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1980 CENSUS OF THE COMMONWEALTH CARIBBEAN

Proposals for Data Analysis

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INTRODUCTION

The following text is a schematized proposal for the analysis of 1980 census data for those countries of the Commonwealth Caribbean which are using the Regional Processing Centre in Barbados to process their data. It is being circulated for comments to members of the working group on data analysis, set up after the 6th Meeting of the Standing Committee of Caribbean Statisticians.

It is proposed that the analytical commentary be centered round a set of derived tables, which present important features of the extensive computer-produced census tables, in an easily digestible form. Each table is described here, with possible extensions which might apply to only a sub-group of countries, and suggested table layouts are presented in an appendix. Data sources for each table are also shown, (References to 1980 data are based on the tabulation plan approved by the 5th Meeting of the Standing Committee of Caribbean Statisticians).

Also included in this plan, is a list of definitions and explanations which will have to be embodied in the text of the analytical commentary, in order to clarify the tables, and point by point suggestions for description of the results shown by the tables. Naturally, the latter will vary somewhat from one country to the next, depending on which features of the tables prove interesting, or need discussing because they contradict or re-inforce results obtained from other parts of the census, or outside data sources.

BASIC TABLES

EXTENSIONS

DATA SOURCES

SECTION A - INTRODUCTION

A1 De Facto census populations by sex, for all census years, with sex ratios, intercensal increase (in absolute numbers and as %), and average intercensal growth rates, per annum.

A2 De Facto population by major area, broken down by population included in detailed tables, and excluded from detailed tables, showing exclusions as proportion of total

A3 De Facto population by type of household (institutional or private) broken down by populations included in/excluded from detailed tables.

A4 De Facto population by usual residence (this country/abroad) broken down by populations included in/excluded from detailed tables.

With Urban/Rural summaries if required.

1980 - Enumerators' visitation records by sex.
1970 - Volume III table A
1960 - First country volume for each territory earlier censuses - as available.

Enumerators' visitation records by sex and area.
Table 1.1.

Enumerators' visitation records by household type.
Table 1.2 and Table 11.1.

Enumerators' visitation records do not show usual residence, so it will not be possible to get a true breakdown of the de facto population by this category. It would not be difficult to impute residence for the institutional population: e.g. hotels - abroad; prisons - this country etc., provided that a detailed listing of population by type of institution is made available. Presumably those enumerated in private households who are not usually resident in the country have a questionnaire filled out, but are excluded from the tabulations by a filter condition during data editing. A request should be made to RPC to produce a count of such non-residents.

EXPLANATIONS AND DEFINITIONS

DISCUSSION

SECTION A -- INTRODUCTION

- A1 "De Facto" population
Intercensal increase
average annual growth rates
Sex ratio
- A2 Criteria for inclusion and exclusion

Construction of this table by finding
differences between the two data sources.
- A3 Definition of household types

Construction of this table by finding
differences between the two data sources.
- A4 Explanation of how this table is constructed,
including imputations made.

Trends in total population size, and sex ratios,
over time.

Size (relative and absolute) of excluded com-
ponent.
Variation of proportion excluded by region.

Proportions excluded by household type.

"Guesstimate" what fraction of the population
excluded from detailed tables consists of
tourists.

BASIC TABLES

EXTENSIONS

DATA SOURCES

A5	Components of intercensal, population change 1970-1980, showing births, deaths, natural increase, intercensal increase, and net migration, all by sex.		Registered births for all years 1970-1980 inc. Registered deaths for all years 1970-1980 inc.
A6	Population size and average annual growth rates (1970-1980) for all Commonwealth Caribbean Countries	If the data can be found, Guyana and Belize may wish to include facts about their non-Commonwealth neighbours.	1970 Vol III, table A 1980 - Table A1 in each countries' census commentary.
A7	Population included in detailed tables by sex, 1970 and 1980, with "included" population as a proportion of the de facto population, and showing intercensal increase (absolute and %) of "included" population		1970 - Vol III, table A 1980 - See table A2

SECTION B - DEMOGRAPHIC CHARACTERISTICS

B1	Population by sex and 5-year age-group, with sex ratios for each age group, and percentage distribution by age for each sex, and for the total population	(Illustration only) population by sex and single years of age (i.e. population pyramid)	Table 1.2
B2	Percentage age distribution of the population in broad age groups: (under 15, 15 to 64, 65+) for 1960, 1970 and 1980.		1960, country Vol. II, table A5 1970, Vol. III, Section B, this country 1980, Table 1.1
B3	Distribution of population by major area, absolute numbers and percentages, 1960, 1970 and 1980; with ratios 70/60 and 80/70.	Urban/Rural summaries where required for 1980.	1960, country Vol. II, table A5 1970, Vol. III, Section C, this country 1980, Table 1.2

EXPLANATIONS AND DEFINITIONS

A5 Natural increase
Net migration

Comment on relative size and direction of natural increase and net migration. Note assumptions made about completeness of coverage of '70 and '80 censuses and completeness of vital statistics - if the estimates of natural increase, intercensal increase and net-migration appear improbable, comment on effects of under-coverage in data sources.

A6

Compare size and growth rate with other countries of the region.

A7

Comment on trend in proportions included in detailed tables, taking into account trend in likely numbers of tourists, as discussed after table A4. Also comment on change in size of "included" population, compared with change in size of De facto population noted after A1.

SECTION B - DEMOGRAPHIC CHARACTERISTICS

B1 Measure of digit preference -

Calculate measure of digit preference (e.g. Whipples index), comment on its size, and point out any obvious digit preference features of age pyramid. Comment on any peculiarities of the age structure, and on trends of sex ratios with age.

B2 Dependency ratio.

Comment on broad changes in age structure since 1960
Calculate dependency ratios and comment on trend.

B3

Comment on relative growth and decline of different areas since 1960.

BASIC TABLES

EXTENSIONS

DATA SOURCES

B4	Population density by major area	Urban/rural summary if required.	Table 1.2 and land areas of each major area - request data from statistical offices.
B5	Locally born population by place of birth and place of residence (major areas)	Urban/rural summary if required.	Table 4.1.
B6	Foreign born population by sex and 10-year age groups, with percentage distributions by age and sex ratios.	Proportions of resident population born abroad by age group (if variation with age is interesting).	Table 3.1
B7	Foreign born population by country of birth and year of immigration.	(note-grouping of birth-place will vary from one country to another).	Table 3.3
B8	Foreign born population by sex, 1960, 1970 and 1980.		1960 Country Vol. II, table 7 1970 by subtraction of "locally born" in Vol. V, from total population in Vol. III. 1980 Table 3.1 Entry and Departure statistics 1970-1980 - request.

SECTION C - ECONOMIC ACTIVITY

C1	Adult population by sex and by week's economic activity (absolute numbers and percentage distribution) and percentage distribution for 1970.	Percentage distributions by week's activity from continuous household survey, where available.	1980 Table 2.1 1970 Vol. IV, table 1 for this country. Survey data - request.
C2	Adult population by sex and by main activity (absolute Nos. and % distribution) and % distribution for 1970		1980 Table 2.2 1970 Vol. IV, table 2.

EXPLANATIONS AND DEFINITIONS

- B4 Population density
dispersal index
- B5
- B6
- B7 Birthplace groupings used.
Note "structural" omissions - dead
immigrants, returning emigrants, etc.
- B8

DISCUSSION

Comment on relative density with reference to current size and trends as revealed by B3: Calculate index of dispersal and comment on its size.

Comment on major components of internal migration, expressing "movers" and "non-movers" as percentage of persons born in an area to illustrate magnitude of drift. Compare with results of tables B3 and B4.

Describe main features of age and sex structure of immigrant population. Express immigrants as a proportion of all residents, and comment on variation of this proportion with age.

Trends in volume of immigration. Percentages of immigrants from principal source countries. Changes in source country composition of migrants during the last decade.

Describe changes in numbers of immigrants since 1960. Making an allowance for deaths of immigrants compute likely volume of in-migration in intercensal intervals. Compare with results of B7. Estimate out-migration from net migration found in A5. Compare with entry and departure statistics for intercensal intervals, if available.

SECTION C - ECONOMIC ACTIVITY

- C1 Define "adult" population, and
"economically active"
- C2 Main activity, Labour Force.

Difference between the sexes. Changes since 1970. Compatibility with household survey data where applicable. Compute economically active as proportion of total adult population for each sex.

Differs between sexes, changes since 1970, labour force proportion of total adult population for

BASIC TABLES	EXTENSIONS	DATA SOURCES
C3 Percentage distribution of Main Activity for each age-group, by sex, with Labour Force expressed as percentage of total population in each age group.	Urban/Rural summaries where required.	Table 2.2
C4 Percentage distribution of Main Activity in each Major Area, by sex, with Labour Force expressed as percentage of total.		Table 2.2.3
C5 Unemployment rates by sex and age group, 1970 and 1980.		1970 - Vol. IV, tables 1 and 2. 1980 - Tables 2.1 and 2.2.
C6 Adult population by sex and number of months worked, with % distribution by number of months worked for 1970 and 1980.		1970 - Vol. IV, table 7. 1980 - Table 2.2.1
C7 Percentage distribution of number of months worked in grouped main activity categories, by sex.		Table 2.2.1
C8 Unemployment rates for educational attainment categories, by sex, for 1970 and 1980.		1970 - Vol. IV, table 7. 1980 - Table 2.2.2
C9 Percentage distribution of Occupational Status for employed persons by sex, 1970 and 1980.		1970 - Vol. IV, table 2 1980 - Table 2.3
C10 Unemployment rates for Occupational status categories by sex, 1970 and 1980.		1970 - Vol. IV, table 2 1980 - table 2.3

EXPLANATIONS AND DEFINITIONS

DISCUSSION

C3		Variations of main activity and labour force with age and sex.
C4		Variation of main activity and proportions in labour force by area.
C5	Unemployment rate, "employed", "Unemployed"	Variation of unemployment with age and sex, trends since 1970.
C6		Differences between sexes, trends since 1970 in number of months worked.
C7	Main activity groupings	Variation by main activity category of number of months worked.
C8		Compare unemployment rates across education groups and between sexes, comment on trends since 1970.
C9	Occupational status	Compare distributions between sexes and note trends over time.
C10		Comment on variation of unemployment over occupational status, between sexes and trends since 1970.

BASIC TABLES	EXTENSIONS	DATA SOURCES
C11 Percentage distribution of occupational groups for employed persons by sex, 1970 and 1980		1970-Vol. IV, table 1 1980-Table 2.4
C12 Unemployment rates for occupational groups by sex, 1970 and 1980		1970 - Vol. IV, table 1 1980 - table 2.4
C13 Percentage distribution of employed persons in various industries, by sex, for 1970 and 1980.		1970 - Vol. IV, table 2 1980 - table 2.5
C14 Unemployment rates for industrial groups, by sex, 1970 and 1980.		1970 - Vol. IV, table 2 1980 - table 2.5
SECTION D - OTHER SOCIO-ECONOMIC CHARACTERISTICS		
D1 Population currently attending school by sex and single years of age; with same expressed as proportion of total population of that age; also proportions for 1970.		1970 - Vol. VI, table 1 1980 - table 5.1
D2 Population currently attending school by sex and type of school attended	Same from school enrolment records for 1979-80.	Table 5.1 request school enrolment records.
D3 Percentage distribution of type of education received by adult population by sex, 1970-1980.		1970 - Vol. VI, table 3 1980 - table 5.2
D4 Percentage distribution of type of education received by adult population, by sex and five-year age-groups.		

EXPLANATIONS AND DEFINITIONS

C11 Occupational group

C12

C13 Industrial group

C14

DISCUSSION

Comparison of distributions between sexes and over time.

Comparison of unemployment rates across groupings and between sexes, noting trends over time.

Comparison of distributions between sexes and over time.

Unemployment rates for different industries, changes since 1970.

SECTION D - OTHER SOCIO-ECONOMIC CHARACTERISTICS

D1

Age patterns of school attendance compared between sexes and over time.

D2 Grouping of school types

Comparison of school type attended by sex, bearing in mind results of D1. Comparison with enrolment statistics - comment on "structural" differences due to mid-term dropouts.

D3 Define "adult" population

Comparison of educational level between sexes and over time.

D4

Describe age patterns of educational level, and compare achievements of males and females.

BASIC TABLES	EXTENSIONS	DATA SOURCES
D5 Percentage distribution of adult population by sex, according to highest exam passed 1970 and 1980.		1970 Vol. VI, table 4 1980 Table 5.3
D6 Proportions of adult populations in each 5-year age group with 7+ years of primary schooling by sex, for 1970 and 1980.		1970 Vol. VI, table 5 1980 Table 5.4
D7 Numbers of persons with vocational training in special occupation groups, and numbers currently training, by sex		Table 6.2
D8 Proportions of adults in each 5-year age group with vocational training, by sex, for 1970 and 1980.		1970 Vol. VI, table 6 1980 Table 6.1
D9 Percentage distribution of method of training for adults with vocational training, by sex, 1970 and 1980.		1970 Vol. VI, table 7 1980 Table 6.2
D10 Population by race, 1960, 1970 and 1980, and percentages in each racial group for each year with ratios 70/60; 80/70.	percentages under 15, if growth rates are very different.	1980 Table 7.1 1970 Vol. VII, Table 1. 1960 Vol. II, Part A, Table 5.
D11 Population by religion, 1960, 1970 and 1980, with percentage distributions for year and ratios 70/60 and 80/70.		1980 Table 7.2 1970 Vol. VII, Table 2. 1960 Vol. II, Part A, Table 6.
SECTION E - MARRIAGE AND FERTILITY		
E1 Population aged 15 and over by sex and marital status, 1960, 1970 and 1980, and percentage distributions by marital status for each year.	(note 1960 data might not be available for all countries)	1960 Vol. III, Part B, Table 1 1970 Vol. VIII, Table 1 1980 Table 8.1

EXPLANATIONS AND DEFINITIONS

DISCUSSION

D5 Grouping of examinations, with particular reference to CXC

Compare achievements of sexes, and trends since 1970.

D6 Note that 7+ years means completed primary

Compare levels for sexes, and trends since 1970. Note any incompatibilities between 1970 and 1980 data.

D7 Relationship of this grouping with one used in C11, and C12

Note major occupations for each sex.

D8

Describe general age pattern of vocational training, note differences for sexes, and trend over time.

D9 Method of training - note difficulty with "On-the-job" category.

Differences between sexes, trends over time.

D10 Groupings of race used.

Changes in racial composition over time.

D11 Groupings of religion used.

Changes in religious adherence over time.

SECTION E - MARRIAGE AND FERTILITY

E1

Check for discrepancies between married males and females
Comment on distributions and trends,

BASIC TABLES	EXTENSIONS	DATA SOURCES
E2 Percentage distribution by marital status in each sex and age group		Table 8.1
E3 Singulate mean age at marriage, by sex, 1960, 1970 and 1980.		1960 Vol. III, part B, table 3 1970 Vol. III, part 1, table 1 1980 Table 8.1.
E4 Proportions never married by age 50 for women and age 60 for men, 1960, 1970 and 1980		- " -
E5 Mean age at marriage, and proportions never marrying, by sex and education		Table 8.1.1
E6 Percentage distribution of females in each 5-year age group, from 15-44, by union status, for 1960, 1970 and 1980.		1960 Vol. III, part B, table 5 1970 Vol. VIII, part 2, table 1 1980 Table 8.2
E7 Mean age at union formation, and proportions never entering a union, 1960, 1970 and 1980.		- " -
E8 Mean age at union formation, and proportions never in union by educational attainment		Table 8.2.1
E9 Live births during the last year by age of mother (5-year age groups) with total numbers of women in each age group (15-49), and age specific fertility rates.	Registered births for May 1970 - April 1980 by age of mother, with age specific fertility rates.	Table 8.4 Registered births by month of occurrence by age of mother - request from statistical offices.
E10 Age specific fertility rates and total fertility rate by educational attainment of mother.		Table 8.4.1

EXPLANATIONS AND DEFINITIONS

DISCUSSION

E2

Comparisons across sex and age groups, recalling population sex ratios, influence of remarriage.

E3

Singulate mean age at marriage

Comparison between the sexes, trends since 1960.

E4

Trends since 1960.

E5

Patterns of marriage with education

E6

Union status categories

Patterns of union formation by age
Trends over time
Comparisons with analysis of marriage.

E7

Mean age at union formation

Trends since 1960.

E8

Patterns of union formation with education

E9

Age specific fertility rates, total fertility rate, half year shift in age in census data compared with registrations.

Compare total live births from census with registered births.
Calculate total fertility rate. Comment on size and shape of fertility schedule. Compare shape with registration based fertility schedule.

E10

Compare shape and level of fertility schedule over education categories.

BASIC TABLES	EXTENSIONS	DATA SOURCES
E11 Age specific fertility rates and total fertility rate by union status		Table 8.4.2.
E12 Total children ever borne by age of women (5-year age groups 15-74, 75+), with women in each age group and mean parity by age, also mean parities by age for 1980.		1970 Vol. VIII, part 3, table 1 1980 Table 8.3
E13 Percentage distribution of women by parity for each age group		Table 8.3
E14 Fertility rates by 5-year age group and parity of mother		Table 8.4
E15 Mean parities by 5-year age group (15-44) and union status, 1970 and 1980	Parities of composite "not cohabiting" group.	Table 8.4.2
E16 Mean parities by 5-year age group and educational attainment		Table 8.3.2
E17 Mean parities by 5-year age group and main activity		Table 8.3.3
E18 Percentage distribution of age at first and last birth, of women currently aged 50 to 64, for 1970 and 1980		1970 Vol. VIII, part 3, Table 6 and 7
E19 Percentage distribution of age at first and last birth of women currently aged 50 to 64, by union status		Tables 8.5 and 8.6

EXPLANATIONS AND DEFINITIONS

- E11
- E12 Mean parity
Relationship between parity and current fertility.
- E13
- E14 Age and parity specific fertility rate.
- E15 Truncation at age 45, difficulty of measuring "visiting union" fertility
- E16
- E17
- E18 Truncation effects.
- E19 Retrospective nature of union status.

DISCUSSION

Compare shape and level of fertility schedule over union status categories.

Describe pattern of variation of parity with age, and trends since 1970. Point out any inconsistencies over time (e.g. declines in cohort parity). Discuss compatibility with current fertility data (E9), taking into account any recent evidence of changes in fertility.

Comment on distributions, particularly on proportions childless by age.

Describe variations of fertility with parity for age groups.

Variation of parity by union status, trends since 1970.

Variation of parity with mother's education.

Variation of parity with mother's employment.

Changes in distribution of ages at first and last birth since 1970.

Variation in distribution of ages at first and last birth with union status.

BASIC TABLES

EXTENSIONS

DATA SOURCES

SECTION F - HOUSING AND HOUSEHOLD

F1	Distribution of households by major area (absolute nos. and % distribution) with mean household size for each area, for 1970 and 1980.	with urban/rural summaries where required.	1970 Vol. IX, table 1
F2	Percentage distribution of households and population by size of household, 1970 and 1980.		1970 Vol. IX, tables 8 and 9 1980 Table 11.3
F3	Percentage distribution of households by no. of rooms, 1970 and 1980.		1970 Vol. IX, tables 8 and 9 1980 Table 11.3
F4	Percentage distribution of households and population by ratio of persons to rooms, 1970 and 1980.		1970 Vol. IX, tables 8 and 9 1980 Table 11.3
F5	Percentage distributions of persons and households by family type		Table 11.3
F6	Mean No. of persons per room by family type		Table 11.3
F7	Mean no. of persons per room by major area.	urban/rural summaries where required.	Table 11.1
F8	Percentage distribution of households by sex and main activity of head, 1970 and 1980.		Table 11.2

EXPLANATIONS AND DEFINITIONS

DISCUSSION

SECTION F - HOUSING AND HOUSEHOLD

F1	Household and mean household size	Compare distribution of households with that of population (as in Table B3). Describe variation of mean household size and compare with population density (table B4). Comment on trends since 1970.
F2	Relationship between the two distributions.	Comment on distributions and trends since 1970.
F3		Comment on distributions and trends since 1970.
F4	Person to room ratios as measure of overcrowding.	Comment on distributions, noting skewness. Note trends since 1970.
F5	Family type	Describe overall family type distribution for persons and households.
F6		Comment on variation of persons per room ratio, with reference to levels found in F4.
F7		Variation in ratio by major area - compare with distribution of households by size (F1) and population density (B4).
F8	Arbitrariness of choice of head.	Compare main activity distribution of household heads, with that of general population. (table C2) note trends since 1970.

BASIC TABLES	EXTENSIONS	DATA SOURCES
F9 Percentage distribution of households by type of dwelling, 1970 and 1980.		1970 Vol. IX, table 2 1980 Table 9.1
F10 Percentage distribution of households by type of tenure, 1970 and 1980.	Breakdown by urban/rural for 1980 if required.	1970 Vol. IX, table 2 1980 table 9.2
F11 Percentage distribution of dwellings by material of construction 1970 and 1980.	Breakdown by urban/rural for 1980 if required.	1970 Vol. IX, table 2 1980 table 9.4
F12 Distribution of dwellings (percentages and absolute number) by year of construction with estimated annual construction rates.		table 9.3
F13 Percentage distribution of dwellings by method of water supply, 1970 and 1980.	Breakdown by urban/rural for 1980 if required.	1970 Vol. IX, table 3 1980 table 10.1
F14 Percentage distribution of dwellings by type and availability of toilet facilities, 1970 and 1980.	Breakdown by urban/rural for 1980 if required.	1970 Vol. IX, tables 4a and 4b. 1980 table 10.2
F15 Percentage distribution by type of lighting	urban/rural breakdown if required	table 10.3
F16 Percentage distribution by type of cooling fuel used.	urban/rural breakdown if required.	table 10.4

EXPLANATIONS AND DEFINITIONS

DISCUSSION

F9

Comment on distribution and changes since 1970.

F10

Comment on distribution and changes since 1970.

F11 Dwelling (as opposed to household)

Comment on distribution and changes since 1970.

F12 Annual construction rate, truncation effects.

Comment on distribution and trend in construction rate.

F13

Comment on distribution and changes since 1970.

F14 Difference between type and availability

Comment on distribution and changes since 1970.

F15

Describe distribution.

F16

Describe distribution.