

CSES 2003-05

Coding and Editing Manual

Victor Canales, Yip Thavrin & Mam Manith

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Chapter 1 General guidelines for data editing

This guidelines address to the Quality Control team, and provide instructions for the Editors working on, at one side, receiving and coding the questionnaires arrived from the field and, at the other side, working on editing and fixing the errors reported for the data files produced at the data entry workshop.

How the fieldwork is organized

There are 50 teams allocated to the fieldwork. Each month there will be 25 teams working at the field, with a workload covering 2, 3 or 4 sample points or PSUs. The fieldwork plan has been scheduled in order to gather around 60 households monthly per team.

Teams are headed by a **Team Supervisor** and integrated by four **Interviewers**.

For a given month the team moves to the PSU one week before in order to achieve preparatory tasks (enumerate the households and select those to be interviewed). Then, each of selected households is submitted to the first part of the questionnaire, where the household composition is established. For the whole month of operation, the household fills up a diary of expenditures and incomes, and the interviewer visits it repeatedly to complete the remaining portions of the questionnaire.

Once the month ended, the team gets back to the NIS central headquarters in Phnom Penh, where the Supervisor delivers the product of the job to the Data Management team.

Each of PSUs is delivered in a packet including all of the documents used and produced in the fieldwork, including maps, enumeration lists, questionnaires, diaries, etc. In this manual, this is referred to as the PSU-packet, and it is the production for the whole workflow.

Basic instructions

Each PSU-packet is assigned by the **Quality Control Supervisor** exclusively to one of Editors. The appointed Editor is responsible for the PSU from its arrival to the office, up to the final approval of the information contained in the corresponding PSU-file.

Each member of the Quality Control staff has a code provided by the Quality Control Supervisor. This code must be written on the cover of each of questionnaires of the PSU. For all practical purposes, the code written is equivalent to the signature of the Editor in charge.

The Quality Control staff use red ballpoint pens to differentiate their annotations from the remaining staff participating in the survey.

Remind it is expected that fieldwork enumerators use blue pens, and fieldwork supervisors use blank pens. Data entry operators are expected to use green ballpoint pens.

How the workflow is organized at the office

The Data Management Manual of the CSES there is a detailed description on the model of the data management organization. Let's summarize here the key facts for the Quality Control team:

- A fieldwork Team Supervisor returns to the office and delivers the PSU-packet (i.e. all of the questionnaires for a PSU where his team has worked for one month).

- At this moment, one member of the Quality Control team is allocated to the Reception of the PSU-packet.
- The PSU-packet is checked to ensure that all of the expected questionnaires are in place, along with the control sheets of the field work, maps, plans, and all of the auxiliary materials used in the fieldwork. Any differences are to be immediately discussed and analyzed by the Team Supervisor with the Quality Control Supervisor, who may refuse the reception of incomplete PSU-packets and return them to the Team Supervisor.
- Received PSU-packets are divided into three parts: TimeUse' sheets are sent to automatic scanning; Village questionnaires are transferred to the specialized operator working in his/her exclusive workstations; and the Household questionnaires (including Diary) must be fully coded and prepared for the data entry.
- Once the PSU-packet ready for data entry of the Households, the packet is delivered by the Quality Control Supervisor to the Data Entry Supervisor. The PSU is now said to be "in activity".
- The Data Entry Supervisor assigns the PSU-packet to a data entry operator, who must enter the questionnaires into a PSU-file. At the end of each data entry session, a consistency report is issued, displaying the errors or problems found in the information of the PSU-file. Errors reported may be solved or not by the operator with the support of the Data Entry Supervisor.
- Once all of the Household questionnaires of the PSU have been entered, the Data Entry Supervisor transfers the files of the PSU to his own workstation. The Data Entry Supervisor delivers the consistency report to the Quality Control Team along with the Household questionnaires.
- The consistency report is checked by the Editor in charge of the PSU, who may decide to correct some of the reported problems. Correcting instructions are returned to the Data Entry Supervisor, who makes the assigned operator to apply the correcting instructions.
- This correcting cycle may be repeated several times. Once the Editor in charge decides there is no more corrections to be made, the PSU becomes ready to be approved.
- Approval of a PSU is a solemn compromise sealed off by the Quality Control Supervisor and the Data Entry Supervisor, with the authorization of the Data Management Chief.
- Once the PSU approved, all of the PSU-files are transferred to the \CSES\Appro' folder of the concentrator workstation in charge of the Data Management Chief, and erased from both the Data Entry supervisor and the operator workstations. The PSU-packet is recomposed with all of the original questionnaires and documents, and placed in a separated storage. None of the approved materials (data files and packets) should never get back to the active' circuit.

The Data Management Chief in the Control catalog of the operation 6 key events in the life cycle of each PSU: (1) the beginning of the fieldwork, (2) the end of the field work, (3) the reception at the office, (4) the preparation of the PSU-packet, (5) the moment the PSU is assigned to a data entry operator, and (6) the final approval of the PSU.

Chapter 2 Reception and coding

This chapter describes how to receive and prepare the questionnaires before delivering them to the Data Entry team.

Receiving the questionnaires from the fieldwork

Fieldwork teams deliver their PSU-packets in folders containing all the controls sheets and maps they have used in the field, along with **Village questionnaire** and the pack of **Household questionnaires** (either 10 household questionnaires for Urban PSUs, or 20 household questionnaires for Rural PSUs).

The **Household questionnaires** must be organized in numerical ascending order by household number within the PSU. The household number, written in the upper right corner of the cover page, must be in the range that corresponds to its Sector (ranging from 1 to 10 for Urban PSUs, from 1 to 20 for Rural PSUs).

Once the contents of the PSU-pack verified, it must be reported to the Quality Control Supervisor who, along with the Data Management Chief, will record its reception at the Control Catalog.

TimeUse' sheets must be separated from Household questionnaires and delivered to the operator in charge of the scanners that read this information separately. This information does not need to be coded.

Household questionnaires must be fully coded, according to the instructions provided later in this manual.

Checking the entire PSU-package

Check the Household questionnaires in the PSU against the Supervisor' Assignment Sheet to make certain that:

- The correct number of households are present.
- TimeUse sheets for each household correspond to qualified household members.
- The Diary is complete, and their pages are organized in ascending order by date.
- The geographic codes and other identification information in the cover sheet has been completed correctly. This information must be the same in cover sheets of both the Household questionnaire and the Diary.

Check with the Quality Control Supervisor if any problem is detected and produce or correct any wrong information coming from the fieldwork.

Coding open questions in the Household questionnaire

The following questions are to be coded in the Household questionnaires:

- Crop in the plot: Q04B04
- Cause of Death: Q11_07
- Occupation: Q13B02, Q13C03

- Industry: Q04H03, Q13B03, Q13C04

The following codes are used in the Diary:

- Expenditure items:
- Measurement units for expenditure items

Coding table: Crops

This code, included in the Appendix 2 of this manual, is a 3-digit code composed of 137 categories. It applies to question 4 in Section 04 part D.

The table is an adaptation of the FAO classification, and was “nationalized” by Mr. Heang Kanol, NIS, working with Ms. Beatriz Godoy, World Bank consultant, early November 2003. The final version, including modifications up to Nov/20 2003, has been fully embedded in the data dictionaries of the survey.

Three residual codes were added for operating purposes:

- 997-Other crop non elsewhere classified
- 998-Respondents don't know the crop
- 999-Missing (the information was not gathered in the interview)

Coding table: Cause of Death

This 2-digit code applies to the question 4 in Section 02 part B (Q04B04).

It includes 46 codes according to the list provided in the Appendix 3.

Codes 01-35 correspond to illnesses, and codes 36-46 are aimed to accidents.

Coding table: Occupation

This 3-digit code includes 63 different categories. Please look at the complete coding table in the Appendix 4 of this manual.

Editors must use this table to code the occupations in:

- Question 2 in section 13 part B
- Question 3 of Section 13 part C

The code is mainly based on ISCO, with specially detailed occupations for agricultural activities. The source *tOccup* excel sheet includes a full reference to the original ISCO codes. See the Appendix 4 of this manual for a copy of this code.

Three residual codes were added for operating purposes:

- 997-Other occupation non elsewhere classified
- 998-Respondents don't know the occupation
- 999-Missing (the information was not gathered in the interview)

Coding table: Industry

The industry coding table is based on ISIC. This 2-digit code has 67 effective categories. The source excel sheet ***tIndus*** provides all the information on links between the code and ISIC.

To fit the specifics of Cambodia, the basic ISIC classification has been expanded in the area of agricultural activities. The description can be found in the Appendix 5 of this manual.

As in other tables, three residual categories have been added for operational purposes:

- 97-Other industry non elsewhere classified
- 98-Respondents don't know the industry
- 99-Missing (the information was not gathered in the interview)

Coding table: Expenditure Items in the Diary

This is a 4-digit code. Please look for details at the Appendix 6 of this manual.

[explain further]

Coding table: Measurement Units of the Expenditures in the diary

This 2-digit code is described in the Appendix 7 of this manual.

It is organized by type of measurement unit (single units, weight measurement, volume units, etc). See master excel sheet ***tEUnit.xls*** for further details.

Chapter 3 Editing errors

To get an efficient data management workflow, the data management needs to work following a model of organization, covering from the smaller detail up to the most global tasks to be performed.

General policy on editing

First at all, please remind that checkings made at the interactive data entry program and the batch consistency program are very similar. Some of the error messages explained below will almost never appear in the consistency reports, as they have likely been solved at the data entry time.

The consistency editing guidelines include instructions on the steps to take to resolve inconsistencies detected during the editing process as well as the actions to take if the inconsistencies cannot be resolved through an examination of the responses to other pertinent questions. While editing data, the Editor must review all of the pertinent questions involved in an inconsistency before making a change. Changes should never be made in a rote manner without a thorough review of all relevant responses.

When an error appears during data entry, the data entry operator should check the question entered and the preceding questions, going back to previous pages and ensuring no data entry error has been made. The operator should also go back to the related questions mentioned in the error message, to verify that no typing mistake was made in any question. If no keying error was made, the operator should request that the data entry supervisor resolve the problem.

During the data editing phase, the process should be organized in such a fashion as to maximize consistency in the correcting process. Care should be taken to ensure that all procedures are followed in a standard manner. Each of the editing rules should be applied in accordance with the guidelines. All of the computer outputs specifying the errors detected at this stage should be retained.

The editing staff should be sure that all changes made to the data file on the computer are noted in the questionnaire with a **RED** pen. Use of red pens will allow corrections made by Editors to be distinguished from those made by the interviewers (blue pen), the field supervisors (black pen) and the data entry operators (green pen). All corrections to the data should be noted on the original questionnaire by crossing through the original response with a single line and writing the new response alongside.

The editing phase of the machine processing of the CSES data should begin immediately after the verification of the questionnaires has been completed for a particular sample point. The editing process should then be repeated for the sample point until no further errors are detected.

Supervision at this stage should ensure that the rules outlined below for correcting inconsistencies are applied uniformly and that errors which recur across questionnaires are corrected in a standardized manner. Again, the cardinal rule of data editing whether in the field or office must be observed: under no circumstances should an answer be made up. Changes can be made only if there is evidence supporting a modification to the response. Acre should be taken not to confuse the 8 (98 or 998) codes (used by the enumerator to indicate that the respondent answered a question with the statement, "I don't know") with the 9 (99 or 999) codes (used in cases of skip errors where the respondent was not asked a question or refused to answer a question to which she should have responded).

How to deal with skip errors

Before discussing the guidelines for correcting inconsistencies in the data file, the problem of resolving skip errors must be addressed. These errors will be discovered during data entry. Both supervisory personnel and data entry operators should review the following suggestions.

Skip errors can result from interviewer errors in the field or from keying errors made by the data entry operators. Skip errors will be evident to an operator if he finds (1) responses in the questionnaire which he is not able to enter in the computer data file or (2) no responses in the questionnaire for a data field for which the software is awaiting an entry.

To resolve these errors, the operator should review the questionnaire in hand and the data which have been entered into the file. By returning through the computer screens and comparing the codes entered into each field with the codes found in the questionnaire, the operator should be able to locate the problem.

If the codes on the screen do not match those in the questionnaire, the operator should go back through more of the computer screens to make certain that no errors were made prior to the error found. He should then correct all errors encountered, making no changes to the questionnaire. If major skip errors are encountered, supervisory personnel should be advised so that field personnel can be alerted to the problems.

If the codes on the computer screens match those in the questionnaire, the error was made in the field and a "missing" (or "not stated") code of 9, 99 or 999 should be entered in the computer - and noted in RED ink in the questionnaire - for each question that has not been answered.

In a few situations it is possible to deduce the correct response from other information recorded in the questionnaire. This is particularly true for questions which affect the flow of the questionnaire. For example, if the question "Has ever attended school?" was left blank, but the following question "What is the higher level ... successfully completed?" contained the response "13=Secondary school certificate", the response to the first question is clearly "Yes". This response should be used in such a case, as using a "missing" code for the not stated data is generally assumed to be a negative response and the following question would be skipped in data entry.

Format of messages

Messages are composed of a message-number, a qualifier and a descriptive text.

Message are numbered with 6 digits as follows

sspqqx

where

- ss** is the section number (i.e. 02, 16)
- p** part of section if any. If the question has no parts, p is 0. Otherwise, part A is 1, B is 2, and so.
- qq** question number where the message is issued
- xx** extension to the message

The qualifier is a letter telling of the level of the problem involved. Letter **E** stands for more serious errors letter **W** is for warnings issued during data entry. In both cases, the data entry operator was expected to fix the problem.

Most of messages having an **E** qualifier are initially designed to be solved at data entry time, and therefore should not appear in the consistency reports. However, the data entry program has been progressively modified to be more tolerant and to allow for the data entry operator to do not stop in front to these error messages. Consequently, consistency reports might include **E**-type messages, whose solution must be provided by Editors.

Message descriptions provided below are the general format of the text, and in most of cases include formatting codes beginning with a percent mark. These format codes are replaced by actual information providing details on the problem reported. Some examples:

%d a number is to be displayed here

%02d a 2-digit number will be displayed

%s this format code is actually replaced by an string

%4.1f a number with one decimal place will appear printed in the actual message

Message description and actions to be taken

Messages explained below are classified in areas, depending on the section of the questionnaire it is issued.

Some of messages are grouped in the explanations provided to best understand how to manage them. For example, messages related to differences detected between a control total and its component fields are always explained together - they differ in the importance of the difference found (in tenths, in hundreds, in thousands, etc). Other example relates to wrong ID codes – for instance, for mothers, children women, etc.

The text of the messages contains, whenever it is useful, a description enclosed into square brackets [] of the line in a multiple roster where the message appears. These identifiers are labeled with a summary of the main reference to the affected line (i.e. **ID** for ID code, **SN** for serial number, **PN** for plot number, etc) followed by a line number.

➔ Data file management

These messages refer to surrounding conditions of the household data, and do not point out to any specific item of information.

000931 E This household is partially saved - make sure of fully save it!

The household has not been completed at the data entry, and a partial-save action was taken. There may be some skipped data recorded that interferes with the consistency checking. *The household must be retrieved and fully saved.*

➔ Household cover

Most of the information given in the cover relates to the dates where different step took place. There is a logical sequence of steps: the date of (the first) interview must precede the last visit. The date the supervisor checked the questionnaire must necessarily be later than the first visit. The date of reinterview requested by supervisor must happen later than the checking date. Office activities also have a predetermined sequence: once the reception made, there is the preparation, then the data entry and later the final approval, always in that order. These very elementary rules are checked out at the data entry time and, for some of them, the operator might choose to pass the problem to the Editors.

001212 E Date of last visit (%s) must be later than the interview (%s)

It is likely a data entry mistake. The date of last visit must follow the date of interview. One of the involved dates could be wrong. At the limit, Supervisor' assignment sheets should be checked to retrieve the correct dates.

001222 E Date of supervisor (%s) must be later than the interview (%s)

Similar as above. Following the logical sequence of events, the Supervisor had to check the questionnaire "after the enumerator completed the questionnaire thoroughly".

001222 E Date of supervisor (%s) must be later than the interview (%s)

001222 E Date of supervisor (%s) must be later than the interview (%s)

Similar to above. Involved dates are expected to follow the natural sequence of events.

001222 E Date of supervisor (%s) must be later than the interview (%s)

001262 E Date of preparation (%s) must not be before the reception (%s)

001262 E Date of preparation (%s) must not be before the reception (%s)

001282 E Date of approval (%s) must be later than the data entry (%s)

For the activities at the office, the natural sequence of events must also be respected. In most of cases, these messages are simple data entry errors.

→ Section 01: List of household members

011040 E [ID%02d] The date of birth (%02d/%02d/%04d) requires at least the year of birth

011041 E [ID%02d] Wrong date of birth (%s) - cannot be later than today (%s)

011042 E [ID%02d] Wrong date of birth (%s) - invalid day in this month

011043 E [ID%02d] Wrong date of birth (%s) - invalid day

011044 E [ID%02d] Wrong date of birth (%s) - invalid month

011045 E [ID%02d] Wrong date of birth (%s) - invalid year

011046 E [ID%02d] Date of birth (%s) cannot be later than the interview (%s)

All the above messages relate to problems with the date of birth and are self explanatory. In most of cases, these problems result from incorrect typing at the data entry station.

011051 W [ID%02d] Age in years (%02d) inconsistent with calculated age (%02d), based on Date of birth (%s) and Interview (%s). PLEASE CHECK WITH THE DATA ENTRY SUPERVISOR, ESTIMATE A SUITABLE AGE AND REENTER THIS FIELD

011052 W [ID%02d] Age in years (%02d) inconsistent with calculated age (%02d or %02d allowed), based on Date of birth (%s) and Interview (%s). PLEASE CHECK WITH THE DATA ENTRY SUPERVISOR, ESTIMATE A SUITABLE AGE AND REENTER THIS FIELD

011053 W [ID%02d] Age in years (%02d) inconsistent with calculated age (%02d, so '96' expected), based on Date of birth (%s) and Interview (%s). PLEASE CHECK WITH THE DATA ENTRY SUPERVISOR, ESTIMATE A SUITABLE AGE AND REENTER THIS FIELD

011054 W [ID%02d] Age in years (%02d) inconsistent with calculated age (either %02d or %02d, so '96' expected), based on Date of birth (%s) and Interview (%s). PLEASE CHECK WITH THE DATA ENTRY SUPERVISOR, ESTIMATE A SUITABLE AGE AND REENTER THIS FIELD

The information on date of birth and age in evolved years are mutually inconsistent. When checking this kind of problems, please remind that the declared age in years is checked against a programmed estimation calculated on the difference between the date of interview less the date of birth. Be aware that most of these problems are expected to be fixed by the data entry operator with the assistance of the Data Entry Supervisor during the first data entry step. In some cases, the data entry staff will require further assistance from an Editor, or even from the Quality Control Supervisor to best fix the problem.

011070 E [ID%02d] Father' ID code %02d cannot be the same as this ID code (%02d)
011071 E [ID%02d] Father' ID code %02d does not exist
011072 W [ID%02d] Father' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)
011073 W [ID%02d] Father' ID code %02d has an age (%d) below the required range (%d-%d)
011074 W [ID%02d] Father' ID code %02d has an age (%d) above the required range (%d-%d)
011075 W [ID%02d] Father' ID code %02d has sex (%d) different from expected (%d)
011076 W [ID%02d] Father' ID code %02d has an age (%d) inconsistent with the age of this member (%d): minimum gap of %d years expected

The information of the father ID must correspond to a household member of this household. Please remind that the father is expected to be at least one generation older than his son or daughter.

011080 E [ID%02d] Mother' ID code %02d cannot be the same as this ID code (%02d)
011081 E [ID%02d] Mother' ID code %02d does not exist
011082 W [ID%02d] Mother' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)
011083 W [ID%02d] Mother' ID code %02d has an age (%d) below the required range (%d-%d)
011084 W [ID%02d] Mother' ID code %02d has an age (%d) above the required range (%d-%d)
011085 W [ID%02d] Mother' ID code %02d has sex (%d) different from expected (%d)
011086 W [ID%02d] Mother' ID code %02d has an age (%d) inconsistent with the age of this member (%d): minimum gap of %d years expected

The mother's ID must correspond to a woman living in the household. This woman should have an age greater than the respondent – with an age gap of at least one generation. These messages appear when a incorrect person-ID has been written in the questionnaire or typed into screens. Editors are expected to solve any problem in this regard.

011100 E [ID%02d] Spouse' ID code %02d cannot be the same as this ID code (%02d)
011101 E [ID%02d] Spouse' ID code %02d does not exist
011102 W [ID%02d] Spouse' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

- 011103 W [ID%02d] Spouse' ID code %02d has an age (%d) below the required range (%d-%d)
 011104 W [ID%02d] Spouse' ID code %02d has an age (%d) above the required range (%d-%d)
 011105 W [ID%02d] Spouse' ID code %02d has sex (%d) different from expected (%d)
 011106 W [ID%02d] Spouse' ID code %02d has not declared this ID as spouse - check mismatch
 011107 W [ID%02d] Spouse' ID code %02d has an age (%d) quite low for the age of this member (%d): maximum gap of %d years expected
 011108 W [ID%02d] Spouse' ID code %02d has an age (%d) quite high for the age of this member (%d): maximum gap of %d years expected

Spouse are expected to be, as obvious, of a sex opposite to the sex of the respondent. As the spouses are normally of a similar age, messages 011107 and 011108 are issued when the difference of ages is beyond two generations (i.e. 24 years). All of these messages may uncover an entry error, and the editors are expected to carefully analyze the situation in order to locate the true spouse.

- 011122 E [ID%02d] 2nd language (%d) invalid: it cannot be the same as previous language. If no more languages, type '0'
 011123 E [ID%02d] 3rd language (%d) invalid: it cannot be the same as previous languages. If no more languages, type '0'

Language' codes are not to be repeated. Data entry operators receive enough explanations in the displayed messages to type a zero if there are no more languages specified. Check the information in questions Q01A12x to best decide on these exceptions.

- 014100 W [IT%02d] %s: Check difference between cash+kind (%d) and total (%d)
 014103 W [IT%02d] %s: Check difference in units between cash+kind (%d) and total (%d)
 014104 W [IT%02d] %s: Check difference in tenths between cash+kind (%d) and total (%d)
 014105 W [IT%02d] %s: Check difference in hundreds between cash+kind (%d) and total (%d)
 014106 W [IT%02d] %s: Check difference in thousands or upper between cash+kind (%d) and total (%d)
 014109 W [IT%02d] %s: Cannot evaluate difference between cash+kind (%d) and total (%d)

Check differences of the sum of questions 2 and 3 against the total provided by the interviewer in the column 4 of Section 01 part D. Any difference will likely correspond to an entry error. Try to locate the values involved in the difference and fix the problem.

- 019011 E [-HH-] No Head of household found
 019012 E [-HH-] %d Heads of household found
 019013 W [-HH-] Count of unique members fails: %d Father, %d Mother, %d Spouse, %d Father-in-law, %d Mother-in-law
 019021 E [ID%02d] Age of Head (%02d) under allowed minimum (%d)
 019022 E [ID%02d] Age of Head (%d) and father's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected

- 019023 E *[ID%02d] Age of Head (%d) and mother's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected*
- 019030 E *[ID%02d] Sex of Spouse (%d) must be the opposite to sex of Head (%d)*
- 019031 E *[ID%02d] Age of Spouse (%02d) under allowed minimum (%d)*
- 019032 E *[ID%02d] Age of Spouse (%d) and father's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected*
- 019033 E *[ID%02d] Age of Spouse (%d) and mother's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected*
- 019042 E *[ID%02d] Age of Son/Daughter (%d) and Head's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected*
- 019052 E *[ID%02d] Age of Grandchild (%d) and Head's age (%02d, ID%02d) inconsistent: minimum gap of %d years expected*
- 019061 E *[ID%02d] Sex of Father (%d) must be the opposite to sex of Mother (%d, ID%02d)*
- 019062 E *[ID%02d] Sex of Mother (%d) must be the opposite to sex of Father (%d, ID%02d)*
- 019063 E *[ID%02d] Sex of Father-in-law (%d) must be the opposite to sex of Mother-in-law (%d, ID%02d)*
- 019064 E *[ID%02d] Sex of Mother-in-law (%d) must be the opposite to sex of Father-in-law (%d, ID%02d)*
- 019090 W *[-HH-] %d problems found (%d errors, %d warnings) in the household roster - please correct before continue*
- 019091 W *[-HH-] %d errors found - please correct before continue*
- 019092 W *[-HH-] %d warnings issued*
- 019099 E *[-HH-] The number of members counted (%d) does not match the information provided in the cover (%d)*

These messages are related to the household composition, and come from a global evaluation on the whole set of household members on the information given in section 01. To solve these problems, editors are expected to fully analyze the composition of the household. There should be no more than one father, one mother, one spouse, one father-in-law and one mother-in-law: these are the so-called “unique relationships”. The age of ascendants and descendants of the head of the household should be consistent with the minimum intergeneration gaps. The sex of spouses should be mutually opposite – including father/mother, and father-in-law/mother-in-law. Message 019092 provides a summary on the number of problems detected in the household composition. All of the reported problems can be easily fixed by the editors following the analysis of the information given in the questionnaire.

→ **Section 02: Education and literacy**

- 020030 W *[ID%02d] Check this bizarre combo: can't read (%d), however can write (%d)*

This message points out to a rather strange declaration. Likely it is an entry mistake. However, it could be true. The editor must carefully check the information provided in questions 2 and 3 of Section 02.

- 020510 W *[ID%02d] Years attended school (%d, for highest level %02d) seem too much for current age (%d): following this info, would have started school at %d years old (under the minimum of %d years to begin attending)*

The program has estimated, based on the highest level of education provided in question 5, the duration in years of the education needed to achieve that level. This duration may exceed the interval from the minimal age for attending the school (5 years) and the interview. Although in some exceptional cases there are persons who skipped a few school years, probably the problem lies in an entry error.

020710 W [ID%02d] Years attended school (%d, for level preceding current grade %02d) seem too much for current age (%d): following this info, would have started school at %d years old (under the minimum of %d years to begin attending)

Similar to above, but referred to the school level currently attended. Check the original information in question 7 and make sure there is no entry error involved. Correct and change the data if needed.

➔ **Section 03: Housing**

030030 W # of rooms (%d) looks too much for the floor area occupied (%d sq-mts)

The program is checking that, in average, the rooms have at least 5 square meters of surface by room – lower surfaces likely come from entry errors. Check questions 2 and 3, and fix the problem if any.

030040 W Outer wall: 2nd material (%d) cannot be the same as the first one

030041 W Outer wall: 2nd percentage (%d) looks wrong - %d expected

030050 W Inner wall: 2nd material (%d) cannot be the same as the first one

030051 W Inner wall: 2nd percentage (%d) looks wrong - %d expected

030060 W Roof: 2nd material (%d) cannot be the same as the first one

030061 W Roof: 2nd percentage (%d) looks wrong - %d expected

030070 W Floor: 2nd material (%d) cannot be the same as the first one

030071 W Floor: 2nd percentage (%d) looks wrong - %d expected

030075 W [materials] The combination of thin outer and inner walls (%02d and %02d) with heavy roof (%02d) looks unreliable

030076 W [materials] The combination of thin outer and inner walls (%02d and %02d) with finished floor (%02d) looks unreliable

030079 W [materials] The combination of outer and inner walls (%02d and %02d), roof (%02d) and floor (%02d) looks unreliable

Check the information involved in percentages and materials of walls, roof and floor. Decide a correction if needed.

030111 E [wet season] %s member fetching water' ID code %02d does not exist

030112 W [wet season] %s member fetching water' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

030113 W [wet season] %s member fetching water' ID code %02d has an age (%d) below the required range (%d-%d)

030114 W [wet season] %s member fetching water' ID code %02d has an age (%d) above the required range (%d-%d)

030151 E [dry season] %s member fetching water' ID code %02d does not exist

030152 W [dry season] %s member fetching water' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

030153 W [dry season] %s member fetching water' ID code %02d has an age (%d) below the required range (%d-%d)

030154 W [dry season] %s member fetching water' ID code %02d has an age (%d) above the required range (%d-%d)

As in several other places, the ID-codes for the household members declared to be in charge of fetching water are expected to be aged no less than 5 years. Small children hardly are able to perform these physically heavy chores. Check and fix if needed.

030231 E %s member fetching firewood' ID code %02d does not exist

030232 W %s member fetching firewood' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

030233 W %s member fetching firewood' ID code %02d has an age (%d) below the required range (%d-%d)

030234 W %s member fetching firewood' ID code %02d has an age (%d) above the required range (%d-%d)

Same as for the persons in charge of fetching water as above mentioned, these persons are expected to be physically able to take in charge this heavy domestic job. Small children under 5 years are unlikely charged of these chores.

030251 W According to question 20 (%d), the household has toilet facility - however there is no WC in question 25

030252 W According to question 20 (%d), the household has no toilet facility - however there is WC in question 25

030253 W Check question 25 - "Bath with WC" (25B=%d) inconsistent with "Only bathroom" (25C=%d)

030254 W Check question 25 - "Bath with WC" (25B=%d) inconsistent with "Only WC" (25D=%d)

030255 W Check question 25 - "Only bathroom" (25C=%d) inconsistent with "Only WC" (25D=%d)

Check the inconsistencies reported. In most of cases, the inconsistency comes from an entry error.

➔ Section 04: Household economic activities

041042 W [PN%02d] For this unit (%d), the plot area (%4.2f) should not have decimals

Plot surfaces measured in square meters or "other" units are not expected to have decimals. Probably it is an entry error regarding the unit of measurement of the plot. Check and fix if needed.

041132 E [PN%02d] 2nd investment (%02d) invalid: it cannot be the same as previous investment. If no 2nd investment, type '00'

041133 E [PN%02d] 3rd investment (%02d) invalid: it cannot be the same as previous investments. If no 3rd investment, type '00'

Check there is no entry mistake in typing the codes for investments of questions 13 in part A.

042000 E As question (1) is Yes, there must be plot/crop lines either in Wet or Dry season

042030 E [SN%02d] Plot code (%02d) is invalid - it is not specified in Section 4A

These messages likely relates to entry errors in part B of this section. Check plot codes in part A and decide any required correction to avoid the inconsistency.

- 042110 W [SN%02d] Check difference between the product 8 * 10 (%d) and col 11 (%d)
 042113 W [SN%02d] Check difference in units between the product 8 * 10 (%d) and col 11 (%d)
 042114 W [SN%02d] Check difference in tenths between the product 8 * 10 (%d) and col 11 (%d)
 042115 W [SN%02d] Check difference in hundreds between the product 8 * 10 (%d) and col 11 (%d)
 042116 W [SN%02d] Check difference in thousands or upper between the product 8 * 10 (%d) and col 11 (%d)
 042119 W [SN%02d] Cannot evaluate difference between the product 8 * 10 (%d) and col 11 (%d)

These problems relate to questions 8, 10 and 11 in part B. Be aware that the problem may come from an incorrect interpretation of the sense of question 10, which is expected to provide an unitary price (riels / unit). Sometimes the enumerator writes here the total sale value instead of the unitary price. Whether this deviation is detected, report the problem to the core fieldwork staff in order to advice the enumerator to gather the expected information, calculate a suitable estimation of the unit price, and instruct the data entry operator to key in the adjusted value.

- 042210 W [SN%02d] %s season: Check difference between the sum of estimated value of output (%d) and Total %02d-%02d (%d)
 042213 W [SN%02d] %s season: Check difference in units between the sum of estimated value of output (%d) and Total %02d-%02d (%d)
 042214 W [SN%02d] %s season: Check difference in tenths between the sum of estimated value of output (%d) and Total %02d-%02d (%d)
 042215 W [SN%02d] %s season: Check difference in hundreds between the sum of estimated value of output (%d) and Total %02d-%02d (%d)
 042216 W [SN%02d] %s season: Check difference in thousands or upper between the sum of estimated value of output (%d) and Total %02d-%02d (%d)
 042219 W [SN%02d] %s season: Cannot evaluate difference between the sum of estimated value of output (%d) and Total %02d-%02d (%d)

As in several other places, messages reporting differences regarding partial amounts and totals are likely due to entry errors. Check every amount possibly involved in the problem, comparing visually the values of column 11 in part B against the total of the season.

- 042120 W [SN%02d] Check difference between the product 9 * 10 (%d) and col 12 (%d)
 042123 W [SN%02d] Check difference in units between the product 9 * 10 (%d) and col 12 (%d)
 042124 W [SN%02d] Check difference in tenths between the product 9 * 10 (%d) and col 12 (%d)
 042125 W [SN%02d] Check difference in hundreds between the product 9 * 10 (%d) and col 12 (%d)
 042126 W [SN%02d] Check difference in thousands or upper between the product 9 * 10 (%d) and col 12 (%d)
 042129 W [SN%02d] Cannot evaluate difference between the product 9 * 10 (%d) and col 12 (%d)

Check involved data in questions 9, 10 and 12 of part B of this section. The problem may lie in an improper interpretation from the enumerator of "unitary prices" in column 10. Proceed like in recommendations for messages 04211x above.

- 042220 W [SN%02d] %s season: Check difference between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)
- 042223 W [SN%02d] %s season: Check difference in units between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)
- 042224 W [SN%02d] %s season: Check difference in tenths between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)
- 042225 W [SN%02d] %s season: Check difference in hundreds between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)
- 042226 W [SN%02d] %s season: Check difference in thousands or upper between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)
- 042229 W [SN%02d] %s season: Cannot evaluate difference between the sum of estimated value of crop rent (%d) and Total %02d-%02d (%d)

There is a difference in the partial amounts and the total for the season in column 12 of part B. In most of cases, there is an entry error to be solved.

- 043020 W [SN%02d] Check difference between the sum of costs (%d) and this sub-total (%s=%d)
- 043023 W [SN%02d] Check difference in units between the sum of costs (%d) and wet season sub-total (%s=%d)
- 043024 W [SN%02d] Check difference in tenths between the sum of costs (%d) and wet season sub-total (%s=%d)
- 043025 W [SN%02d] Check difference in hundreds between the sum of costs (%d) and wet season sub-total (%s=%d)
- 043026 W [SN%02d] Check difference in thousands or upper between the sum of costs (%d) and wet season sub-total (%s=%d)
- 043029 W [SN%02d] Cannot evaluate difference between the sum of costs (%d) and wet season sub-total (%s=%d)

These messages may appear when differences arise in the partial amounts of wet season when compared to the total of the season (column 2 in part C). Check and fix.

- 043030 W [SN%02d] Check difference between the sum of costs (%d) and this sub-total (%s=%d)
- 043033 W [SN%02d] Check difference in units between the sum of costs (%d) and dry season sub-total (%s=%d)
- 043034 W [SN%02d] Check difference in tenths between the sum of costs (%d) and dry season sub-total (%s=%d)
- 043035 W [SN%02d] Check difference in hundreds between the sum of costs (%d) and dry season sub-total (%s=%d)
- 043036 W [SN%02d] Check difference in thousands or upper between the sum of costs (%d) and dry season sub-total (%s=%d)
- 043039 W [SN%02d] Cannot evaluate difference between the sum of costs (%d) and dry season sub-total (%s=%d)

These messages relate specifically to column 3, last dry season, in part C column 3. Check and fix as needed. They likely come from entry errors.

- 043040 W [SN%02d] Check difference between the sum of costs (%d) and this sub-total (%s=%d)
- 043043 W [SN%02d] Check difference in units between the sum of costs (%d) and both seasons sub-total (%s=%d)

- 043044 W [SN%02d] Check difference in tenths between the sum of costs (%d) and both seasons sub-total (%s=%d)**
- 043045 W [SN%02d] Check difference in hundreds between the sum of costs (%d) and both seasons sub-total (%s=%d)**
- 043046 W [SN%02d] Check difference in thousands or upper between the sum of costs (%d) and both seasons sub-total (%s=%d)**
- 043049 W [SN%02d] Cannot evaluate difference between the sum of costs (%d) and both seasons sub-total (%s=%d)**

The messages point out to probable entry errors in the amounts of column 4 in part C, regarding both seasons. Check and fix.

- 045050 W [SN%02d] Livestock currently owned: the number (%d) and its value (%d) look inconsistent - please check**
- 045070 W [SN%02d] Livestock owned 12 months ago: the number (%d) and its value (%d) look inconsistent - please check**

Look for entry errors in 4-5 and 6-7 of part E. In some of cases, the enumerator may have omitted either the number or the value of the livestock involved. Try to retrieve any possible entry error.

- 045040 W Check difference between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**
- 045043 W Check difference in units between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**
- 045044 W Check difference in tenths between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**
- 045045 W Check difference in hundreds between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**
- 045046 W Check difference in thousands or upper between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**
- 045049 W Cannot evaluate difference between the sum of lines 01-10 (%d) and "TOTAL 1-10" (%s=%d)**

Differences detected in the sum of values and the total for rows 1-10 in livestock are likely due to entry mistakes. Check and fix.

- 045160 W Check difference between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**
- 045163 W Check difference in units between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**
- 045164 W Check difference in tenths between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**
- 045165 W Check difference in hundreds between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**
- 045166 W Check difference in thousands or upper between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**
- 045169 W Cannot evaluate difference between the sum of lines 1-5 (%d) and "Total 1-5" (%s=%d)**

These messages relate to column 16 in part E. In most of cases, they will come from entry errors. Check and fix.

- 046090 W** Check difference between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)
- 046093 W** Check difference in units between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)
- 046094 W** Check difference in tenths between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)
- 046095 W** Check difference in hundreds between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)
- 046096 W** Check difference in thousands or upper between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)
- 046099 W** Cannot evaluate difference between the sum of amounts spent (%d) and "Total 1-11" (%s=%d)

The differences detected in these messages relate to question 9 in part F. Check the =values of each of items 1-11 and correct any possible mistake.

- 046110 W** Check difference between the sum of amounts received (%d) and "Total 1-7" (%s=%d)
- 046113 W** Check difference in units between the sum of amounts received (%d) and "Total 1-7" (%s=%d)
- 046114 W** Check difference in tenths between the sum of amounts received (%d) and "Total 1-7" (%s=%d)
- 046115 W** Check difference in hundreds between the sum of amounts received (%d) and "Total 1-7" (%s=%d)
- 046116 W** Check difference in thousands or upper between the sum of amounts received (%d) and "Total 1-7" (%s=%d)
- 046119 W** Cannot evaluate difference between the sum of amounts received (%d) and "Total 1-7" (%s=%d)

Check the values given in part F, question 11. Fix every entry error that may be at the origin of the problem.

- 047030 W** Check difference between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)
- 047033 W** Check difference in units between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)
- 047034 W** Check difference in tenths between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)
- 047035 W** Check difference in hundreds between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)
- 047036 W** Check difference in thousands or upper between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)
- 047039 W** Cannot evaluate difference between the sum of questions 4/5/6 (%d) and "Total" (%s=%d)

See questions 4, 5 and 6 in part G, identify the source of the difference regarding the total amount in question 7, and fix.

- 047040 W** Check difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047043 W** Check difference in units between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

- 047044 W** Check difference in tenths between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047045 W** Check difference in hundreds between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047046 W** Check difference in thousands or upper between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047049 W** Cannot evaluate difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

The "total 1-10" in part G for question 4 does not meet the sum of the values given for the different products in this column. Check and fix.

- 047050 W** Check difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047053 W** Check difference in units between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047054 W** Check difference in tenths between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047055 W** Check difference in hundreds between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047056 W** Check difference in thousands or upper between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047059 W** Cannot evaluate difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

The sum of values in column 5, part G, does not match the "total 1-10". Identify the source of the problem and fix.

- 047060 W** Check difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047063 W** Check difference in units between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047064 W** Check difference in tenths between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047065 W** Check difference in hundreds between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047066 W** Check difference in thousands or upper between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047069 W** Cannot evaluate difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

Check column 6 in part G, and fix the reported difference of the sum against the "total 1-10".

- 047070 W** Check difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047073 W** Check difference in units between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047074 W** Check difference in tenths between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)
- 047075 W** Check difference in hundreds between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

047076 W Check difference in thousands or upper between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

047079 W Cannot evaluate difference between the sum of lines 1-10 (%d) and "Total 1-10" (%s=%d)

Search the source of the difference detected by "total -10" in part G, question 7, and fix.

047090 W Check difference between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

047093 W Check difference in units between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

047094 W Check difference in tenths between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

047095 W Check difference in hundreds between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

047096 W Check difference in thousands or upper between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

047099 W Cannot evaluate difference between the sum of lines 1-6 (%d) and "Total 1-6" (%s=%d)

Check the values given in the 6 items of expenditures in part G, and fix the difference in question 9.

048041 E [AN%d] Most knowledgeable member' ID code %02d does not exist

048042 W [AN%d] Most knowledgeable member' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

048043 W [AN%d] Most knowledgeable member' ID code %02d has an age (%d) below the required range (%d-%d)

048044 W [AN%d] Most knowledgeable member' ID code %02d has an age (%d) above the required range (%d-%d)

See part H: the ID code given for the main member involved in business is invalid for this purpose (perhaps it refers to a person under 15 years of age). Fix if needed.

048051 E [AN%d] %s member' ID code %02d does not exist

048052 W [AN%d] %s member' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

048053 W [AN%d] %s member' ID code %02d has an age (%d) below the required range (%d-%d)

048054 W [AN%d] %s member' ID code %02d has an age (%d) above the required range (%d-%d)

For the quoted activity number of part H, check the ID code given for other members involved in business. Remember they are expected to be at least 10 years old, and fix any mistakes.

048200 W Check difference between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d

048203 W Check difference in units between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d

048204 W Check difference in tenths between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d

- 048205 W** Check difference in hundreds between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048206 W** Check difference in thousands or upper between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048209 W** Cannot evaluate difference between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d

Identify and fix the source of the difference detected by the control total and the sum of amounts spent in 18 cost items in part H.

- 048300 W** Check difference between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048303 W** Check difference in units between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048304 W** Check difference in tenths between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048305 W** Check difference in hundreds between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048306 W** Check difference in thousands or upper between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d
- 048309 W** Cannot evaluate difference between the sum of lines 1-18 (%d) and "Total 1-18" (%d) for Activity %d

The control total for the amounts received does not match the calculated sum of values given for cost items 1-20. Identify the problem and fix.

→ **Section 5: Household liabilities**

- 050042 E** [LN%02d] 2nd loan source (%02d) invalid: it cannot be the same as previous loan source. If no 2nd loan source, type '00'
- 050043 E** [LN%02d] 3rd loan source (%02d) invalid: it cannot be the same as previous loan sources. If no 3rd loan source, type '00'

[explain] {loan sources}

- 050080 W** Check difference between the sum of lines 1-%d (%d) and "Total 1-4" (%d)
- 050083 W** Check difference in units between the sum of lines 1-%d (%d) and "Total 1-4" (%d)
- 050084 W** Check difference in tenths between the sum of lines 1-%d (%d) and "Total 1-4" (%d)
- 050085 W** Check difference in hundreds between the sum of lines 1-%d (%d) and "Total 1-4" (%d)
- 050086 W** Check difference in thousands or upper between the sum of lines 1-%d (%d) and "Total 1-4" (%d)
- 050089 W** Cannot evaluate difference between the sum of lines 1-%d (%d) and "Total 1-4" (%d)

[explain] {totals in 05, q9}

→ **Section 06: Household income from other sources**

- 060020 W** Check difference between the sum of lines 1-13 (%d) and "Total 1-13" (%d)

- 060023 W *Check difference in units between the sum of lines 1-13 (%d) and "Total 1-13" (%d)*
- 060024 W *Check difference in tenths between the sum of lines 1-13 (%d) and "Total 1-13" (%d)*
- 060025 W *Check difference in hundreds between the sum of lines 1-13 (%d) and "Total 1-13" (%d)*
- 060026 W *Check difference in thousands or upper between the sum of lines 1-13 (%d) and "Total 1-13" (%d)*
- 060029 W *Cannot evaluate difference between the sum of lines 1-13 (%d) and "Total 1-13" (%d)*

[explain] {totals in 06, q2}

➔ Section 07: Durable goods & other expenditures

- 071042 E *[IN%02d] 2nd acquisition mode (%02d) invalid: it cannot be the same as previous acquisition mode. If no 2nd acquisition mode, type '0'*
- 071043 E *[IN%02d] 3rd acquisition mode (%02d) invalid: it cannot be the same as previous acquisition modes. If no 3rd acquisition mode, type '0'*
- 071044 E *[IN%02d] 4th acquisition mode (%02d) invalid: it cannot be the same as previous acquisition modes. If no 4th acquisition mode, type '0'*

[explain] {part A: acquisition modes}

- 071050 W *Check difference between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*
- 071053 W *Check difference in units between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*
- 071054 W *Check difference in tenths between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*
- 071055 W *Check difference in hundreds between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*
- 071056 W *Check difference in thousands or upper between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*
- 071059 W *Cannot evaluate difference between the sum of pieces acquired 5a+5b (%d) and the number of pieces given in question 3 (%d)*

[explain] {part A: number of durable goods (05A+05B <> 03) }

- 072020 W *Check difference between the sum of in-cash plus in-kind (%d) and "Total" (%d)*
- 072023 W *Check difference in units between the sum of in-cash plus in-kind (%d) and "Total" (%d)*
- 072024 W *Check difference in tenths between the sum of in-cash plus in-kind (%d) and "Total" (%d)*
- 072025 W *Check difference in hundreds between the sum of in-cash plus in-kind (%d) and "Total" (%d)*
- 072026 W *Check difference in thousands or upper between the sum of in-cash plus in-kind (%d) and "Total" (%d)*
- 072029 W *Cannot evaluate difference between the sum of in-cash plus in-kind (%d) and "Total" (%d)*

[explain] {part B: q3+q4 <> q5 }

- 072030 W *Check difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072033 W *Check difference in units between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072034 W *Check difference in tenths between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072035 W *Check difference in hundreds between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072036 W *Check difference in thousands or upper between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072039 W *Cannot evaluate difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*

[explain] {part B: totals in q3}

- 072040 W *Check difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072043 W *Check difference in units between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072044 W *Check difference in tenths between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072045 W *Check difference in hundreds between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072046 W *Check difference in thousands or upper between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072049 W *Cannot evaluate difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*

[explain] { part B: totals in q4}

- 072050 W *Check difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072053 W *Check difference in units between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072054 W *Check difference in tenths between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072055 W *Check difference in hundreds between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072056 W *Check difference in thousands or upper between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*
072059 W *Cannot evaluate difference between the sum of lines 1-5 (%d) and "Total 1-5" (%d)*

[explain] { part B: totals in q5}

➔ **Section 08: Construction**

- 080032 E *[IN%02d] 2nd use (%02d) invalid: it cannot be the same as previous use. If no 2nd use, type '0'*
080033 E *[IN%02d] 3rd use (%02d) invalid: it cannot be the same as previous uses. If no 3rd use, type '0'*

[explain] {uses}

- 080110 E *Date the construction started (%s) must not be later than the interview (%s)*

[explain] {construction start}

080120 E *Date the use started (%s) must be not be later than the interview (%s)*
080121 E *Date the use started (%s) must be not be before the construction started (%s)*

[explain] {use start}

→ **Section 09: Nutrition**

091021 W *[ID%02d] Rice "for breakfast" quantities can just record plates, or half (0.50) or quarter (0.25) of a plate*
091031 W *[ID%02d] Rice "for lunch" quantities can just record plates, or half (0.50) or quarter (0.25) of a plate*
091041 W *[ID%02d] Rice "for dinner" quantities can just record plates, or half (0.50) or quarter (0.25) of a plate*
091051 W *[ID%02d] Rice "other" quantities can just record plates, or half (0.50) or quarter (0.25) of a plate*

[explain] {part A: rice quantities should be integer, half or quarter plates}

091060 W *[ID%02d] Check difference between the sum of meals (%4.2f) and "Total rice" (%4.2f)*
091061 W *[ID%02d] Rice total quantities can just be plates, or half or quarter fractions of a plate*
091063 W *[ID%02d] Check difference in units between the sum of meals (%4.2f) and "Total rice" (%4.2f)*
091064 W *[ID%02d] Check difference in tenths between the sum of meals (%4.2f) and "Total rice" (%4.2f)*
091065 W *[ID%02d] Check difference in hundreds between the sum of meals (%4.2f) and "Total rice" (%4.2f)*
091066 W *[ID%02d] Check difference in thousands or upper between the sum of meals (%4.2f) and "Total rice" (%4.2f)*
091069 W *[ID%02d] Cannot evaluate difference between the sum of meals (%4.2f) and "Total rice" (%4.2f)*

[explain] { part A: totals in q6}

092031 W *[FN%02d] The amount of eggs consumed (%4.2f) cannot not have decimals*

[explain] { part B: no fractions allowed in eggs}

→ **Section 10: Fertility & child care**

101000 E *The number of women 15-49 (%d) must not be greater than the number of HH members (%d)*
101001 W *The number of women 15-49 (%d) does not match the count on household schedule (%d)*

[explain] {part A: matching counters}

101021 E *[SN%02d] Woman' ID code %02d does not exist*
101022 W *[SN%02d] Woman' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)*
101023 W *[SN%02d] Woman' ID code %02d has an age (%d) below the required range (%d-%d)*

101024 W [SN%02d] Woman' ID code %02d has an age (%d) above the required range (%d-%d)

101025 E [SN%02d] Woman' ID code %02d has sex (%d) different from expected (%d)

[explain] {part A: woman's ID}

101081 E [SN%02d] The sum (%d) of male children living in the household/outside/dead (%d/%d/%d) does not match the total number of male children born (%d)

101082 E [SN%02d] The sum (%d) of female children living in the household/outside/dead (%d/%d/%d) does not match the total number of female children born (%d)

101091 E [SN%02d] The number of male children dead before age 5 (%d) must not be greater than %d

101092 E [SN%02d] The number of female children dead before age 5 (%d) must not be greater than %d

101101 E [SN%02d] The number of male children dead before age 1 (%d) must not be greater than %d

101102 E [SN%02d] The number of female children dead before age 1 (%d) must not be greater than %d

[explain] {part A: check the number of children declared}

102000 E The number of children up to 2 years (%d) must not be greater than the number of HH members (%d)

102001 W The number of children up to 2 years (%d) does not match the count on household schedule (%d)

[explain] {part B: matching counters}

102021 E [SN%02d] Mother' ID code %02d does not exist

102022 W [SN%02d] Mother' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

102023 W [SN%02d] Mother' ID code %02d has an age (%d) below the required range (%d-%d)

102024 W [SN%02d] Mother' ID code %02d has an age (%d) above the required range (%d-%d)

102025 E [SN%02d] Mother' ID code %02d has sex (%d) different from expected (%d)

[explain] {part B mother's ID}

102031 E [SN%02d] Child' ID code %02d does not exist

102032 W [SN%02d] Child' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)

102033 W [SN%02d] Child' ID code %02d has an age (%d) below the required range (%d-%d)

102034 W [SN%02d] Child' ID code %02d has an age (%d) above the required range (%d-%d)

102038 W [SN%02d] Child' ID code %02d has a mother in question 8 of section 01 (%02d) not matching the mother given in question 2 of section 10B (%02d)

[explain] {part B: child's ID}

102060 W [SN%02d] Delay for breastfeeding (%d/%d/%d) is invalid - please check and correct

[explain] {part B }

- 102091 E [SN%02d] Males dead before 5 years (%d) is invalid - cannot exceed %d
 102092 E [SN%02d] Females dead before 5 years (%d) is invalid - cannot exceed %d
 102101 E [SN%02d] Males dead before 1 years (%d) is invalid - cannot exceed %d
 102102 E [SN%02d] Females dead before 1 years (%d) is invalid - cannot exceed %d

[explain] {part B: }

- 102111 W [SN%02d] Child' ID code %02d: BCG vaccination date (%02d/%04d) is wrong - 98/9998 or full date expected
 102112 W [SN%02d] Child' ID code %02d: BCG vaccination date (%02d/%04d) is wrong - 66/6666 or full date expected
 102113 W [SN%02d] Child' ID code %02d: BCG vaccination date (%02d/%04d) before date of birth (%02d/%02d/%04d)
 102114 W [SN%02d] Child' ID code %02d: BCG vaccination date (%02d/%04d) later than last visit (%02d/%02d/%02d)
 102121 W [SN%02d] Child' ID code %02d: Polio vaccination date (%02d/%04d) is wrong - 98/9998 or full date expected
 102122 W [SN%02d] Child' ID code %02d: Polio vaccination date (%02d/%04d) is wrong - 66/6666 or full date expected
 102123 W [SN%02d] Child' ID code %02d: Polio vaccination date (%02d/%04d) before date of birth (%02d/%02d/%04d)
 102124 W [SN%02d] Child' ID code %02d: Polio vaccination date (%02d/%04d) later than last visit (%02d/%02d/%02d)
 102131 W [SN%02d] Child' ID code %02d: DPT vaccination date (%02d/%04d) is wrong - 98/9998 or full date expected
 102132 W [SN%02d] Child' ID code %02d: DPT vaccination date (%02d/%04d) is wrong - 66/6666 or full date expected
 102133 W [SN%02d] Child' ID code %02d: DPT vaccination date (%02d/%04d) before date of birth (%02d/%02d/%04d)
 102134 W [SN%02d] Child' ID code %02d: DPT vaccination date (%02d/%04d) later than last visit (%02d/%02d/%02d)
 102141 W [SN%02d] Child' ID code %02d: Measles vaccination date (%02d/%04d) is wrong - 98/9998 or full date expected
 102142 W [SN%02d] Child' ID code %02d: Measles vaccination date (%02d/%04d) is wrong - 66/6666 or full date expected
 102143 W [SN%02d] Child' ID code %02d: Measles vaccination date (%02d/%04d) before date of birth (%02d/%02d/%04d)
 102144 W [SN%02d] Child' ID code %02d: Measles vaccination date (%02d/%04d) later than last visit (%02d/%02d/%02d)

[explain] {part B: vaccination dates}

➔ Section 11: Mortality

- 110061 W [LN%02d] This dead person would be head's Father (%02d) - however, there is a Father currently living at the household
 110062 W [LN%02d] This dead person would be head's Mother (%02d) - however, there is a Mother currently living at the household

[explain] {}

➔ **Section 12: Health check of children**

120001 W *The number of children less than 6 years (%d) does not match the count on household schedule (%d)*

[explain] {}

120021 E *[SN%02d] Child' ID code %02d does not exist*

120022 W *[SN%02d] Child' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)*

120023 W *[SN%02d] Child' ID code %02d has an age (%d) below the required range (%d-%d)*

120024 W *[SN%02d] Child' ID code %02d has an age (%d) above the required range (%d-%d)*

[explain] {}

120030 W *[SN%02d] Child' ID code %02d: date measured (%02d/%02d/%04d) and date of birth (%02d/%02d/%04d) do not allow for exact checking*

[explain] {}

120040 W *[SN%02d] Child' ID code %02d: height (%3.1f) exceeds reasonable limits (from %3.1f to %3.1f) for the sex (%d) and age (%d months, in group %s)*

120051 W *[SN%02d] Child' ID code %02d: because of the age (%d months), had to be measured lying down - check Q12_05=%d*

120052 W *[SN%02d] Child' ID code %02d: because of the age (%d months), had to be measured standing up - check Q12_05=%d*

120060 W *[SN%02d] Child' ID code %02d: weight (%3.1f) exceeds reasonable limits (from %3.1f to %3.1f) for the sex (%d) and age (%d months, in group %s)*

120061 W *[SN%02d] Child' ID code %02d: height (%3.1f) and weight (%3.1f) are likely inverted*

[explain] {}

➔ **Section 13: Current economic activity**

131021 E *[ID%02d] Respondent' ID code %02d does not exist*

131022 W *[ID%02d] Respondent' ID code %02d has an undetermined age (%d) not meeting the required range (%d-%d)*

131023 W *[ID%02d] Respondent' ID code %02d has an age (%d) below the required range (%d-%d)*

131024 W *[ID%02d] Respondent' ID code %02d has an age (%d) above the required range (%d-%d)*

131092 E *[ID%02d] 2nd way (%02d) invalid: it cannot be the same as previous way. If no 2nd way, type '0'*

131093 E *[ID%02d] 3rd way (%02d) invalid: it cannot be the same as previous ways. If no 3rd way, type '0'*

[explain] {part A: ways tried to find a job}

132021 E *[ID%02d] 1stOccup/Occupation code (%04d) is invalid - please correct*

132022 E *[ID%02d] 2ndOccup/Occupation code (%04d) is invalid - please correct*

132031 E *[ID%02d] 1stOccup/Industry code (%04d) is invalid - please correct*

132032 E *[ID%02d] 2ndOccup/Industry code (%04d) is invalid - please correct*

[explain] {part B: occupation & industry codes}

- 133031 E [ID%02d] 1stOccup/Occupation code (%04d) is invalid - please correct
- 133032 E [ID%02d] 2ndOccup/Occupation code (%04d) is invalid - please correct
- 133041 E [ID%02d] 1stOccup/Industry code (%04d) is invalid - please correct
- 133042 E [ID%02d] 2ndOccup/Industry code (%04d) is invalid - please correct

[explain] {part C: occupation & industry codes }

- 133081 E [ID%02d] 1stOccup/Earnings declaration (%d/%d/%d) is invalid - please correct
- 133082 E [ID%02d] 2ndOccup/Earnings declaration (%d/%d/%d) is invalid - please correct

[explain] {part C: earnings declaration}

➔ Section 14: Health

- 141042 E [ID%02d] 2nd disability (%02d) invalid: it cannot be the same as previous disability. If no 2nd disability, type '00'
- 141043 E [ID%02d] 3rd disability (%02d) invalid: it cannot be the same as previous disabilities. If no 3rd disability, type '00'

[explain] {part A: disabilities}

➔ Section 15: HIV/AIDS

- 150042 E [ID%02d] 2nd mean (%02d) invalid: it cannot be the same as previous mean. If no 2nd mean, type '00'
- 150043 E [ID%02d] 3rd mean (%02d) invalid: it cannot be the same as previous means. If no 3rd mean, type '00'
- 150044 E [ID%02d] 4th mean (%02d) invalid: it cannot be the same as previous means. If no 4th mean, type '00'
- 150045 E [ID%02d] 5th mean (%02d) invalid: it cannot be the same as previous means. If no 5th mean, type '00'

[explain] {means to avoid}

- 150062 E [ID%02d] 2nd place (%02d) invalid: it cannot be the same as previous place. If no 2nd place, type '00'
- 150063 E [ID%02d] 3rd place (%02d) invalid: it cannot be the same as previous places. If no 3rd place, type '00'

[explain] {places where the test was made}

- 150092 E [ID%02d] 2nd place (%02d) invalid: it cannot be the same as previous place. If no 2nd place, type '00'
- 150093 E [ID%02d] 3rd place (%02d) invalid: it cannot be the same as previous places. If no 3rd place, type '00'

[explain] {places to go for the test}

➔ Section 16: Victimization

- 162031 E [EN%d] Theft/Victim' ID code %02d does not exist

[explain] {part B: victim of theft}

162031 E [EN%d] Theft/Victim' ID code %02d does not exist

[explain] {part C: victim of accident}

164032 E [ID%02d] 2nd kind of violence (%02d) invalid: it cannot be the same as previous kind of violence. If no 2nd kind of violence, type '00'

164033 E [ID%02d] 3rd kind of violence (%02d) invalid: it cannot be the same as previous kinds of violence. If no 3rd kind of violence, type '00'

[explain] {part D: kind of violence}

➔ **Diary cover**

x

[explain] {}

➔ **Diary/Expenditures**

x

[explain] {}

➔ **Diary/Incomes**

x

[explain] {}

x

[explain] {}

x

[explain] {}

Appendix 1: Tolerance limits for height and weight of children

Both the data entry and the consistency programs check given heights and weights of children against a table providing the minimum and maximum expected values for the age (evaluated in months-of-age) and the sex. The following table, also used by the recent CDSH-2002, provides the extreme ranges by groups of age and sex. Values are given in centimeters for height, and in kilograms for weight.

<u>Age in Months</u>	<u>Height (centimeters)</u>				<u>Weight (kilograms)</u>			
	<u>Males</u>		<u>Females</u>		<u>Males</u>		<u>Females</u>	
	<u>Minimum</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Maximum</u>
0 - 2	36.0	74.0	36.0	72.0	0.5	10.0	0.5	9.0
3 - 5	45.0	83.0	44.0	80.0	1.0	13.0	1.0	12.0
6 - 8	51.0	87.0	50.0	86.0	2.0	15.0	2.0	14.0
9 - 11	56.0	91.0	54.0	90.0	3.0	16.5	2.5	15.5
12 - 14	59.0	96.0	57.0	95.0	4.0	17.5	3.0	16.5
15 - 17	62.0	100.0	60.0	99.0	4.0	18.5	3.5	17.5
18 - 20	64.0	104.0	62.0	102.0	4.0	19.5	3.5	18.5
21 - 23	65.0	107.0	64.0	106.0	4.5	20.5	4.0	19.5
24 - 26	67.0	108.0	66.0	107.0	4.5	23.0	4.5	21.5
27 - 29	68.0	112.0	68.0	111.0	5.0	24.0	5.0	23.0
30 - 32	70.0	115.0	69.0	114.0	5.0	24.5	5.0	24.5
33 - 35	71.0	118.0	71.0	117.0	5.0	25.5	5.0	25.5
36 - 38	73.0	121.0	72.0	120.0	5.0	26.0	5.0	27.0
39 - 41	74.0	124.0	74.0	122.0	5.0	27.0	5.0	28.0
42 - 44	75.0	127.0	75.0	124.0	5.0	28.0	5.5	29.0
45 - 47	77.0	129.9	77.0	126.0	5.0	29.0	5.5	30.0
48 - 50	78.0	132.0	78.0	129.0	5.0	30.0	5.5	31.0
51 - 53	79.0	134.0	79.0	131.0	5.0	31.0	5.5	32.0
54 - 56	80.0	136.0	81.0	133.0	5.5	32.0	6.0	33.0
57 - 60	82.0	139.0	81.0	136.0	5.5	33.0	6.0	34.5
61 - 72	82.0	140.0	81.0	137.0	5.5	34.0	6.0	36.0

Appendix 2: Codes for Crops

Appendix 3: Codes for Cause of Death

Code	English description	Khmer description
<i>Illnesses and injuries</i>		
01	Stomach ache/disorder	
02	Back pain	
03	Back pain	
04	Ear pain	
05	Ear pain	
06	Fever	
07	Diarrhea	
08	Cold and cough without rapid or difficult breathing	
09	Cold and cough with rapid or difficult breathing	
10	Bronchitis	
11	Pleurisy	
12	Tuberculosis	
13	Diabetes	
14	Disease of urinary system	
15	Disease of the heart	
16	Measles	
17	Hypertension	
18	Typhoid fever	
19	Dengue fever	
20	Chickenpox	
21	Chickenpox	
22	Chickenpox	
23	Cancer	
24	Avitaminosis and other nutritional deficiencies	
25	Anaemia	
26	Jaundice	
27	Skin disorder	

28	Leprosy	
29	Malaria	
30	Food-bone disease	
31	Water-bone disease	
32	Mental disorders	
33	Mine injury	
34	Road accident	
35	Other injury and illness	
Accidents		
36	Drowning	
37	Accident at work (fell from scaffolding, tree etc)	
38	Chemical burns	
39	Animals, insects, snake bite	
40	Electrical shock	
41	Suicide (hanging, poisoning...)	
42	Death by thunder strike	
43	Death by fallen tree	
44	Suffocating (lack of air in mining cave)	
45	Death by magic spell	
46	Other accident	
98	Don't know	

Appendix 4: Codes for Occupation

Appendix 5: Codes for Industry

Appendix 6: Codes for Expenditure items in the Diary

Appendix 7: Codes for Measurement units in the Diary