

APPENDIX - 6

1993 POPULATION AND HOUSING CENSUS OF THE GAMBIA

Instructions for Post Enumeration Survey

1. General

There are three distinct stages of operation in the PES. These are:

- (i) Listing and enumeration of persons in all households in all compounds falling within the allotted Enumeration Area (E.A.).
- (ii) Desk matching of particulars collected in (i) with those contained in Form A Household Particulars, filled in during the Census.
- (iii) Field reconciliation of particulars regarding individuals who are not matched in PES Forms and Census forms concerned.

Form PES Part 1 will be used for initial listing and Form PES Part 2 will be filled in during field reconciliation after Desk Matching in the Office. The reference time for PES will be the Midnight of Monday, May 17, 1993.

2. Instructions to Enumerators for listing and enumeration

When you go to field you should carry with you

- (i) E.A. Map and E.A. Description
- (ii) Sufficient number of Forms, PES part 1

Utmost care has to be exercised in filling the schedule as some of the items may require careful probing. Please read out the brief note on this survey given on the first page of the schedule to anyone who wants to know why this enquiry is made. The concepts and definitions of all items included remain the same as in the Census. You should study them once again to refresh your memory. You may also carry with you a copy of the Census instructions for reference purposes in the field.

You should start the listing from the first compound and proceed to the next and so on. It is expected that the compound Nos. given during the Census will still be there.

3. Form PES Part 1 Section 1

Fill in the Identification Particulars as in the Census. The PES EA Code will be given to you which may be filled in the last column. Check whether the person whom you are enumerating as the head of the household is the same as the one who was head at census time. If it is a different person note the relationship of the present head to the head enumerated in the Census below the column Head of the Household.

The name of respondent in PES and his/her relationship to head may be given in the space provided for each at left hand bottom of the first page.

(II) Section 2

In this Section, enumerate all persons who stayed in this household on PES night (Thursday, May 6 1993). This will include usual members present and visitors on PES night. First write down in Col. 1 the usual members present followed by visitors as on PES night. Do not list the names of the usual members of this household who were absent on PES night. This is a crucial stage in the survey. You should, therefore, make every effort to enumerate all the persons mentioned above.

Columns 2 to 8

The information to be collected in these columns are the same as Cols. 2 to 5, Col. 7, Col. 13 and Col. 14 of Form A Household Questionnaire Part 2 canvassed in the Census. You may refresh your memory by reading the Census instructions for filling the corresponding columns in PES.

Column 9

This column has to be filled in for all persons listed in this Section. In this column you have to ascertain whether each person listed now was present or absent on Census Night, i.e. April 15, 1993. Ask, ``were you present or absent on Census Night? If present, Code 1 has to be given and if absent , Code 2 has to be given.

Column 10

This column will be filled for infants (age 00 in Col 3) who were absent on Census Night (Code 2 in Col 9). If such a child was born after Census Night give Code 1, if born before Census Night give Code 2.

Please note that these are key columns in Form PES Part 1 and should be filled after careful probe. These columns help to determine whether a person was eligible for enumeration in the Census and if so whether he/she has been enumerated or not.

(iii) Section 3

This Section contains a set of special probing questions which should be asked after completely filling all the columns of

Section 2

Question 1

If at least one of the persons listed in Section 2 was present on Census Night (April 15), tick Col. 2, leave Col. 3 blank and go to Question 2. If all persons mentioned in Part 2 were not present on Census Night it may be a case of in-migrated household or substitute household. In that case tick Col. 3, leave Col. 2 blank and go to Question 3, skipping Question 2.

Question 2

This should be answered only if there is a tick in Col. 2 against, Question 1. You may ask the respondent in the following manner: "You told me that the following person(s) were staying in this household on April 15. (Read out the names of persons with `1' in Col. 9 of section 2). Can you remember anyone else who stayed here on Census Night of April 15 who is/are not currently present in the household?". Remember, this will include any death since census date and any usual member absent at the time of the Survey.

If the answer is `Yes' circle `Yes' in Col. 2. If the answer is `No', circle `No' in Col. 3. If `Yes', collect the information of other persons who stayed on Census Night, but not on PES night in Section 4. If `No', you may terminate the interview.

Question 3

You may ask, ``You told me that none of the persons staying in this household now had stayed here on the night of April 15. If so, can you tell me who was staying here on April 15?" If the answer is `Yes', circle `Yes' in Col 2 and fill up all columns in Section 4. If the answer is `No' you should ascertain from neighbours, local officials etc, the required information and complete Section 4.

In the Remarks column, indicate the name and address of the person who gave the information.

4. Form PES Part 2

This Form in sufficient number will be taken to the field for reconciliation after Desk matching of PES Part 1 with Census records.

(i) Section 1

This relates to identification particulars which are same as for PES Part 1 Section 1.

(ii) Section 2

The matched persons (e.g. persons for whom name, relationship to head and marital status agree) would have been listed at Desk Matching stage and this should be used for reference purposes in the field.

(iii) Section 3

Columns 1 to 4 relating to non-matched persons would have been filled during Desk Matching stage from Form A.

Column 5 to 8

The persons listed in this section are those for whom some or all particulars (i.e. name, sex, relationship to head and marital status), differ in the two records.

For all such persons you will fill in these Columns.

5. Form P.E.S. Part 3

This relates to reconciliation of errors, if any, in respect of particulars regarding age, nationality, literacy and full - time education.

For the matched persons listed in Part 2 Section 2, these particulars would have also been Desk-matched between PES and Census. Cases of non-match would be listed in a separate Form called PES Part 3 (Section 2). In this Form also Section 1 relates to identification particulars which would have also been filled in during Desk Match. During field reconciliation you should ascertain which information (PES or CEN) is correct and record it against F.R. If both are wrong, write the correct information as ascertained in F.R.

At the end return to your supervisor all forms - PES Parts 1, 2 and 3.

6. Duties of Supervisor

Supervisor is in overall charge of the work of his/her Enumerators. Supervisor should help enumerators in identifying the selected E.As. and give general guidance. Supervisor should also test check in the field at least 10 percent of households. All the forms should be scrutinised carefully and signed.

APPENDIX - 7

POST ENUMERATION SURVEY

INSTRUCTIONS FOR DESK MATCH FOR PES PART 1, SECTION 2 AND SECTION 4

During the Desk Match for a E.A. you should have before you the following:-

- (i) Filled - in PES Part 1
- (ii) The Corresponding Census record, namely filled - in Form A
- (iii) Blank PEC Part 2 with Section 1 filled in and
- (iv) Blank PEC Part 3 with Section 1 filled in

You have to match particulars like name, sex, relationship to head and marital status in both PES and census records. In PES Part 1 Section 2 you have to consider for matching only persons with code 1 in col. 9. In Section 4 you have to match all persons.

The Desk Match should be carried out entry by entry. First check whether head of household is the same. It is possible that there might have been a change between Census and PES. Take note of any such change while verifying relationship.

Agreement regarding Name and Sex

Check whether the name and sex of the first person in PES form tallies with an entry in Form A. Ignore minor variations in spelling of name. If it tallies, put a tick mark over the name and sex in PES Form. If not, put a cross.

Agreement regarding Relationship

For persons for whom the name tallies in both the records check if the relationship to head tallies in both. As already mentioned take into account changes in head if any while doing this matching. If the relationship tallies put a tick over it in PES Form Otherwise put a cross.

Agreement regarding Marital Status

For the person whose name and the relationship to head tally, check if the marital status also tallies. If it tallies put a tick over marital status in PES Form. If not put a cross.

If you have recorded tick over all the four items mentioned above for the person in PES Form, tick the serial number in PES Form and in Form A for the corresponding entry. Repeat this matching procedure for all persons in PES Form.

If after seeing all the entries in the household in PES Part Section 2 (with code 1 in Col. 9), you may find unticked entries in Form A and PES Part 1 Section 2 and Section 4. Please note that persons with Code 2 in Col. 9 of PES Part 1 Section 2 need not be considered at all for matching purposes as they were not there on census night.

For matched persons (with tick (%) mark in Form A) copy out particulars from Form A in Part 2 Section 2.

There may be non-matched persons both in Form A and PES Part 2 Section 2 and Section 4

For non - matched persons in Form A, copy out particulars from Form A, in Part 2 Section 3 with a marginal remark ``Census". After this copy out particulars of non-matched persons in PES Part 1 Section 2 and Section 4 with a marginal remark ``PES".

MATCHING OF OTHER CHARACTERISTICS

Now take up one by one the matched persons in Part 1 Section 2. Match their particulars regarding age, nationality, literacy (only literate codes 1, 2 or 3 and not script) and full time education with Form A in the same way you matched earlier, name, sex etc. If these entries completely match for a person (i.e. all items ticked in PES Part 1 Section 2) no further action regarding this person is called for. If even one does not agree, record all these particulars for that person in Part 3 Section 2 from Census record and PES record in the space against CEN and PES.

After completing desk match in the manner detailed above for all households in the E.A., you are ready for Field reconciliation of Form PES Part 2 and Part 3 as mentioned in the PES instructions.

APPENDIX - 8

ESTIMATION OF COVERAGE ERROR AT NATIONAL LEVEL FROM PES

Let N_c be the number of persons counted in census. N_p , the number of persons counted in PES. N_m , the number of persons matched during Desk match and field reconciliation and N_t , the true total number of persons. Let the probability of a particular person being counted in census be P_1 and the probability of a particular person being counted in PES be P_2 .

1 Estimate of N_t

Since census and PES are independent,

$$E(N_m) = P_1 P_2 N_t \quad (1)$$

$$E(N_c) = P_1 N_t \quad (2)$$

$$E(N_p) = P_2 N_t \quad (3)$$

$$N_m = P_1 P_2 N_t = \frac{N_c}{N_t} \cdot \frac{N_p}{N_t} \cdot N_t = \frac{N_c \cdot N_p}{N_t}$$

$$\therefore N_t = \frac{N_c \cdot N_p}{N_m}$$

If E_c is the number of erroneously included persons in census, then,

$$N_t = \frac{(N_c - E_c) \cdot N_p}{N_m} \quad \text{---- I}$$

2. Estimate of completeness

Missed rate in census = $1 - R$ where R is the completion rate given by $\frac{N_m}{N_p}$. Erroneously Enumerated Rate is = $\frac{E_c}{N_t}$

$$\text{Net error rate} = \frac{(1 - R) \cdot N_p - E_c}{N_t}$$

$$= 1 - \frac{N_m}{N_p} - \frac{E_c}{N_t} \quad \text{----- II}$$

From equation I, $\frac{N_m}{N_p} = \frac{N_c - E_c}{N_t}$

Substituting in II,

$$\text{Net error rate} = 1 - \frac{N_c - E_c}{N_t} - \frac{E_c}{N_t}$$

$$= 1 - \frac{N_c}{N_t} \quad \text{----- III}$$

Equation I gives the true population and Equation III gives the Net error rate. While working out the completion rate, missed rate, erroneously enumerated rate and net error rate, the corresponding Standard Errors will also be worked out and presented. Following is the Estimation Model:

CENSUS	PES		
	TOTAL	REPORTED	NOT REPORTED
TOTAL	Nt	Np	(V2)
REPORTED	Nc	Nm	U2
NOT REPORTED	(V1)	U1	(Z)

Note :- $U1 = Np - Nm$; $U2 = Nc - Nm$