



NATION RELIGION KING

ROYAL GOVERNMENT OF CAMBODIA

General Population Census of Cambodia

March, 1998



Edit Rules for Manual Coding & Editing

National Institute of Statistics, Ministry of Planning
Phnom Penh, Cambodia
June 1998

Table of Contents

<i>Chapter 1</i>	<i>Introduction</i>	
	1. Editing	page 1
	2. Coding	page 1
	3. General instructions for editing and coding	page 1
	4. Original information	page 2
	5. Leading zeroes	page 2
	6. Legible entries	page 2
	7. Identification Particulars	page 2
	8. Phases in Census Data Processing	page 3
<i>Chapter 2</i>	<i>Check-in procedures</i>	
	9. Introduction	page 4
	10. Sorting of documents	page 4
	11. Checking the Geographic codes	page 5
	12. Control Forms	page 6
	13. Moving the documents to the Archive	page 6
<i>Chapter 3</i>	<i>Editing of Summary Statements</i>	
	14. Introduction	page 7
	15. Summary Forms	page 7
	16. Editing of Enumerator's Summary – Form 2	page 8
	17. Building and Household numbering	page 9
	18. Special cases	page 9
	19. Checking the Geographic codes	page 9
	20. Return of documents	page 9
<i>Chapter 4</i>	<i>Edit rules for Part 1 of Form B</i>	
	21. Introduction	page 10
	22. Identification Particulars	page 10
	23. Population Particulars	page 10
	24. Multiple questionnaires for one household	page 10
	25. Visitors not reflected in Part 2	page 10
	26. Household Type	page 11
	27. Building No., Household No. and Arranging the questionnaires	page 11

<i>Chapter 5</i>	<i>Edit rules for Part 2 of Form B</i>	
	28. Type of errors	page 13
	29. Edit rules for Part 2	page 14
<i>Chapter 6</i>	<i>Edit rules for Parts 3 and 4 of Form B</i>	
	30. Edit rules for Part 3 - Fertility	page 24
	31. Edit rules for Part 4 – Housing conditions and Facilities	page 26
<i>Chapter 7</i>	<i>Edit rules for Form A – House-list</i>	
	32. Introduction	page 29
	33. Edit rules for Form A	page 29
<i>Appendixes:</i>	A - Code list for Districts and Countries	page 30
	B - Code list for OCCUPATION	page 36
	C - Code list for INDUSTRY	page 52

Chapter 1 - Introduction

The purpose of this manual is to introduce the office editors/coders to the edit instructions and rules as they pertain to the questionnaires and forms used for the General Population Census of Cambodia, conducted between March 3 to 12, 1998.

In any large scale statistical exercise, and especially in Censuses and Surveys, it is of the utmost importance to check for errors in the data received from the field. Statistics derived from data that is not clean, i.e. containing errors, will provide the end user with wrong information and may jeopardize the objective of the entire exercise. Therefore, your role as an editor/coder is one of the keystones to a successful Census. It is your task to detect and correct the various possible errors of the field returns.

1. Editing

The objective of the editing process is to maximize the quality of the data by detecting and making suitable imputations of the possible errors in the questionnaires.

Most of the errors you will detect can be attributed to the field work. During the interview, the respondent may not have known the answer to a certain question, e.g. some people may not know their age. Others may not have fully understood a particular question and hence provided the enumerator with a wrong answer. In some cases, the respondent might not have been willing to answer a certain question. Finally, the enumerator himself may have contributed to the errors by not recording the respondent's answers correctly.

In this manual you will be shown what type of errors to look for. The manual will also provide you with instructions on how to correct such errors.

2. Coding

Besides editing the questionnaires, your task also includes the coding of some of the variables. During the fieldwork, the responses to most questions on Form B were recorded with numeric codes. However, some answers were recorded in a descriptive manner. These are: Birth Place, Previous Residence, Occupation and Industry. It will be your responsibility to give correct numeric codes to such open questions. This manual provides you with the valid codes for these variables.

3. General instructions for editing and coding

After office editing and coding, the questionnaires will be moved to the data entry section. Since different persons will perform specific tasks on the same questionnaires, it is important that all entries are consistent and legible. There are a number of general guidelines that should be followed as you review the questionnaires. These include:

- that all original entries are maintained;
- that leading zeroes are entered where required;
- that all entries are legible.

4. Original information must be maintained

Whenever it is necessary to make changes to the questionnaire, you should never erase or obliterate the original entry. Instead, you should draw a single horizontal line through the incorrect entry and write the new code clearly above the original one. To further differentiate the original and corrected entries, you should use a red ink pen when making corrections. In order to avoid multi-cancellation, you should be sure of what you are to write before committing it on paper.

Example: :

0	1	9
<div style="background-color: black; height: 10px; width: 100%;"></div>		

Wrong

0	1	9
0	1	8

Right

5. Leading zeroes must be filled

Some of the variables may require leading zeroes as part of their code. This is required whenever the answer to a particular variable is less than the number of digits specified for that field. For example, the variable EDUCATIONAL ATTAINMENT has a width of two digits. If the code for EDUCATIONAL ATTAINMENT for a particular person is less than 10, leading zeroes must be used.

Example:

8	
---	--

Wrong

	8
--	---

Wrong

0	8
---	---

Right

6. Entries must be legible

It is your responsibility to ensure that all numeric entries are legible. This will assist the keyboard operators in minimizing the number of typing errors. Draw a single horizontal line through any entry that is difficult to read and rewrite the new entry immediately above the original one.

7. Identification particulars

The 1998 Population Census used several forms and questionnaires during its field operation. A common feature on all these different documents is a set of geographical codes that facilitates identification. Unique code combinations are assigned to each E.A. and to each household within E.A.s. This combination of geographical codes plays an crucial role while processing data for various stages of presentation and in tracing erroneous records.

The elements of composite identification particulars identifying different levels of administrative units are as follows:

1. Province	- 2 digits
2. District	- 2 digits
3. Commune	- 2 digits
4. Village	- 2 digits
5. Enumeration Area	- 2 digits
6. Building number	- 3 digits
7. Household number	- 2 digits

The processing of the questionnaires of the 1998 Population Census will be done batch-wise; the Enumeration Areas will constitute the batches. The Province, District, Commune, Village and Enumeration Area codes of each batch will be given to you step by step as work progresses. It will be your responsibility to ascertain that the codes recorded on the forms are correct and consistent (that is, the identification codes on all forms belonging to a particular E.A. should be the same).

8. Phases in Census Data Processing

The first phase in Census Data processing is the receipt of census documents at the processing center (i.e. the Population Census Office in Phnom Penh). This is called the 'check-in' phase which will take place during March - April, 1998. During the check-in phase the questionnaires will be properly sorted, packaged and labeled. Registers will be kept to ascertain that all Enumerators have submitted their returns. Finally, the batches will be arranged and stored onto shelving racks in our archive rooms.

The documents will be scrutinized for errors and inconsistencies during the manual editing and coding phase, after which they will be passed on to the data entry section (data entry phase). Finally, after data capture, the records will be re-checked with the use of various computer programs (computer editing phase). Once the data is checked and cleaned, various tabulations, reports and other products will be prepared to disseminate as widely as possible the census results.

In order to release the provisional census results at an early stage, we will first concentrate on the Summary data sheets (Form 2). It is anticipated that the processing of these forms can be finalized by June, 1998. Once the provisional results have been released we will commence the processing of Form B, the main census questionnaire. Finally, we will capture part of the information contained in Form A, the house-listing. Specific edit rules and procedures pertain to each of these documents. They will be described in the subsequent chapters of this manual.

Chapter 2 – Check-in procedures

9. Introduction

The first activity in processing census data is to ascertain that all documents have been received from the field and to arrange, package and label them in an orderly manner. The documents will be stored and arranged (E.A.-wise) onto shelving racks in our archive rooms. The order in which the E.A. batches are to be placed is determined by the geographical codes. In other words, the sequence is Province, District, Commune, Village, Enumeration Area. Such a geographical arrangement will facilitate easy retrieval during the subsequent processing phases.

10. Sorting of documents

Many different forms were used during the fieldwork of the 1998 Population Census, a complete listing of them is given in Table 1 below.

Table 1. Forms and questionnaires used for the 1998 Population Census

<i>Name</i>	<i>Description</i>
Form A	House-listing
Form B	Household questionnaire
Form 1	House-list Summary
Form 2	Enumerator's Summary
Form 3	Account for Questionnaires received by Enumerator
Form 4	Certificate from Village Chief
Form 5	Supervisor's Summary
Form 6	Receipt for materials given
Form 7	List of filled-in records submitted by Enumerators
Form 8	Commune Population Statement
Form 9	District Population Statement
Form 10	Province Population Statement
Form 11	Appointment Order Form for Enumerators and Supervisors
Form 12	Appointment Order Form for the Census Officer
Village map	
E.A. map	

Not all of these forms are required for subsequent processing. Some of them were mainly designed to check the logistic arrangements of the census, the recruitment of staff, and the coverage of the fieldwork. Other forms will be used to have a quick glance at the census results.

The first task will be to separate the various forms and to arrange them into categories and by geographical area. This separation needs to be done very carefully as not to mix up documents. We will segregate the forms into 4 distinct categories:

Category 1. All forms pertaining to an Enumeration Area.

1. Form A – House-listing,
2. Form B – Household questionnaire,
3. Form 1 – Summary of house-listing,
4. Form 2 – Enumerator’s Summary,
5. Form 3 – Enumerators Account for Questionnaires.

The above 5 forms can further be classified into (a) **filled-in**, (b) **cancelled**, and (c) **unused** forms. We want to keep all filled-in and cancelled forms together for future reference, the unused ones are no longer needed and can be placed separately.

The project has acquired a large number of plastic manila folders in which all **filled-in** and **cancelled** Forms A, B, 1, 2 and 3 for a particular Enumeration Area will be kept. The folders have labels attached to the front which clearly identify the E.A. The identification is made up of the geographical code structure as explained in para 7. The unused forms will be placed in a carton box.

Category 2. Forms for quick count.

1. Form 5 - Supervisor’s Summary,
2. Form 8 - Commune Population Statement,
3. Form 9 - District Population Statement,
4. Form 10 - Province Population Statement.

All these forms will be placed province-wise in one plastic manila folder.

Category 3. Village and Enumeration Area maps.

1. Village maps,
2. Enumeration Area maps.

All Village and E.A. maps will be placed province-wise in a carton box.

Category 4. Miscellaneous documents.

1. Form 4 – Certificate from Village Chief,
2. Form 6 – Receipt for materials given,
3. Form 7 – List of filled-in records submitted by Enumerators
4. Form 11 – Appointment Order for Enumerators and Supervisors,
5. Form 12 – Appointment Form for the Census Officer,
6. Enumeration manuals.

All other documents will be put province-wise in a carton box.

11. Checking the Geographic codes

Once the forms have been separated you need to ascertain that the geographical codes are correct and consistent. To this end, you will be provided with a code-list of all Enumeration Areas. Read the names of the Province, District, Commune and Village as written on the forms and find the associated identification codes from the code-list.

Then check every Form A, B, 1, 2 and 3 within the E.A. folder to make sure that the identification codes are clearly written on all documents and that they are consistent.

12. Control Forms

You also need to check the completeness of the documents. In other words, check that **all documents** for **all Enumeration Areas** were received. Remember that the list of Enumeration Areas (the code-list) you will be working with was compiled several weeks before the census fieldwork and may not be final. It is quite possible that some Enumeration Areas no longer existed or that new Enumeration Areas were formed during the census field work.

We will use so-called ‘control forms’ to post (a) **what we have received** and (b) **for which Enumeration Areas**. There will be control forms for every phase in the data processing (see para 8). A specimen of the check-in control form is given in Annex 1. On this form you find all Enumeration Areas for a certain province together with the names and codes of the Districts, Communes and Villages.

After you have checked the documents in an E.A. folder you should fill out the check-in control form for that E.A. You enter the date on which you checked the E.A. and your name. Furthermore, you should count all the Forms A, B, 1, 2 and 3, and entered their numbers in the respective columns. Please note that you have to count the number of forms and not the number of pages. You then enter the E.A. Population which can be taken from the box titled ‘GRAND TOTAL FOR E.A.’ on the Summary Form 2. Finally, you affix your signature. In the last column (Remarks) you can write any abnormalities you may have encountered while checking the E.A. (for example, missing documents).

13. Moving the documents to the Archive

Before the E.A. folders are moved to the archive rooms, they have to pass through our control unit first in order to scan the bar-codes. At the end of the check-in exercise, the number of Enumeration Areas received will be matched against the number of E.A.s in the census frame. This will reveal important information about missing E.A.s.

14. Introduction

The processing of census data is generally a cumbersome and time-consuming activity. In the case of the Cambodian Census it is estimated that the completion of the various phases of data processing (editing and coding, data entry, computer editing and tabulation) for all questionnaires may take one year approximately. This implies that the final and detailed census results will become available only by the middle of 1999.

Many data users consider this wait period too long. Also, many users do not require all the details given by the cross-classifications, they are satisfied with population figures by gender and by geographical area. The timely release of preliminary census figures, therefore, constitutes an important milestone in a census operation. The main outcome of the census (i.e. the population by area and by sex) will be made known and can be applied merely a few months after completion of the fieldwork.

These figures, however, are only preliminary and provisional. The questionnaires are still subject to manual and computer editing during which changes and imputations to some schedules will become imperative. The final census figures may therefore vary from the provisional ones, but these differences are not expected to be significant.

15. Summary forms

At the completion of the census fieldwork, the enumerators were requested to fill out two summary statements:

- Form 1 – Summary of House-listing (e.g. summary of Form A);
- Form 2 – Enumeration Summary (e.g. summary of Form B)

At this stage, we will concentrate on the editing and processing of Form 2, the Enumeration Summary. This statement will yield the preliminary census figures by geographical area and by sex. Editing of Form 1, the House-listing summary, will be taken up at a later stage during the processing of Form A.

An example of Form 2 is given on the next page. The important fields on this form are:

1. the geographical codes;
2. Building No.;
3. Household No.;
4. No. of questionnaires used for the household;
5. Male population;
6. Female population;
7. Total population;
8. Type of household.

16. Editing of Enumerator's Summary – Form 2

The edit rules pertaining to Form 2 are very simple and easy to understand. Essentially, you have to ascertain that what is recorded on Form B, the main census questionnaire, corresponds with the entries on the Summary form. The provisional census figures, the main outcome of this exercise, will only be useful when the Summary statements are a true reflection of the main questionnaires.

The entries on Summary Form 2 are recorded household-wise, i.e. one line for every household in the Enumeration Area. Editing, and later on data entry, of the information will be performed on this level. At the bottom of Form 2 you find rows for the PAGE TOTAL and GRAND TOTAL FOR EA. These rows were already filled out by the Enumerators and the information was recorded during the Check-in phase. At this stage, it is **not** your duty to check these additions.

For the editing of Form 2, you have to open every Form B and count from Part 2 – Individual Particulars – the number of Males and Females. The number of lines with SEX code of ‘1’ represent the Male persons, the lines with a SEX code of ‘2’ are the Female persons. You then check the entries for that household on the Summary Form 2. In case the entries correspond you move on to the next household. However, should they differ, you have to correct the Form 2 entries. **ONLY CORRECT THE ENTRIES ON FORM 2, NEVER CHANGE FORM B INFORMATION.**

Form B. Part 2: INDIVIDUAL PARTICULARS

Sl.	Full Name	Relationship	Sex
1	Im Vanno	1	1
2	Mak Sochea	2	2
3	Orn Phanit	3	1
4	Im Vanchan	3	1
5	Yon Nimol	6	1
6	Ya Sovanny	6	2
7	Mak Nay	6	2
8	Nin Yam	6	2
9			
0			

Example A. Consistent entries.

Enumerator's Summary		
Males	Females	Persons
4	4	8

Example B. Inconsistent entries.

Enumerator's Summary		
Males	Females	Persons
3 4	5 4	8

The column ‘Persons’ on Form 2 obviously reflect the sum of the number of Males and Females. You have to check that this entry is consistent.

Besides the population figures, the Summary form also records the Number of Questionnaires used (for the household) and the Type of Household. These two items have to be checked as follows. To check the Number of Questionnaires used for the household you have to count the number of Form B's used for the household and compare it with the entry in this column. Should there be a difference, you have to correct the entry in Form 2. To check the Household Type, you have to refer to Form B, Part 1. Again, if the entries are different you should correct the one in Form 2. You may find some Form B's where the Household Type is not marked nor coded. In these cases you should assign code ‘1’ for Regular Household.

17. Building and Household Numbering.

The entries on Form 2 are household-wise, i.e. one row for every household. The combination of Building Number and Household Number should yield a unique code for each household in the Enumeration Area. Normally, the entries on Form 2 will start from Building No. 001, Household No. 01 and then increment. Before you commence editing, you may have to sort the bundle of Form B's to match this order. If any other sequencing was adopted in filling out Form 2, you have to arrange the Form B's in the same order.

18. Special cases

It is of utmost importance that all households (Form B's) are reflected on the Summary form. You may come across E.A.'s where one or more households were not entered on Form 2. This is especially true for Phnom Penh where, during the check-in phase, some self-filling forms were added to the E.A. folder. **In such a case you have to add the household(s) to the Summary form.** You use the next available line of Form 2 to do so. Blank Form 2's will be made available should you not have enough blank lines. When adding households to Summary Form 2, you must ascertain that the Building and Household Numbers on Form B are consistent with those on Form 2. You can assign the codes as determined by the Summary form in case there is no Building or Household Number on Form B.

The reverse may also happen, i.e. a household is listed on Form 2 but the associated Form B cannot be traced. In this case, you should call the attention of Mr. John Carr who will be supervising the editing process.

Finally, you may find E.A.s for which there is no Summary Form available. In such rare cases a fresh Summary Form needs to be generated.

To sum up, the entries as checked by you in Form 2 should fully correspond to the number of Form B's for the Enumeration Area. Not a single household should be left unaccounted for.

19. Checking the Geographic codes

The importance of the geographical codes was already stressed on Chapter 1 – Para 7. You are again reminded to check every Form B and 2 within the E.A. folder and make sure that the identification codes are clearly written on all documents and that they are consistent.

20. Return of documents

After the editing is completed, the Form 2 summary statements are to be separated from the other E.A. documents. They will be placed, commune-wise, in a paper envelope with the geographic codes and names written on the cover. The envelope is to be handed over to Mr. John Carr. All other documents for the E.A. (i.e. Form A's, Form B's, Form 1's and Form 3's) are to be placed back into the plastic folder and returned to the archive.

Chapter 4 - Edit rules for Part 1 of Form B.

21. Introduction

The main census questionnaire, Form B, is a rather complex form which requires careful scrutiny before it is passed on to the Data Entry section. The form is divided into 4 parts. Part 1 of the questionnaire comprises the identification and population particulars of the entire household. Part 2 contains questions on the particulars of the individual members in the household. Part 3 comprises questions on Fertility, whereas Part 4 relates to the Housing conditions and facilities. This chapter discusses the edit rules pertaining to Part 1 of the census questionnaire.

22. Identification Particulars

With the use of identification particulars, unique codes are assigned to each of the households. This combination of codes plays an important role while processing data for various stages of presentation or in tracing faulty records. The elements of the identification particulars were already discussed in para 7 of Chapter 1. You are herewith again reminded of the importance of this code structure and that it is your responsibility to ascertain that the codes are correct and consistent.

23. Population Particulars

Statements 1.1 to 1.3 on the questionnaire were used to differentiate between the de-facto and the de-jure population. The information in these statements will be processed at some later stage. Hence, they do not require further editing. **It is however of the utmost importance to check whether the number of lines (persons) in Part 2 of the questionnaire corresponds with the figure entered in the thick box of Part 1 (titled 'Total No. of Persons in Statements 1.1 and 1.2'). You should therefore count the filled-out lines in Part 2 and verify this against the figure given in Part 1.** For example, if the total number of persons in Statements 1.1 and 1.2 is 6 you should have 6 filled-out lines in Part 2.

24. In case of multiple questionnaires for one household

It is possible that more than one questionnaire was used for a particular household. This will be the case when a household comprises more than 10 persons. The enumerator was instructed to write the total number of questionnaires used for one household in the square provided at the left hand bottom of Part 1. You should check whether this box was filled out and if so, whether the subsequent questionnaires are present.

The box of Part 1 (Total No. of Persons in Statement 1.1 and 1.2) of the first questionnaire should give the total number of persons in the household.

25. Visitors not reflected in Part 2.

Statement 1.2 lists the visitors who were present in the household on census night. The enumerators were instructed to include these visitors in Part 2 (Individual Particulars) of the census questionnaire. It has, however, been observed that not all enumerators

followed these instructions. It is also possible that detailed particulars of visitors were not provided to the enumerators as the respondent was not aware of them. As a result of these situations, **you may encounter households where visitors are listed in Statement 1.2 but no individual particulars are recorded for them in Part 2. These visitors should not be omitted from the census count as they were present in the household on census night. You will therefore have to add them in Part 2 by applying the following instructions:**

- (a) use the next available line number in Part 2 and record the information given in Statement 1.2 of Part 1. Write the NAME, the code for RELATIONSHIP TO HEAD (use the codes as in Column 3, Part 2), and SEX code.
- (b) Since no information is available for the remaining questions in Part 2, you should code them as '9' indicating 'Not Stated'.
- (c) Re-check that, after adding any 'omitted visitors', the 'Total No. of Persons in Statements 1.1 and 1.2' corresponds with the number of filled-out lines in Part 2 .

26. Household Type

The Type of Household is given in Part 1 in the column after the Identification Particulars and before the Population Particulars. The codes for Household Type range from 1 to 5. You have to ascertain that the given code is valid. **If the code is invalid or no code is specified write code '1' for regular household.**

It may also happen that the enumerator has indicated special population groups by writing it on the top of the questionnaire. For example, they may have written 'Boat Population', 'Transient Population', 'Institutional' or 'Homeless'. **Should you see any such indication for special population groups you have to make sure that the appropriate code for Household Type is given.**

27. Building No., Household No. and Arranging the questionnaires

After these initial checks, the Forms B should be arranged by Building and Household number. When more than one questionnaire was used for a household, they should be arranged by the serial numbers provided in Statement 1.1 and 1.2 of Part 1.

Occasionally, you may come across questionnaires with no Building or Household numbers. This will especially prevail in Phnom Penh where self-filled form were used for the foreign population. **In these cases you should assign the next available numbers.** For example, suppose the last questionnaire for the E.A. has Building No. 098 and Household No. 01. When you encounter a questionnaire without any codes for Building and Households you should assign the next available code, e.g. 099 for the Building and 01 for the Household.

Within an E.A. batch you may also find duplicated Building and Household numbers. For example, you may find two or more households bearing Building No. '001' and Household No. '01'. Duplication of Building and Household numbers may have occurred because of special population groups, such as boat and transient population. Such duplicate identification is not very important since we will essentially use the

Household Type code to distinguish these special groups. You may therefore ignore duplicated Building and Household numbers.

To summarize the above instructions, you have to ensure that all questionnaires have valid Building and Household numbers. If any such codes are missing you have to assign next available numbers. Duplication in numbering can be ignored. After verifying all codes are correct, you then use the Building and Household numbers to arrange the E.A. batch, starting from Building '001' Household '01'.

Chapter 5 - Edit rules for Part 2 of Form B.

Part 2 of the Household Questionnaire contains some 20 questions on the particulars of the individual members of the household. It will be your responsibility as an editor to verify that the answers to these questions are recorded correctly and consistently.

28. Type of errors

Generally, we can differentiate between three types of errors, i.e. Range errors, Skip errors and Consistency errors.

Range errors. Each variable in the questionnaire has its specific range of valid codes. For example, the variable SEX can only have code '1' for male or code '2' for female. Any other code for SEX is invalid. The valid codes for a particular variable are called ranges, i.e. the range for SEX is 1 to 2. All other codes are invalid; they are out of range. It will be your responsibility to check the entries for all variables in the questionnaire and verify that their codes are within range.

Skip errors. Some of the questions in the questionnaire are only applicable under certain conditions. For example, the questions on Education, Employment Period, Occupation, Employment Status, Industry and Sector of Employment are only applicable under certain circumstances. If these circumstances are not met these questions will be left blank, i.e. they are skipped. The following skip patterns apply to Form B:

- | | | |
|-------------------------------|---|--|
| 1. Q11 - Duration of stay | - | skipped when Q10 is '1' |
| 2. Q12 - Reason for Migration | - | skipped when Q10 is '1' |
| 3. Q14B - Highest grade | - | skipped when Q14A is '1' |
| 4. Q16 - Employment period | - | skipped when Q15 is 3, 4, 5, 6, 7 or 8 |
| 5. Q17 - Occupation | - | skipped when Q15 is 3, 4, 5, 6, 7 or 8 |
| 6. Q18 - Employment status | - | skipped when Q15 is 3, 4, 5, 6, 7 or 8 |
| 7. Q19 - Industry | - | skipped when Q15 is 3, 4, 5, 6, 7 or 8 |
| 8. Q20 - Employment sector | - | skipped when Q15 is 3, 4, 5, 6, 7 or 8 |

Consistency errors. Besides checking the ranges and skip patterns, you will also have to check the consistency of the variables. A consistency check compares the entries of two or more variables to ensure they are consistent with each other. As an example, if Q3 - RELATIONSHIP to Head of Household is coded as '2' (Wife/Husband) the code in Q6 - MARITAL STATUS must be '2' (Married).

Consistency checks can be classified into two groups, i.e. within-person consistency and between-persons consistency. The example above illustrated a within-person consistency check (Q3 - RELATIONSHIP was compared with the entry of Q6 - MARITAL STATUS for the same person). Between-persons consistency checks compares the entries of variables for different persons in the household. For example, if the Q5 - AGE of the Head of Household is 35 then his children cannot normally be older than say 20 years. **To detect between-persons consistency errors you have to study the composition of the entire household.**

29. Edit rules for Part 2

In the subsequent sections, all the variables of Part 2 of Form B will be discussed together with the edit rules that pertain to them.

Q1 - SERIAL NUMBER

The Q1 - SERIAL NUMBER is a unique code assigned to each person in a household. The first person should always have code '1'. Serial numbers must be in a sequential order, incremented by 1 for every subsequent person in the household. There should neither be missing nor duplicated serial numbers. Whenever you find incorrect serial numbers, you should renumber them.

From the above it becomes obvious that the last serial number should be identical to the entry in the thick box of Part 1, titled 'Total No. of Persons in Statement 1.1 and 1.2'. You have to verify that this is indeed the case.

Q3 - RELATIONSHIP to Head of Household

The variable Q3 - RELATIONSHIP describes the relationship of each person in a household to the Head of that household. This variable applies to all persons, i.e. the universe is all persons. It is a complex variable to edit since it relates to many other variables.

Universe: all persons.

Related variables: HOUSEHOLD TYPE;
Q1 - SERIAL NUMBER;
Q4 - SEX;
Q5 - AGE;
Q6 - MARITAL STATUS.

Range: 1 to 7.

Consistency checks:

- 1) the first person in a household (with serial number '1') should always be the Head of the Household (code '1').
- 2) persons with a serial number greater than '1' can never be the Head of the Household; they should have Relationship codes from '2' to '7'.
- 3) there can be only one Head of the Household. Not more than one person per household can have code '1' for Relationship. **If there is no Head of the Household or in case there are multiple Heads of Household, you should call the attention of your Supervisor.**
- 4) for Institutional Households (Household Type '2') every inmate, except the first, should be coded as '7' Non-Relative. The first person in an Institutional Household is coded as the Head (code '1').
- 5) there can be only two persons in a household with a Relationship code of '4', i.e. there can be only two parents per household. In this context it should be noted that parent refers to the natural mother or father of the Head of the Household. If you find more than two persons in a household with Relationship codes of '4', you should call the attention of your Supervisor.

- 6) in the same vein, there can be only one natural father (with Q3 - RELATIONSHIP = 4 and Q4 - SEX = 1) and one natural mother (with Q3 - RELATIONSHIP = 4 and Q4 - SEX = 2) per household. **If you find more than one natural father or mother you should call the attention of your Supervisor.**

If the code for Q3 - RELATIONSHIP is not given you should impute code '6' 'Other Relative'.

Important Instruction

During initial checks it has been observed that the coding of Relation to Head is far from perfect. The textual answers in Statements 1.1 and 1.2 are normally correct and detailed but the codes given in Column 3 of Part 2 are not. Typical errors are:

- Children of Daughters/Sons are coded as '3' instead of '5'**
- Children of Sisters/Brothers are coded as '3' instead of '6';**
- Mother/Father of Spouse is coded as '4' instead of '6'**

It is therefore very important to read the textual answers in Statement 1.2 (Part 1) and to cross-check the given codes in Column 2 of Part 2.

Q4- SEX

Universe: all persons

Related variables: Q3 - RELATIONSHIP to Head;
Q2 - NAME.

Range: 1 to 2.

Consistency checks:

1. if Q3 - RELATIONSHIP = 2 (Wife/Husband) the sex of the person should be the opposite to that of the Head of Household. For example, if the Head of Household is a male (SEX = 1) then for his spouse (Q3 - RELATIONSHIP = 2) the sex should '2' (Female). If not correct accordingly.
2. if the variable Q4 - SEX is not filled, check the Q3 - RELATIONSHIP and the Q2 - NAME of the person to determine the appropriate code (code '1' or '2').

Q5 - AGE

Universe: all persons.

Related variables: Q3 - RELATIONSHIP to Head.

Range: 00 to 98.

The consistency of age-reporting will be thoroughly checked using in-house developed computer software. Therefore, your task is limited to checking that an age is reported. If Q5 - AGE is not filled out for a particular person you should call the attention of your Supervisor.

Q6 - MARITAL STATUS

Universe: all persons.

Related variables: Q3 - RELATIONSHIP;
Q5 - AGE.

Range: 1 to 5, and 9.

Consistency checks:

- 1) for persons with a Q3 - RELATIONSHIP code of '2' (Wife/Husband) the Q6 - MARITAL STATUS must be '2' (Married).
- 2) if there is a Wife or Husband present in the household (i.e. any person with Q3 - RELATIONSHIP = '2') then the Q6 - MARITAL STATUS of the Head of the Household must be '2' (Married).

If Q6 - MARITAL STATUS is not filled out you should impute a code:

- a) in case the Q3 - RELATIONSHIP of the person is '1' or '2', apply the rules above;
- b) in case the Q3 - RELATIONSHIP of the person is '4' (Father/Mother), impute code '2' (Married);
- c) for Q3 - RELATIONSHIP codes of 3, 5, 6 or 7; if the person is under 15 years of age impute code '1' (Never Married);
- d) for Q3 - RELATIONSHIP codes of 3, 5, 6 or 7; if the person is 15 years and above, impute code '9' (Not Stated);

Q7 - MOTHER TONGUE

Universe: all persons.

Related variables: Q7 - MOTHER TONGUE of other household members.

Range: 1 to 8.

In case this question is left blank you should impute:

- 1) study the Q7 - MOTHER TONGUE of other members of the household and impute the main Mother tongue of the household;
- 2) if this question is left blank for the entire household call your Supervisor.

Q8 - RELIGION

Universe: all persons.

Related variables: Q7 - MOTHER TONGUE;
Q8 - RELIGION of other members.

Range: 1 to 4.

If Q8 - RELIGION is not filled out you have to determine the appropriate code:

- 1) study the Q8 - RELIGION of other members of the household and impute the main religion of the household;
- 2) if Q8-RELIGION for all members of the household is not given and if Q7 - MOTHER TONGUE of the person is Khmer, impute code '1' (Buddhism)
- 3) if you cannot determine an appropriate code call your Supervisor.

Q9 - BIRTH PLACE

Universe: all persons

Related variables: none

Range: see Appendix A.

The answer to Q9 - BIRTH PLACE was recorded in a descriptive manner. Code '1' was entered for persons born in the village of enumeration, while the name of the Village and District were recorded for those born outside the village of enumeration. It will be your duty to assign appropriate codes to these answers. Appendix A of this manual provides you with the codes of all the Districts in the country. It also provides the Country codes in case the person was born outside Cambodia.

In order to determine the appropriate code you should observe the following guidelines:

- 1) if code '1' was recorded, write the same code '1' in the shaded code box;
- 2) if another Town/Village was recorded, find the District in Appendix A and assign the associated code in the shaded code box;
- 3) if the person was born outside Cambodia, find the Country of Birth in Appendix A and assign the associated code in the shaded code box;
- 4) if you cannot find the District code or in case the column was left blank, call your Supervisor.

Q10 - PREVIOUS RESIDENCE

Universe: all persons.

Related variables: Q9 - BIRTH PLACE.

Range: see Appendix A.

The answer to Q10 - PREVIOUS RESIDENCE was recorded in a descriptive manner. Code '1' was entered for persons with no previous residence (i.e. they always lived in the village of enumeration), while the name of the Village and District were recorded for those who have lived elsewhere. It will be your duty to assign appropriate codes to these answers. Appendix A of this manual provides you with the codes of all the Districts in the country. It also provides the Country codes in case the person has lived outside Cambodia.

In order to determine the appropriate code you should observe the following guidelines:

- 1) if code '1' was recorded, write the same code '1' in the shaded code box;
- 2) if another Town/Village was recorded, find the District in Appendix A and assign the associated code in the shaded code box;
- 3) if the person lived outside Cambodia, find the Country in Appendix A and assign the associated code in the shaded code box;
- 4) if you cannot find the District code or in case the column was left blank, call your Supervisor.

Consistency check: if the answer to Q10 - PREVIOUS RESIDENCE was '1' then the code of Q9 - BIRTH PLACE should also be '1'. If this is not the case, use the code of Q9 - BIRTH PLACE for imputation of Q10 - PREVIOUS RESIDENCE.

Q11 - DURATION OF STAY

Universe: persons with a Previous Residence other than '1'.

Related variables: Q5 - AGE;
Q10 - PREVIOUS RESIDENCE.

Range: 00 to 98, and 99.

The variable Q11 - DURATION OF STAY is part of a skip pattern. It must be skipped for persons with a Q10 - PREVIOUS RESIDENCE of '1'; for persons with a Q10 - PREVIOUS RESIDENCE other than '1' an entry is required.

If the column is left blank but an entry is required according to the rule above, impute code '99' for Not Stated.

Q11 - DURATION OF STAY cannot exceed the age of the person. If the Q11 - DURATION OF STAY is greater than the person's age, impute '99' for Not Stated

Q12 - REASON FOR MIGRATION

Universe: persons with a Previous Residence other than '1'

Related variables: Q5 - AGE;
Q10 - PREVIOUS RESIDENCE.

Range: 1 to 9 or 0.

The variable Q12 - REASON FOR MIGRATION is also part of a skip pattern. It must be skipped for persons with a Q10 - PREVIOUS RESIDENCE of '1'; for persons with a Q10 - PREVIOUS RESIDENCE other than '1' an entry is required.

Table 1. Consistency between Reason for Migration and Age

Q12 - REASON FOR MIGRATION is also related to the age of the person. For example, it is highly unlikely for a young child to have moved for employment reasons. Similarly, it is not likely that an elderly person of age 65 or above moved because of educational reasons. In Table 1 you find a cross classification of Q12 - REASON FOR MIGRATION against broad Age Groups. The dark colored cells are the invalid combinations, the light shaded cells represent the valid combinations.

Reason for Migration	0 - 6	7 - 14	Age 15 - 34	Group 35 - 64	65 +
1. Transfer of work place					
2. Search of employment					
3. Education					
4. Marriage					
5. Family moved					
6. Natural calamities or insecurity					
7. Repatriation					
8. Visiting only					
9. Other					

If the column has an invalid entry as indicated in the table above or if it is left blank where an entry is required according to the skip pattern, impute code '0' (Not Stated).

It has been observed during the pre-tests that some enumerators frequently use code '9' for Other Reason. In such a case they ought to have specified the reason. You must ascertain that the reason specified indeed is not included in the pre-coded answers. If,

you find that the reason given is included in the pre-coded answer assign that code. For example, if Q12 is coded as '9' and the description is 'Return home after Khmer Rouge regime' then the proper code should have been '7' Repatriation. You should thus strike out '9' and replace with '7'.

Q13 - LITERACY

Universe: all persons.

Related variables: Q5 - AGE;
Q14B - HIGHEST GRADE;
Q17 - OCCUPATION.

Range: 1 to 2, and 9.

Although Q13 is asked for all persons, we do not expect young children (under age 7) to be literate. Therefore, if Q5-AGE is less than 7, Q13 should be 2.

The variable Q13 - LITERACY is also correlated to Q14A and Q14B. You should especially examine the entry in column 14B - HIGHEST GRADE to see whether it is consistent with age. Take for example a person whose age was recorded as 8 but the Q13 - LITERACY was filled out as '1', Q14A - SCHOOL ATTENDANCE was recorded as '3' (Past) and Q14B - HIGHEST GRADE was recorded as '13'. In such a case the person's age was most likely recorded wrongly. You should consult your supervisor in such cases.

Consistency checks:

- 1) if the answer to Q14B - HIGHEST GRADE is '02' or higher, Q13 - LITERACY must be '1' (Literate). Note that it is possible that a person can be literate (code '1') without any school attendance (code '1' in Q14A) or without passing any grade (code '00' in Q14B);
- 2) Q13 - LITERACY should also be checked against Q17 - OCCUPATION. Certain occupations like medical doctors, lawyers, engineers etc. require an educational attainment, hence Q13 - LITERACY must be '1' (Literate). In case of doubt consult your Supervisor.

If this column is left blank where an entry is required, use the above rules to determine the appropriate code. If these rules do not provide any guidance, impute code '9' for Not Stated.

Q14A - SCHOOL ATTENDANCE

Universe: all persons.

Related variables: Q5 - AGE;
Q14B - HIGHEST GRADE.

Range: 1 to 3.

Q14A - SCHOOL ATTENDANCE should be checked against the answer in Q14B - HIGHEST GRADE. If a person has attained one grade or more then Q14A - SCHOOL ATTENDANCE must be either '2' (Now) or '3' (Past).

If Q14A - SCHOOL ATTENDANCE is left blank where an entry is required, you have to determine the appropriate code. If Q14B - HIGHEST GRADE is blank, code Q14A

as '1' (Never), if Q14B is filled out use Q15 - MAIN ACTIVITY to determine between code '2' and '3'. If the person is student (Q15 - MAIN ACTIVITY is '5'), impute code '2' (Now), otherwise impute code '3' (Past).

Q14B - HIGHEST GRADE ATTAINED

Universe: persons with Educational Attendance of '2' or '3'.

Related variables: Q5 - AGE;
Q14A - SCHOOL ATTENDANCE.

Range: 00 to 17, and 99.

The variable Q14B- HIGHEST GRADE is part of a skip pattern. It must be filled for persons with Q14A - SCHOOL ATTENDANCE of '2' or '3'. It is left blank for all persons with Q14A - SCHOOL ATTENDANCE of '1'.

The entry in Q14B is related to AGE. For example, it will be very unlikely for a young person of say 10 years old to have attained a grade higher than '04'. Table 2 below shows the minimum ages for the various grades. **It is important to note that at all time a person can be older than this age, but the person can not be younger!** For instance, if a person's highest grade is recorded as 10, the minimum age is 15. This implies that if the person is 25 years old the entries are consistent (valid), but if the person is 14 the age is too young for such a grade. If you find an inconsistency you should call the attention of your Supervisor.

Table 2. Minimum ages by Highest grade

<i>Minimum Age</i>	<i>7 +</i>	<i>10 +</i>	<i>15 +</i>	<i>20 +</i>
Highest grade	01 to 03 or 17	04 to 08 or 17	09 to 13 or 17	14 to 15 or 17

Q15 - MAIN ACTIVITY

Universe: all persons.

Related variables: Q5 - AGE;
Q16- EMPLOYMENT PERIOD;
Q17 - OCCUPATION;
Q18 - EMPLOYMENT STATUS;
Q19 - INDUSTRY;
Q20 - EMPLOYMENT SECTOR.

Range: 1 to 8.

As illustrated in Table 3, the answer to this question will determine whether or not the subsequent economic questions (Q16 to Q20) need to be filled out.

Table 3. Skip pattern of Q16 to Q20 based on the response of Main Activity

Main Activity	Q16. Employment Period	Q17. Occupation	Q18. Employment Status	Q19. Industry	Q20. Employment Sector
1. Employed	00 to 12, 99	001 to 999	1 to 5, 9	011 to 999	1 to 5, 9

2. Unemployed (worked before)	00 to 12, 99	001 to 999	1 to 5, 9	011 to 999	1 to 5, 9
3. Unemployed (Never worked)	blank	blank	blank	blank	blank
4. Home maker	blank	blank	blank	blank	blank
5. Student	blank	blank	blank	blank	blank
6. Dependent	blank	blank	blank	blank	blank
7. Rentier, Retired or other income recipient	blank	blank	blank	blank	blank
8. Other	blank	blank	blank	blank	blank

Consistency checks:

- 1) if Q15 - MAIN ACTIVITY, is not filled out or is coded as '3', '4', '5', '6', '7' or '8', check whether there are any valid entries in Q16 to Q20. If there is a valid entry in any of these questions, impute Q15 as '1' (Employed).
- 2) if Q15 - MAIN ACTIVITY, is coded as '1' or '2' but Q16 to Q20 are left blank, you should retain the codes for Q15 - MAIN ACTIVITY and code Q16 to Q20 as Not Stated (fill out with code '9') after consulting your Supervisor.
- 3) if Q15 - MAIN ACTIVITY, is left blank and Q16 to Q20 are also blank, code Q15 as '8' (Other).
- 4) if Q15 to Q20 are left blank for the entire household, you should call your Supervisor.

Q16 - EMPLOYMENT PERIOD

Universe: persons with Q15 - MAIN ACTIVITY of '1' or '2'.

Related variables: Q15 - MAIN ACTIVITY.

Range: 00 to 12, and 99.

The variable Q16 - EMPLOYMENT PERIOD is part of a skip pattern. It must be filled for persons with a Q15 - MAIN ACTIVITY of '1' or '2'. It is left blank for all persons with a Q16 - MAIN ACTIVITY of '3', '4', '5', '6', '7' and '8' (see Table 3).

The range for Q16 - EMPLOYMENT PERIOD is from '00' to '12'. If Q16 is out of range or is left blank where an entry is required, you should impute code '99' for Not Stated.

For employed persons (with Q15-ACTIVITY = '1') the range for Q16-EMPLOYMENT PERIOD should actually be from '06' to '12'. It has been observed, however, that some enumerators did not fill out this question correctly and recorded employment periods of less than 6 months. Since it will be cumbersome and time-consuming to correct all such wrong entries you can ignore them at this stage. During computer editing specialized software will be used to impute erroneous coding of Q16-EMPLOYMENT PERIOD.

Q17 - OCCUPATION

Universe: persons with Q15 - MAIN ACTIVITY of '1' or '2'.

Related variables: Q15 - MAIN ACTIVITY.

Range: see Appendix B.

The variable Q17 - OCCUPATION is part of a skip pattern. It must be filled for persons with a Q15 - MAIN ACTIVITY of '1' or '2'. It is left blank for all persons with a Q15 - MAIN ACTIVITY of '3', '4', '5', '6', '7' and '8'.

Q17 - OCCUPATION is recorded in a descriptive manner. The coding of this variable will be done by a separate team of specialized coders. You should therefore not alter the entries in this column.

Q18 - EMPLOYMENT STATUS

Universe: persons with Q15 - MAIN ACTIVITY of '1' or '2'.

Related variables: Q15 - MAIN ACTIVITY;
Q17 - OCCUPATION.

Range: 1 to 5, and 9.

The variable Q18 - EMPLOYMENT STATUS is part of a skip pattern. It must be filled for persons with a Q15 - MAIN ACTIVITY of '1' or '2'. It is left blank for all persons with a Q15 - MAIN ACTIVITY of '3', '4', '5', '6', '7' and '8'.

The range for Q18 - EMPLOYMENT STATUS is from '1' to '5'. If Q18 is out of range or is left blank where an entry is required, you should impute code '9' for Not Stated.

The coding for Q17 - OCCUPATION and Q18 - EMPLOYMENT STATUS can be inter-related. For example, occupations listed under Major group 4 (Clerks) will most likely be paid employees (i.e. Q18 should be '2') whereas Market sales workers (Major group 5) may be mostly own-account workers (Q18 should be '3').

Q19 - INDUSTRY

Universe: persons with Q15 - MAIN ACTIVITY of '1' or '2'.

Related variables: Q15 - MAIN ACTIVITY;
Q17 - OCCUPATION;
Q18 - EMPLOYMENT STATUS.

Range: see Appendix C.

The variable Q19 - INDUSTRY is part of a skip pattern. It must be filled for persons with a Q15 - MAIN ACTIVITY of '1' or '2'. It is left blank for all persons with a Q15 - MAIN ACTIVITY of '3', '4', '5', '6', '7' and '8'.

Q19 - INDUSTRY is recorded in a descriptive manner. The coding of this variable will be done by a separate team of specialized coders. You should therefore not alter the entries in this column.

Q20 - EMPLOYMENT SECTOR

Universe: persons with Q15 - MAIN ACTIVITY of '1' or '2'.

Related variables: Q15 - MAIN ACTIVITY;
Q17 - OCCUPATION;
Q18 - EMPLOYMENT STATUS;
Q19 - INDUSTRY.

Range: 1 to 5, and 9.

The variable Q20 - EMPLOYMENT SECTOR is part of a skip pattern. It must be filled for persons with a Q15 - MAIN ACTIVITY of '1' or '2'. It is left blank for all persons with a Q15 - MAIN ACTIVITY of '3', '4', '5', '6', '7' and '8'.

The range for Q20 - EMPLOYMENT SECTOR is from '1' to '5'. If Q20 is out of range or is left blank where an entry is required, you should impute code '9' for Not Stated.

Consistency checks:

- 1) The coding of Q20 - EMPLOYMENT SECTOR can be related to Q17 - OCCUPATION, Q18 - EMPLOYMENT STATUS and Q19 - INDUSTRY.
- 2) Generally all Government workers (Q20 - EMPLOYMENT SECTOR is '1') are Paid employees. Therefore, if Q20 is '1' the code in Q18 - EMPLOYMENT STATUS should be '2'.
- 3) Certain occupations indicate the employment sector of the person. For example, if the Q17 - OCCUPATION was coded as '112' (Senior government officials) then Q20 - EMPLOYMENT SECTOR should be coded as '1' (Government). Similarly, if Q17 is coded as '621' (Subsistence agricultural worker) or if Q17 is listed under Major group 5 (Market sales workers), the Q20 of that person should be '4' (Private).
- 4) there is also a relationship between Q19 - INDUSTRY and Q20 - EMPLOYMENT SECTOR. For example, for persons working in Private households (Q19 - INDUSTRY is '950'), the Q20 - EMPLOYMENT SECTOR should be '4' (Private).

Above are just a few examples of the many inter-relationships between Q17 - OCCUPATION, Q18 - EMPLOYMENT STATUS, Q19 - INDUSTRY and Q20 - EMPLOYMENT SECTOR. The coding of these four variables will therefore be left to a team of specialized coders.

Chapter 6. Edit rules for Parts 3 and 4 of Form B.

Part 3 of the Household Questionnaire comprises questions on Fertility, whereas Part 4 relates to the Housing conditions and facilities. The edit rules applying to these questions will be discussed in this chapter.

30. Edit rules for Part 3 - Fertility

The Fertility questions are asked to all Females Aged 15 and Above. The Enumerators were instructed to identify on Part 2 all females Aged 15 and Above and to transpose their names and serial numbers to Part 3. The Names are recorded in Column 2 and the Serial Numbers in Column 3.

The first very important check is to ascertain that all Females Aged 15 and Above as recorded in Part 2, have been transposed to Part 3. Also check that the Names and Serial Numbers were transposed consistently.

You may find cases where eligible females (older than 15 years) have been omitted from Part 3. You should add them in Part 3 by copying the Name, and Serial Number from Part 2. To determine the fertility information of these ‘omitted females’ you should look at their Q6-MARITAL STATUS. If the MARITAL STATUS is ‘1’ (NEVER MARRIED) place ‘00’ in all fertility questions. If the MARITAL STATUS is ‘2’ (MARRIED), ‘3’ (WIDOWED), ‘4’ (DIVORCED), or ‘5’ (SEPARATED) place ‘99’ in the fertility questions to indicate ‘Not Stated’.

ASCERTAIN THAT ALL FEMALES AGED 15 AND ABOVE HAVE REPORTED FERTILITY INFORMATION IN PART 3.

CHILDREN BORN; F4a - MALES and F4b - FEMALES

Universe: Females aged 15 and above

Related variables: Q4 - SEX;
Q5 – AGE;
Q6 – MARITAL STATUS.

Range: 0 to 20, and 99.

The variable CHILDREN BORN is part of a skip pattern; it is only asked to Females aged 15 and above.

CHILDREN BORN is divided into two parts; Male Births and Female Births. The range for each of them is from 0 to 20, i.e. the minimum number of Male Births is 0, the maximum number is 20. In the same vein, the minimum number of Female Births is 0, the maximum is 20. **Note that the Total number of Births per woman (the sum of Male Births and Female Births) also cannot exceed 20. You should therefore sum up the number of Male Births and Female Births and check that the total is between 0 and 20. In case you encounter entries where the Total Births exceeds 20, call the attention of your Supervisor.**

If CHILDREN BORN is left blank where an entry is required according to the skip pattern, impute code '00' if the Q6-MARITAL STATUS is '1' (NEVER MARRIED), otherwise impute '99' for Not Stated.

CHILDREN ALIVE; F4c - MALES and F4d - FEMALES

Universe: Females aged 15 and above

Related variables: Q4 - SEX;
Q5 - AGE;
Q6 – MARITAL STATUS;
CHILDREN BORN.

Range: 0 to 20, and 99.

The variable CHILDREN ALIVE is also part of a skip pattern; it is only asked to Females aged 15 and above.

CHILDREN ALIVE is divided into two parts; Male Alive and Female Alive. The range for each of them is from 0 to 20, i.e. the minimum number of Male Alive is 0, the maximum number is 20; the minimum number of Female Alive is 0, the maximum is 20.

In addition to these general ranges, the following rules apply:

- 1) **the entry in Male Alive should be less or equal to the entry in Male Birth. It can never exceed this entry, i.e. there cannot be more Males alive than were born.**
- 2) **similarly, the entry in Female Alive should be less or equal to the entry in Female Birth. It can never exceed this entry, i.e. there cannot be more Females alive than were born.**

You should therefore compare the entries in Male Alive and Female Alive with those in Male Births and Female Births. Should you encounter cases where Male Alive and/or Female Alive exceeds the respective entries in Male Birth and Female Births, call the attention of your Supervisor.

If CHILDREN ALIVE is left blank where an entry is required according to the skip pattern, impute code '00' if the Q6-MARITAL STATUS is '1' (NEVER MARRIED), otherwise impute '99' for Not Stated.

CHILDREN DEAD; F4e - MALES and F4f - FEMALES

Universe: Females aged 15 and above

Related variables: Q4 - SEX;
Q5 - AGE;
CHILDREN BORN;
CHILDREN ALIVE.

Range: 0 to 20, and 99.

The entries in these Columns mainly serve as a check for CHILDREN BORN and CHILDREN ALIVE. You have to verify that:

(a) MALES BORN = (c) MALES ALIVE + (e) MALES DEAD and

(b) FEMALES BORN = (d) FEMALES ALIVE + (f) FEMALES DEAD

In case of any discrepancies call the attention of your Supervisor.

F5 - BIRTHS LAST YEAR

Universe: Females aged 15 and above

Related variables: Q4 - SEX;
Q5 - AGE;
Q6 – MARITAL STATUS;
CHILDREN BORN.

Range: 0 to 3, and 9.

The variable F5 - BIRTHS LAST YEAR is also part of a skip pattern; it is only asked to Females aged 15 and above.

This question is divided into two parts, Male Births and Female Births. The general range for each is from 0 to 3. You should however, also verify that the sum of Male Births and Female Births does not exceed 3.

Furthermore, the entries in BIRTHS LAST YEAR should be compared to those in (a) MALES BORN and (b) FEMALES BORN. The following rules apply:

F5 - MALES BORN LAST YEAR <= F4A - MALES BORN and

F5 - FEMALES BORN LAST YEAR <= F4B - FEMALES BORN

Should you encounter cases where F5 exceeds F4 for either Males or Females, call the attention of your Supervisor.

If F5 - BIRTHS LAST YEAR is left blank where an entry is required according to the skip pattern, impute code '0' if the Q6-MARITAL STATUS is '1' (NEVER MARRIED), otherwise impute '9' for Not Stated.

31. Edit rules for Part 4 - Housing Conditions and Facilities.

The following edit rules apply to Housing Conditions and Facilities of Part 4 of the questionnaire.

H1 - OCCUPANCY

Universe: all households.

Related variables: none.

Range: 1 to 4, and 9.

The range for H1 - OCCUPANCY is from 1 to 4. If this variable is out of range or left blank you should impute code '9' for Not Stated.

H2 - LIGHT

Universe: all households.

Related variables: other households in the Enumeration Area.

Range: 1 to 7, and 9 (for Phnom Penh only).

The range for H2 - LIGHT is from 1 to 7. In case this variable is out of range or is left blank you have to impute according to the following guidelines:

- 1) if the Enumeration Area is within Phnom Penh (Province code = '12') impute code '9' for Not Stated;
- 2) for all other E.A.'s outside Phnom Penh, impute the predominant source of light for the area.

H3 - COOKING FUEL

Universe: all households.

Related variables: other households in the Enumeration Area.

Range: 1 to 7, and 9 (for Phnom Penh only).

The range for H3 - COOKING FUEL is from 1 to 7. In case this variable is out of range or is left blank you have to impute according to the following guidelines:

- 1) if the Enumeration Area is within Phnom Penh (Province code = '12') impute code '9' for Not Stated;
- 2) for all other E.A.'s outside Phnom Penh, impute the predominant cooking fuel for the area.

H4 - TOILET

Universe: all households.

Related variables: other households in the Enumeration Area.

Range: 1 to 2, and 9 (for Phnom Penh only).

The range for H4 -TOILET is from 1 to 2. In case this variable is out of range or is left blank you have to impute according to the following guidelines:

- 1) if the Enumeration Area is within Phnom Penh (Province code = '12') impute code '9' for Not Stated;
- 2) for all other E.A.'s outside Phnom Penh, impute the predominant answer for the area (code '1' or '2').

H5 - DRINKING WATER

Universe: all households.

Related variables: other households in the Enumeration Area.

Range: 1 to 6, and 9 (for Phnom Penh only).

The range for H5 - DRINKING WATER is from 1 to 6. In case this variable is out of range or is left blank you have to impute according to the following guidelines:

- 1) if the Enumeration Area is within Phnom Penh (Province code = '12') impute code '9' for Not Stated;
- 2) for all other E.A.'s outside Phnom Penh, impute the predominant supply of drinking water for the area.

H6 - ROOMS

Universe: all households.

Related variables: none.

Range: 1 to 8, and 9.

The range for H6 - ROOMS is from 1 to 8. If this variable is out of range or left blank you should impute code '9' for Not Stated.

Chapter 7. Edit rules for Form A – House-list.

32. Introduction

Form A, the House-list, was filled out about 4 days preceding the Census Night. It was basically used to locate and identify all residential places. The house-list also contains some information about the predominant building materials. This information will supplement the questions in Form B, Part 4, on Housing conditions and Facilities.

33. Edit rules for Form A

First you need to check that the Identification particulars are entered properly in the specified columns on the top of Form A. Use the same rules and principles as given earlier in this manual.

The edit rules mainly relate to **Construction Materials** and the **Purpose of the Building**. The other variables on Form A, such as Particulars of Head of Household and Number of Persons usually living in the household, will not be captured. They, therefore, do not require any editing.

Wall (Col. 3)

A dash (-) was used for structures on pillars without a wall. In such cases you should impute code '0'. In case of blank or invalid entry (other than '0' to '8'), impute code '9' (unspecified) if the EA is within Phnom Penh. In other areas impute the predominant wall material of the area.

Roof (Col. 4)

If the entry is blank or invalid (other than code '1' to '8'), impute code '9' (unspecified) if the EA is within Phnom Penh. In other areas impute the code for predominant roof materials of the area. **You should also verify the following: if ROOF material was coded as '4' (Concrete/Brick/Stone), the WALL material**

should also be ‘4’ (Concrete/Brick/Stone). If WALL material is other than code ‘4’, correct the code for ROOF material as ‘8’ (Other).

Floor (Col. 5)

For blank or invalid entry (other than col. ‘1’ to ‘7’), impute code ‘9’ for Phnom Penh and the code for predominant floor material for all other areas.

Purpose of Building/ Structure (Col. 6)

If there is no entry or if there is any invalid entry (other than ‘1’ to ‘4’) impute code ‘9’.