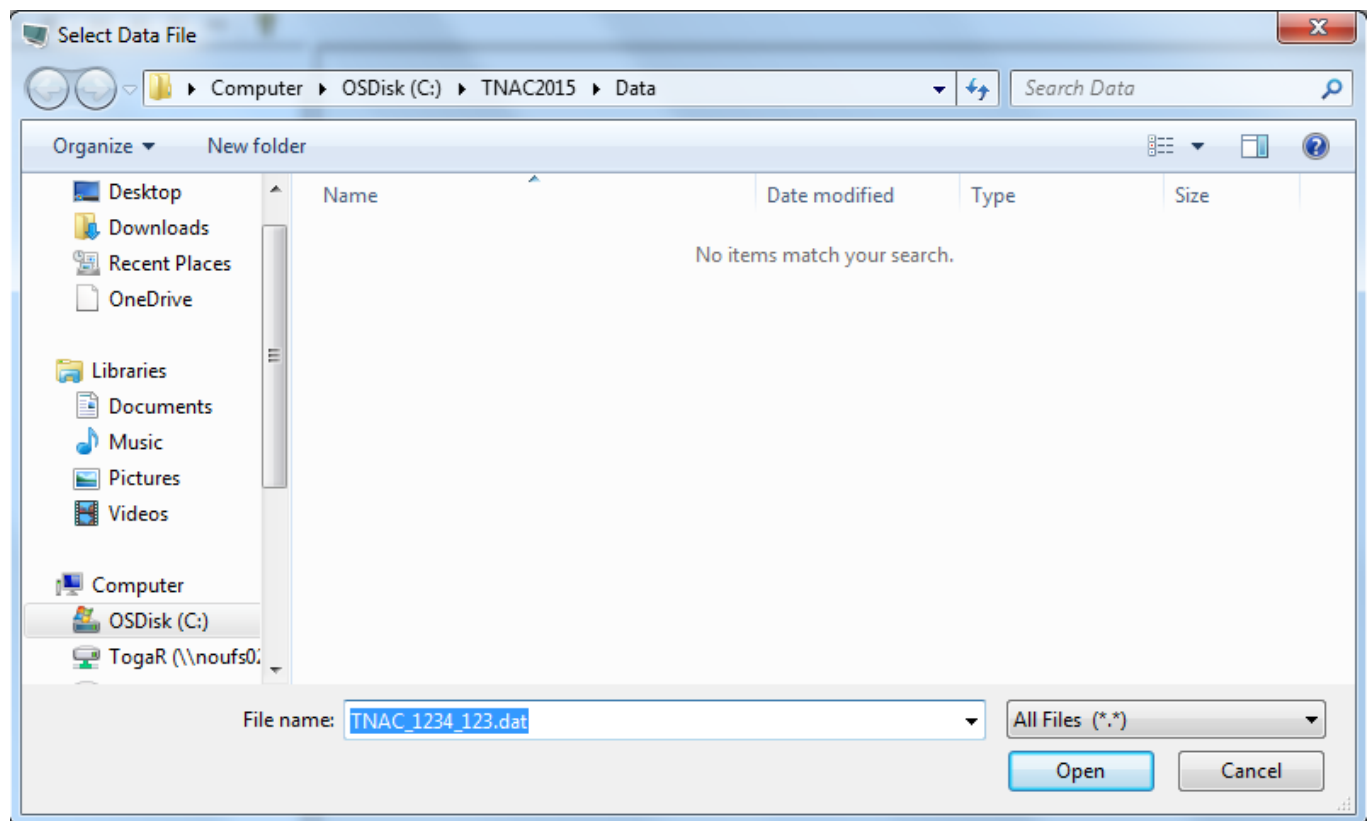
Files Dicts Forms

To begin data entry, click on the 'RUN' button on the top of the screen.

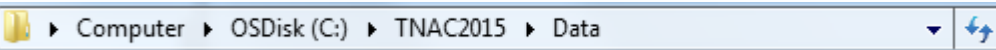


The following screen will show up where you type in the data filename you need to create.

Figure 2.



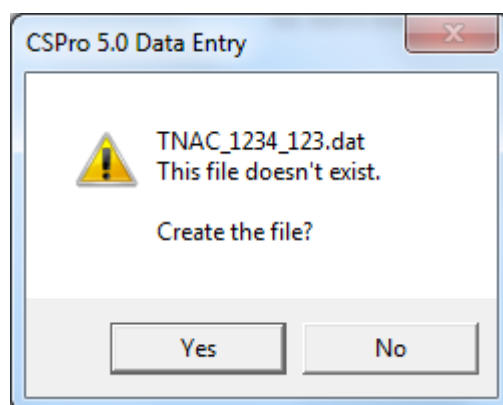
As mentioned above, the folder 'Data' is where you save all your datafiles, hence, make sure the directory path at the top of the screen points to the 'Data' folder. If this is not the case, then change the

pathname: 

Then in the File name field, type in the datafile name of the EA you are going to data entry. Please note the datafile naming convention described above. Filename should be in the format TNAC_XXXX_YYY.dat

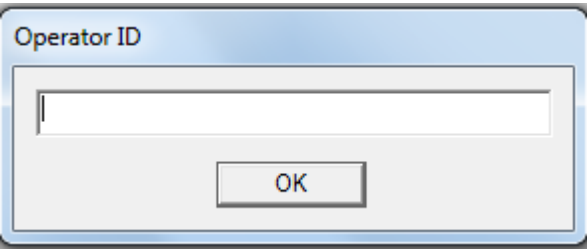
Click 'Open'. If this is the first time you are creating the datafile, then this message will pop-up:

Figure 3.




Since this file is being created for the first time, click on 'Yes' to create the file. The following menu will pop up where you type in your ID number...whatever it is 😊

Figure 4.



One you type in your ID then click 'OK'

Then you are ready to start data entry.

To add another questionnaire, then select the add button on the top left of the screen  OR click CTRL+A.

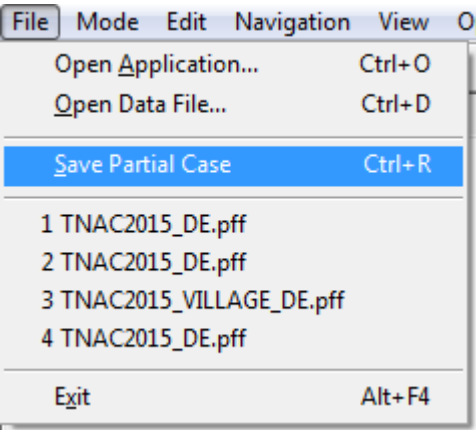
Once you have completed a EA, then you follow the same procedure in Figure 2 for entering a new EA.

In case you did not finish an EA and had to finish another time, then:

You need to 'partial save' the screen so it could allow you to continue at a later time.

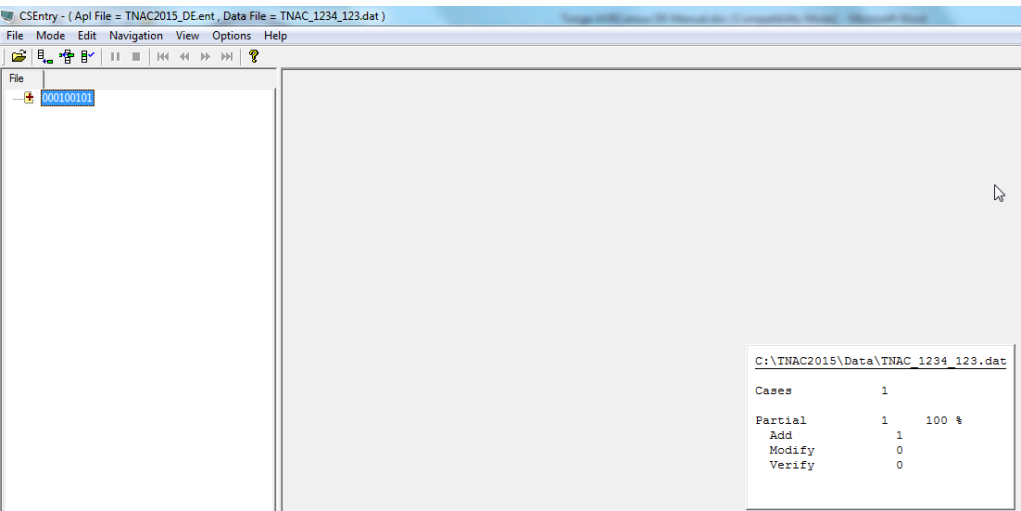
To partial save, click 'CTRL R' or click on the 'File' menu and select 'Save Partial Case'

Figure 5



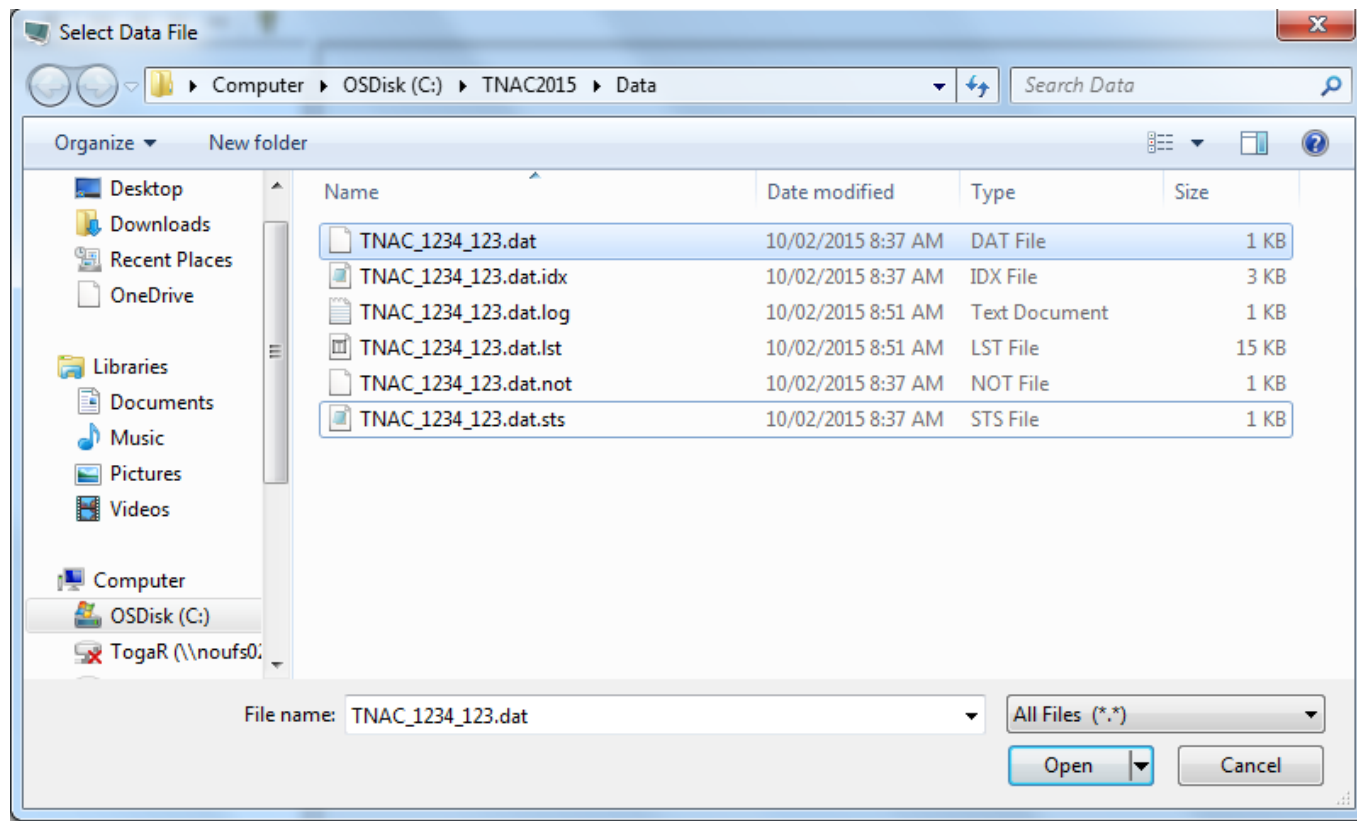
Once you partial save, the following screen will show up telling you then number of cases you have punched in and on the left will show you the 'tree' of all the cases you have entered.

Figure 6



If you have exited the system and you wanted to continue the data entry, then double click on the data entry icon on the desktop but this time you will open the datafile you wanted to continue entering data, so you have to select the data filename.

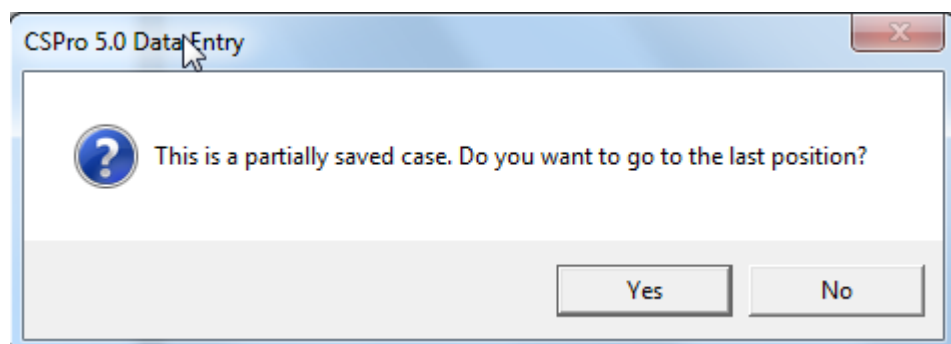
Figure 7



Then click 'Open'. Type in your ID then the screen in Figure 6 will show.

Just 'double click' on the case you want to continue then:

Figure 8



If you click 'Yes' then it will take you the last field you had been entering the last time' whereas if you select 'No' then it open the screen from the beginning.

LOGICS, SKIPS and CONSISTENCY CHECKS

1. Section B:
 - a. The totals for Males, Females and Total will be punched first before you enter individual person particulars. This allows the system to check that you have captured the right number of people.
2. Section C:

- a. This section is a filtering question for the other sections.
 - i. Make sure you look through the questionnaire and see which sections are filled and have to be consistent with what is recorded in Section C.
 - ii. If they are all coded '2' then the system will allow you to enter Section D then end the data entry for the household.
 - iii. If they answer '1' in any, then those sections should only be filled.

ERROR messages

'Total Male does not match number of males in household'

'Total Female does not match number of females in household'

'Total does not match total persons in household'

These messages mean the total punched for males, females and TOTAL does not match the number of males, females and total in the household listing.

'Should only be one HEAD or HEAD is always person 1'

'Only ONE spouse and always in line 2'

'Head and Spouse have same SEX'

These errors happen when you punch the 'Relationship' code in Section B column 4.

'Age of Head / Spouse should be > 14'

'Age difference between father and child should be > 14'

'Age difference between mother and child should be > 14'

'Age difference with grandchild is invalid'

These messages happen when the age difference is 14 or less between the head/spouse and child/grandchild.