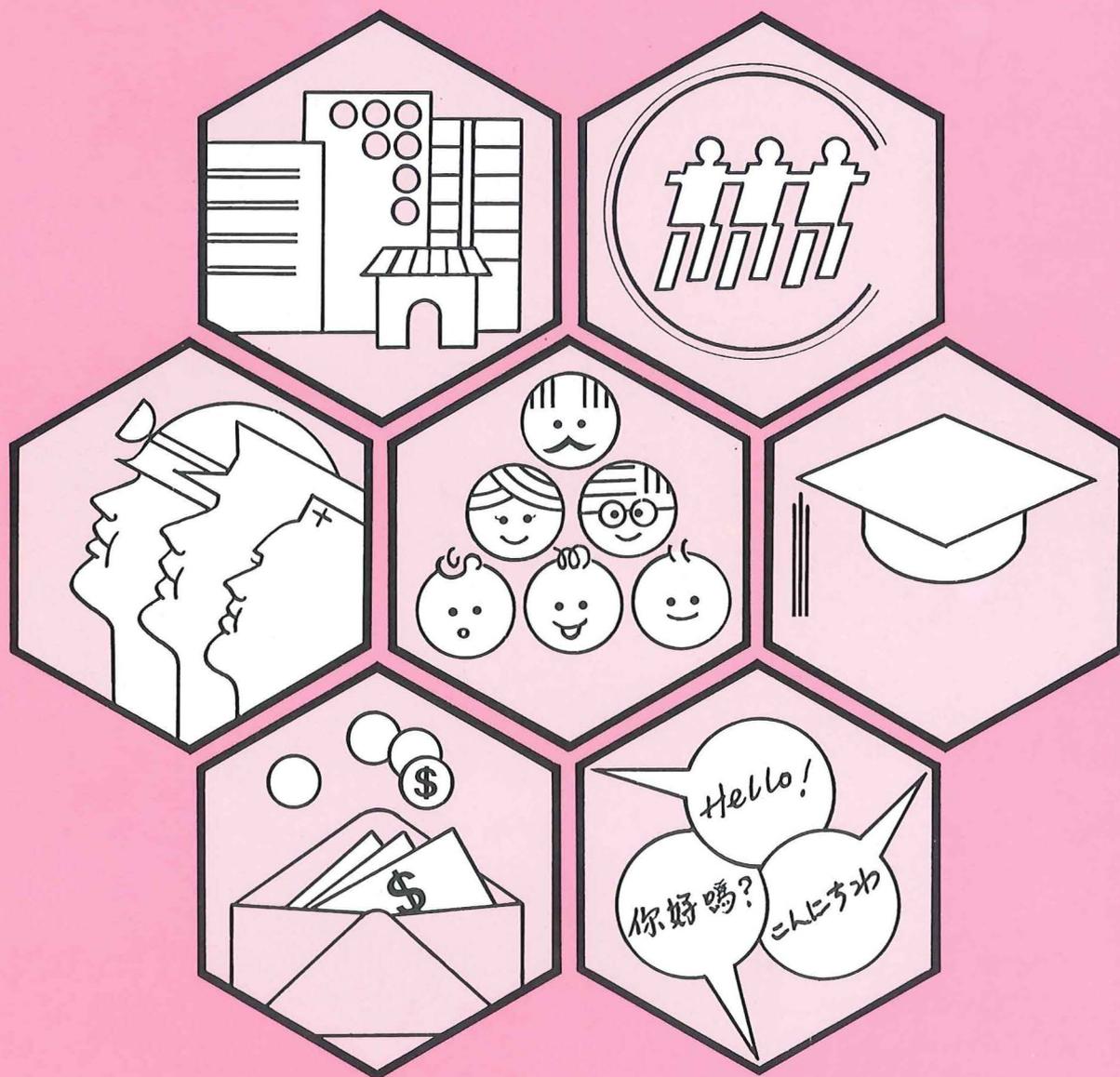


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# HONG KONG 1991 POPULATION CENSUS

## *Main Report*



# Hong Kong 1991 Population Census

## Main Report

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# Contents

	<i>Page</i>
<b>Foreword</b>	5
<b>List of Tables</b>	7
<b>Conventions</b>	15
<b>Chapter 1 : Overview</b>	17
<b>Chapter 2 : Demographic Characteristics</b>	25
<b>Chapter 3 : Household Characteristics</b>	49
<b>Chapter 4 : Education Characteristics</b>	69
<b>Chapter 5 : Economic Characteristics</b>	79
<b>Chapter 6 : Housing Characteristics</b>	99
<b>Chapter 7 : Internal Movement</b>	109
<b>Chapter 8 : New Town Population</b>	127
<b>Chapter 9 : Census Procedures</b>	145
<b>Chapter 10 : Sample Design and Estimation Procedures</b>	157
<b>Chapter 11 : Assessment of Quality of the Census Data</b>	165
<b>Annexes</b>	
Annex 1 : Definition of Terms	177
Annex 2 : Technical Notes	197
I : Computation of Singulate Mean Age at Marriage	198
II : Computation of Net Annual Internal Movement Rate	201

**Appendices**

Appendix 1 : Short Form Questionnaire	203
Appendix 2 : Long Form Questionnaire	205
Appendix 3 : Optical Character Recognition (OCR) Form	207
Appendix 4 : Map of District Board District Boundaries : Hong Kong Island, Kowloon and New Kowloon	209
Appendix 5 : Map of District Board District/New Town Boundaries : The New Territories	211
Appendix 6 : List of 1991 Population Census Publications	213
Appendix 7 : Order Form for Publications on the 1991 Population Census	215

## Foreword

This is the final one in a series of publications on the results of the 1991 Population Census. This report presents data from the Census in the form of detailed analysis of specific topics on the demographic, household, education, economic and housing characteristics of the population. A general account of findings in respect of various topics is presented together with supporting tables. Comparisons are made with the results of the past censuses as appropriate. Descriptions of procedures and techniques and an assessment of data quality are also given to complete the report.

The 1991 Population Census comprised a complete enumeration of all persons by age and sex and a one-in-seven sample enquiry on a broad range of demographic and socio-economic characteristics of the population. All households in Hong Kong were enumerated during a ten-day period from 15 to 24 March 1991. The Census results provide a snapshot of the size and characteristics of the population on the Census reference date of 15 March 1991.

This report goes into some length in analysing the demographic, social and economic situation of the population. The report 'Main Tables', which was published earlier on, contains detailed tables covering the population, households and living quarters in the whole territory and may be considered as closely complementary to this one. Besides, results of the Census on various specific aspects are available in a number of other publications already released. A full list of the series of census publications is given at the end of this report.

Frederick W H HO  
Commissioner for Census & Statistics

May 1993



# List of Tables

	<i>Page</i>
<b>Overview</b>	
Table 1.1 De facto Population and Resident Population, 1991	19
<b>Demographic Characteristics</b>	
Table 2.1 Resident Population and Annual Growth Rates, 1961-1991	32
Table 2.2 Components of Population Growth, 1961-1991	32
Table 2.3 Crude Birth Rates, Crude Death Rates and Rates of Natural Increase, 1961-1991	32
Table 2.4 Number of Births and General Fertility Rates, 1971-1991	33
Table 2.5 Age-specific Fertility Rates, 1971-1991	33
Table 2.6 Age-sex-specific Death Rates by Sex and Age, 1971-1991	34
Table 2.7 Expectation of Life at Birth by Sex, 1971-1991	35
Table 2.8 Expectation of Life at Birth for Hong Kong and Selected Countries by Sex, 1981-1988	35
Table 2.9 Population by Age and Sex, 1971-1991	36
Table 2.10 Percentage Distribution of Population by Age, 1971-1991	37
Table 2.11 Median Age and Age Dependency Ratios, 1971-1991	38
Table 2.12 Sex Ratios of Population by Age, 1971-1991	38
Table 2.13 Sex Ratios by Nationality and Age, 1991	39
Table 2.14 Population by Place of Birth, 1981, 1986 and 1991	40
Table 2.15 Proportion of Population Born in Hong Kong by Age and Sex, 1981, 1986 and 1991	40
Table 2.16 Population by Nationality and Place of Birth, 1991	41
Table 2.17 Population Aged 15 and Over by Sex and Marital Status, 1981, 1986 and 1991	42

	<i>Page</i>
Table 2.18 Proportion of Never Married Population Aged 15-54 by Sex and Age, 1981, 1986 and 1991	43
Table 2.19 Median Age at First Marriage by Sex, 1971-1991	44
Table 2.20 Population Aged 5 and Over by Usual Language/Dialect and Place of Birth, 1991	44
Table 2.21 Proportion of Population Aged 5 and Over Able to Speak Selected Languages/Dialects, 1991	45
Table 2.22 Population by Duration of Residence in Hong Kong and Place of Birth, 1991	45
Table 2.23 Population Aged 5 and Over Having Moved into Hong Kong during the Past Five Years by Age and Sex, 1991	46
Table 2.24 Resident Population by Area, 1981, 1986 and 1991	46
Table 2.25 Resident Population by District Board District, 1981, 1986 and 1991	47

## **Household Characteristics**

Table 3.1 Number of Domestic Households, 1961-1991	56
Table 3.2 Domestic Households by Household Size, 1981, 1986 and 1991	56
Table 3.3 Percentage Distribution of Domestic Households by Type of Living Quarters and Household Size, 1981, 1986 and 1991	57
Table 3.4 Domestic Households by Household Composition, 1981, 1986 and 1991	58
Table 3.5 Percentage Distribution of Domestic Households by Household Size and Number of Children Aged Under 15, 1981, 1986 and 1991	59
Table 3.6 Domestic Households with Elderly Persons Aged 60 and Over by Household Size, 1981, 1986 and 1991	60
Table 3.7 Domestic Households with Elderly Persons Aged 60 and Over Living with Non-elderly Persons by Household Size, 1981, 1986 and 1991	61

	<i>Page</i>
Table 3.8 Average Number of Working Members and Ratio of Non-working Members to Working Members by Household Size, 1981, 1986 and 1991	62
Table 3.9 Domestic Households by Monthly Household Income, 1981, 1986 and 1991	62
Table 3.10 Median Monthly Household Income by Household Size, 1981, 1986 and 1991	63
Table 3.11 Percentage Distribution of Domestic Households by Monthly Household Income and Number of Working Members, 1991	64
Table 3.12 Median Monthly Household Income by Type of Living Quarters, 1981, 1986 and 1991	65
Table 3.13 Decile Distribution of Monthly Household Income of Domestic Households, 1981, 1986 and 1991	66
Table 3.14 Median Monthly Household Income of Domestic Households between Quintiles in the Income Distribution, 1981, 1986 and 1991	67
Table 3.15 Median Monthly Household Rent and Median Rent-income Ratios of Domestic Households in Permanent Housing by Type of Living Quarters, 1981 and 1991	67
Table 3.16 Headship Rates by Age and Standardised Headship Rates, 1981, 1986 and 1991	68
Table 3.17 Age-specific Headship Rates by Age, 1981, 1986 and 1991	68

## **Education Characteristics**

Table 4.1 Population Aged 6 and Over with Primary Education or Above by Age, 1981, 1986 and 1991	73
Table 4.2 Percentage Distribution of Population Aged 15 and Over by Educational Attainment and Sex, 1981 and 1991	73
Table 4.3 Percentage Distribution of Population Aged 15 and Over by Age and Educational Attainment, 1991	74
Table 4.4 School Attendance Rates by Age and Sex, 1981, 1986 and 1991	74

	<i>Page</i>
Table 4.5 Pupil-teacher Ratios and Average Class Size by Level of Education, 1981, 1986 and 1991	74
Table 4.6 Percentage Distribution of Population Aged 15 and Over with Tertiary Education by Age and Whether Studying, 1981 and 1991	75
Table 4.7 Percentage Distribution of Population with Tertiary Education by Type of Tertiary Education and Sex, 1981 and 1991	76
Table 4.8 Percentage Distribution of Population with Tertiary Education by Field of Education and Sex, 1981 and 1991	77

## **Economic Characteristics**

Table 5.1 Population by Sex and Activity Status, 1961-1991	85
Table 5.2 Average Annual Growth Rates of Population by Sex and Activity Status, 1961-1991	86
Table 5.3 Growth of Labour Force Analysed by Factors, 1981 and 1991	86
Table 5.4 Labour Force Participation Rates by Age and Sex, 1981, 1986 and 1991	87
Table 5.5 Standardised Overall Labour Force Participation Rates by Sex, 1981, 1986 and 1991	87
Table 5.6 Population by Age, Activity Status and Sex, 1981, 1986 and 1991	88
Table 5.7 Median Age of Economically Active Population by Sex, 1981, 1986 and 1991	89
Table 5.8 Labour Force Participation Rates by Age, Sex and Marital Status, 1981, 1986 and 1991	90
Table 5.9 Labour Force and Labour Force Participation Rates by Broad Area and Sex, 1981, 1986 and 1991	91
Table 5.10 Working Population by Educational Attainment and Sex, 1981, 1986 and 1991	92
Table 5.11 Working Population by Activity Status, 1981, 1986 and 1991	93

	<i>Page</i>
Table 5.12 Working Population by Occupation (ISCO-88 Classification) and Sex, 1991	93
Table 5.13 Working Population by Occupation (ISCO-68 Classification), 1981, 1986 and 1991	94
Table 5.14 Working Population by Industry and Sex, 1981, 1986 and 1991	95
Table 5.15 Median Monthly Income from Main Employment of Working Population by Sex and Age, 1981, 1986 and 1991	96
Table 5.16 Median Monthly Income from Main Employment of Working Population by Occupation (ISCO-88 Classification), 1991	97
Table 5.17 Economically Inactive Population by Activity Status and Sex, 1981, 1986 and 1991	98

## **Housing Characteristics**

Table 6.1 Occupied Living Quarters by Type of Living Quarters, 1981, 1986 and 1991	102
Table 6.2 Occupied Living Quarters by Type of Living Quarters and Broad Area, 1981, 1986 and 1991	103
Table 6.3 Domestic Households by Type of Living Quarters, 1981, 1986 and 1991	104
Table 6.4 Average Number of Domestic Households per Living Quarters by Type of Living Quarters, 1981, 1986 and 1991	105
Table 6.5 Average Number of Occupants per Living Quarters by Type of Living Quarters, 1981, 1986 and 1991	106
Table 6.6 Domestic Households by Tenure of Accommodation, 1981, 1986 and 1991	107

## **Internal Movement**

Table 7.1 Population Aged 5 and Over Having Moved within the Past Five Years by Sector of Origin and Sector of Destination, 1991	115
Table 7.2 Non-movers, In-movers, Out-movers and Net Movement Rates within the Past Five Years by District/New Town, 1991	116

	<i>Page</i>	
Table 7.3	Population Aged 5 and Over by Age, Sex, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991	117
Table 7.4	Sex Ratios of Population Aged 5 and Over by Age, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991	118
Table 7.5	Population Aged 5 and Over by Educational Attainment, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991	119
Table 7.6	Labour Force Participation Rates by Age, Sex and Whether Having Moved within Hong Kong within the Past Five Years, 1991	120
Table 7.7	Working Population by Occupation, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991	121
Table 7.8	Domestic Households Having Moved within Hong Kong within the Past Five Years by Household Composition and Sector of Destination, 1991	122
Table 7.9	Domestic Households Having Moved within Hong Kong within the Past Five Years by Household Size and Sector of Destination, 1991	123
Table 7.10	Domestic Households by Type of Living Quarters, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991	124
Table 7.11	Median Monthly Household Income of Domestic Households by Sector of Destination and Whether Having Moved within Hong Kong within the Past Five Years, 1991	125
Table 7.12	Movers within the Past Ten Years by Present District of Residence and When Last Changed Residence before Census, 1991	126

## **New Town Population**

Table 8.1	Resident Population by Broad Area, 1981, 1986 and 1991	132
Table 8.2	Resident Population and Population Density by New Town, 1991	132

	<i>Page</i>	
Table 8.3	Population by New Town and Age, 1991	133
Table 8.4	Age Dependency Ratios by New Town, 1991	134
Table 8.5	Sex Ratios by Age and Broad Area, 1991	134
Table 8.6	Population Aged 15 and Over by Educational Attainment and Broad Area, 1991	135
Table 8.7	School Attendance Rates of Population Aged 3-18 by Age, Sex and Broad Area, 1991	135
Table 8.8	Labour Force Participation Rates by Sex, Age and Broad Area, 1991	136
Table 8.9	Working Population by Industry and Broad Area, 1991	137
Table 8.10	Working Population by Occupation (ISCO-88 Classification) and Broad Area, 1991	137
Table 8.11	Working Population by Monthly Income from Main Employment and Broad Area, 1991	138
Table 8.12	Domestic Households by Household Composition and Broad Area, 1991	138
Table 8.13	Domestic Households by Household Size and Broad Area, 1991	139
Table 8.14	Domestic Households by Monthly Household Income and Broad Area, 1991	139
Table 8.15	Population by New Town and Type of Housing, 1991	140
Table 8.16	Domestic Households by Type of Living Quarters and Broad Area, 1991	141
Table 8.17	Median Monthly Household Rent of Domestic Households by Type of Living Quarters and Broad Area, 1991	142
Table 8.18	Median Rent-income Ratios of Domestic Households by Type of Living Quarters and Broad Area, 1991	143

### **Assessment of Quality of the Census Data**

Table 11.1	Sample Estimates of Selected Proportions and Rates, their Estimated Standard Errors and 95% Confidence Intervals, 1991	170
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	<i>Page</i>
Table 11.2 Sample Estimates of Selected Totals, their Estimated Standard Errors and 95% Confidence Intervals, 1991	171
Table 11.3 Coding Errors of Selected Data Items, 1991	172
Table 11.4 Analysis of Data Transcription Error, 1991	173
Table 11.5 Substitution Error in Scanning and Recognition of Images, 1991	174
Table 11.6 Analysis of Validation Errors, 1991	174
Table 11.7 Analysis of Imputation Rates for Selected Data Items, 1991	175
Table 11.8 Comparison of 1991 Population Census Estimate of Population Aged Under 5 and the Independent Estimate	176

## Conventions

The following symbols are used in the tables:

- ' - ' signifies nil;
- ' .. ' signifies not applicable; and
- ' 0.0 ' signifies less than 0.05 but not zero.



# Chapter 1 Overview

## Introduction

It is a well established practice for Hong Kong to conduct a population census once every ten years. The aim is to obtain up-to-date information on the population of Hong Kong which are vital to Government planning and policy formulation, particularly in such fields as education, housing, transport, medical and social services. The data are also important to the private sector for formulating business strategies and to researchers for conducting social and economic studies.

Population censuses were conducted in 1961, 1971 and 1981. For both the 1961 and 1971 Censuses, the entire population was counted and enquired of their demographic and socio-economic characteristics. In the 1981 Census, the operation comprised a complete headcount of all persons by age and sex whereas enquiry on the detailed characteristics of the population was conducted on the basis of a large sample. This design represents a more cost-effective approach.

In order that more up-to-date information on the population could be made available, a population by-census is also conducted in between two censuses. Thus, in 1966, 1976 and 1986 there were population by-censuses conducted. A by-census differs from a full census in not having a complete headcount of the population but simply enquiring on the detailed characteristics of the population on the basis of a large sample. The size and characteristics of the entire population are inferred from the sample results in accordance with appropriate statistical theory. As a result, the statistics obtained from a by-census may be slightly less precise than those from a census.

Statistics compiled from information collected in censuses and by-censuses have high precision, even when the data are classified by detailed population sub-groups and small geographical areas. They therefore differ from other sample surveys on the population, which normally employ much smaller samples, whereby statistics on detailed population sub-groups and small geographical areas tend to be limited in availability.

## Design of the 1991 Population Census

The design of the 1991 Population Census was similar to that of the 1981 Population Census. It comprised a complete but simple enumeration of all persons on their basic characteristics such as age and sex, and a detailed one-in-seven sample enquiry on a broad range of socio-economic characteristics of the population. An exception was made for the Sai Kung and Islands districts, for which the sampling fraction for the detailed enquiry was two-in-five.

Operationally speaking, six sevenths of households in Hong Kong were enumerated with a 'short form' questionnaire. A copy of the original questionnaire, slightly reduced in size, is at Appendix 1. In this simple enumeration, the questionnaire was mailed in advance by the Census and Statistics Department to each selected household, together with

instruction on how householders should complete it themselves. The self-completed questionnaires were collected by the enumerator personally during the Census operation period. When collecting the questionnaire, the enumerator would check for any omissions and clarify any dubious answers written down by householders.

A one-in-seven sample of all living quarters selected and all the households therein were included for the sample enquiry using a 'Long form' questionnaire. A copy of the original questionnaire, slightly reduced in size, is at Appendix 2. In addition to those questions on basic characteristics asked in the 'Short form', householders were required to answer more detailed questions on such topics as marital status, place of birth, nationality, language spoken, educational attainment, activity status, occupation, industry and internal movement. Information relating to living quarters and households was also collected. Householders were enumerated by the traditional interviewer method, where personal interviews were conducted by enumerators to collect data from each member of a household directly.

## **Census operation**

The 1991 Population Census (or in short the Census) was conducted in the ten-day period from 15 to 24 March 1991. The Census, being a colossal survey operation and having a universal population coverage, required a large number of temporary census officers. Altogether 14 900 temporary staff were employed to do the enumeration and such related tasks as supervision, quality control and data coding. The temporary enumeration staff were mostly senior secondary school students. Those taking up supervision were school teachers, while the checking and editing of questionnaires were performed by students from tertiary educational institutions. A small number of serving civil servants were also employed to help in the census operation during their off-duty or leave periods. They were mainly deployed to enumerate some special classes of the population such as prisoners, hospital in-patients and street sleepers.

## **Legal status of the Census**

The 1991 Population Census was taken under the Census and Statistics (1991 Population Census) Order 1990, made by the Governor in Council under section 9(1) of the Census and Statistics Ordinance (Laws of Hong Kong, Chapter 316). Under this Ordinance, persons specified to give information for the purpose of the census are obliged to supply information for completing the census schedule. The same Ordinance stipulates that their answers are to be treated in confidence and that no information relating to any identifiable person or household will be released.

## **Report coverage**

The final count of the 1991 Population Census shows a total of 5 674 114 local residents, 35 823 transients and 51 847 Vietnamese migrants in Hong Kong on the Census reference date of 15 March 1991. The resident population of 5 674 114 included 5 522 281

residents present in Hong Kong (which is referred to as the 'enumerated resident population' in this report) and 151 833 residents temporarily away from Hong Kong on the Census reference date. The de facto population of Hong Kong on the Census reference date was 5 609 951. This refers to the number of persons present in the territory on that date, including not only the enumerated residents but also 35 823 transients and 51 847 Vietnamese migrants (Table 1.1).

**Table 1.1 De facto Population and Resident Population, 1991**

<i>Category</i>	<i>De facto Population<sup>(1)</sup></i>	<i>Resident Population<sup>(2)</sup></i>
Enumerated residents present in Hong Kong <sup>(3)</sup>	5 522 281	5 522 281
Transients <sup>(4)</sup>	35 823	..
Vietnamese migrants <sup>(5)</sup>	51 847	..
Residents temporarily away from Hong Kong	..	151 833
<b>Total</b>	<b>5 609 951</b>	<b>5 674 114</b>

- Notes :
- (1) All persons who were present in Hong Kong on the Census reference date of 15 March 1991.
  - (2) All usual residents in Hong Kong on the Census reference date of 15 March 1991, including those who were temporarily away from Hong Kong on that date.
  - (3) Residents who were present in Hong Kong on the Census reference date of 15 March 1991. They were referred to as the enumerated resident population in this report.
  - (4) Transients were persons staying in hotels/boarding houses or on board ocean-going vessels/coasters in Hong Kong waters on the Census reference date of 15 March 1991.
  - (5) Vietnamese migrants include Vietnamese refugees; Vietnamese migrants having been screened out and those pending determination of refugee status; ex-China Vietnamese illegal immigrants; Vietnamese migrants rescued by ocean-going vessels; and children born in Hong Kong to the above categories of Vietnamese migrants.

In the enumeration, basic information on age and sex was collected from the entire resident population using either the 'Short form' or the 'Long form' questionnaires. Additional detailed information on the demographic and socio-economic characteristics was only collected from the enumerated residents using the 'Long form' questionnaires. No enquiry on these detailed characteristics was made to those residents who were temporarily away from Hong Kong because they were not available for the personal interview. For transients and Vietnamese migrants, only their population counts were obtained.

In this report, Tables 1.1, 2.1, 2.24, 2.25, 8.1 and 8.2 refer to the entire resident population. These tables are essential for presenting the geographical distribution and population density of the entire resident population. All the other tables on the demographic and socio-economic profiles of the population and their related analyses referred to the enumerated resident population only. However, as the enumerated resident population constituted some 97.3% of the resident population, findings about them may be taken as representative of the resident population for many practical purposes.

Living quarters covered in this report are those occupied on the Census reference date. The figures on households refer to domestic households, which accounted for 98.6% of the enumerated resident population. The rest of the population were in collective households. There were 11 102 enumerated marine residents living on board 2 179 vessels on the Census reference date, for which statistics on their type of living quarters, rent and tenure of accommodation are not available.

In this report, the data in Tables 1.1, 2.1, 2.9-2.11, 2.24, 2.25, 3.1, 6.1-6.5, 8.1 and 8.2 are based on the complete enumeration of either the resident population or the enumerated resident population. For all the other tables, the data are estimates derived from the sample enquiry of the enumerated resident population.

To achieve consistency between total counts obtained from the complete enumeration and estimates derived from the sample enquiry, the 'ratio estimation' method is employed. Total counts of living quarters by type, households by type of living quarters and population by age and sex at the District Board district level were chosen as controls when applying the method. The control process ensures that corresponding estimates derived from the sample are consistent with these total counts in each District Board district. Such an approach is generally adopted by statistical authorities worldwide when conducting a census with complete enumeration supplemented by a sample enquiry. However, while the above has been done, there may still be a problem of matching between some count figures based on the complete enumeration and the corresponding estimates derived from the sample enquiry when characteristics of population, households and living quarters are cross-tabulated. Nevertheless, the differences are usually insignificant. For an illustration of an actual case, please see the note to Table 8.16.

In this report, statistics derived from administrative records and registration systems are also brought in to supplement the analyses in some chapters. Tables 2.2-2.8, 2.19, 4.5 and 11.8 contain such information.

## **Summary of major findings**

Some salient trends or developments of the Hong Kong population are identified from the analyses detailed in Chapters 2 to 8 of this report. They are summarised below:

### ■ *Demographic Characteristics*

1. The population grew very slowly, at an average annual rate of 1.5% in the first half of the past decade and 0.6% in the second half of the decade.
2. The population is aging as a result of fertility decline and mortality improvement. The median age of the population rose from 26 years in 1981 to 32 years in 1991.
3. The sex ratio (number of males per 1 000 females) in the age group 25-44 dropped sharply, from 1 223 in 1981 to 1 028 in 1991. This

may be attributable to a significant increase in the number of female foreign domestic helpers in Hong Kong over the past decade.

4. The proportion of the population born in Hong Kong remained at about 60% throughout the past decade. However, for those aged under 15, the proportion born in Hong Kong remained stable at around 90%.
5. Both men and women are delaying marriage, with women having a greater tendency to do so.
6. A marked redistribution of population occurred in the past decade. There was a significant reduction in population in some older or populous urban districts, while strong population growth was seen in the New Territories. On a net basis, the population on Hong Kong Island experienced little change in number whereas that in Kowloon and New Kowloon decreased by almost 20%. In contrast, the population in the New Territories increased by nearly 80%.
7. Between 1981 and 1991, major gains of population were seen in Sha Tin District (+388 000 persons), Tuen Mun District (+260 000) and Tai Po District (+127 800). On the other hand, the districts experiencing major losses of population were Wong Tai Sin (-117 300), Kowloon City (-90 400), Sham Shui Po (-87 400), Mong Kok (-77 500), Yau Tsim (-65 000) and Wan Chai (-55 800).

■ *Household Characteristics*

8. The number of domestic households grew from 1.2 million in 1981 to almost 1.6 million in 1991, at a rate faster than that of the population.
9. Average household size continued to decline, from 3.9 persons in 1981 to 3.4 persons in 1991. The decline in household size was more marked for those living in public housing than in private housing.
10. 'One unextended nuclear family' households remained the dominant type of household composition, with the proportion of such households rising from 54% in 1981 to 62% in 1991.
11. The median household income rose from \$2,955 in 1981 to \$9,964 in 1991, an increase of 237%. After discounting the effect of the inflation, at a rate of 116% in the same period as measured by the increase in Consumer Price Index (A), the real growth of median household income was 56%.

■ *Education Characteristics*

12. The level of educational attainment of the population improves markedly with greater education opportunities.

13. The school attendance rate for females between 12 and 18 years of age was higher than that for their male counterparts throughout the past decade. However, the pattern was the opposite for the age group 19-24.
14. As a result of the increasing opportunities available to the population to acquire tertiary education through part-time studies, the number of part-time students in tertiary education more than doubled in the past decade, from 16 400 in 1981 to 36 400 in 1991.
15. There was a substantial reduction in the proportion of the population with tertiary education in such fields as 'Arts and social science' and 'Education' in the past ten years. On the other hand, there was an increase in the proportion of the population with tertiary education in 'Business, commercial and computer studies'.

■ *Economic Characteristics*

16. The labour force increased at an average annual rate of 1.2%, from 2.5 million in 1981 to 2.8 million in 1991.
17. The growth of the labour force was slower than that of the population aged 15 and over due to a decrease in the labour force participation rate from 67% in 1981 to 64% in 1991.
18. Over the past ten years, the labour force participation rate for males decreased while that for females remained stable, resulting in a decrease in the sex ratio of the labour force from 1 828 males per 1 000 females in 1981 to 1 630 in 1991.
19. The labour force is aging as reflected by an increase in the median age of the labour force from 31.8 in 1981 to 34.4 in 1991.
20. The educational attainment of the labour force improved substantially in the past ten years, with the proportion of those having upper secondary education or above increasing from 33% in 1981 to 50% in 1991.

■ *Housing Characteristics*

21. The total number of occupied living quarters increased by 42% in the past ten years, while the number of households increased by 28%. The development is also reflected in the degree of sharing dropping from 1.19 in 1981 to 1.06 in 1991. The average number of occupants per living quarters dropped from 4.7 in 1981 to 3.7 in 1991.
22. Due to the rapid development of new towns in the past ten years, the number of occupied living quarters in the New Territories increased significantly, accounting for 42% of all occupied living quarters in

Hong Kong in 1991 as against 27% in 1981.

23. The number of households occupying living quarters in Housing Authority home ownership estates increased from about 7 000 to 116 000 in the past ten years.
24. The proportion of households owning their accommodation increased substantially from 28% to 43% in the past decade.

■ ***Internal Movement***

25. In the Census, movers refer to persons who changed residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa. Movers tended to be people of working age, having higher level of educational attainment belonging to smaller households or belonging to households with higher income.

■ ***New Town Population***

26. Population in the new towns was much younger than that in the older urban areas of Hong Kong Island and Kowloon and New Kowloon. In particular, the proportion of population under age 15 was much higher. The median age of the new town population was 29 as compared with 33 for the older urban areas.
27. Educational attainment of the population in the new towns was in general lower than that of its counterpart in the older urban areas. The population in the new towns and that in the older urban areas had broadly similar income from main employment. However, there were relatively more working persons in the new towns engaged in the manufacturing industry and hence relatively more production and related workers.
28. The proportion of 'unextended nuclear family' households in the new towns, at 68% was substantially higher than the corresponding figure of 58% for the older urban areas.
29. The average size of households in the new towns, at 3.6, was higher than the average of 3.3 for the older urban areas.
30. Of the 2.1 million new town population, 54% were accommodated in public and aided housing while 13% in Housing Authority home ownership estates. The corresponding figures for the older urban areas were 35% and 5% respectively.



## **Chapter 2 Demographic Characteristics**

### **Introduction**

Census findings, which provide stock data of the population, reflect only the status of the population at the time the census was taken. To monitor continuous population changes, birth, death and migration statistics have to be studied. The flow data of these vital events and migration movements are compiled respectively from the registration of births and deaths and the monitoring of population movements to and from Hong Kong. These flow data explain some of the important demographic trends in the inter-censal period.

This chapter begins with an account of the 1991 Population Census head count and the growth of population in the past decades, followed by an analysis of vital and migration statistics, reviewing important demographic trends in the past two decades. Salient features like place of birth, nationality, marital status, duration of residence in Hong Kong and usual language/dialect and spatial distribution of the population are then discussed.

### **Census count and population growth**

At the time of the 1991 Population Census, the total population present in Hong Kong was some 5.6 million, comprising 5 522 300 enumerated residents, 51 800 Vietnamese migrants and 35 800 transients. Some 151 800 Hong Kong residents were estimated to be temporarily away from Hong Kong at the time of the Census and hence the resident population of Hong Kong should be 5 674 100 (Table 1.1 in Chapter 1).

Unless otherwise stated, all the analyses that follow refer to the 'enumerated resident population' only.

Between 1961 and 1991, the resident population of Hong Kong increased by over 2.5 million or at an average rate of 2% per annum. However, the average annual growth rate was in fact slowing down mainly due to the decreasing rate of natural increase (i.e. the balance of births over deaths). There were some years (for example 1978 to 1980) when immigration flow (both legal and illegal) was large and swayed this general trend. As a result, the population growth for the period 1976-1981 surged to over 3% per annum on average. Population growth had slackened in the past decade with the average annual growth rate dropping to 1% largely because of a reduction in the net balance of migration (Tables 2.1, 2.2 and 2.3).

### **Components of population change**

Changes in the population size are the result of natural increase and net migration. The former is related to trends of fertility and mortality which will be analysed separately below. Regarding the latter, as inflow and outflow of population were haphazard in the past, no particular trend is observed. Moreover, since there is no direct and complete measure of immigration and emigration, only the net balance of population movements is

available and referred to as net migration (Table 2.2).

In the 1960s, population growth in Hong Kong was related to high natural increase because of high fertility. Between 1961 and 1971, natural increase accounted for 87% of the population growth in the period. However in the 1970s, fertility declined sharply and natural increase therefore dwindled; but net gain from immigration principally from China remained high, the contribution of natural increase therefore dropped to about 53%. The higher level of immigration in the decade was very much related to the inflow of more than 272 700 illegal immigrants from China. (They were allowed to stay in Hong Kong before the Touch Base Policy was discontinued as from 24 October 1980). The influx accounted for some 51% of the total net migration in the 1970s. In the 1980s, although the number of legal immigrants from China stabilised at around 28 000 per year, the inflow was almost totally offset by the outflow of Hong Kong residents. As a result, natural increase assumed a dominant role in population growth in the past decade, accounting for 92% of the population increase (Table 2.2).

### *Fertility decline*

Fertility started to decline in the 1970s. The crude birth rate dropped rapidly from 19.7 per 1 000 population in 1971 to 12.0 in 1991, despite a relatively large increase in the number of women of childbearing age of 15-49. This is indicative of the momentum of the fertility decline in the last twenty years (Table 2.3). The dramatic fertility decline can be better illustrated by the general fertility rate given by the number of births per 1 000 women of childbearing ages. Despite an ever increasing number of women of childbearing age, the number of births continued to drop; hence the rate dropped by about 50% between 1971 and 1991 (Table 2.4).

Women of all ages had fewer children, according to the trend of the age-specific fertility rates from 1971 to 1991. Over this period, fertility declined at different paces in different times of the period for women of different ages. In general, for women aged below 30, fertility declined faster in the later decade than in the earlier one. The opposite was true for those aged 30 and over. In the first stage of fertility decline, there was a dramatic reduction of high order births which were largely delivered by older women, thus their fertility rates fell faster. When fertility dropped to a lower level, further decline was basically related to younger women delaying their marriage, postponing their first birth and limiting, or even avoiding, the second birth. Therefore the fertility rates at younger ages continued to reach new lows in recent years (Table 2.5).

The most rapid fertility decline occurred from 1971 to 1976 when the age-specific fertility rates for all ages but the youngest age group 15-19 dropped sharply. By 1981, fertility decline also started in the youngest age group. Women in the most fertile age groups 20-24, 25-29 and 30-34 recorded varying rates of decline in fertility between 1971 and 1991. The fertility rate for women aged 20-24 in 1991 dropped to just about a quarter of its level in 1971. For women aged 25-29 and 30-34, their fertility rates in 1991 were about 40% and 47% of their respective levels in 1971. The older age groups saw even greater reductions (Table 2.5).

## ***Mortality improvement***

The crude death rate has remained stable at around 5.0 per 1 000 population in the past twenty years, despite the continuous improvement in mortality for all age groups in the period. This is related to the aging of the population where an older population naturally resulted in more deaths, thus restricting any further fall of the crude death rate (Table 2.3).

To isolate the effect of population structure on mortality, age-specific death rates are calculated separately for males and females. These death rates dropped substantially in the past twenty years. Such improvements in mortality have been brought about through the provision of better medical services by the government and greater awareness of health related issues by the public. The death rates of the younger population plunged dramatically. In particular, the death rate for infants aged 0 decreased by about 60% between 1971 and 1991. For children aged 1-4, the death rate fell by about 70% during the same period (Table 2.6). In comparison, the reduction in the death rates for the middle age groups was moderate and that for the older age groups was not so large. The primary reason behind this differential pattern is that with medical advances diseases which were once fatal, particularly at the young and middle ages can now be cured; but deaths brought about by senility and degenerative diseases are less easy to prevent.

The rapid decline in mortality has led to a continuous extension of the life expectancy of the population. Life expectancy at birth for males and females reached 75 and 81 years respectively in 1991, as compared with the corresponding figures of 68 and 75 years in 1971 (Table 2.7). These dramatic increases in longevity of the population mean that Hong Kong now compares favourably with, if not surpassing, the experience of many low mortality countries (Table 2.8).

## **Age structure**

The age structure of Hong Kong population changed significantly in the past twenty years as a result of the fertility decline and mortality improvement. The number of children aged under 15 decreased from about 1.4 million in 1971 to 1.2 million in 1991, and as a result, their proportion in the total population dropped significantly from 36% to 21%. During the same period, the number of persons aged 65 and above increased from 177 600 to 482 000 and accordingly their share increased from 5% to 9%. The aging of the population is also reflected in the increase of the median age of the population from 22 years to 32 years over the same period (Tables 2.9, 2.10 and 2.11).

This changing age structure means that a higher proportion of the population is now of age 15-64. One way to illustrate the economic implications of these changes is to look at the age dependency ratio, which is defined as the number of persons under age 15 and those above 64 per 1 000 persons in the age group 15-64. This ratio decreased from 675 in 1971 to 420 in 1991, reflecting a reduction in the economic burden of the population. This was brought about principally by the decline in the child dependency which more than offset the increase in elderly dependency (Table 2.11).

## **Sex composition**

The sex composition of a population can be measured by the sex ratio, which is defined as the number of males per 1 000 females in the population. The sex ratio of a population is determined by the sex ratio at birth, sex differential in mortality improvement and sex ratio for immigrants and emigrants. The overall sex ratio for the population increased from 1 033 in 1971 to 1 093 in 1981. However, it has started to decline since then and dropped to 1 038 in 1991. The changes varied by age. The most significant changes occurred in the age group 25-44 where the sex ratio plunged from a peak of 1 223 in 1981 to 1 028 in 1991 (Table 2.12). The influx of female foreign domestic helpers in the past decade, who were mostly Filipinos and Thais, contributed mainly to this fall (Table 2.13). If the estimated effect of foreign domestic helpers in these age groups were discounted in the calculation, the sex ratio of the population of these age groups would only have fallen from 1 233 in 1981 to 1 072 in 1991.

The sex ratio for the age group 65 and over increased due mainly to the sex differential in mortality improvement. The expectation of life at birth for females rose by 5.3 years from 1971 to 1991, but that for males rose by 7.3 years in the same period (Table 2.7). Due to the more favourable improvement in mortality for males than females, the sex ratio for the age group 65 and over therefore increased.

A breakdown of the sex ratio by age and nationality reflects some interesting social trends. In the age bracket 45-54, the number of males of Canadian nationality was more than double that of females because a considerable number of male emigrants returned to work in Hong Kong while leaving their wives and children in Canada. As for the Japanese aged 35-64, the high sex ratio indicates the presence of a large number of Japanese men working alone in Hong Kong, leaving their families in Japan. As for the high sex ratio for those Chinese (place of domicile - other than Hong Kong) aged 15-24, it was mainly due to a higher number of males than females being employed in Hong Kong and a much greater number of males than females being imprisoned (largely because of their illegal entry into Hong Kong) at the time of the Census. The very low sex ratios for Filipinos and Thais at ages 15-54 obviously reflect the presence of foreign domestic helpers, the majority of whom were females in the age group 20-44 (Table 2.13).

## **Place of birth**

Migration is important to the demography of Hong Kong, thus the proportion of population born in Hong Kong is not expected to be overwhelming. It was 57% in 1981 and around 60% in 1986 and 1991, while the number of such persons increased from 2.9 million in 1981 to 3.3 million in 1991. The number of persons born in China and Macau remained steady at slightly less than 2 million in the past decade. Their proportion, however, dropped slightly from 40% to 36% during the period. On the other hand, the number of persons who were born elsewhere increased by over 60% from 158 100 in 1981 to 255 200 in 1991; hence their proportion in the population increased from 3% to 5% (Table 2.14).

In 1991, among the population aged 65 and over, only 13% of males and 14% of females were born in Hong Kong. With successively younger age groups, the proportions

of the population born in Hong Kong increased. For persons aged under 15, 91% of both males and females were born in Hong Kong (Table 2.15).

## **Nationality**

At the time of the Census, nearly 60% of the population, or over 3 million people, claimed their nationality as British (with right of abode in Hong Kong only). Another 34% reported their nationality as Chinese (place of domicile - Hong Kong). Other nationality groups of significant sizes included British (with right of abode outside Hong Kong), Filipino and Chinese (place of domicile - other than Hong Kong) (Table 2.16).

Of the 18 500 persons who claimed Portuguese nationality, 92% were born in China and Macau (Table 2.16).

The above data refer to the first nationality reported by the respondents in the Census. It may be noted that some respondents claimed a second nationality as well.

## **Marital status**

Between 1981 and 1991 the proportion of the population who were currently married increased from 54% to 60% for men and from 56% to 60% for women. The number of men who were currently married was greater than the number of their female counterpart (Table 2.17). Related to this may include such situations as expatriates working alone in Hong Kong and residents having wives living in China or elsewhere.

During the past decade, the proportion of never married for males dropped by 7 percentage points while that for females decreased by 4 percentage points. This proportion is very much affected by the age structure of the population and so for more in depth analysis, standardised proportions may be computed to eliminate effects due to the different age-sex structures of the population in different years in the comparison. According to the standardised proportions, the proportion of never married actually increased over the past decade, as a result of the continuous postponement of marriage (Table 2.17).

From the Census data on the proportion of never married for males and females, the singulate mean age at marriage can be derived separately for both sexes. (Readers who are interested in the method of computing the singulate mean age at marriage may refer to Technical Note I in Annex 2). This measure shows the mean number of years lived in the single state until age 50 by a person on average. The singulate mean age at marriage for men increased by 1.3 years from 29.2 in 1981 to 30.5 in 1991. For women, it increased by 2.4 years from 25.8 to 28.2 over the same period. This reflects that while both sexes were postponing their marriages, females were more inclined to do so (Table 2.18).

Marriage statistics obtained from the marriage registration system also provide information on age at first marriage. However, such statistics only refer to those getting married within a reference year and therefore are affected by the age structure of the population. In 1981, the median ages at first marriage were 27.0 for males and 23.9 for

females. The corresponding figures were 29.1 and 26.2 in 1991 (Table 2.19).

The ratio of the number of widows to the number of widowers was 4.6 in 1981, 4.5 in 1986 and 4.3 in 1991 (Table 2.17). These relatively high ratios have been brought about by the following factors. Firstly, the male mortality rates have always been higher than the female mortality rates, especially so at the elder ages, thus the number of widows would always outnumber the number of widowers. Secondly, men in Hong Kong tend to marry wives who are younger than themselves, thereby hastening the mortality effect in bringing about widowhood. Marriage statistics indicate an average difference of 3 years between the age of the groom and the age of the bride (Table 2.19). Thirdly, marriage statistics also reveal that in the past few years widowers were more likely than widows to be remarried.

## **Usual language/dialect**

Among the population aged 5 and over, Cantonese was the most common language/dialect spoken at home in Hong Kong, as it was reported as such by nearly 4.6 million people. English was spoken as a usual language by 114 100 persons, or a mere 2% of the population. Among those born in Hong Kong, 98% used Cantonese as their usual language/dialect. However, among those born in China and Macau, only 82% used Cantonese as their usual language/dialect, most of the remaining spoke Putonghua or Chinese dialects at home (Table 2.20).

In addition to the 2% of the population who used English as their usual language/dialect, another 29% of the population claimed an ability to speak English. There was 17% of the population claiming their ability to speak Putonghua as another language/dialect (Table 2.21).

## **Duration of residence in Hong Kong**

In 1991, only slightly over 2% had lived in Hong Kong for less than one year. After subtracting the 62 600 babies of age zero enumerated in the Census, it is estimated that there were 72 100 persons who were in Hong Kong for less than one year (Tables 2.9 and 2.22).

About 79% of the population had lived in Hong Kong for ten years or more. Considering only those persons aged ten and over which totalled to about 4.8 million, the proportion of such persons who had lived in Hong Kong for ten years or more increased to 92% (Tables 2.9 and 2.22).

There was also a question in the Census on place of residence five years ago. The findings revealed that at the time of the Census, there were 205 200 persons whose place of residence five years ago was not Hong Kong. These were the people who had migrated to Hong Kong or had returned from a place outside Hong Kong after March 1986 (Table 2.23).

## **Spatial distribution**

There was a substantial redistribution of population during the past ten years. The resident population in the New Territories increased markedly from 1.33 million in 1981 to 2.37 million in 1991. In Kowloon and New Kowloon, the population dropped from 2.52 to 2.03 million in the period. The population on Hong Kong Island showed no significant change, increasing slightly from 1.22 to 1.25 million. The population redistribution gave the New Territories the largest share (42%) of the resident population in 1991. This compares with 36% for Kowloon and New Kowloon and 22% for Hong Kong Island (Table 2.24).

All districts in the New Territories recorded a population growth in the past ten years. The percentage of increase in the period was highest in Sha Tin (328%), followed by Tuen Mun (216%) and Sai Kung (207%). In Kowloon and New Kowloon, population decreased in all districts. The decline was particularly marked in the older districts such as Yau Tsim and Mong Kok. On Hong Kong Island, the population in Central and Western and Wan Chai had decreased while those in Eastern and Southern had increased by almost 20% (Table 2.25).

It may be noted that 'New Territories', for the purpose of the 1991 Population Census, just as for many other government administrative purposes, refers to the nine District Board districts, viz. Kwai Tsing, Tsuen Wan, Tuen Mun, Yuen Long, North, Tai Po, Sha Tin, Sai Kung and Islands as shown in Appendix 5. It is not exactly the same area as understood in the context of the early history of Hong Kong.

**Table 2.1 Resident Population and Annual Growth Rates, 1961 - 1991**

<i>Year</i>	<i>Resident Population</i>	<i>Net Increase</i>	<i>Average Annual Growth Rate (%)</i>
1961	3 129 648 <sup>(1)</sup>	..	..
1971	3 936 630 <sup>(1)</sup>	806 982	2.3
1976	4 402 990 <sup>(1)</sup>	466 360	2.1
1981	5 109 812 <sup>(2)</sup>	706 822	3.3
1986	5 495 488 <sup>(3)</sup>	385 676	1.5
1991	5 674 114 <sup>(4)</sup>	178 626	0.6
1961 - 1991	..	2 544 466	2.0

Notes : (1) Resident population of the 1961 Census, 1971 Census and 1976 By-Census did not include residents temporarily away from Hong Kong at the time of the Census/By-Census.

(2) The figure includes 123 252 residents temporarily away from Hong Kong at the time of the 1981 Census.

(3) The figure includes 99 491 residents temporarily away from Hong Kong at the time of the 1986 By-Census.

(4) The figure includes 151 833 residents temporarily away from Hong Kong at the time of the 1991 Census.

**Table 2.2 Components of Population Growth, 1961 - 1991**

<i>Period</i>	<i>Natural Increase</i>	<i>%</i>	<i>Net Migration</i>	<i>%</i>	<i>Population Growth</i>	<i>%</i>
Mid 1961 - mid 1971	761 700	86.8	115 400	13.2	877 100	100.0
Mid 1971 - mid 1981	586 800	52.5	531 000	47.5	1 117 800	100.0
Mid 1981 - mid 1991	488 800	92.1	41 700	7.9	530 500	100.0

Source : Birth, death and passenger movement statistics.

**Table 2.3 Crude Birth Rates, Crude Death Rates and Rates of Natural Increase, 1961 - 1991**

<i>Year</i>	<i>Crude Birth Rate (per 1 000 population)</i>	<i>Crude Death Rate (per 1 000 population)</i>	<i>Rate of Natural Increase (per 1 000 population)</i>
1961	35.0	6.1	28.9
1971	19.7	5.0	14.7
1976	17.4	5.0	12.4
1981	16.8	4.8	12.0
1986	13.0	4.7	8.3
1991	12.0	5.0	7.0

Source : Birth and death statistics.

**Table 2.4 Number of Births and General Fertility Rates, 1971 - 1991**

<i>Year</i>	<i>Number of Live Births</i>	<i>Women Aged 15 to 49</i>	<i>General Fertility Rate (per 1 000 women aged 15-49)</i>
1971	79 789	919 800	86.7
1976	78 511	1 094 500	71.7
1981	86 751	1 330 600	65.2
1986	71 620	1 465 400	48.9
1991	68 281	1 581 400	43.2

Source : Birth statistics.

**Table 2.5 Age-specific Fertility Rates, 1971 - 1991**

<i>Age of Mother</i>	<i>Age-specific Fertility Rate (per 1 000 women)</i>					<i>Index of Rates</i>		
	<i>1971</i>	<i>1976</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1971</i>	<i>1981</i>	<i>1991</i>
15-19	17.0	17.2	11.7	7.0	6.4	100	69	38
20-24	145.0	107.9	85.9	47.9	39.0	100	59	27
25-29	243.0	189.1	153.0	109.1	96.4	100	63	40
30-34	162.2	117.7	97.3	76.3	75.6	100	60	47
35-39	83.3	48.1	34.4	26.3	27.7	100	41	33
40-44	28.4	14.4	6.8	3.9	4.1	100	24	14
45-49	3.8	1.5	0.7	0.3	0.2	100	18	5
	<i>Total Fertility Rate (per woman)</i>					<i>Index of Total Fertility Rate</i>		
	3.46	2.48	1.93	1.34	1.23	100	56	36

Source : Birth statistics.

**Table 2.6 Age-sex-specific Death Rates by Sex and Age, 1971 - 1991**

<i>Sex and Age Group</i>	<i>Age-sex-specific Death Rate (per 1 000 population)</i>					<i>Index of Rates</i>		
	<i>1971</i>	<i>1976</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1971</i>	<i>1981</i>	<i>1991</i>
<b>Male</b>								
0	21.2	16.2	10.7	7.5	6.3	100	50	30
1 - 4	1.0	0.8	0.7	0.3	0.3	100	63	25
5 - 14	0.5	0.4	0.3	0.2	0.2	100	61	36
15 - 29	1.1	0.8	0.7	0.5	0.6	100	66	55
30 - 44	3.1	2.5	1.8	1.4	1.4	100	57	44
45 - 64	13.5	11.5	10.0	8.9	8.2	100	74	61
65 - 84	59.9	54.8	45.1	42.0	40.7	100	75	68
85 and over	144.6	166.6	119.9	133.7	126.3	100	83	87
<b>Female</b>								
0	16.1	12.0	9.2	7.1	6.9	100	57	43
1 - 4	0.8	0.8	0.4	0.4	0.3	100	45	36
5 - 14	0.3	0.3	0.2	0.2	0.2	100	74	50
15 - 29	0.6	0.5	0.4	0.3	0.3	100	64	52
30 - 44	1.7	1.5	1.0	0.8	0.7	100	61	42
45 - 64	6.5	6.2	5.5	4.7	4.2	100	84	64
65 - 84	35.3	33.4	30.2	27.1	27.2	100	86	77
85 and over	137.6	129.6	122.1	109.2	113.3	100	89	82

Source : Death statistics.

**Table 2.7 Expectation of Life at Birth by Sex, 1971 - 1991**

<i>Year</i>	<i>Expectation of Life at Birth (Number of years)</i>	
	<i>Male</i>	<i>Female</i>
1971	67.8	75.3
1976	69.6	76.2
1981	72.3	78.5
1986	74.1	79.4
1991	75.1	80.6

Source : Death statistics.

**Table 2.8 Expectation of Life at Birth for Hong Kong and Selected Countries by Sex, 1981 - 1988**

<i>Country/Territory</i>	<i>Expectation of Life at Birth (Number of years)</i>					
	<i>1981</i>		<i>1986</i>		<i>1988</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Hong Kong	72.3	78.5	74.1	79.4	74.4	79.9
Sweden	73.1	79.1	74.0	80.0	74.2	80.0
England and Wales	71.1	77.1	72.1	77.8	72.7	78.2
USA	70.4	77.8	71.3	78.3	71.5	78.3
Japan	73.8	79.1	75.2	80.9	75.5	81.3

Source : Death statistics and publications from various countries.

**Table 2.9 Population by Age and Sex, 1971 - 1991**

<i>Age Group</i>	<i>Sex</i>	<i>1971</i>	<i>1976</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
0	M	33 641	36 520	42 683	38 367	32 725
	F	31 675	34 110	38 561	35 380	29 837
	T	65 316	70 630	81 244	73 747	62 562
1 - 4	M	159 525	160 530	160 267	166 713	143 723
	F	151 350	148 220	147 172	153 038	132 226
	T	310 875	308 750	307 439	319 751	275 949
5 - 9	M	259 283	209 340	212 353	215 835	209 256
	F	248 830	199 100	196 537	200 225	193 931
	T	508 113	408 440	408 890	416 060	403 187
10 - 14	M	267 671	274 020	227 062	228 723	213 340
	F	255 929	263 420	212 872	208 666	196 878
	T	523 600	537 440	439 934	437 389	410 218
15 - 19	M	219 657	272 490	292 604	234 901	213 439
	F	208 187	259 740	271 321	216 423	196 203
	T	427 844	532 230	563 925	451 324	409 642
20 - 24	M	173 211	224 010	307 600	285 188	216 280
	F	163 142	211 840	276 232	276 347	213 919
	T	336 353	435 850	583 832	561 535	430 199
25 - 29	M	107 121	196 200	258 905	308 385	283 377
	F	86 603	171 220	224 221	293 232	294 190
	T	193 724	367 420	483 126	601 617	577 567
30 - 34	M	117 066	117 570	219 253	257 860	303 200
	F	95 559	91 080	179 816	238 351	297 521
	T	212 625	208 650	399 069	496 211	600 721
35 - 39	M	129 490	126 170	132 307	215 137	251 372
	F	115 631	100 050	100 571	190 233	239 958
	T	245 121	226 220	232 878	405 370	491 330
40 - 44	M	133 659	131 670	140 808	132 929	210 858
	F	121 890	116 990	109 701	109 103	188 844
	T	255 549	248 660	250 509	242 032	399 702
45 - 49	M	112 946	129 390	141 225	139 029	131 057
	F	105 424	114 740	119 323	117 006	107 983
	T	218 370	244 130	260 548	256 035	239 040
50 - 54	M	100 968	117 130	136 307	144 341	135 447
	F	94 295	116 280	119 811	124 858	113 171
	T	195 263	233 410	256 118	269 199	248 618
55 - 59	M	74 933	92 890	109 476	128 507	135 776
	F	75 671	90 090	102 554	119 064	120 869
	T	150 604	182 980	212 030	247 571	256 645
60 - 64	M	52 292	75 950	90 725	104 765	120 266
	F	63 409	79 430	89 484	104 849	114 595
	T	115 701	155 380	180 209	209 614	234 861

**Table 2.9 Population by Age and Sex, 1971 - 1991 (Continued)**

<i>Age Group</i>	<i>Sex</i>	<i>1971</i>	<i>1976</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
65 - 69	M	28 393	42 950	65 530	77 098	89 550
	F	45 267	57 350	72 481	83 499	95 547
	T	73 660	100 300	138 011	160 597	185 097
70 - 74	M	17 441	23 980	37 789	53 660	61 908
	F	35 611	44 490	53 895	66 568	73 018
	T	53 052	68 470	91 684	120 228	134 926
75 and over	M	13 305	20 250	29 274	41 026	60 417
	F	37 555	53 780	67 840	86 691	101 600
	T	50 860	74 030	97 114	127 717	162 017
Total	M	2 000 602	2 251 060	2 604 168	2 772 464	2 811 991
	F	1 936 028	2 151 930	2 382 392	2 623 533	2 710 290
	T	3 936 630	4 402 990	4 986 560	5 395 997	5 522 281

**Table 2.10 Percentage Distribution of Population by Age, 1971 - 1991**

<i>Age Group</i>	<i>1971</i>	<i>1976</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
	%	%	%	%	%
Under 15	35.8	30.1	24.8	23.1	20.9
15 - 34	29.7	35.1	40.7	39.1	36.5
35 - 64	30.0	29.3	27.9	30.2	33.9
65 and over	4.5	5.5	6.6	7.6	8.7
Total	100.0	100.0	100.0	100.0	100.0

**Table 2.11 Median Age and Age Dependency Ratios, 1971 - 1991**

	1971	1976	1981	1986	1991
			<i>Median Age</i>		
	21.7	23.9	26.0	28.6	31.5
			<i>Age Dependency Ratio</i>		
Child dependency ratio	599	467	362	333	296
Elderly dependency ratio	76	86	95	109	124
Overall dependency ratio	675	553	457	442	420

**Table 2.12 Sex Ratios of Population by Age, 1971 - 1991**

<i>Age Group</i>	1971	1976	1981	1986	1991
Under 15	1 047	1 055	1 079	1 088	1 084
15 - 24	1 058	1 053	1 096	1 055	1 048
25 - 44	1 161	1 192	1 223	1 100	1 028
45 - 64	1 007	1 037	1 108	1 109	1 144
65 and over	499	560	683	726	784
Overall	1 033	1 046	1 093	1 057	1 038

**Table 2.13 Sex Ratios by Nationality and Age, 1991**

<i>Nationality</i>	<i>Age Group</i>							<i>Overall</i>
	<i>0-14</i>	<i>15-24</i>	<i>25-34</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	<i>65 and over</i>	
British (with right of abode in Hong Kong only)	1 077	1 048	1 030	1 040	1 061	960	746	1 041
British (with right of abode in places outside Hong Kong)	1 089	977	974	1 183	1 416	1 333	1 263	1 101
Chinese (place of domicile - Hong Kong)	1 195	1 198	1 168	1 266	1 294	1 125	789	1 106
Chinese (place of domicile - other than Hong Kong)	1 163	1 629	1 086	964	1 168	1 011	707	1 125
Filipino	1 138	53	45	91	111	542	728	79
Portuguese	1 122	979	889	907	762	783	609	917
United States American	1 021	1 288	904	1 047	1 206	991	943	1 032
Canadian	1 147	735	916	1 349	2 155	787	859	1 127
Indian, Pakistani, Bangladeshi and Sri Lankan	1 080	1 481	1 210	1 179	1 719	1 818	1 148	1 295
Thai	1 239	318	82	36	77	347	597	117
Japanese	1 128	569	848	1 649	1 808	2 293	783	1 185
Others	1 004	714	796	778	1 010	874	760	844
Overall	1 084	1 048	991	1 078	1 205	1 087	784	1 038

**Table 2.14 Population by Place of Birth, 1981, 1986 and 1991**

<i>Place of Birth</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Hong Kong	2 854 482	57.2	3 203 165	59.4	3 299 597	59.8
China and Macau	1 973 976	39.6	1 999 185	37.0	1 967 508	35.6
Elsewhere	158 102	3.2	193 647	3.6	255 176	4.6
Total	4 986 560	100.0	5 395 997	100.0	5 522 281	100.0

**Table 2.15 Proportion of Population Born in Hong Kong by Age and Sex, 1981, 1986 and 1991**

<i>Age Group</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Under 15	90.5	90.9	90.4	91.3	90.5	91.1
15 - 24	78.5	83.9	83.7	84.9	80.8	80.9
25 - 34	54.6	60.1	66.7	69.0	73.6	70.5
35 - 44	22.4	25.8	36.0	38.7	51.6	52.2
45 - 54	17.0	19.2	20.7	22.8	21.5	23.6
55 - 64	12.4	14.3	14.6	15.7	17.4	19.3
65 and over	11.0	11.7	11.4	12.0	12.9	13.5
Overall	56.1	58.5	59.1	59.6	60.1	59.4

**Table 2.16 Population by Nationality and Place of Birth, 1991**

<i>Nationality</i>	<i>Place of Birth</i>							
	<i>Hong Kong</i>		<i>China and Macau</i>		<i>Elsewhere</i>		<i>Total</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
British (with right of abode in Hong Kong only)	3 234 973	98.1	52 617	2.7	6 854	2.7	3 294 444	59.6
British (with right of abode in places outside Hong Kong)	40 372	1.2	2 987	0.2	25 143	9.9	68 502	1.2
Chinese (place of domicile - Hong Kong)	..	..	1 836 141	93.2	60 960	23.8	1 897 101	34.4
Chinese (place of domicile - other than Hong Kong)	1 963	0.1	44 915	2.3	1 151	0.5	48 029	0.9
Filipino	630	0.0	420	0.0	63 608	24.8	64 658	1.2
Portuguese	1 358	0.0	16 951	0.9	179	0.1	18 488	0.3
United States American	3 237	0.1	3 302	0.2	11 844	4.6	18 383	0.3
Canadian	6 245	0.2	3 400	0.2	5 490	2.2	15 135	0.3
Indian, Pakistani, Bangladeshi and Sri Lankan	2 741	0.1	159	0.0	11 429	4.5	14 329	0.3
Thai	225	0.0	195	0.0	11 367	4.5	11 787	0.2
Japanese	485	0.0	144	0.0	10 221	4.0	10 850	0.2
Others	7 368	0.2	6 277	0.3	46 930	18.4	60 575	1.1
<b>Total</b>	<b>3 299 597</b>	<b>100.0</b>	<b>1 967 508</b>	<b>100.0</b>	<b>255 176</b>	<b>100.0</b>	<b>5 522 281</b>	<b>100.0</b>

**Table 2.17 Population Aged 15 and Over by Sex and Marital Status, 1981, 1986 and 1991**

<i>Sex and Marital Status</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>		<i>Standardised Percentage <sup>(1)</sup></i>		
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
							<i>%</i>	<i>%</i>	<i>%</i>
<b>Male</b>									
Never married	848 037	43.2	843 697	39.7	807 443	36.5	34.2	34.8	36.5
Married	1 059 856	54.1	1 207 549	56.9	1 333 049	60.2	62.5	61.4	60.2
Widowed	41 492	2.1	50 491	2.4	48 584	2.2	2.6	2.7	2.2
Divorced/Separated	12 418	0.6	21 089	1.0	23 871	1.1	0.7	1.1	1.1
Total	1 961 803	100.0	2 122 826	100.0	2 212 947	100.0	100.0	100.0	100.0
<b>Female</b>									
Never married	582 430	32.6	616 955	30.4	626 554	29.0	23.9	26.2	29.0
Married	1 001 503	56.0	1 162 301	57.4	1 290 860	59.8	63.8	61.1	59.8
Widowed	191 474	10.7	225 380	11.1	210 390	9.8	11.6	11.6	9.8
Divorced/Separated	11 843	0.7	21 588	1.1	29 614	1.4	0.7	1.1	1.4
Total	1 787 250	100.0	2 026 224	100.0	2 157 418	100.0	100.0	100.0	100.0

Note : (1) Using the 1991 age distribution of the male and female population as standard.

**Table 2.18 Proportion of Never Married Population Aged 15-54 by Sex and Age, 1981, 1986 and 1991**

<i>Sex and Age Group</i>	<i>Proportion of Never Married (%)</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>
<b>Male</b>			
15 - 19	98.7	99.4	99.4
20 - 24	89.4	92.2	93.5
25 - 29	57.5	61.9	67.0
30 - 34	27.3	29.5	33.1
35 - 39	15.2	14.2	16.0
40 - 44	11.9	8.6	9.9
45 - 49	9.2	7.4	6.4
50 - 54	7.4	6.9	6.0
	<i>Singulate Mean Age at Marriage<sup>(1)</sup></i>		
	29.2	29.7	30.5
<b>Female</b>			
15 - 19	96.6	97.9	98.4
20 - 24	71.3	78.7	82.9
25 - 29	30.3	37.5	45.5
30 - 34	11.0	14.5	19.8
35 - 39	4.5	7.4	10.4
40 - 44	2.7	3.8	6.8
45 - 49	2.3	2.4	3.7
50 - 54	2.6	1.7	2.2
	<i>Singulate Mean Age at Marriage<sup>(1)</sup></i>		
	25.8	27.1	28.2

Note : (1) For details of the computation, please refer to the Technical Note I in Annex 2.

**Table 2.19 Median Age at First Marriage by Sex, 1971 - 1991**

<i>Year</i>	<i>Median Age at First Marriage</i>	
	<i>Male</i>	<i>Female</i>
1971	27.8	22.9
1976	26.8	23.4
1981	27.0	23.9
1986	28.0	25.3
1991	29.1	26.2

Source : Marriage statistics.

**Table 2.20 Population<sup>(1)</sup> Aged 5 and Over by Usual Language/Dialect and Place of Birth, 1991**

<i>Usual Language/ Dialect</i>	<i>Place of Birth</i>			<i>Total</i>
	<i>Hong Kong</i>	<i>China and Macau</i>	<i>Elsewhere</i>	
Cantonese	2 907 578	1 598 411	77 333	4 583 322
English	10 449	2 626	101 009	114 084
Putonghua	3 112	45 594	8 871	57 577
Chiu Chau	9 820	60 233	2 759	72 812
Hakka	22 466	57 108	4 560	84 134
Fukien	4 801	90 578	3 666	99 045
Sze Yap	1 662	20 350	403	22 415
Shanghainese	2 017	31 759	302	34 078
Other Chinese dialects	6 161	45 314	735	52 210
Filipino	92	15	5 832	5 939
Japanese	198	178	8 519	8 895
Others	2 567	2 400	29 431	34 398
<b>Total</b>	<b>2 970 923</b>	<b>1 954 566</b>	<b>243 420</b>	<b>5 168 909</b>

Note : (1) In this table, population excludes dumb persons.

**Table 2.21 Proportion of Population<sup>(1)</sup> Aged 5 and Over Able to Speak Selected Languages/Dialects, 1991**

<i>Language/Dialect</i>	<i>Percentage of Population Able to Speak:</i>		<i>Total</i>
	<i>As a Usual Language/Dialect</i>	<i>As Another Language/Dialect</i>	
Cantonese	88.7	7.1	95.8
English	2.2	29.4	31.6
Putonghua	1.1	17.0	18.1
Chiu Chau	1.4	4.0	5.4
Hakka	1.6	3.7	5.3
Fukien	1.9	1.7	3.6
Sze Yap	0.4	1.5	1.9
Shanghainese	0.7	1.1	1.8
Filipino	0.1	1.0	1.1
Japanese	0.2	0.8	1.0

Note : (1) In this table, population excludes dumb persons.

**Table 2.22 Population by Duration of Residence in Hong Kong and Place of Birth, 1991**

<i>Duration of Residence in Hong Kong (Complete Year)</i>	<i>Place of Birth</i>							
	<i>Hong Kong</i>		<i>China and Macau</i>		<i>Elsewhere</i>		<i>Total</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Less than one	63 097	1.9	36 104	1.8	35 500	13.9	134 701	2.4
One to three	196 861	6.0	81 142	4.1	71 403	28.0	349 406	6.3
Four to six	206 922	6.3	82 471	4.2	31 949	12.5	321 342	5.8
Seven to nine	231 600	7.0	91 794	4.7	18 664	7.3	342 058	6.2
Ten and over	2 601 117	78.8	1 675 997	85.2	97 660	38.3	4 374 774	79.3
Total	3 299 597	100.0	1 967 508	100.0	255 176	100.0	5 522 281	100.0

**Table 2.23 Population Aged 5 and Over Having Moved into Hong Kong during the Past Five Years by Age and Sex, 1991**

<i>Age Group</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>
5 - 9	8 808	7 749	16 557
10 - 14	7 258	6 165	13 423
15 - 19	6 965	5 747	12 712
20 - 24	6 507	14 769	21 276
25 - 29	11 200	28 048	39 248
30 - 34	9 644	22 721	32 365
35 - 39	8 388	17 222	25 610
40 - 44	6 389	10 222	16 611
45 - 49	3 369	4 911	8 280
50 - 54	2 874	3 754	6 628
55 - 59	1 716	2 434	4 150
60 - 64	1 215	1 930	3 145
65 - 69	883	1 222	2 105
70 - 74	503	862	1 365
75 and over	602	1 096	1 698
Total	76 321	128 852	205 173

**Table 2.24 Resident Population by Area, 1981, 1986 and 1991**

<i>Area</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Hong Kong Island	1 215 656	23.8	1 201 459	21.9	1 250 993	22.0
Kowloon and New Kowloon	2 515 374	49.2	2 349 445	42.7	2 030 683	35.8
The New Territories	1 329 035	26.0	1 907 031	34.7	2 374 818	41.9
Marine	49 747	1.0	37 553	0.7	17 620	0.3
Total	5 109 812	100.0	5 495 488	100.0	5 674 114	100.0

**Table 2.25 Resident Population by District Board District, 1981, 1986 and 1991**

<i>District Board District<sup>(1)</sup></i>	<i>Resident Population</i>			<i>Percentage Change</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1981-86</i>	<i>1986-91</i>	<i>1981-91</i>
<b>Hong Kong Island</b>						
Central and Western	283 916	257 131	253 383	-9.4	-1.5	-10.8
Wan Chai	236 149	200 403	180 309	-15.1	-10.0	-23.6
Eastern	474 237	500 451	560 200	+5.5	+11.9	+18.1
Southern	221 354	243 474	257 101	+10.0	+5.6	+16.1
Sub-total	1 215 656	1 201 459	1 250 993	-1.2	+4.1	+2.9
<b>Kowloon and New Kowloon</b>						
Yau Tsim	176 726	146 496	111 692	-17.1	-23.8	-36.8
Mong Kok	247 912	206 941	170 368	-16.5	-17.7	-31.3
Sham Shui Po	467 994	433 958	380 615	-7.3	-12.3	-18.7
Kowloon City	493 325	432 894	402 934	-12.2	-6.9	-18.3
Wong Tai Sin	503 865	438 417	386 572	-13.0	-11.8	-23.3
Kwun Tong	625 552	690 739	578 502	+10.4	-16.2	-7.5
Sub-total	2 515 374	2 349 445	2 030 683	-6.6	-13.6	-19.3
<b>New Territories</b>						
Kwai Tsing	} 622 387	420 049	440 807	+6.9	+4.9	+14.5
Tsuen Wan		245 238	271 576		+10.7	
Tuen Mun	120 657	287 539	380 683	+138.3	+32.4	+215.5
Yuen Long	189 441	211 540	229 724	+11.7	+8.6	+21.3
North	115 364	146 818	165 666	+27.3	+12.8	+43.6
Tai Po	74 356	140 504	202 117	+89.0	+43.9	+171.8
Sha Tin	118 331	362 033	506 368	+205.9	+39.9	+327.9
Sai Kung	42 531	46 074	130 418	+8.3	+183.1	+206.6
Islands	45 968	47 236	47 459	+2.8	+0.5	+3.2
Sub-total	1 329 035	1 907 031	2 374 818	+43.5	+24.5	+78.7
Land total	5 060 065	5 457 935	5 656 494	+7.9	+3.6	+11.8
Plus Marine	49 747	37 553	17 620	-24.5	-53.1	-64.6
Whole territory	5 109 812	5 495 488	5 674 114	+7.5	+3.3	+11.0

Note : (1) The boundaries of the District Board districts have been revised three times since 1981. The effect of the boundary revision on the geographical distribution of population was small in most districts. The only major change was the splitting of Tsuen Wan into two districts, Tsuen Wan and Kwai Tsing in 1984. Intercensal comparison of district population should be made with these considerations in mind.



## **Chapter 3 Household Characteristics**

### **Introduction**

The basic unit of enquiry in the 1991 Population Census, as in previous censuses/by-censuses, was a household. In the Census, every person in all households found in a living quarters was enumerated. Persons who make common provisions for essentials for living inside a living quarters are regarded as members of the same household. Thus, a person who shares his living quarters with another family but cooks his own meals and keeps his own account of expenses is regarded as a one-person household. In this case, the family represents a separate household and the living quarters is said to have a 'Degree of sharing' of two (households per living quarters).

It must be noted that 'family' and 'household' are different social units. People forming a family are related either by marriage, kinship or adoption. Most often a family coincides with a household but the two may, in effect, differ because members of the same household need not be related. The household concept has important implications for planning purposes, as the unit of demand for housing and for consumption of goods and services is often a household.

Households can be distinguished into collective and domestic households. Collective households mainly consist of people living in institutions such as old people's homes, and staff quarters of factories and barracks. Domestic households consist of people living under the same roof, whether related or not, and sharing food and expenses. In 1991, about 5.4 million persons (or 99% of the population) were living in domestic households. The analyses which follow refer to domestic households only and focus on external characteristics of the household, like household size, household composition, distribution of household rent and household income, as well as derived characteristics like headship.

### **Number of households**

The number of domestic households grew from 1.2 million in 1981, to 1.5 million in 1986 and almost 1.6 million in 1991. The average annual growth rate was faster in the first half of the decade, at 3.1%, than in the second half, at 1.7% (Table 3.1). During the decade, the total population living in domestic households had not increased as quickly as the number of households. Correspondingly, there was a significant reduction in household size.

### **Household size**

Small households have become increasingly common in the past ten years. In 1981, the proportion of households with 6 persons or more was 23%. The same proportion declined to 16% in 1986 and further to 11% in 1991. The increasing tendency to form smaller households is also reflected by the increase in the proportion of households with 2 to 4 persons, from 48% in 1981 to 60% in 1991. Consequently the proportion of households

of very large sizes decreased substantially. In 1981, 3% of all households had 9 or more persons, whereas in 1991 the figure had dropped to less than 1% (Table 3.2). The rapid decline in fertility in the past 20 years, together with the tendency of young married couples to live apart from their parents after marriage gave rise to this trend towards smaller households. The average household size declined from 3.9 persons in 1981 to 3.4 persons in 1991 (Table 3.2).

Analysed by housing type, it is observed that public and aided rental blocks always contained the highest proportion of large households (with five or more members). In 1991, 33% of households in public and aided rental blocks had five or more members. This compared with a corresponding figure of only 20% for private housing blocks. The dwindling of large households over the past decade was more dramatic for public and aided rental blocks than for private housing blocks. Hence, average household size for public housing households decreased more markedly from 4.6 persons in 1981 to 3.9 persons in 1991, while that for private housing households slipped from 3.5 persons to 3.1 persons over the same period (Table 3.3).

## **Household composition**

Household composition refers to the classification of domestic households by 'family' type. A family type is defined with reference to a family nucleus which normally consists of husband and wife, with or without their never married child(ren), or at least one parent with one or more never married children. Households which are composed of one such family nucleus are said to be 'Unextended nuclear family household'. When there are related persons of different generations living with the family nucleus in the household, it becomes a 'Vertically extended nuclear family household'. On the other hand, if such related persons are of the same generation as the members of the family nucleus, the household is a 'Horizontally extended nuclear family household'.

Almost 62% of the households in 1991 were composed of an 'Unextended nuclear family'. The proportion of such households was only 54% in 1981. The actual number of such households had increased by nearly 300 000 in the past decade. Concomitantly, the proportion of households consisting of an extended family declined from 16% in 1981 to 13% in 1991 (Table 3.4).

## **Number of children and elderly in household**

Hong Kong has experienced a continuous decline in fertility since the late 1960s and this led to a reduction in the number of children under 15. In 1981, 48% of households had no children under 15. By 1986, the proportion had increased to 54%. In 1991, 58% of all households had no children under 15. The decline in birth rate is reflected in the proportion of households with three or more children, which decreased markedly from 15% in 1981 to 6% in 1991. However, the proportions of households with one and two children remained stable at around 20% and 17% respectively (Table 3.5).

As mentioned in Chapter 2, the population of Hong Kong grew older in the last

twenty years. As a result of the drastic decline in fertility and the remarkable increase in life expectancy, there are now proportionally more elderly people in the population.

The number of elderly persons aged 60 and over increased by about 209 900 in the past decade (Table 2.9 in Chapter 2). Out of all households, the proportion with one or more elderly members has risen slightly from 31% in 1981 to 33% in 1991 (Table 3.6). The number of one-person households rose from 189 100 in 1981 to 233 900 in 1991 (Table 3.4). In particular, the proportion of one-person households which consisted of elderly persons living alone increased from 32% in 1981 to 34% in 1991, or there were 20 200 more elderly persons living alone in 1991 as compared with 1981 (Table 3.6). Of those households with elderly persons living with non-elderly persons, the average number of elderly persons per household increased from 1.25 in 1981 to 1.29 in 1991 (Table 3.7).

## **Number of working members in household**

In line with the drop in average household size for all households, the average number of working members per household dropped from 1.9 in 1981 to 1.7 in 1991. However, the ratio of non-working members to working members, which reflects the economic dependency of the household, fluctuated around 1.0 throughout the decade. For households with 6 persons or more, there has been an increase in the average number of working members; households with 8 persons experienced the largest increase of 0.3 working members in the past decade. Consequently, the economic dependency of such households decreased slightly. Small and medium sized households experienced practically no changes in the number of working members or their economic dependency (Table 3.8).

## **Household income**

Consistent with the growth of the Hong Kong economy in the past decade, household income has risen significantly in the past ten years. In 1981, 67% of all households had a monthly household income of under \$4,000; this figure had dropped to 35% in 1986 and was only 12% in 1991 (Table 3.9). However, this change was not attributed to growth in household income alone. Between 1981 and 1991, the inflation rate as measured by the increase in the Consumer Price Index (A) was 116%. In other words, \$4,000 in 1981 would be equivalent to about \$8,648 in 1991, under the effect of inflation. In 1991, 44% of households had a monthly household income of less than \$8,648, accordingly, one should therefore compare this figure with the 67% quoted above. This suggests that, despite inflation, there has indeed been a significant real increase in household income. Added to this was the decrease in average household size which effectively increased the income available to each household member.

Concurrently the median household income for all households rose 237% from \$2,955 in 1981 to \$9,964 in 1991. When analysed by household size, it can be observed that all households, regardless of size, recorded increases of over 200% in their median monthly household income in the past ten years. The greatest increase occurred to households of size one, at 277% and the smallest increase to households of size 4, at 218% (Table 3.10). It should be noted that all these rates of increase are well above the rate of inflation in the same

period, suggesting some real growth in household income. In real terms, not only have the rich become richer, the poor have also become richer.

The income of a household is closely related to the number of working members in the household. The effect of an extra working member on household income can be quite considerable. In 1991, of those households with no working members, 63% had a monthly income of under \$6,000. Among those households with one working member, 40% had a monthly income of under \$6,000. For those households with two or three working members, the proportion with monthly household income below \$6,000 was only 8% and 2% respectively (Table 3.11).

When analysed by type of living quarters, household income was also found to have increased considerably. Households living in Housing Authority rental blocks experienced considerable rises in their median monthly household income in the past ten years. An even larger increase was recorded for households living in villas/bungalows/modern village houses, which saw a rise of 300% in their median household income, from \$3,098 in 1981 to \$12,400 in 1991. As regards households living in Housing Authority Home Ownership estates, they had about the same median household income in 1991 as those living in private self-contained housing blocks, at \$12,000 (Table 3.12).

To measure changes in the extent of diversity in income distribution, all households can be ranked according to their monthly household income and then divided into ten equal groups, beginning with the household with the lowest income until the household with the highest income. By tabulating the proportion of all household incomes earned by each of the ten groups of households, an indication of the extent of diversity in income distribution is obtained.

Table 3.13 shows the decile distribution of household income of domestic households in 1981, 1986 and 1991. In 1991, the 10% of households with the lowest income earned only 1.3% of all household incomes while the 10% of households with the highest income earned 37.3% of all household incomes. The corresponding figures in 1981 were 1.4% and 35.2% respectively. If there were no diversity in the income distribution, each of the ten groups of households would have earned 10% of all household incomes. These trends suggest that there was an increase in the diversity of the household income distribution. However, care should be taken in interpreting these trends. One deficiency of this measure is that it fails to take into account the effect of upward mobility of the population on the social ladder and accordingly, on the income distribution. Take for example, households falling in the bottom decile in 1981 may have moved up the social ladder, earned higher income and therefore fell in higher deciles in 1991. Their original positions in the bottom decile may be replaced by households which have newly arrived in Hong Kong or by households whose members have just entered the labour force. This is a natural process in social and economic development.

The Gini coefficient, which takes a value between zero and one, is often used as an indicator of diversity in household income distribution. A value of zero indicates no diversity in the household income distribution, or every household has an equal share of the total household income. A value of one means one household owns the total household income and the rest own none. In actuality, these two extreme values do not arise. In general, the higher the value of the Gini coefficient, the greater the income diversity. The

Gini coefficient of the household income distribution in 1991 was 0.476, which was slightly higher than that in 1986 and that in 1981 (Table 3.13). The use of the Gini coefficient to indicate diversity in income distribution suffers from the same handicap as the decile distribution, as outlined in the previous paragraph. One further disadvantage in using the Gini coefficient and the decile distribution to indicate diversity in income distribution is their inherent inability to reflect the structural changes in the economy and the consequential transformation to occupational patterns which this brings. In the case of Hong Kong, the economy was once dominated by the secondary sector which is now being replaced by the tertiary sector. This means that more people are working in the professional, managerial and supervisory levels which have experienced faster pay increases. For details of this phenomenon of occupation upgrading, please see Chapter 5. It should be pointed out that a degree of diversity in income distribution is common even in the most economically advanced countries.

Although there has been an observed increase in diversity in income distribution, the median income of each group of households between quintiles did increase significantly over the past decade. Between 1981 and 1986, the largest increase in median income occurred in the bottom group, with a 97% increase over the five year period. Between 1986 and 1991, the greatest increase occurred in the uppermost group, with a 106% increase and the smallest increase in the lowest group, with a 71% increase. Over the entire decade, all groups of households experienced substantial increases in their median income, at rates well in excess of the corresponding inflation rate of 116%, as measured by the increase in the Consumer Price Index (A) (Table 3.14).

The use of the Gini coefficient and the decile distribution of household income only serves to indicate different trends in the diversity of income distribution among households. The effects of taxation and of social benefits on the distribution of household income, which tend to reduce the diversity of income, have not been considered in the above analyses. No account is taken of the intangible income received by the lower income households in the form of increased Government spending in housing, health and education. The economic benefits of such welfare services in alleviating the apparent diversity in household income distribution should not be underestimated.

## **Household rent**

The median rent, which is a summary statistic of the household rent distribution, indicates the general rise in rent paid by such domestic households in the past ten years. Domestic households in private housing blocks paid the highest median rent among all types of living quarters in this period. Their median rent in 1991 was up from the 1981 figure of \$450 to \$1,600. This represented an increase of 256% in the ten years period. The inflation rate, as indicated by the increase in the Consumer Price Index (A), was 116% (Table 3.15).

The rent-income ratio, which expresses the household rent as a percentage of the household income, can be used as a measure of the affordability of the domestic households to pay for the accommodation. Among domestic households in different types of living quarters, those in private housing blocks recorded the highest median rent-income ratio of 20.0% in 1991 (Table 3.15).

Median rent-income ratios for domestic households in all types of living quarters increased moderately in the past ten years. Apart from the differential rates of increase of rent and income, the change is also attributable to many factors including the improvement in housing quality which carries a higher rent (Table 3.15).

## Headship of households

The head of a household is defined as a person acknowledged as such by other members of the household. In the 1991 Population Census, as in previous censuses/by-censuses, one person in the household was thus designated as the head. The headship concept is important for analysis of household formation patterns. Over the past ten years, there has been some significant changes in headship characteristics.

The age-specific headship rate is the ratio of the number of household heads in a given age group to the total number of persons in the same age group of the population living in domestic households. Over the past ten years, headship rates for the age groups 15-44 declined significantly. Concomitantly, for those household heads aged 65 and over, the headship rates increased by six percentage points. The overall headship rate rose slightly from 33.9 per 100 in 1981 to 36.8 per 100 in 1991 (Table 3.16). However, the standardised overall headship rate declined from 38.1 in 1981 to 36.8 in 1991, indicating that much of the increase in the overall headship rate was due to the changing age structure of the population, particularly the aging effect (Table 3.16). The standardised overall headship rate is obtained by multiplying the age-specific headship rates in each year by the number of people in the relevant age group in the standard population (which has been chosen to be the 1991 population), summing the results and then dividing by the total population of the standard population.

Changes in headship rates over time reflect the changing propensities to form new households. Many socio-economic factors affect trends in headship rates. Two such factors are discussed below.

The median ages at first marriage of both males and females have been increasing over the past ten years (Please refer to Chapter 2). This increasing postponement of marriage then leads to a slowing down of household formation among those of marriageable age. This phenomenon would tend to decrease the headship rates at the younger ages.

The presence of large numbers of foreign domestic helpers in Hong Kong in recent years also contributed to the decline in headship rate, particularly among those aged 25-44. They are typically not household heads in the Census definition, so headship rates in the corresponding age groups are expected to have been lowered because of their presence. Table 3.17 presents age-specific headship rates computed with foreign domestic helpers included and excluded in the domestic household population. It is noticed that the impact on overall headship rate has increased from 1981 to 1991. The difference between the two sets of overall headship rates was 0.1 per 100 in 1981 but increased to 0.5 per 100 in 1991. This is hardly surprising as the number of foreign domestic helpers in Hong Kong has increased rather substantially in the past few years. Analysed by age group, the largest difference in 1991 occurred in the age group 35-44, followed by that in the age group 25-34, showing that

most foreign domestic helpers were in these two age groups (Table 3.17).

**Table 3.1 Number of Domestic Households, 1961 - 1991**

<i>Year</i>	<i>Number of Domestic Households</i>	<i>Average Annual Growth Rate<sup>(1)</sup> (%)</i>	
		<i>Domestic Households</i>	<i>Population</i>
1961	687 209	..	..
1971	857 008	2.2	2.3
1976	1 024 680	3.4	2.1
1981	1 244 738	4.3	3.3
1986	1 452 576	3.1	1.5
1991	1 582 215	1.7	0.6

Note : (1) For the years ending the year shown at left.

**Table 3.2 Domestic Households by Household Size, 1981, 1986 and 1991**

<i>Household Size</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1	189 087	15.2	214 921	14.8	233 923	14.8
2	191 841	15.4	237 177	16.3	288 713	18.2
3	191 995	15.4	251 507	17.3	306 373	19.4
4	213 908	17.2	299 050	20.6	355 835	22.5
5	177 618	14.3	217 838	15.0	225 383	14.2
6	126 247	10.1	125 021	8.6	105 502	6.7
7	74 971	6.0	59 869	4.1	40 280	2.5
8	39 996	3.2	26 277	1.8	15 734	1.0
9	19 497	1.6	11 303	0.8	5 779	0.4
10 and over	19 578	1.6	9 613	0.7	4 693	0.3
<b>Total</b>	<b>1 244 738</b>	<b>100.0</b>	<b>1 452 576</b>	<b>100.0</b>	<b>1 582 215</b>	<b>100.0</b>
	<i>Average Household Size</i>					
	3.9		3.7		3.4	

**Table 3.3 Percentage Distribution of Domestic Households<sup>(1)</sup> by Type of Living Quarters and Household Size, 1981, 1986 and 1991**

<i>Year and Type of Living Quarters</i>	<i>Household Size (%)</i>					<i>Total</i>	<i>Average Household Size</i>
	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four</i>	<i>Five and over</i>		
1981							
Public and aided rental blocks	6.8	9.5	13.1	19.0	51.6	100.0	4.6
Housing Authority home ownership estates	3.9	13.0	20.2	21.4	41.5	100.0	4.3
Private housing blocks	19.7	19.2	16.9	16.4	27.8	100.0	3.5
Institutions, village houses, simple stone structures and other permanent housing	18.9	15.6	14.5	16.3	34.7	100.0	3.9
Temporary housing	19.9	17.9	17.3	15.8	29.1	100.0	3.6
Overall	15.2	15.5	15.5	17.2	36.6	100.0	3.9
1986							
Public and aided rental blocks	7.3	10.0	15.6	24.2	42.9	100.0	4.2
Housing Authority home ownership estates	3.4	15.9	23.7	27.8	29.2	100.0	3.8
Private housing blocks	19.3	20.8	18.4	18.2	23.3	100.0	3.3
Institutions, village houses, simple stone structures and other permanent housing	21.2	17.9	16.7	17.0	27.2	100.0	3.5
Temporary housing	22.6	18.6	17.1	18.1	23.6	100.0	3.3
Overall	14.8	16.4	17.3	20.6	30.9	100.0	3.7
1991							
Public and aided rental blocks	9.4	12.8	18.3	26.3	33.2	100.0	3.9
Housing Authority home ownership estates	5.4	18.2	24.0	29.1	23.3	100.0	3.6
Private housing blocks	18.5	22.1	20.2	19.6	19.6	100.0	3.1
Institutions, village houses, simple stone structures and other permanent housing	21.2	20.9	17.0	17.6	23.3	100.0	3.4
Temporary housing	27.6	19.2	16.4	17.1	19.7	100.0	3.1
Overall	14.8	18.3	19.4	22.5	25.0	100.0	3.4

Note : (1) In this table, figures exclude domestic households living on board vessels.

**Table 3.4 Domestic Households by Household Composition, 1981, 1986 and 1991**

<i>Household Composition<sup>(1)</sup></i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
One person	189 087	15.2	186 841	12.9	233 923	14.8
One unextended nuclear family	677 109	54.4	860 067	59.2	975 498	61.6
One vertically extended nuclear family	168 690	13.6	173 107	11.9	169 543	10.7
One horizontally extended nuclear family	30 318	2.4	31 173	2.1	28 813	1.8
Two or more nuclear families	78 225	6.3	89 837	6.2	75 185	4.8
Related persons forming no nuclear family	73 687	5.9	69 074	4.8	67 750	4.3
Unrelated persons	27 622	2.2	30 724	2.1	31 503	2.0
Households composed only of persons who do not usually live there	..	..	11 753	0.8	..	..
<b>Total</b>	<b>1 244 738</b>	<b>100.0</b>	<b>1 452 576</b>	<b>100.0</b>	<b>1 582 215</b>	<b>100.0</b>

Note : (1) For the 1981 and 1991 Population Censuses, household composition was derived based on the relationship of all persons who were found in the household on the Census reference date, whereas for the 1986 By-Census it was based on the relationship of all persons who usually lived in the household.

**Table 3.5 Percentage Distribution of Domestic Households by Household Size and Number of Children Aged Under 15, 1981, 1986 and 1991**

<i>Year and Household Size</i>	<i>Number of Children Aged Under 15</i>				<i>Total</i>
	<i>Zero</i>	<i>One</i>	<i>Two</i>	<i>Three and over</i>	
<b>1981</b>					
Under three	96.4	3.5	0.1	..	100.0
Three	47.3	47.9	4.7	0.1	100.0
Four	29.7	21.3	46.5	2.5	100.0
Five	23.2	21.4	23.8	31.6	100.0
Six	18.6	21.0	22.6	37.8	100.0
Seven and over	10.2	17.0	21.4	51.4	100.0
Overall	48.3	19.4	17.1	15.2	100.0
<b>1986</b>					
Under three	97.0	2.9	0.1	..	100.0
Three	49.7	46.1	4.1	0.1	100.0
Four	32.2	20.1	46.2	1.5	100.0
Five	29.5	20.8	23.3	26.4	100.0
Six	28.2	22.1	22.4	27.3	100.0
Seven and over	19.4	22.4	22.9	35.3	100.0
Overall	53.7	19.7	17.4	9.2	100.0
<b>1991</b>					
Under three	97.3	2.6	0.1	..	100.0
Three	52.8	43.9	3.3	0.0	100.0
Four	34.6	21.7	42.8	0.9	100.0
Five	30.5	22.3	25.5	21.7	100.0
Six	30.5	21.6	23.7	24.2	100.0
Seven and over	23.2	21.8	22.7	32.3	100.0
Overall	57.5	19.8	16.4	6.3	100.0

**Table 3.6 Domestic Households with Elderly Persons Aged 60 and Over by Household Size, 1981, 1986 and 1991**

<i>Household Size</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%<sup>(1)</sup></i>	<i>Number</i>	<i>%<sup>(1)</sup></i>	<i>Number</i>	<i>%<sup>(1)</sup></i>
1	59 534	31.5	70 865	33.0	79 718	34.1
2	58 824	30.7	78 265	33.0	103 861	36.0
3	50 911	26.5	70 030	27.8	93 222	30.4
4	49 530	23.2	67 771	22.7	82 091	23.1
5	52 030	29.3	68 634	31.5	73 754	32.7
6	46 149	36.6	52 595	42.1	48 495	46.0
7	31 689	42.3	29 010	48.5	21 785	54.1
8	18 228	45.6	14 083	53.6	8 914	56.7
9	9 345	47.9	6 335	56.0	3 453	59.8
10 and over	10 599	54.1	5 960	62.0	2 976	63.4
<b>Total</b>	<b>386 839</b>	<b>31.1</b>	<b>463 548</b>	<b>31.9</b>	<b>518 269</b>	<b>32.8</b>

Note : (1) Proportion of domestic households with elderly persons aged 60 and over and with the household size shown at left, in all domestic households in Hong Kong with the same household size.

**Table 3.7 Domestic Households with Elderly Persons Aged 60 and Over Living with Non-elderly Persons by Household Size, 1981, 1986 and 1991**

<i>Household Size</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number of households</i>	<i>Total number of elderly persons<sup>(1)</sup></i>	<i>Number of households</i>	<i>Total number of elderly persons<sup>(1)</sup></i>	<i>Number of households</i>	<i>Total number of elderly persons<sup>(1)</sup></i>
2	39 500	39 500	49 272	49 272	62 373	62 373
3	49 680	64 792	68 028	90 712	90 909	124 089
4	49 365	63 795	67 575	88 665	81 873	109 987
5	52 020	65 076	68 571	86 869	73 694	95 370
6	46 149	58 595	52 546	68 296	48 484	64 393
7	31 679	40 770	28 989	38 842	21 772	30 327
8	18 222	23 909	14 083	19 319	8 909	12 853
9	9 339	12 758	6 328	8 925	3 453	5 356
10 and over	10 594	15 135	5 953	8 991	2 976	5 119
Total	306 548	384 330	361 345	459 891	394 443	509 867
<i>Average Number of Elderly Persons per Household<sup>(2)</sup></i>						
	1.25		1.27		1.29	

Notes : (1) Aged 60 and over.

(2) In this table, the figures exclude households consisting entirely of elderly persons.

**Table 3.8 Average Number of Working Members and Ratio of Non-working Members to Working Members by Household Size, 1981, 1986 and 1991**

<i>Household Size</i>	<i>Average Number of Working Members</i>			<i>Ratio of Non-working Members to Working Members</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
1	0.7	0.7	0.7	0.4	0.4	0.5
2	1.4	1.4	1.3	0.4	0.5	0.5
3	1.6	1.6	1.6	0.8	0.9	0.9
4	1.8	1.8	1.8	1.2	1.2	1.2
5	2.1	2.2	2.2	1.3	1.3	1.3
6	2.5	2.7	2.7	1.4	1.3	1.3
7	3.0	3.2	3.2	1.4	1.2	1.2
8	3.4	3.6	3.7	1.3	1.2	1.2
9	3.9	4.2	4.1	1.3	1.1	1.2
10 and over	4.8	4.9	4.9	1.5	1.2	1.3
Overall	1.9	1.8	1.7	1.1	1.0	1.0

**Table 3.9 Domestic Households by Monthly Household Income, 1981, 1986 and 1991**

<i>Monthly Household Income (HK\$)</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Under 2,000	355 437	28.6	141 289	9.7	75 552	4.8
2,000 - 3,999	477 995	38.3	368 884	25.4	115 236	7.3
4,000 - 5,999	209 281	16.8	340 871	23.5	202 511	12.8
6,000 - 7,999	91 622	7.4	209 360	14.4	218 388	13.8
8,000 - 9,999	42 742	3.4	125 631	8.6	181 846	11.5
10,000 - 14,999	39 375	3.2	146 199	10.1	314 379	19.9
15,000 - 19,999	12 250	1.0	53 412	3.7	176 406	11.1
20,000 - 29,999	8 751	0.7	38 559	2.7	156 500	9.9
30,000 - 39,999	2 561	0.2	13 573	0.9	60 169	3.8
40,000 - 49,999	1 261	0.1	5 698	0.4	28 374	1.8
50,000 and over	3 463	0.3	9 100	0.6	52 854	3.3
Total	1 244 738	100.0	1 452 576	100.0	1 582 215	100.0

**Table 3.10 Median Monthly Household Income by Household Size, 1981, 1986 and 1991**

<i>Household Size</i>	<i>Median Monthly Household Income (HK\$)</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>
1	1,272	2,444	4,800
2	2,445	4,486	9,000
3	2,865	5,069	10,000
4	3,146	5,422	10,000
5	3,463	6,123	12,000
6	3,887	7,020	14,000
7	4,391	7,994	16,250
8	4,991	8,853	18,715
9	5,527	9,915	20,500
10 and over	6,537	11,427	22,000
Overall	2,955	5,160	9,964

**Table 3.11 Percentage Distribution of Domestic Households by Monthly Household Income and Number of Working Members, 1991**

<i>Monthly Household Income (HK\$)</i>	<i>Number of Working Members</i>				
	<i>Zero</i>	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four and over</i>
Under 2,000	36.8	2.4	0.3	0.1	0.1
2,000 - 3,999	14.3	13.0	1.9	0.5	0.2
4,000 - 5,999	11.9	24.3	5.5	1.2	0.5
6,000 - 7,999	9.2	21.5	12.5	3.0	0.8
8,000 - 9,999	6.2	11.6	17.1	6.5	1.7
10,000 - 14,999	9.7	13.2	29.0	31.1	12.3
15,000 - 19,999	4.7	5.0	13.2	23.3	26.1
20,000 - 29,999	3.7	4.2	10.4	17.5	36.5
30,000 - 39,999	1.6	1.9	4.2	6.5	11.9
40,000 - 49,999	0.7	1.0	2.1	3.4	3.8
50,000 and over	1.2	1.9	3.8	6.9	6.1
Total	100.0	100.0	100.0	100.0	100.0

**Table 3.12 Median Monthly Household Income by Type of Living Quarters, 1981, 1986 and 1991**

<i>Type of Living Quarters</i>	<i>Median Monthly Household Income (HK\$)</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>
Housing Authority rental blocks			
Group A	3,067	5,062	8,393
Group B	2,525	4,210	6,843
Housing Society rental blocks	3,709	6,048	9,985
Housing Authority home ownership estates	4,785	7,077	12,000
Private housing blocks			
Self-contained	3,246	5,858	12,000
Non self-contained	1,666	3,145	5,900
Villas/Bungalows/Modern village houses	3,098	5,395	12,400
Simple stone structures	2,312	3,657	6,243
Institutions	3,504	4,887	8,000
Other permanent housing	3,370	5,486	11,000
Roof-top structures	2,352	3,795	6,800
Other temporary housing	2,248	3,466	6,000
Overall <sup>(1)</sup>	2,953	5,159	9,967

Note : (1) In this table, figures exclude domestic households living on board vessels.

**Table 3.13 Decile Distribution of Monthly Household Income of Domestic Households, 1981, 1986 and 1991**

<i>Households Enclosed Between Deciles<sup>(1)</sup></i>	<i>1981</i> %	<i>1986</i> %	<i>1991</i> %
Up to 1st (lowest)	1.4	1.6	1.3
1st and 2nd	3.2	3.4	3.0
2nd and 3rd	4.4	4.4	4.0
3rd and 4th	5.4	5.4	5.0
4th and 5th	6.5	6.4	6.1
5th and 6th	7.8	7.6	7.4
6th and 7th	9.4	9.1	9.0
7th and 8th	11.5	11.4	11.4
8th and 9th	15.2	15.2	15.5
9th and 10th (highest)	35.2	35.5	37.3
Total	100.0	100.0	100.0
		<i>Gini Coefficient</i>	
	0.451	0.453	0.476

Note : (1) Households are ranked by income individually. The first decile refers to the point in the array of households below which there are exactly 10% of households. The second decile refers to the point in the array below which there are exactly 20% of households. And so on.

**Table 3.14 Median Monthly Household Income of Domestic Households between Quintiles<sup>(1)</sup> in the Income Distribution, 1981, 1986 and 1991**

<i>Households Enclosed Between Quintiles</i>	<i>Median Monthly Household Income (HK\$)<sup>(2)</sup></i>			<i>Percentage Change</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1981-1986</i>	<i>1986-1991</i>	<i>1981-1991</i>
Up to 1st (lowest)	1,026	2,024	3,460	+97	+71	+237
1st and 2nd	2,375	3,606	6,659	+52	+85	+180
2nd and 3rd	2,955	5,160	9,964	+75	+93	+237
3rd and 4th	4,261	7,455	14,989	+75	+101	+252
4th and 5th (highest)	7,551	13,585	27,963	+80	+106	+270

Notes : (1) Households are ranked by income individually. The first quintile refers to the point in the array of households below which there are exactly 20% of households. The second quintile refers to the point in the array below which there are exactly 40% of households. And so on.

(2) Median monthly household income for the group of households enclosed between the stated quintiles refers to the income of the household which is positioned at the middle of the array of households in the given group.

**Table 3.15 Median Monthly Household Rent and Median Rent-income Ratios of Domestic Households in Permanent Housing by Type of Living Quarters, 1981 and 1991**

<i>Type of Living Quarters</i>	<i>Median Monthly Household Rent (HK\$)</i>		<i>Median Rent-income Ratio (%)</i>	
	<i>1981</i>	<i>1991</i>	<i>1981</i>	<i>1991</i>
Public and aided rental blocks	151	669	5.3	7.7
Housing Authority home ownership estates	.. <sup>(1)</sup>	1,350	.. <sup>(1)</sup>	7.6
Private housing blocks	450	1,600	17.9	20.0
Institutions, village houses, simple stone structures and other permanent housing	150	700	5.7	7.4

Note : (1) The median is not compiled as the total number of households in this category is too small.

**Table 3.16 Headship Rates by Age and Standardised Headship Rates, 1981, 1986 and 1991**

Age Group	1981	1986	1991
	<i>Headship Rate (%)</i>		
15 - 24	7.1	5.8	4.7
25 - 34	31.3	30.6	28.6
35 - 44	50.9	48.8	46.9
45 - 54	56.4	56.7	55.9
55 - 64	56.4	57.9	58.1
65 and over	47.3	50.4	53.6
Overall	33.9	35.6	36.8
	<i>Standardised Headship Rate<sup>(1)</sup> (%)</i>		
	38.1	37.9	36.8

Note : (1) Using 1991 population by age as standard.

**Table 3.17 Age-specific Headship Rates by Age, 1981, 1986 and 1991**

Age Group	<i>Age-specific Headship Rate (per 100 persons in the population)</i>					
	<i>Including Foreign Domestic Helpers</i>			<i>Excluding Foreign Domestic Helpers</i>		
	1981	1986	1991	1981	1986	1991
15 - 24	7.1	5.8	4.7	7.1	5.8	4.7
25 - 34	31.3	30.6	28.6	31.4	31.0	29.3
35 - 44	50.9	48.8	46.9	51.0	49.3	47.7
45 - 54	56.4	56.7	55.9	56.4	56.9	56.3
55 - 64	56.4	57.9	58.1	56.4	57.9	58.2
65 and over	47.3	50.4	53.6	47.3	50.4	53.6
Overall	33.9	35.6	36.8	34.0	35.9	37.3

## **Chapter 4    Education Characteristics**

### **Introduction**

In the 1991 Population Census, four questions were asked on the education characteristics of the population. Respondents were first asked about their level of educational attainment, regardless of whether they had completed the course. They were then asked whether they were still studying and if the answer was affirmative, the mode of study. Those respondents who had tertiary education were further asked about their specific field of education. This information is important for understanding the improvement of educational level of the population in Hong Kong over time.

To facilitate comparison, the classification of educational attainment and field of education largely follow those adopted in the 1981 Census and the 1986 By-Census. The only difference is in the treatment of holders of certificate/diploma courses in technical institutes/polytechnics. These courses were classified under 'Tertiary (or post-secondary) education' in the 1981 Census, but under 'Matriculation education' in the reports of the 1986 By-Census. However, these courses have been grouped under 'Tertiary education' in this report to enable exact comparison with the grouping 'Tertiary education' in the 1991 Population Census.

### **Educational attainment**

Primary education is the foundation to further education. The proportion of the population with primary education or above measures the extent to which the basic level of education attained by the population. In general, this proportion increased steadily from 1981 to 1991 for the population of Hong Kong. The increase was more significant in the age groups of 35-44 and 45-54, indicating that improvement in educational opportunities actually began some 40 years ago. In 1981, about 88% of those aged 35-44 who attained at least primary education should have had their primary education in the 1940s and 1950s. By 1991, the proportion increased to 96% for the same age group which referred to some younger cohorts of persons, reflecting a big increase in primary educational opportunities from 1950s onwards. Such an improvement in the educational opportunities of the population over time can also be observed, though less dramatically, by comparing such a proportion among various age groups in 1991. The proportion was much higher in the younger than in the older age groups. In particular, with the introduction of compulsory primary education in 1971, the proportion for the age group 15-24 reached almost 100% in 1991. In contrast, the proportion was only 86% for those aged 45-54 who had their primary education in the 1940s and 1950s (Table 4.1).

The above analysis represents an overview study. A closer look can be taken with reference to the educational attainment of the population aged 15 and over. According to the current system of nine years of compulsory education in Hong Kong, which has been operating since 1978, most students reaching age 15 should have attained lower secondary education. It is therefore meaningful to compare the proportion of population with secondary education or above for those aged 15 and over in 1991 with that ten years ago. The increase

in such a proportion from 50% to 62% in the past decade was very significant, indicating clearly the remarkable growth in educational opportunities above the primary level. If one focuses on the proportion of population with tertiary education, the increase from 7% to 11% over the same period was more impressive. The improvement was found to be more significant for females than males (Table 4.2).

The greater opportunities for education available to the younger population improved markedly their level of educational attainment. For those aged 15-24 in 1991, the proportion of population with no schooling or only kindergarten education was less than 1% whereas that with secondary/matriculation education was high at 82%. On the other hand, for those aged 55 and over, as there were much fewer opportunities for education at their schooling ages, a very large proportion (43%) had no schooling or only kindergarten education, whereas the proportion with secondary/matriculation education was low at 15% (Table 4.3).

## School attendance

The school attendance rate, which is the number of full-time students per 100 population in a particular age group, is a useful indicator of the prevalence of educational opportunities for the younger population who are at schooling ages. Since the introduction of six years of compulsory education covering primary education in 1971 and an addition of three more years covering lower secondary education in 1978, it is natural to see that school attendance rates for children aged 6-11 and 12-16 came very close to 100% in the last ten years. The attendance rate for children aged 3-5 were also high above 90% in 1991 because kindergarten prepares children for entering primary education (Table 4.4).

For the age groups 17-18 and 19-24, school attendance is no longer related to compulsory education, the attendance rates therefore reflect the interplay between the forces of further education and employment. Over the past ten years, the school attendance rate for the age group 17-18 increased steadily from 45% in 1981 to 58% in 1991, and that for the age group 19-24, from 9% to 15%. These suggest that greater educational opportunities were available in matriculation class and tertiary institutions, thus enabling more young people to continue their higher education instead of seeking employment in the labour market (Table 4.4).

The school attendance rates exhibited very interesting sex differentials. The rates for females aged 12-18 were generally higher than those for the male counterparts over the last decade. On the other hand, for the age group of 19-24, which corresponds to the period of tertiary education, the pattern was reversed, i.e. the school attendance rate was higher in the case of males than females. This trend prevailed in the last ten years but the gap had narrowed in the past five years (Table 4.4).

Besides the above quantitative expansion, there was also qualitative improvement in the provision of education in the past decade. The improvement is reflected in the decreases in the pupil-teacher ratio and the average class size for education at kindergarten, primary and secondary level in the past decade. The greatest improvement was in the kindergarten level where the pupil-teacher ratio dropped from 37 pupils per teacher in 1981 to 25 in 1991 and the average class size was reduced from 33 to 27 in the same period

(Table 4.5).

## **Tertiary education**

Owing to the increased tertiary educational opportunities in the past ten years, persons with tertiary education had increased substantially both in number and in their share of the population. In 1981, about 249 500 persons (or 7% of the total) aged 15 and over had tertiary education, whereas by 1991 the number was almost doubled and reached 490 900 (or 11% of the total). This development was particularly prominent for the younger population. For those persons in the age group 20-24, the proportion more than doubled from 9% in 1981 to 21% in 1991. The increase for the age group 25-34 from 9% to 16% in the same period was also remarkable (Table 4.6).

The median age of those persons with tertiary education remained at 31 in the past ten years. On the other hand, the median age of part-time students increased from 22 in 1981 to 26 in 1991, as there was a dramatic increase in the number of persons aged 25-34 studying part-time in tertiary institutions. The median age of those studying full time in tertiary institutions, remained at 21 throughout the period, owing to the fact that these institutions drew in youngsters of the same age band to study (Table 4.6).

### ***Mode of study***

The way of acquiring tertiary education was also changing. For the age group 15-19, the proportion of persons with tertiary education who were studying full time increased from 66% in 1981 to 78% in 1991. For the age group 20-24, 45% of the persons with tertiary education were studying full time, as against 42% in 1981. These could be attributed to the rapid increase in the number of full time places in tertiary educational institutions. On the other hand, as a result of the increasing opportunities available to the population to acquire tertiary education through part-time studies, distance learning and open college where mature persons without the basic qualification could do so, the number of part-time students in tertiary education more than doubled from about 16 400 in 1981 to 36 400 in 1991 (Table 4.6).

### ***Type of tertiary education***

There were shifts over the past ten years in the pattern of the types of tertiary education for persons with tertiary education. The proportions of the population with tertiary education who had studied or were studying teacher and nurse training courses and other non-degree courses decreased from 28% in 1981 to 20% in 1991. On the other hand, the proportions of those who had studied or were studying certificate/diploma courses and higher diploma/endorsement certificate courses in technical institutes/polytechnics, associateship or equivalent courses in polytechnics and degree courses all increased (Table 4.7).

A detailed analysis of the above shifts in pattern by sex revealed that there was a significant change in the type of tertiary education for females with tertiary education. For females with tertiary education, the proportion of those who had studied or were studying teacher and nurse training courses dropped significantly from 25% in 1981 to only 14 % in 1991. On the other hand, the proportion of those who had studied or were studying

certificate/diploma courses in technical institutes/polytechnics increased from 12% in 1981 to 18% in 1991 and that for degree course also increased from 41% to 47% in the same period respectively. For males with tertiary education, the proportions with different types of tertiary education remained relatively stable (Table 4.7).

### ***Field of education***

In the past ten years, there were significant decreases in the proportions of the population with tertiary education in such fields as 'Arts and social science' and 'Education'. Whereas in 1981, one out of three persons with tertiary education was educated in these fields, by 1991, only one out of four was so educated. On the other hand, a larger proportion of the population with tertiary education was educated in 'Business, commercial and computer studies'. In 1981, one out of five persons with tertiary education were educated in this field, but in 1991, it was one out of four. As for other fields of education, their shares remained relatively stable in the last decade (Table 4.8).

The sex differential in the field of education remained steady over the last decade. The proportions of males in the fields 'Pure science', 'Architecture and construction engineering' and 'Mechanical, electrical, electronic and marine engineering', out of all males with tertiary education were greater than the corresponding proportions for females. The opposite was true in the fields 'Arts and social science', 'Education', 'Business, commercial and computer studies' and 'Medical and health related studies' (Table 4.8).

**Table 4.1 Population Aged 6 and Over with Primary Education or Above by Age, 1981, 1986 and 1991**

Age Group				Percentage of Population in Age Group		
	1981	1986	1991	1981	1986	1991
6 - 14	735 071	743 822	720 583	95.3	96.7	97.5
15 - 24	1 129 540	1 004 573	835 745	98.4	99.2	99.5
25 - 34	846 066	1 068 693	1 155 989	95.9	97.3	98.1
35 - 44	425 681	604 625	851 087	88.1	93.4	95.5
45 - 54	364 957	410 367	419 576	70.6	78.1	86.0
55 and over	378 186	474 901	550 671	52.6	54.9	56.6
Overall	3 879 501	4 306 981	4 533 651	85.8	87.6	88.7

**Table 4.2 Percentage Distribution of Population Aged 15 and Over by Educational Attainment and Sex, 1981 and 1991**

Educational Attainment	1981			1991		
	Male	Female	Both sexes	Male	Female	Both sexes
No schooling/Kindergarten	7.6	25.5	16.1	7.1	18.5	12.8
Primary	36.8	31.5	34.2	26.1	24.3	25.2
Lower secondary	21.3	14.6	18.1	22.9	15.4	19.1
Upper secondary	22.2	20.2	21.3	26.0	27.5	26.7
Matriculation	4.0	3.2	3.6	4.9	4.9	4.9
Tertiary :						
Non-degree courses	3.6	3.0	3.3	5.7	5.0	5.4
Degree courses	4.5	2.0	3.4	7.3	4.4	5.9
Total	100.0 (1 961 803)	100.0 (1 787 250)	100.0 (3 749 053)	100.0 (2 212 947)	100.0 (2 157 418)	100.0 (4 370 365)

Note : In this table, figures in brackets are total counts for 100%.

**Table 4.3 Percentage Distribution of Population Aged 15 and Over by Age and Educational Attainment, 1991**

Age Group	Educational Attainment				Total
	No schooling/ Kindergarten	Primary	Secondary/ Matriculation	Tertiary	
15 - 24	0.5	3.5	82.3	13.7	100.0 (839 841)
25 - 34	1.9	18.2	64.4	15.5	100.0 (1 178 288)
35 - 44	4.5	34.1	50.8	10.6	100.0 (891 032)
45 - 54	14.0	38.8	35.5	11.7	100.0 (487 658)
55 and over	43.4	37.4	14.9	4.3	100.0 (973 546)

Note : In this table, figures in brackets are total counts for 100%.

**Table 4.4 School Attendance Rates by Age and Sex, 1981, 1986 and 1991**

Age Group	1981			1986			1991		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
3 - 5	83.5	82.7	83.1	91.5	91.7	91.6	94.9	94.9	94.9
6 - 11	98.5	98.5	98.5	99.5	99.5	99.5	99.8	99.8	99.8
12 - 16	83.4	84.6	84.0	92.2	94.5	93.3	91.8	95.6	93.6
17 - 18	44.9	45.0	45.0	53.9	58.3	56.0	54.3	62.7	58.3
19 - 24	10.0	7.1	8.6	13.5	10.2	11.9	16.2	13.9	15.1
25 and over	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2

**Table 4.5 Pupil-teacher Ratios and Average Class Size by Level of Education, 1981, 1986 and 1991**

Level of Education	Pupil-teacher Ratio			Average Class Size		
	1981	1986	1991	1981	1986	1991
Kindergarten	37.4	30.9	24.8	32.6	29.7	26.5
Primary	30.1	27.5	26.7	36.9	36.2	34.7
Secondary/Matriculation	28.9	23.6	21.4	40.3	38.1	36.8

Source : Education Department.

**Table 4.6 Percentage Distribution of Population Aged 15 and Over with Tertiary Education by Age and Whether Studying, 1981 and 1991**

<i>Year and Age Group</i>	<i>Whether Studying</i>						<i>Total</i>		<i>Percentage of Population with Tertiary Education in Age Group</i>
	<i>Studying</i>		<i>Had completed study/Withdrew</i>						
	<i>Mode: full-time</i>	<i>Mode: part-time</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
<b>1981</b>									
15 - 19	6 959	65.6	2 750	26.0	887	8.4	10 596	100.0	1.9
20 - 24	22 027	41.5	9 622	18.1	21 420	40.4	53 069	100.0	9.1
25 - 34	2 402	2.9	3 834	4.6	76 401	92.5	82 637	100.0	9.4
35 - 44	74	0.1	168	0.3	51 272	99.6	51 514	100.0	10.7
45 - 54	-	-	10	0.0	27 496	100.0	27 506	100.0	5.3
55 and over	-	-	-	-	24 225	100.0	24 225	100.0	3.4
<b>Total</b>	<b>31 462</b>	<b>12.6</b>	<b>16 384</b>	<b>6.6</b>	<b>201 701</b>	<b>80.8</b>	<b>249 547</b>	<b>100.0</b>	<b>6.7</b>
<i>Median Age</i>									
	21.0		22.0		35.0		31.0		
<b>1991</b>									
15 - 19	19 942	78.4	3 245	12.7	2 265	8.9	25 452	100.0	6.2
20 - 24	40 207	44.7	11 733	13.1	37 886	42.2	89 826	100.0	20.9
25 - 34	6 274	3.4	17 702	9.7	158 708	86.9	182 684	100.0	15.5
35 - 44	354	0.4	3 631	3.8	90 405	95.8	94 390	100.0	10.6
45 - 54	-	-	42	0.1	57 052	99.9	57 094	100.0	11.7
55 and over	-	-	-	-	41 445	100.0	41 445	100.0	4.3
<b>Total</b>	<b>66 777</b>	<b>13.6</b>	<b>36 353</b>	<b>7.4</b>	<b>387 761</b>	<b>79.0</b>	<b>490 891</b>	<b>100.0</b>	<b>11.2</b>
<i>Median Age</i>									
	21.0		26.0		34.0		31.0		

**Table 4.7 Percentage Distribution of Population with Tertiary Education by Type of Tertiary Education and Sex, 1981 and 1991**

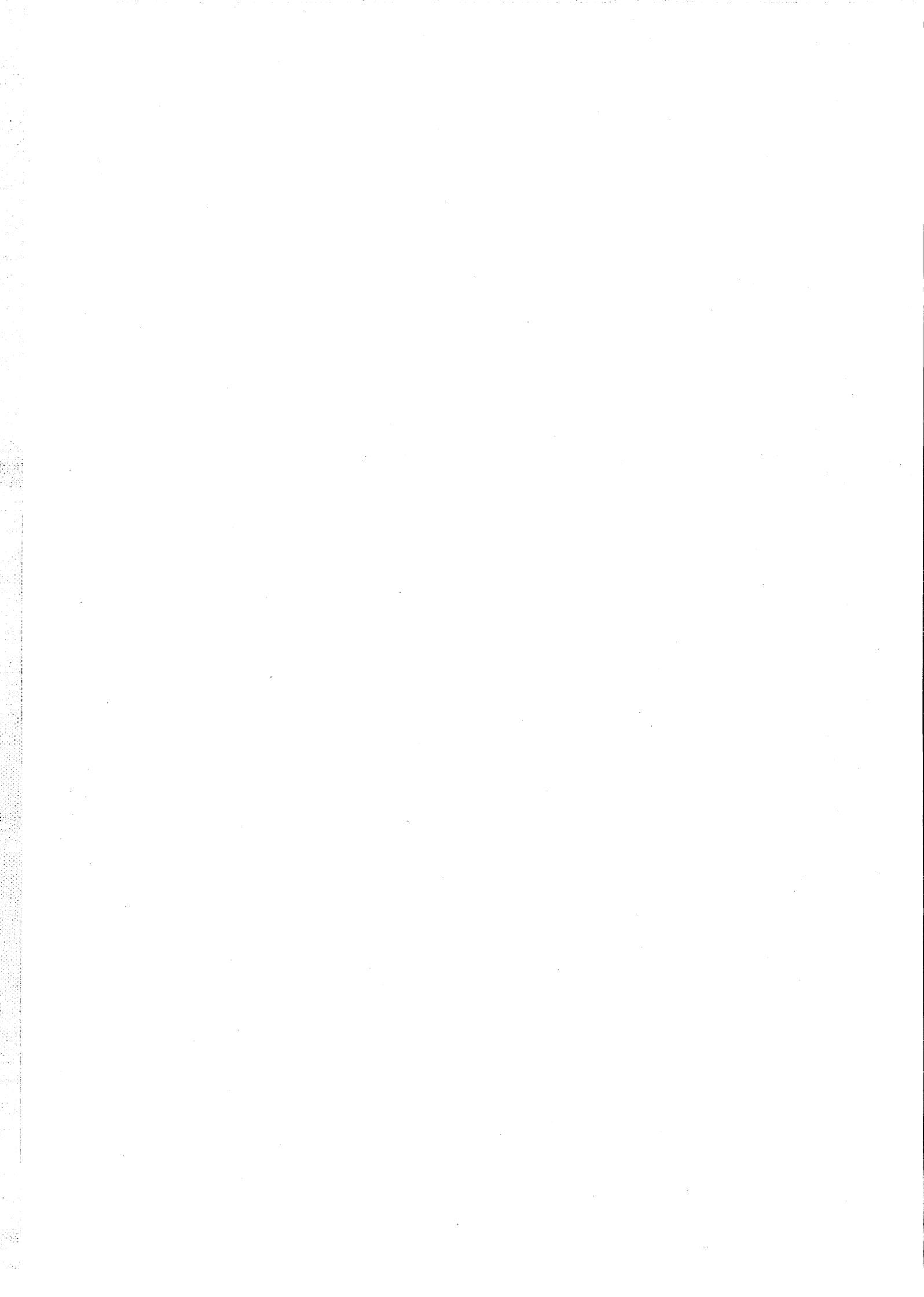
<i>Type of Tertiary Education</i>	<i>1981</i>			<i>1991</i>		
	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>
Certificate/diploma courses in technical institutes/polytechnics	16.1	11.5	14.4	16.8	18.2	17.4
Higher diploma/endorsement certificate courses in technical institutes/polytechnics	7.3	6.2	6.9	9.5	5.9	8.0
Associateship or equivalent courses in polytechnics	0.5	0.2	0.4	2.7	1.5	2.2
Teacher and nurse training courses	4.9	24.5	12.0	2.9	14.2	7.6
Other non-degree courses	15.2	17.1	15.9	12.1	13.4	12.7
Degree courses	56.0	40.5	50.4	56.0	46.8	52.1
Total	100.0 (159 163)	100.0 (90 384)	100.0 (249 547)	100.0 (287 259)	100.0 (203 632)	100.0 (490 891)

Note : In this table, figures in brackets are total counts for 100%.

**Table 4.8 Percentage Distribution of Population with Tertiary Education by Field of Education and Sex, 1981 and 1991**

<i>Field of Education</i>	<i>1981</i>			<i>1991</i>		
	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>
Arts and social science	20.8	24.9	22.4	16.6	22.2	18.9
Pure science	8.7	5.3	7.4	8.3	5.0	6.9
Education	7.3	19.6	11.7	3.7	12.1	7.2
Business, commercial and computer studies	17.5	24.4	20.0	24.5	30.3	26.9
Medical and health related studies	6.4	14.7	9.4	5.5	11.1	7.8
Architecture and construction engineering	11.7	1.8	8.1	10.6	2.4	7.2
Mechanical, electrical, electronic and marine engineering	18.1	2.0	12.3	20.3	4.3	13.7
Textile, design and other industrial technology	3.5	2.4	3.1	4.0	4.0	4.0
Other vocational studies	6.0	4.9	5.6	6.5	8.6	7.4
Total	100.0 (159 163)	100.0 (90 384)	100.0 (249 547)	100.0 (287 259)	100.0 (203 632)	100.0 (490 891)

Note : In this table, figures in brackets are total counts for 100%.



## **Chapter 5 Economic Characteristics**

### **Measurement of economic activity**

The whole population can be divided into two mutually exclusive and exhaustive categories: the economically active population (i.e. the labour force) and the economically inactive population. The economically active population includes all persons aged 15 and over who during the reference period performed some work for wages, salaries, gain or profit, in cash or in kind, as well as persons aged 15 and over with a formal attachment to their job but temporarily not at work for reasons like taking vacation leave. It also includes unemployed persons, who were those not working but were available for work and were actively seeking work. On the other hand, the economically inactive population refers to those who were neither working nor seeking work during the reference period. It includes mainly home-makers, students, retired persons and inmates of institutions such as prisons and hospitals.

### **Labour force**

#### *Growth of the labour force*

During the past decade, the labour force increased by 307 200 (or 12%) from 2.5 million in 1981 to 2.8 million in 1991. The increase was much larger, in both absolute and relative terms, for females than for males. In 1991, the number of males in the labour force was 123 900 (or 8%) more than that in 1981, while the corresponding increase in the number of females was 183 300 (or 21%) (Table 5.1).

Between 1981 and 1991, the growth of the labour force, at an average annual rate of 1.2%, was slower than that of persons aged 15 and over, particularly between 1986 and 1991 (Table 5.2). The size of the labour force is determined by the size and age-sex structure of the population and the propensity of the population to enter the labour force, which is measured by the labour force participation rate.

#### *Demographic factors*

As different age-sex groups have different labour force participation rates, the overall labour force participation rate and size of the labour force are affected by changes in the age-sex structure of the population. To assess this effect, we can compare the actual number of persons in the labour force, say in 1981, with a hypothetical figure obtained by applying the 1981 age-sex specific labour force participation rates to the population aged 15 and over in 1991, with its size and age-sex structure different from that of the 1981 population. The difference between the actual and the hypothetical figures reflects the change in the size of the labour force due to the differences in size of the population aged 15 and over, and in the percentage distribution by age and sex within this age group.

Under such a comparison, the labour force would increase by 389 000, attributable to the demographic factors. In this case, they refer to the growth of the population aged 15 and over and the increasing proportion of persons in the prime working age group 25-44. However, part of this increase, which was derived hypothetically, must have been offset by the decrease in the labour force participation rate, thus reducing the actual increase of the labour force to only 307 200 (Table 5.3).

### ***Labour force participation rate***

The overall labour force participation rate decreased steadily from 67% in 1981 to 64% in 1991. Analysed by sex, the labour force participation rate for males decreased consistently from 83% in 1981 to 79% in 1991; but that for females fluctuated around 50% in the past ten years (Table 5.4).

The pattern of the labour force participation rate by age for either sex remained fairly stable over the past ten years. In general, the rate for males increased rapidly from a low level at ages 15-19 to a high level at ages 25-34, and then remained at such a high level for ages 35-54 before it dropped to a very low level at ages 65 and over. As for females, the rate also increased from a low level at ages 15-19 but peaked at ages 20-24, and it then decreased gradually with increasing age. The participation rate for males was always higher than that for females at every age, although the differences had narrowed moderately since 1981 (Table 5.4).

Changes in the labour force participation rates over the past ten years differed among different age-sex groups. The rate for persons at the ages 15-24 dropped mainly as a result of the increase in educational opportunities in both secondary and tertiary levels. As for persons in the older age group 55 and over, the rate dropped significantly probably because of the growing affluence of society which enabled them to retire earlier. In the prime working ages 25-44, the rates for males remained high, but they had decreased slightly over the past ten years. On the contrary, the rates for females in the age group 25-34 increased significantly, probably due to such factors as changing attitudes towards women's roles in society, postponement of marriage and fertility decline (Table 5.4).

The overall labour force participation rate is affected by the changes in both the age-sex structure of the population and the age-sex specific labour force participation rates. The effect of the former factor can be eliminated by computing a standardised overall labour force participation rate based on the sex and age structure of the population in 1991. For males, the standardised rate shows a steeper decline than the original rate between 1981 and 1986. For females, the standardised rate for 1981 was smaller than the original rate (Table 5.5).

## **Structure of labour force**

### ***Age and sex***

Over the past ten years, the proportion of persons in the labour force who were in the prime working age group 25-44 increased from 43% in 1981 to 59% in 1991, but that of those in the younger and older age groups decreased. Although the earlier retirement of

persons in the older age groups would have lowered the median age of the labour force, there was an aging of the labour force caused mainly by the aging of the population and the later entry into the labour force due to increasing educational opportunities of the young people. The median age of the labour force increased from 31.8 in 1981 to 34.4 in 1991. As a result of the larger increase in the female labour force, the sex ratio of the economically active population decreased from 1 828 males per 1 000 females in 1981 to 1 630 in 1991 (Tables 5.6 and 5.7).

## **Labour force participation rate**

### *Marital status*

The labour force participation rate for never married females was 70% in 1991, which was significantly higher than that for married females, at 45%. On the other hand, the labour force participation rate for never married males (75%) was lower than those who were married (83%). Over the past ten years, while the labour force participation rate for never married females in the age group 20-34 decreased slightly, that for married females increased significantly (Table 5.8).

### *Geographical areas*

Over the past ten years, the labour force participation rate for persons living in Hong Kong Island remained stable while the rates for Kowloon and New Kowloon, new towns and the other areas of the New Territories decreased. As a result, Hong Kong Island had the highest labour force participation rate in 1991. Previously in 1981 and 1986, Kowloon and New Kowloon recorded the highest rate (Table 5.9).

## **Working population**

### *Educational attainment*

Educational attainment of the working population continued to improve in the past ten years. The proportion of the working population who had no schooling decreased from 11% in 1981 to 6% in 1991. The proportion of those having secondary/matriculation education, however, increased from 45% in 1981 to 57% in 1991, and that of those having tertiary education, from 8% to 14% in the same period. Analysed by sex, the improvement in educational attainment for females in the labour force was more remarkable than that for males (Table 5.10).

### *Activity status*

In 1991, about 88% of the working population were employees, roughly the same as in 1981. On the other hand, the proportion of employers in the working population increased from 4% in 1981 to 6% in 1991. Correspondingly, the number of employers increased substantially from 89 800 to 152 900 in the period, indicating that more people were running their own business (Table 5.11).

## ***Occupation***

The 1991 Population Census adopted a new classification for occupations as promulgated by the International Labour Organisation in 1988, known as the 1988 International Standard Classification of Occupation (ISCO-88). This new classification is different from the 1968 International Standard Classification of Occupation (ISCO-68) adopted in previous censuses and by-censuses. Based on the ISCO-88, 19% of the working population were in elementary occupations, while 14% were in professional and associate professional occupations. The occupational distribution was different between males and females. A significantly higher proportion of females was found working as clerks and in elementary occupations than that of males. The reverse situation was found in such occupations as managers and administrators, and craft and related workers (Table 5.12).

Since ISCO-88 involves greater disaggregation of occupations by skill level and skill specialisation, it is not possible to convert the occupation data from the previous censuses and by-censuses (classified on the basis of ISCO-68) to conform with ISCO-88. However, it is possible to convert the 1991 occupation data to conform with ISCO-68 to enable a comparison to be made with the past census data. The results show that in line with the structural transformation of the Hong Kong economy, there was a distinct upgrading of the occupational distribution of the working population over the past ten years. The proportion of persons in the professional, technical, administrative and managerial occupations increased from 9% in 1981 to 14% in 1991, while that in production occupation decreased from 50% to only 36% during the same period. Increases were also noted for the proportion of clerical, sales and service workers over the past ten years (Table 5.13).

## ***Industry***

The working population has been shifting from engaging in secondary industries to tertiary industries over the past ten years. The proportion of the working population in manufacturing industries decreased significantly from 41% in 1981 to only 28% in 1991. On the contrary, the proportions of the working population increased significantly in the transport, storage and communication industries; financing, insurance, real estate and business services; and community, social and personal services (Table 5.14).

Analysed by sex, a higher proportion of females was found working in the manufacturing industry than males, but the difference was narrowing over the past ten years. In the wholesale, retail and import and export trades, restaurants and hotels industries, the proportion of female workers was lower than their male counterparts in 1981. However, the situation was reversed in 1991 due to the much faster increase of female workers in these industries (Table 5.14).

## ***Monthly income from main employment***

Monthly income from main employment of the working population increased significantly over the past ten years. The median monthly income from main employment increased by some 241% from \$1,516 in 1981 to \$5,170 in 1991. Discounting the inflation rate of some 116% as measured by the increase in the Consumer Price Index (A) over the same period, the median monthly income from main employment increased by 58% in real terms in the past decade (Table 5.15).

The median monthly income from main employment of males was in general higher than that of females, but the gap between the two was narrowing due to the faster income growth of female workers in the past ten years. The median monthly income from main employment of males was 55% higher than that of females in 1981 but only 41% higher in 1991. It should be noted that this simple indicator cannot adequately prove or disprove the existence of any sex discrimination in terms of employment income. A host of other factors such as occupation education, experience, hours of work and even physique have to be analysed in comparing the employment income of males and females (Table 5.15).

Analysed by age, males in the age group 25-44 and females in the age group 20-34 had relatively higher monthly income from main employment (Table 5.15).

The median monthly income from main employment varied greatly among occupations. It ranged from \$15,000 for professional workers, followed by \$12,000 for managers and administrators, to the lowest of \$3,500 for workers in the elementary occupations (Table 5.16).

## **Unemployed population**

### ***Measurement of unemployment***

The measurement of unemployment is not simple. In defining unemployment, account has to be taken of a person's availability to work and the extent to which he or she is actively seeking work. Thus a housewife who did not actively seek work during the reference period would be classified as economically inactive, even though there could be circumstances in which she was prepared to work. However, a housewife who took active steps to look for economic work would be classified as economically active. Such a distinction would be similarly difficult to determine in the case of students, who might have a desire to find part-time work, but would be classified as unemployed only if they could establish that they were actually available for work during the reference period and took steps to find work.

Given the constraints that a population census would encounter in asking very detailed screening questions on the activity related to work seeking (such as the main steps taken to seek work and the length of the period of job seeking, which are indeed asked in the General Household Survey), estimates of the unemployed are likely to be less accurate. Some of those economically inactive persons who claimed that they were seeking work but in actuality had taken no active actions might have possibly been classified as unemployed in the Census. In the General Household Survey, they would be subject to detailed screening questions and classified as economically inactive. In other words, persons falling on the boundary between economically active population (which is made up of working persons and the unemployed) and the economically inactive population would be more accurately classified in the General Household Survey than in the Census. Users of census data are therefore cautioned not to compare the unemployment data obtained from the Census with those obtained from the General Household Survey, which was devised to monitor the unemployment situation. Inclusion of the questions for deriving unemployment statistics in the Census mainly serves to complete the enumeration of the entire labour force.

## **Economically inactive population**

### ***Age and sex***

A large proportion of the economically inactive persons was aged under 15. However, the proportion decreased from 50% in 1981 to 42% in 1991. On the other hand, the proportion of those in the older age group of 65 and over increased from 10% in 1981 to 15% in 1991 (Table 5.6).

The age distribution of the economically inactive population was different between males and females. While the proportions of economically inactive persons in the younger and the older age groups were high for both sexes, a much higher proportion was recorded in the prime working age bracket 25-54 among females than males mainly because of the predominance of home-makers at these ages among females (Table 5.6).

### ***Activity status***

Students remained the largest single group of economically inactive population, although its proportion decreased from some 51% in 1981 to some 47% in 1991. With the aging of the population, the proportion of retired persons increased significantly from 8% to about 17% during the period. Analysed by sex, the proportion of home-makers in the female economically inactive population decreased from some 43% in 1981 to some 38% in 1991, reflecting the trend of more females participating in the labour force (Table 5.17).

**Table 5.1 Population by Sex and Activity Status, 1961 - 1991**

<i>Sex and Year</i>	<i>Total population</i>	<i>Persons aged 15 and over</i>	<i>Economically active</i>	<i>Economically inactive<sup>(1)</sup></i>
<b>Male</b>				
1961	1 607 779	943 764	852 850	90 914
1971	2 000 602	1 280 482	1 084 355	196 127
1981	2 604 168	1 961 803	1 618 389	343 414
1986	2 772 464	2 122 826	1 716 411	406 415
1991	2 811 991	2 212 947	1 742 271	470 676
<b>Female</b>				
1961	1 521 869	908 849	334 708	574 141
1971	1 936 028	1 248 244	534 627	713 617
1981	2 382 392	1 787 250	885 415	901 835
1986	2 623 533	2 026 224	1 037 437	988 787
1991	2 710 290	2 157 418	1 068 731	1 088 687
<b>Both sexes</b>				
1961	3 129 648	1 852 613	1 187 558	665 055
1971	3 936 630	2 528 726	1 618 982	909 744
1981	4 986 560	3 749 053	2 503 804	1 245 249
1986	5 395 997	4 149 050	2 753 848	1 395 202
1991	5 522 281	4 370 365	2 811 002	1 559 363

Note : (1) In this table, the figures exclude persons aged under 15.

**Table 5.2 Average Annual Growth Rates of Population by Sex and Activity Status, 1961 - 1991**

<i>Sex and Year</i>	<i>Total population</i>	<i>Persons aged 15 and over</i>	<i>Economically active</i>	<i>Economically inactive<sup>(1)</sup></i>
<b>Male</b>				
1961 - 1971	2.2	3.1	2.4	8.0
1971 - 1981	2.7	4.4	4.1	5.8
1981 - 1986	1.3	1.6	1.2	3.4
1986 - 1991	0.3	0.8	0.3	3.0
<b>Female</b>				
1961 - 1971	2.4	3.2	4.8	2.2
1971 - 1981	2.1	3.7	5.2	2.4
1981 - 1986	1.9	2.5	3.2	1.9
1986 - 1991	0.7	1.3	0.6	1.9
<b>Both sexes</b>				
1961 - 1971	2.3	3.2	3.1	3.2
1971 - 1981	2.4	4.0	4.5	3.2
1981 - 1986	1.6	2.0	1.9	2.3
1986 - 1991	0.5	1.0	0.4	2.2

Note : (1) In this table, the figures exclude persons aged under 15.

**Table 5.3 Growth of Labour Force Analysed by Factors, 1981 and 1991**

	1981		1991	
	<i>Actual</i> (1)	<i>Hypothetical*</i> (2)	<i>Actual</i> (3)	
Labour force	2 503 804	2 892 783	2 811 002	
Actual increase in labour force				+307 198 [(3)-(1)]
- due to change in demographic factors				+388 979 [(2)-(1)]
- due to change in the level of participation in the labour force				-81 781 [(3)-(2)]

Note : \* Derived by applying the 1981 age-sex-specific labour force participation rates to the 1991 age-sex distribution of population. This represents the expected size of the labour force in 1991 if the level of participation in the labour force remained the same as that in 1981 while the age-sex structure of the population had changed.

**Table 5.4 Labour Force Participation Rates by Age and Sex, 1981, 1986 and 1991**

Age Group	1981			1986			1991		
	Male %	Female %	Both sexes %	Male %	Female %	Both sexes %	Male %	Female %	Both sexes %
15 - 19	45.2	42.6	43.9	37.9	33.6	35.9	35.2	28.6	32.1
20 - 24	90.9	79.7	85.6	88.3	83.7	86.0	84.8	82.9	83.8
25 - 34	98.3	56.8	79.3	97.6	64.8	81.7	96.5	68.4	82.4
35 - 44	98.6	53.4	79.0	97.7	57.9	79.3	96.9	57.0	77.7
45 - 54	96.0	46.7	73.2	94.1	49.1	73.4	92.9	49.1	73.1
55 - 64	76.8	34.8	56.2	70.9	30.4	51.1	68.0	24.4	47.1
65 and over	35.5	15.0	23.3	29.7	12.1	19.5	22.6	7.5	14.1
Overall	82.5	49.5	66.8	80.9	51.2	66.4	78.7	49.5	64.3

**Table 5.5 Standardised Overall Labour Force Participation Rates (LFPR) by Sex, 1981, 1986 and 1991**

Year	Overall LFPR (%)		Standardised Overall LFPR <sup>(1)</sup> (%)	
	Male	Female	Male	Female
1981	82.5	49.5	83.7	48.2
1986	80.9	51.2	80.9	50.3
1991	78.7	49.5	78.7	49.5

Note : (1) See item (87) in 'Definition of Terms'. This represents the expected overall labour force participation rates for males and females in 1981 and 1986 if the level of labour force participation in each age group remained the same in that year while the age distribution had changed to that of 1991.

**Table 5.6 Population by Age, Activity Status and Sex, 1981, 1986 and 1991**

Year and Age Group	Economically Active				Economically Inactive			
	Male	Female	Both sexes		Male	Female	Both sexes	
	%	%	Number	%	%	%	Number	%
<b>1981</b>								
Under 15	..	..	..	..	65.2	39.8	1 237 507	49.8
15 - 19	8.2	13.1	247 834	9.9	16.3	10.4	316 091	12.7
20 - 24	17.3	24.9	499 807	20.0	2.8	3.7	84 025	3.4
25 - 34	29.0	25.8	699 346	28.0	0.8	11.7	182 849	7.4
35 - 44	16.6	12.7	381 787	15.2	0.4	6.5	101 600	4.1
45 - 54	16.5	12.6	378 119	15.1	1.1	8.5	138 547	5.6
55 - 64	9.5	7.6	220 623	8.8	4.7	8.4	171 616	6.9
65 and over	2.9	3.3	76 288	3.0	8.7	11.0	250 521	10.1
Total	100.0	100.0	2 503 804	100.0	100.0	100.0	2 482 756	100.0
<b>1986</b>								
Under 15	..	..	..	..	61.5	37.7	1 246 947	47.1
15 - 19	5.2	7.0	161 885	5.9	13.8	9.1	289 439	11.0
20 - 24	14.7	22.3	482 956	17.5	3.2	2.8	78 579	3.0
25 - 34	32.2	33.2	896 963	32.6	1.3	11.8	200 865	7.6
35 - 44	19.8	16.7	513 483	18.6	0.8	7.9	133 919	5.1
45 - 54	15.5	11.4	385 306	14.0	1.6	7.8	139 928	5.3
55 - 64	9.6	6.6	233 442	8.5	6.4	9.8	223 743	8.5
65 and over	3.0	2.8	79 813	2.9	11.4	13.1	328 729	12.4
Total	100.0	100.0	2 753 848	100.0	100.0	100.0	2 642 149	100.0
<b>1991</b>								
Under 15	..	..	..	..	56.0	33.8	1 151 916	42.4
15 - 19	4.3	5.3	131 376	4.7	12.9	8.5	278 266	10.3
20 - 24	10.5	16.6	360 699	12.8	3.1	2.2	69 500	2.6
25 - 34	32.5	37.8	970 683	34.6	1.9	11.4	207 605	7.7
35 - 44	25.7	22.8	692 264	24.6	1.3	11.2	198 768	7.3
45 - 54	14.2	10.2	356 298	12.7	1.8	6.9	131 360	4.8
55 - 64	10.0	5.4	231 554	8.2	7.7	10.8	259 952	9.6
65 and over	2.8	1.9	68 128	2.4	15.3	15.2	413 912	15.3
Total	100.0	100.0	2 811 002	100.0	100.0	100.0	2 711 279	100.0

**Table 5.7 Median Age of Economically Active Population by Sex, 1981, 1986 and 1991**

<i>Sex</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
		<i>Median Age</i>	
Male	33.3	34.3	35.9
Female	28.8	30.3	32.1
Both sexes	31.8	32.9	34.4
		<i>Sex Ratio (males per 1 000 females)</i>	
	1 828	1 654	1 630

**Table 5.8 Labour Force Participation Rates by Age, Sex and Marital Status, 1981, 1986 and 1991**

<i>Year and Age Group</i>	<i>Male</i>				<i>Female</i>			
	<i>Never married %</i>	<i>Married %</i>	<i>Widowed/ Divorced/ Separated %</i>	<i>Overall %</i>	<i>Never married %</i>	<i>Married %</i>	<i>Widowed/ Divorced/ Separated %</i>	<i>Overall %</i>
1981								
15-19	44.8	72.9	67.1	45.2	42.3	50.6	64.2	42.6
20-24	90.1	98.0	89.6	90.9	91.2	50.9	79.0	79.7
25-34	97.3	99.2	93.1	98.3	96.2	45.4	74.1	56.8
35-44	96.2	99.1	94.8	98.6	91.2	51.2	74.5	53.4
45-54	93.6	96.4	90.8	96.0	81.3	44.6	56.7	46.7
55-64	81.6	77.2	68.3	76.8	70.2	31.5	37.5	34.8
65 and over	43.4	37.5	24.1	35.5	30.2	16.1	12.6	15.0
Overall	76.4	88.6	58.4	82.5	68.1	43.1	28.3	49.5
1986								
15-19	37.6	83.7	66.7	37.9	33.2	53.7	63.6	33.6
20-24	87.4	98.0	93.6	88.3	89.7	61.1	87.5	83.7
25-34	96.3	98.8	94.5	97.6	95.2	53.0	77.2	64.8
35-44	92.0	98.6	94.5	97.7	91.1	55.0	74.6	57.9
45-54	86.6	95.0	87.6	94.1	81.4	47.5	56.2	49.1
55-64	73.7	71.4	62.2	70.9	62.4	29.2	30.2	30.4
65 and over	36.6	31.3	21.8	29.7	23.4	14.3	9.9	12.1
Overall	76.1	85.8	53.9	80.9	69.8	47.0	24.5	51.2
1991								
15-19	35.1	65.6	14.3	35.2	28.2	53.9	100.0	28.6
20-24	84.2	93.8	89.3	84.8	86.7	64.3	80.1	82.9
25-34	95.1	97.9	95.5	96.5	95.4	54.9	81.0	68.4
35-44	91.5	97.9	92.2	96.9	91.3	52.6	76.1	57.0
45-54	83.5	93.9	84.8	92.9	83.7	47.4	55.5	49.1
55-64	68.9	68.7	56.7	68.0	59.5	23.7	23.4	24.4
65 and over	30.5	23.6	15.6	22.6	15.4	8.5	5.9	7.5
Overall	74.8	82.8	46.7	78.7	69.8	45.0	21.0	49.5

**Table 5.9 Labour Force and Labour Force Participation Rates (LFPR) by Broad Area and Sex, 1981, 1986 and 1991**

<i>Year and Broad Area</i>	<i>Male</i>		<i>Female</i>		<i>Both sexes</i>	
	<i>Number</i>	<i>LFPR(%)</i>	<i>Number</i>	<i>LFPR(%)</i>	<i>Number</i>	<i>LFPR(%)</i>
1981						
Hong Kong Island	383 317	82.5	220 447	49.2	603 764	66.1
Kowloon and New Kowloon	826 371	82.9	443 610	49.8	1 269 981	67.3
New towns	286 272	83.2	155 724	49.7	441 996	67.2
Other areas of the New Territories <sup>(1)</sup>	122 429	78.6	65 634	48.5	188 063	64.6
Overall	1 618 389	82.5	885 415	49.5	2 503 804	66.8
1986						
Hong Kong Island	372 568	80.7	244 391	52.0	616 959	66.2
Kowloon and New Kowloon	768 873	80.7	453 334	51.4	1 222 207	66.6
New towns	459 690	81.9	273 133	50.2	732 823	66.3
Other areas of the New Territories <sup>(1)</sup>	115 280	78.5	66 579	51.2	181 859	65.7
Overall	1 716 411	80.9	1 037 437	51.2	2 753 848	66.4
1991						
Hong Kong Island	384 325	79.1	270 467	53.5	654 792	66.1
Kowloon and New Kowloon	649 056	77.3	385 736	48.7	1 034 792	63.4
New towns	623 393	80.8	363 600	48.0	986 993	64.6
Other areas of the New Territories <sup>(1)</sup>	85 497	73.7	48 928	47.4	134 425	61.3
Overall	1 742 271	78.7	1 068 731	49.5	2 811 002	64.3

Note : (1) In this table, the figures include population living on board vessels.

**Table 5.10 Working Population by Educational Attainment and Sex, 1981, 1986 and 1991**

<i>Year and Educational Attainment</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	
	<i>%</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1981				
No schooling/Kindergarten	6.6	18.2	256 718	10.7
Primary	39.0	32.5	883 923	36.9
Lower secondary	21.4	15.0	460 320	19.1
Upper secondary	21.1	23.7	529 741	22.0
Matriculation	3.5	3.7	85 173	3.5
Tertiary: Non-degree courses	3.6	4.3	92 112	3.8
Degree courses	4.8	2.6	96 080	4.0
Total	100.0	100.0	2 404 067	100.0
1986				
No schooling/Kindergarten	5.3	12.8	214 516	8.1
Primary	31.3	25.7	771 123	29.2
Lower secondary	23.1	14.7	527 760	20.0
Upper secondary	24.5	30.6	709 097	26.8
Matriculation	4.5	5.5	128 317	4.9
Tertiary: Non-degree courses	5.2	6.6	151 494	5.7
Degree courses	6.1	4.1	140 966	5.3
Total	100.0	100.0	2 643 273	100.0
1991				
No schooling/Kindergarten	4.4	7.6	152 714	5.6
Primary	25.1	19.4	622 066	22.9
Lower secondary	24.7	15.2	572 071	21.1
Upper secondary	26.7	36.7	830 817	30.6
Matriculation	5.0	6.8	153 905	5.7
Tertiary: Non-degree courses	6.1	7.7	181 362	6.7
Degree courses	8.0	6.6	202 168	7.4
Total	100.0	100.0	2 715 103	100.0

**Table 5.11 Working Population by Activity Status, 1981, 1986 and 1991**

<i>Activity Status</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Self-employed	146 806	6.1	172 876	6.5	145 481	5.4
Employers	89 767	3.7	111 613	4.2	152 943	5.6
Employees <sup>(1)</sup>	2 129 905	88.6	2 309 706	87.4	2 383 159	87.8
Unpaid family workers <sup>(2)</sup>	37 589	1.6	49 078	1.9	33 520	1.2
<b>Total</b>	<b>2 404 067</b>	<b>100.0</b>	<b>2 643 273</b>	<b>100.0</b>	<b>2 715 103</b>	<b>100.0</b>

Notes : (1) In this table, the figures include outworkers and student workers.

(2) In this table, the figure for 1981 includes voluntary workers in social or religious organisations.

**Table 5.12 Working Population by Occupation (ISCO-88 Classification\*) and Sex, 1991**

<i>Occupation</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	
	<i>%</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Managers and administrators	11.8	4.9	249 247	9.2
Professionals	4.1	3.0	99 331	3.7
Associate professionals	9.7	11.3	279 909	10.3
Clerks	8.0	28.8	431 651	15.9
Service workers and shop sales workers	13.7	12.5	359 319	13.2
Craft and related workers	21.0	4.4	397 992	14.7
Plant and machine operators and assemblers	13.9	12.7	365 826	13.5
Elementary occupations	16.6	21.7	503 832	18.5
Others	1.2	0.7	27 996	1.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>2 715 103</b>	<b>100.0</b>

Note : \* See item (68) in 'Definition of Terms' for some important remarks about occupational classifications.

**Table 5.13 Working Population by Occupation (ISCO-68 Classification\*), 1981, 1986 and 1991**

<i>Occupation</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Professional, technical and related workers	143 700	6.0	220 528	8.3	237 264	8.7
Administrative and managerial workers	64 106	2.7	95 417	3.6	139 148	5.1
Clerical and related workers	293 905	12.2	385 587	14.6	504 443	18.6
Sales workers	247 924	10.3	309 059	11.7	313 115	11.5
Service workers	374 093	15.6	429 389	16.2	506 920	18.7
Agricultural workers and fishermen	50 676	2.1	50 150	1.9	24 877	0.9
Production and related workers, transport equipment operators and labourers	1 212 545	50.4	1 143 280	43.3	981 795	36.2
Armed forces and unclassifiable	17 118	0.7	9 863	0.4	7 541	0.3
Total	2 404 067	100.0	2 643 273	100.0	2 715 103	100.0

Note : \* See item (68) in 'Definition of Terms' for some important remarks about occupational classifications.

**Table 5.14 Working Population by Industry and Sex, 1981, 1986 and 1991**

<i>Year and Industry</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	
	<i>%</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1981				
Manufacturing	34.6	53.1	990 365	41.3
Construction	11.2	1.4	185 999	7.7
Wholesale, retail and import/export trades, restaurants and hotels	20.7	16.5	461 489	19.2
Transport, storage and communication	10.3	2.5	181 368	7.5
Financing, insurance, real estate and business services	4.5	5.5	115 870	4.8
Community, social and personal services	14.4	17.8	375 703	15.6
Others	4.3	3.2	93 273	3.9
Total	100.0	100.0	2 404 067	100.0
1986				
Manufacturing	31.0	43.9	946 653	35.8
Construction	9.3	1.1	164 268	6.2
Wholesale, retail and import/export trades, restaurants and hotels	23.5	20.3	589 918	22.3
Transport, storage and communication	10.9	3.0	210 367	8.0
Financing, insurance, real estate and business services	6.2	6.8	169 967	6.4
Community, social and personal services	15.8	22.7	486 167	18.4
Others	3.3	2.2	75 933	2.9
Total	100.0	100.0	2 643 273	100.0
1991				
Manufacturing	26.4	31.3	768 121	28.2
Construction	10.5	1.1	187 851	6.9
Wholesale, retail and import/export trades, restaurants and hotels	21.6	24.1	611 386	22.5
Transport, storage and communication	13.1	4.3	265 686	9.8
Financing, insurance, real estate and business services	10.2	11.2	287 168	10.6
Community, social and personal services	15.7	26.7	539 123	19.9
Others	2.5	1.3	55 768	2.1
Total	100.0	100.0	2 715 103	100.0

**Table 5.15 Median Monthly Income from Main Employment of Working Population<sup>(1)</sup> by Sex and Age, 1981, 1986 and 1991**

<i>Sex and Age Group</i>	<i>Median Monthly Income from Main Employment (HK\$)</i>		
	<i>1981</i>	<i>1986</i>	<i>1991</i>
<b>Male</b>			
15 - 19	1,105	1,750	3,600
20 - 24	1,500	2,375	5,000
25 - 34	2,000	3,100	6,500
35 - 44	2,000	3,500	7,000
45 - 54	1,800	3,000	5,900
55 - 64	1,500	2,500	4,500
65 and over	1,100	2,000	3,300
Overall	1,801	3,067	6,000
<b>Female</b>			
15 - 19	1,072	1,732	3,800
20 - 24	1,200	2,000	4,500
25 - 34	1,300	2,450	5,000
35 - 44	1,000	2,000	4,000
45 - 54	1,000	1,800	3,500
55 - 64	900	1,500	3,000
65 and over	700	1,200	2,000
Overall	1,165	2,143	4,250
<b>Both sexes</b>	<b>1,516</b>	<b>2,573</b>	<b>5,170</b>

Note : (1) In this table, working population excludes unpaid family workers.

**Table 5.16 Median Monthly Income from Main Employment of Working Population<sup>(1)</sup> by Occupation (ISCO-88 Classification\*), 1991**

<i>Occupation</i>	<i>Median Monthly Income from Main Employment (HK\$)</i>
Managers and administrators	12,000
Professionals	15,000
Associate professionals	8,000
Clerks	5,000
Service workers and shop sales workers	5,000
Craft and related workers	5,000
Plant and machine operators and assemblers	4,500
Elementary occupations	3,500
Others	3,500
Overall	5,170

Notes : (1) In this table, working population excludes unpaid family workers.

\* See item (68) in 'Definition of Terms' for some important remarks about occupational classifications.

**Table 5.17 Economically Inactive Population by Activity Status and Sex, 1981, 1986 and 1991**

<i>Year and Activity Status</i>	<i>Male</i>	<i>Female</i>	<i>Both sexes</i>	
	<i>%</i>	<i>%</i>	<i>Number</i>	<i>%</i>
<b>1981</b>				
Home-makers	1.3	43.2	658 584	26.5
Students	66.5	40.1	1 254 959	50.5
Retired persons	12.5	4.4	190 148	7.7
Inmates of institutions	1.2	0.4	18 647	0.8
Others	18.5	11.9	360 418	14.5
Total	100.0	100.0	2 482 756	100.0
<b>1986</b>				
Home-makers	0.8	39.0	626 893	23.7
Students	66.0	40.5	1 339 712	50.7
Retired persons	15.8	9.2	311 865	11.8
Inmates of institutions	1.7	0.8	30 842	1.2
Others	15.7	10.5	332 837	12.6
Total	100.0	100.0	2 642 149	100.0
<b>1991</b>				
Home-makers	0.9	37.9	631 760	23.3
Students	61.8	37.6	1 278 015	47.2
Retired persons	21.2	15.0	473 112	17.4
Inmates of institutions	1.3	0.3	18 614	0.7
Others	14.8	9.2	309 778	11.4
Total	100.0	100.0	2 711 279	100.0

## **Chapter 6 Housing Characteristics**

### **Introduction**

Data on housing characteristics from a population census are useful for assessing housing development and identifying and quantifying the housing needs of the population. In general, living quarters are classified by the type of construction materials, the purpose for which they were built and the sector responsible for their construction/management. To facilitate the analysis, living quarters are first dichotomised into permanent quarters and temporary structures/housing, according to the construction materials. They are then further classified into public and aided rental blocks, Housing Authority home ownership estates, private housing blocks, modern village houses, simple stone structures, institutions, other permanent housing and temporary housing. Detailed descriptions of the above quarters types are given under the item 'Type of Living Quarters' in Annex 1 'Definition of Terms'.

The changes in the distribution of occupied living quarters by type reflect the changes in the quality of housing or the conditions of living of the population. It is generally agreed that self-contained quarters (with internal piped water supply and flush toilet system) are better than non self-contained quarters and temporary housing. In addition, the degree of sharing of the living quarters and the tenure of accommodation are also useful indicators on conditions of living. It should be noted that information on type of living quarters was not obtained from the enumeration but was derived from the 'Frame of quarters', which was maintained for the Census operation and other household surveys.

### **Number of living quarters**

Based on the Census results, the total number of occupied living quarters increased by 42% from 1 061 100 in 1981 to 1 508 000 in 1991. However, the percentage increase varied among different types of living quarters. The number of living quarters in Housing Authority Group A rental blocks, Housing Authority home ownership estates, self-contained private housing blocks and villas/bungalows/modern village houses, increased drastically in the decade. Those types of living quarters with less adequate housing conditions all decreased in number in the same period. Thus the number of living quarters in Housing Authority Group B rental blocks, non self-contained units in private housing blocks and roof-top structures all dropped substantially (Table 6.1).

The distribution of occupied living quarters by type changed significantly over the past ten years. In 1991, altogether 79% of the occupied living quarters were in Housing Authority Group A rental blocks, Housing Authority home ownership estates and self-contained private housing blocks, all of which provide superior living conditions. The corresponding figure was 58% in 1981. The proportion of roof-top structures and other temporary housing dropped to only 4% in 1991 from 10% in 1981. All these changes reflect a significant improvement in the living conditions of the population (Table 6.1).

## **Geographical distribution of living quarters**

The rapid expansion of the new towns and the redevelopment of the old districts in the past decade drastically changed the distribution of different types of living quarters in different areas of the territory. In 1981, 49% of the living quarters were found in Kowloon and New Kowloon, 27% in the New Territories and 24% on Hong Kong Island. Between 1981 and 1991, development in the New Territories was so dramatic that the number of occupied living quarters there increased by over 120%, from 281 800 to 629 600. Consequently, 42% of all occupied living quarters were found in the New Territories by 1991. The proportions of living quarters on Hong Kong Island and in Kowloon and New Kowloon have dropped, particularly so for the latter (Table 6.2).

In the last decade, both the number and proportions of all types of living quarters except temporary housing in the New Territories increased. The growth in number was especially significant for public and aided rental blocks and private housing blocks. Despite the dramatic increase in the number of occupied living quarters in private housing blocks in the New Territories, there were still greater numbers of such quarters on Hong Kong Island (237 500) and in Kowloon and New Kowloon (241 400) than in the New Territories (149 300) in 1991. But for public and aided rental blocks and Housing Authority home ownership estates, their number in the New Territories (350 800) far exceeded the corresponding number for Hong Kong Island (78 200) and Kowloon and New Kowloon (261 600) as a result of the new town development programme (Table 6.2).

## **Domestic households by type of living quarters**

Owing to the increasing supply of better quality housing, the demolition and redevelopment of old housing estates and the internal migration of the population to the new towns in the past decade, there were shifts in the proportions of households in different types of living quarters. Generally speaking, the shift was towards better quality housing.

The development of Housing Authority home ownership estates played an important role in the improvement of the housing condition of the population in the past decade. The proportion of households residing in such estates increased from less than 1% in 1981 to over 7% in 1991. For public and aided rental blocks, there was significant increase in the proportion of households living in Housing Authority Group A rental blocks but substantial reduction in the proportion of households living in Housing Authority Group B rental blocks. This in effect represents a general improvement in living conditions in the past ten years because housing conditions in Group B rental blocks are generally considered less adequate. The improvement in housing condition is also evident by the drastic reduction in the proportions and numbers of households living in roof-top structures and other temporary housing (Table 6.3).

## **Degree of sharing**

The degree of sharing, as measured by the average number of domestic households per living quarters, is another useful indicator of conditions of living. In the past

ten years, the degree of sharing dropped from 1.19 in 1981 to 1.06 in 1991 (Table 6.4).

Sharing of a living quarters in public and aided rental blocks is usually not allowed except in such case as 'Sheltered Housing', where a few 'one person' households of elderly people share a public housing unit. The degree of sharing in such type of living quarters remained very close to one in the past decade. Thus the drop in the overall degree of sharing was mainly due to a substantial reduction in the degree of sharing in the private housing sector, particularly in private housing blocks (Table 6.4).

### **Average number of occupants per living quarters**

Concurrent with the general decrease in the number of domestic households in a living quarters, the average number of occupants per living quarters also dropped in the past decade, from 4.7 in 1981 to 3.7 in 1991. The drop was due to the decrease in degree of sharing and the decrease in the average household size of domestic households (Table 6.5).

Sharing of living quarters by households in both self-contained and non self-contained flats in private housing blocks and in roof-top structures was high. However this had not resulted in particularly high average numbers of occupants in these types of living quarters. This reflects that domestic households in these types of living quarters were of smaller size. The phenomenon is observed throughout the past ten years (Tables 6.4 and 6.5).

### **Tenure of accommodation**

In the past decade, the changing distribution of the tenure of accommodation of domestic households also suggests an improvement in the housing conditions of the population. The proportion of owner-occupiers increased from 28% in 1981 to 43% in 1991. On the other hand, the proportion of main tenants and sub-tenants, which are usually analysed together as they are inter-related, decreased drastically from 16% to 3% in the period. The proportion of sole tenants remained at around 45% in the past ten years (Table 6.6).

**Table 6.1 Occupied Living Quarters by Type of Living Quarters, 1981, 1986 and 1991**

<i>Type of Living Quarters</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Housing Authority rental blocks						
Group A	194 544	18.3	332 535	24.7	450 226	29.9
Group B	183 970	17.3	148 099	11.0	96 219	6.4
Housing Society rental blocks	25 645	2.4	29 106	2.2	28 446	1.9
Housing Authority home ownership estates	7 356	0.7	57 134	4.2	115 718	7.7
Private housing blocks						
Self-contained	417 543	39.4	517 083	38.4	627 552	41.5
Non self-contained	4 034	0.4	1 120	0.1	678	0.0
Villas/Bungalows/Modern village houses	22 708	2.1	40 159	3.0	49 969	3.3
Simple stone structures	50 424	4.8	46 095	3.4	31 106	2.1
Institutions	13 298	1.3	36 393	2.7	13 307	0.9
Other permanent housing	35 081	3.3	34 580	2.6	30 915	2.1
Roof-top structures	7 538	0.7	6 986	0.5	3 086	0.2
Other temporary housing	98 945	9.3	96 768	7.2	60 775	4.0
Total	1 061 086	100.0	1 346 058	100.0	1 507 997	100.0

**Table 6.2 Occupied Living Quarters by Type of Living Quarters and Broad Area, 1981, 1986 and 1991**

<i>Year and Type of Living Quarters</i>	<i>Hong Kong Island</i>		<i>Kowloon and New Kowloon</i>		<i>The New Territories</i>		<i>The whole territory</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
<b>1981</b>								
Public and aided rental blocks	54 271	13.4	238 234	59.0	111 654	27.6	404 159	100.0
Housing Authority home ownership estates	944	12.8	2 823	38.4	3 589	48.8	7 356	100.0
Private housing blocks	167 426	39.7	212 314	50.4	41 837	9.9	421 577	100.0
Institutions, village houses, simple stone structures and other permanent housing	21 634	17.8	24 680	20.3	75 197	61.9	121 511	100.0
Temporary housing	14 944	14.0	42 033	39.5	49 506	46.5	106 483	100.0
Total	259 219	24.4	520 084	49.0	281 783	26.6	1 061 086	100.0
<b>1986</b>								
Public and aided rental blocks	57 589	11.3	251 349	49.3	200 802	39.4	509 740	100.0
Housing Authority home ownership estates	5 698	10.0	18 291	32.0	33 145	58.0	57 134	100.0
Private housing blocks	199 080	38.4	235 543	45.5	83 580	16.1	518 203	100.0
Institutions, village houses, simple stone structures and other permanent housing	26 719	17.0	28 770	18.3	101 738	64.7	157 227	100.0
Temporary housing	13 860	13.4	30 660	29.6	59 234	57.0	103 754	100.0
Total	302 946	22.5	564 613	42.0	478 499	35.5	1 346 058	100.0
<b>1991</b>								
Public and aided rental blocks	66 767	11.6	231 463	40.3	276 661	48.1	574 891	100.0
Housing Authority home ownership estates	11 466	9.9	30 161	26.1	74 091	64.0	115 718	100.0
Private housing blocks	237 495	37.8	241 432	38.4	149 303	23.8	628 230	100.0
Institutions, village houses, simple stone structures and other permanent housing	18 055	14.4	16 338	13.0	90 904	72.6	125 297	100.0
Temporary housing	7 527	11.8	17 684	27.7	38 650	60.5	63 861	100.0
Total	341 310	22.6	537 078	35.6	629 609	41.8	1 507 997	100.0

**Table 6.3 Domestic Households<sup>(1)</sup> by Type of Living Quarters, 1981, 1986 and 1991**

<i>Type of Living Quarters</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Housing Authority rental blocks						
Group A	198 222	15.9	335 188	23.2	451 088	28.6
Group B	188 871	15.3	149 548	10.3	96 722	6.1
Housing Society rental blocks	25 972	2.1	29 113	2.0	28 503	1.8
Housing Authority home ownership estates	7 176	0.6	57 183	4.0	115 729	7.3
Private housing blocks						
Self-contained	580 004	46.8	634 011	43.9	705 629	44.8
Non self-contained	6 834	0.6	2 128	0.1	1 056	0.1
Villas/Bungalows/Modern village houses	26 328	2.1	42 000	2.9	50 752	3.2
Simple stone structures	57 775	4.7	50 281	3.5	32 200	2.0
Institutions	2 313	0.2	4 704	0.3	3 766	0.2
Other permanent housing	29 485	2.4	31 465	2.2	28 970	1.8
Roof-top structures	9 552	0.8	8 344	0.6	3 797	0.2
Other temporary housing	105 111	8.5	101 724	7.0	61 860	3.9
<b>Total</b>	<b>1 237 643</b>	<b>100.0</b>	<b>1 445 689</b>	<b>100.0</b>	<b>1 580 072</b>	<b>100.0</b>

Note : (1) In this table, figures exclude domestic households living on board vessels.

**Table 6.4 Average Number of Domestic Households per Living Quarters by Type of Living Quarters, 1981, 1986 and 1991**

<i>Type of Living Quarters</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
Housing Authority rental blocks			
Group A	1.01	1.01	1.01
Group B	1.02	1.01	1.01
Housing Society rental blocks	1.00	1.00	1.00
Housing Authority home ownership estates	1.00	1.00	1.00
Private housing blocks			
Self-contained	1.40	1.23	1.13
Non self-contained	1.74	1.91	1.57
Villas/Bungalows/Modern village houses	1.11	1.06	1.02
Simple stone structures	1.15	1.10	1.04
Institutions	1.03	1.13	1.09
Other permanent housing	1.06	1.06	1.02
Roof-top structures	1.28	1.20	1.24
Other temporary housing	1.09	1.06	1.02
Overall	1.19	1.11	1.06

**Table 6.5 Average Number of Occupants per Living Quarters by Type of Living Quarters, 1981, 1986 and 1991**

<i>Type of Living Quarters</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>
Housing Authority rental blocks			
Group A	5.1	4.6	4.1
Group B	4.3	3.7	3.1
Housing Society rental blocks	5.0	4.4	3.8
Housing Authority home ownership estates	4.3	3.8	3.6
Private housing blocks			
Self-contained	4.9	4.0	3.5
Non self-contained	4.6	5.0	4.1
Villas/Bungalows/Modern village houses	4.7	4.1	3.7
Simple stone structures	4.7	4.0	3.5
Institutions	4.3	1.5	4.0
Other permanent housing	3.4	3.0	2.9
Roof-top structures	4.0	3.4	3.2
Other temporary housing	4.0	3.5	3.1
Overall	4.7	4.0	3.7

**Table 6.6 Domestic Households<sup>(1)</sup> by Tenure of Accommodation, 1981, 1986 and 1991**

<i>Tenure of Accommodation</i>	<i>1981</i>		<i>1986</i>		<i>1991</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Owner-occupier	345 026	27.9	506 926	35.1	673 067	42.6
Sole tenant	545 158	44.0	657 818	45.4	719 954	45.6
Co-tenant	68 910	5.6	85 274	5.9	63 683	4.0
Main tenant	48 634	3.9	24 353	1.7	12 209	0.8
Sub-tenant	145 382	11.7	73 570	5.1	41 505	2.6
Rent free	30 534	2.5	31 486	2.2	16 969	1.1
Provided by employer	53 999	4.4	66 262	4.6	52 685	3.3
Total	1 237 643	100.0	1 445 689	100.0	1 580 072	100.0

Note : (1) In this table, figures exclude domestic households living on board vessels.



## Chapter 7 Internal Movement

### Introduction

Between 1981 and 1991, a marked redistribution of population occurred as people moved away from the older and more populous areas of Hong Kong Island, Kowloon and New Kowloon towards the New Territories.

The 1991 Population Census gave some emphasis to the topic of internal movement and has included some questions which help to provide useful insights into the patterns of internal movement and their impact on the spatial distribution of the population.

The question on 'Place of residence five years ago' enables the identification of persons who resided in Hong Kong in 1986 and 1991 but who recorded change in their district of residence. It is very useful for measuring the levels and direction of internal movements during the past five years but does have some limitations. It fails, for example, to pinpoint exactly the time when the move occurred within the past five years. It also fails to take account of multiple moves within the five-year interval or to recognise movers who moved during the period but returned to their district of origin before the Census reference date.

Persons who had lived outside their present district of residence during the past ten years were also asked of their district of previous residence and when they last move to the present district. Again, the questions fail to record multiple moves and they do not provide precise period data to measure annual rates. However, they are useful for measuring the duration of residence for given populations within given geographical areas.

The exact demarcation of geographical areas adopted would greatly affect statistics on movers. In the 1991 Population Census, the system adopted delineates the whole territory into 28 geographical sub-divisions (GSD), comprising ten District Board districts on Hong Kong Island and in Kowloon and New Kowloon; the Islands District; eight new towns; eight 'other areas' each of which covers the remaining area not included in a new town in their respective District Board district in the New Territories; and the marine anchorages throughout the territory as a group.

A move is defined as a change of residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa.

In other words, a move must involve crossing the boundaries of geographical sub-divisions, whereas change of residence within a geographical sub-division is not defined as a move.

Altogether 1 108 900 persons aged 5 and over were identified as having moved within the past five years. Children under age 5 were excluded as they were not born five years before the Census.

In order to facilitate analysis and discern the major streams of population movements, the 28 geographical sub-divisions are aggregated in the presentation of statistics. It should be noted that a move still follows its original definition despite the geographical aggregation in the analysis.

There are two levels of aggregation. First, the 28 geographical sub-divisions (GSD) are aggregated into 20 geographical divisions (GD) comprising ten District Board districts on Hong Kong Island and in Kowloon and New Kowloon, eight new towns, the other areas of the New Territories (which is constituted of the Islands District, all eight 'other areas' mentioned above) and the marine anchorages. The 20 geographical divisions are further aggregated to form five broad sectors, viz. Hong Kong Island (Central and Western/Wan Chai), Hong Kong Island (Eastern/Southern), Kowloon and New Kowloon, new towns and other areas of the New Territories.

It should be noted that the only difference between GSD and GD is that the nine GSDs covering the eight 'other areas' of the District Board districts in the New Territories and the Islands District are grouped together as the GD 'other areas of the New Territories'. As for the other 19 GSDs, they are identical to the 19 GDs.

## **Pattern of movement**

Of the 1 108 900 persons aged 5 and over who moved between 1986 and 1991, 605 300 persons (55%) moved to GSDs in the new towns sector and 260 100 (23%) to those in the sector Kowloon and New Kowloon. Among those who moved to GSDs in the new towns sector, three quarters were from GSDs in the other sectors, with the bulk (55%) being from GSDs in the sector Kowloon and New Kowloon. Movements between GSDs in the new towns sector amounted to 165 500. For the 260 100 persons moving into GSDs in the sector Kowloon and New Kowloon, 165 600 (64%) originated from GSDs in the same sector. However, it is interesting to note that quite a large number of persons (57 400) had been attracted to GSDs in the sector Kowloon and New Kowloon from GSDs in the new towns sector. These were the major streams of population movements (Table 7.1).

It may be noted that movements to GSDs of the two sectors on Hong Kong Island were relatively fewer in number. GSDs in the sector Hong Kong Island (Eastern/Southern) received more movers than the sector Hong Kong Island (Central and Western/Wan Chai) as movements to the former (137 300) doubled that to the latter (66 300). Interestingly, the major source of movers to GSDs in these two sectors was their counterpart GSDs on Hong Kong Island (Table 7.1).

Table 7.2 shows the in- and out-movements aggregated to the GD level. On Hong Kong Island, only two GDs, namely Eastern District and Southern District gained in population. Other areas of the New Territories and the six GDs in Kowloon and New Kowloon all lost population. In the New Territories, all new towns except Tsuen Wan received more population than they lost.

A net annual internal movement rate that relates net internal movements to the population that would have arisen in the absence of such movements is derived as a way of measuring the impact of internal movement on population redistribution. (A description of

the computation of net annual internal movement rate is given in Technical Note II in Annex 2). Within Hong Kong Island, Wan Chai District recorded a population decline at an average annual rate of about 3% during the past five years. Similarly, Central and Western District recorded a population decline at an average annual rate of about 2%. Eastern and Southern Districts, however, had a population gain at an average annual rate of around 1%. All districts in Kowloon and New Kowloon lost population, particularly Yau Tsim and Mong Kok which lost population at average annual rates of 5% and 4% respectively. In contrast, all the new towns had population gains except Tsuen Wan New Town. The most significant growth was recorded in Tseung Kwan O New Town at an average annual rate of 110%. It may be noted that there was a very low base for comparison and that most movements occurred during the three years before the Census. The new towns Sha Tin and Tai Po also gained significantly in percentage terms over the same period. Apart from the new towns, other areas of the New Territories decreased in population at an average annual rate of 2% between 1986 and 1991 (Table 7.2).

## **Characteristics of movers**

### ***Age and sex structure***

The age structure of movers suggests that persons of working age with young families were among those more likely to move. For the whole territory, about one third of movers were aged 25-34 compared with less than 20% for non-movers. For persons aged 5-14 and those aged 35-44, they also appeared to be a bit more inclined to move. On the other hand, persons aged 15-24 and those aged 45 and over were less prone to move (Table 7.3).

Sex ratios (i.e. males per 1 000 females) of movers differed with respect to age. At ages 15-34, sex ratios of movers were particularly low, suggesting a higher propensity of females than males to move. At ages 35-54, the opposite was true (Table 7.4).

### ***Educational attainment***

Movers in general had higher educational attainment than non-movers. The relative differential is greatest at the highest level where tertiary degrees were attained by more than 5.4% of movers as compared with less than 3.8% of non-movers. At the lowest level, among non-movers 14% had not gone beyond kindergarten as compared with 9% for movers (Table 7.5).

Those moving within or to Hong Kong Island had distinctly higher educational attainment than other movers. Indeed, educational attainment among movers to the new towns was the lowest. For Hong Kong Island bound movers, over half of them had attained upper secondary education or higher, while the corresponding figure for movers to the new towns was less than 35%. Even within Hong Kong Island, there were important differences. Movers to the Central and Western and Wan Chai Districts were better educated, especially at the tertiary level. (Table 7.5).

### ***Labour force participation***

Labour force participation was generally higher for movers than non-movers

for males, but the differences largely reflected the concentration of movers in the working ages 25-44. For females, this pattern was in general true except at ages 25-34, where non-movers had a higher rate than movers. Indeed, after standardisation of the rates by age, only small differences between movers and non-movers remained (Table 7.6).

### ***Occupational distribution***

Spatial patterns are well-exemplified by the occupational distribution of movers. The best educated, as already noted, moved within or to Hong Kong Island. Not surprisingly therefore, these movers tended to work in the more senior or professional jobs. Among the movers to Hong Kong Island, more than 44% worked as managers/administrators or in the professional or associate professional groups. For movers to Kowloon and New Kowloon, the corresponding percentage was a little over 25% and for the new towns, lower still at about 22%; for non-movers the figure was 21% (Table 7.7).

Though less striking, a notable difference is observed in the occupations of movers to Kowloon and New Kowloon as against those to the new towns. Movers to the new towns were more likely to work in craft and related occupations or as plant and machine operators and assemblers. To a lesser extent, these occupations were also important among movers to Kowloon and New Kowloon, but the highest proportion of movers to there was in service and shop sales occupations (Table 7.7).

### ***Household characteristics***

Some interesting points are observed about the household characteristics of movers. For domestic households having moved (see Definition of Terms), household size was usually smaller. One person households and unextended nuclear family households together accounted for 81% of all households that moved, as compared with 76% for the whole territory (Table 3.4 of Chapter 3 and Table 7.8).

About 81% of households that moved comprised 4 or fewer persons. Size of household was also related to destination. Movers to Central and Western and Wan Chai Districts on Hong Kong Island and to Kowloon and New Kowloon were more likely to be alone and when being part of households, the households tended to be smaller in size. In contrast, movers to elsewhere in the territory belonged to larger households. The average size of households was largest for those destined for the new towns. Indeed, 46% of domestic households that moved into the new towns had a size of 4 persons or more, as compared with 38% for Hong Kong Island and 33% for Kowloon and New Kowloon (Table 7.9).

### ***Housing characteristics***

Contrasts between the sectors of destination were wider still when movers were considered by type of living quarters. While in general households having moved were more likely than those not having moved to live in self-contained quarters in private housing blocks, the situation varied widely. For the two sectors on Hong Kong Island, 77% of households that moved there were in private housing blocks. While not quite as high, a large proportion of households (63%) that moved into Kowloon and New Kowloon also reported living in private housing blocks. The figure for the New Territories was significantly lower. For the new towns, 34% of the households that moved there lived in private housing blocks,

while for other areas of the New Territories the corresponding figure was 11% (Table 7.10).

The importance of Housing Authority housing in the new towns compared with other sectors is clearly shown. Of the 203 900 households having moved into the new towns, 76 500 were residing in Housing Authority rental blocks (Group A) and a further 37 700 in Housing Authority home ownership estates (Table 7.10).

The housing pattern for households that moved into other areas of the New Territories differed from those which moved into the other sectors. The majority of these households (56%) resided in villas, bungalows or other modern village houses. A relatively large proportion of households (28%) that moved to this sector lived in less adequate living quarters such as simple stone structures and temporary housing (Table 7.10).

### ***Household Income***

Households that moved into a sector had a higher median of household income than those households that stayed. This phenomenon was common to all the five sectors, although it was less conspicuous for the new towns. This was probably related to the greater affordability of higher income households to move (Table 7.11).

Among the households that moved, those that moved to Hong Kong Island had much higher household income than those that moved to the other sectors. The medians of household income for those households that moved to the two sectors on Hong Kong Island were both around \$16,000, or 60% higher than the median of \$10,000 for all mover households. It has nevertheless to be noted that for those households that had not moved, the medians of household income for the two sectors on Hong Kong Island were also higher than households elsewhere (Table 7.11).

## **Duration of residence in present district**

### ***Method of study***

As discussed in the 'Introduction' of this chapter, the question on 'Place of residence five years ago' has been used to find out the levels and direction of internal movements. The other set of questions on place of previous residence and duration of residence in present district could provide statistics on the time dimension of internal movements. Any person who last changed residence within the past ten years is analysed by their duration of residence in the present District Board district in Table 7.12. In this context, residence is regarded as having been changed only if the district of previous residence and the district present residence belong to different District Board districts. The number of such persons is in excess of 1.8 million. It should be noted that in this section of analysis, children under 5 are also included. This is in contrast to the previous sections in this chapter (Table 7.12).

### ***Findings***

It is interesting to study the number and percentage of persons moving into a District Board district in the year preceding the Census. While the question is only concerned

with the last move and when duration is shortened to a period from January 1990 to March 1991, the effect of multiple moves is small and the results approach real measures of annual movement. In the year preceding the Census, which in effect covered 15 months from January 1990 to March 1991, 401 400 persons moved, or about 8% of the population. This information, describing as it does the most recent movement, is of prime importance to planners who would need to understand current behaviour to make reasonable assumptions about the future (Table 7.12).

Of these 401 400 movers, about 235 900 (59%) moved into the districts in the New Territories each of which mostly contained a new town. The highest number, in excess of 47 000, moved to Sha Tin District (Table 7.12).

A high proportion of movers in the period from January 1990 to March 1991 to the current population reflects the more recent occurrence of internal movement. A high figure of 25% was observed for Sai Kung District during 1990-91. Other districts in the New Territories have received large proportions of movers during this period, though not to the same extent. Nevertheless, recent movers contributed more than 10% to the populations of Tai Po, North, Tuen Mun and Tsuen Wan Districts (Table 7.12).

Almost three quarters of the population of Sai Kung District had moved in during the past ten years. During this longer period, internal movement to Sha Tin, Tai Po, and Tuen Mun Districts was relatively important in all these cases, as movers accounted for more than half of the population in the respective districts (Table 7.12).

**Table 7.1 Population Aged 5 and Over Having Moved within the Past Five Years by Sector of Origin and Sector of Destination, 1991**

<i>Sector of Origin</i>	<i>Sector of Destination</i>					<i>Total</i>
	<i>Hong Kong Island (Central and Western/Wan Chai)</i>	<i>Hong Kong Island (Eastern/Southern)</i>	<i>Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	
	<i>Number (percentage share in brackets)</i>					
Hong Kong Island (Central and Western/Wan Chai)	<b>11 033</b> (16.6)	55 166 (40.2)	12 944 (5.0)	25 426 (4.2)	2 913 (7.3)	107 482 (9.7)
Hong Kong Island (Eastern/Southern)	25 972 (39.2)	<b>16 535</b> (12.0)	16 855 (6.5)	34 766 (5.7)	3 888 (9.7)	98 016 (8.8)
Kowloon and New Kowloon	17 579 (26.5)	40 110 (29.2)	<b>165 613</b> (63.6)	331 970 (54.9)	15 947 (40.0)	571 219 (51.6)
New towns	8 655 (13.1)	17 857 (13.0)	57 356 (22.1)	<b>165 487</b> (27.3)	14 660 (36.7)	264 015 (23.8)
Other areas of the New Territories	3 075 (4.6)	7 633 (5.6)	7 293 (2.8)	47 624 (7.9)	<b>2 523</b> (6.3)	68 148 (6.1)
<b>Total</b>	<b>66 314</b> (100.0)	<b>137 301</b> (100.0)	<b>260 061</b> (100.0)	<b>605 273</b> (100.0)	<b>39 931</b> (100.0)	<b>1 108 880</b> (100.0)

Note : Figures in bold italics along the diagonal of the table refer to the number of movers who had been defined in the 'Definition of Terms' but moved only within a sector.

**Table 7.2 Non-movers, In-movers, Out-movers and Net Movement Rates within the Past Five Years by District/New Town, 1991**

<i>District/New Town<sup>(1)</sup></i>	<i>Type of Mover</i>			<i>Net Internal Movement</i>	<i>Net Annual Internal Movement Rate (%)</i>
	<i>Non-movers</i>	<i>In-movers</i>	<i>Out-movers</i>		
<b>Hong Kong Island</b>					
Central and Western	172 168	35 830	53 909	-18 079	-1.7
Wan Chai	113 757	30 484	53 573	-23 089	-2.9
Eastern	384 089	96 868	66 168	+30 700	+1.3
Southern	175 022	40 433	31 848	+8 585	+0.8
Sub-total	845 036	203 615	205 498	-1 883	-0.0
<b>Kowloon and New Kowloon</b>					
Yau Tsim	77 650	15 807	45 471	-29 664	-5.4
Mong Kok	117 451	29 643	66 524	-36 881	-4.4
Sham Shui Po	280 950	49 776	104 377	-54 601	-3.0
Kowloon City	276 405	63 206	104 677	-41 471	-2.3
Wong Tai Sin	296 236	52 548	98 214	-45 666	-2.4
Kwun Tong	469 630	49 081	151 956	-102 875	-3.6
Sub-total	1 518 322	260 061	571 219	-311 158	-3.2
<b>New towns</b>					
Kwai Tsing	303 560	86 440	72 533	+13 907	+0.7
Tsuen Wan	170 576	60 204	61 249	-1 045	-0.1
Tuen Mun	223 154	93 375	30 007	+63 368	+4.6
Yuen Long	63 580	35 547	18 441	+17 106	+3.9
Fanling/Sheung Shui	69 006	35 160	16 596	+18 564	+4.0
Tai Po	105 396	60 619	17 223	+43 396	+6.2
Sha Tin	279 038	164 242	46 098	+118 144	+6.4
Tseung Kwan O	6 408	69 686	1 868	+67 818	+109.5 <sup>(2)</sup>
Sub-total	1 220 718	605 273	264 015	+341 258	+4.2
Other areas of the New Territories	180 650	39 546	58 780	-19 234	-1.7
Marine	8 664	385	9 368	-8 983	-12.9
The whole territory	3 773 390	1 108 880	1 108 880	-	-

Notes : (1) These refer to the 20 Geographical Divisions (GD) mentioned in the Introduction of Chapter 7.

(2) The net annual internal movement rate for Tseung Kwan O is calculated on the basis of a three-year time frame because most movements there occurred during the three years before the Census. As for the other GDs, the time frame covers five years.

**Table 7.3 Population<sup>(1)</sup> Aged 5 and Over by Age, Sex, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991**

Age Group	Sex	Having Moved					Total	Not Having Moved
		Sector of Destination						
		Hong Kong Island (Central and Western/ Wan Chai)	Hong Kong Island (Eastern/ Southern)	Kowloon and New Kowloon	New towns	Other areas of the New Territories		
Number (percentage share in brackets)								
5 - 14	M	4 040 (6.1)	10 446 (7.6)	18 453 (7.1)	59 093 (9.8)	2 934 (7.3)	94 966 (8.6)	301 590 (8.0)
	F	3 928 (5.9)	9 518 (6.9)	16 346 (6.3)	53 528 (8.8)	2 551 (6.4)	85 871 (7.7)	281 425 (7.5)
15 - 24	M	3 883 (5.9)	7 820 (5.7)	15 966 (6.1)	36 049 (6.0)	2 219 (5.6)	65 937 (5.9)	340 031 (9.0)
	F	4 709 (7.1)	8 674 (6.3)	19 839 (7.6)	39 603 (6.5)	2 986 (7.5)	75 811 (6.8)	307 145 (8.1)
25 - 34	M	8 843 (13.4)	17 949 (13.1)	38 708 (14.9)	96 990 (16.1)	6 468 (16.2)	168 958 (15.2)	384 219 (10.2)
	F	11 969 (18.1)	23 310 (17.0)	43 252 (16.6)	106 481 (17.7)	7 264 (18.1)	192 276 (17.4)	339 773 (9.0)
35 - 44	M	7 985 (12.0)	15 963 (11.6)	29 392 (11.3)	61 784 (10.2)	4 400 (11.0)	119 524 (10.8)	320 783 (8.5)
	F	7 176 (10.8)	14 073 (10.2)	20 675 (8.0)	45 911 (7.6)	3 026 (7.6)	90 861 (8.2)	306 092 (8.1)
45 - 54	M	3 030 (4.6)	5 884 (4.3)	13 267 (5.1)	23 301 (3.8)	1 950 (4.9)	47 432 (4.3)	209 251 (5.5)
	F	2 527 (3.8)	4 902 (3.6)	8 524 (3.3)	16 589 (2.7)	1 152 (2.9)	33 694 (3.0)	176 365 (4.7)
55 - 64	M	2 418 (3.6)	4 434 (3.2)	9 824 (3.8)	16 480 (2.7)	1 340 (3.4)	34 496 (3.1)	214 797 (5.7)
	F	1 948 (2.9)	4 611 (3.4)	7 238 (2.8)	15 930 (2.6)	851 (2.1)	30 578 (2.8)	196 035 (5.2)
65 and over	M	1 466 (2.2)	4 066 (3.0)	7 625 (2.9)	13 513 (2.2)	1 127 (2.8)	27 797 (2.5)	177 559 (4.7)
	F	2 392 (3.6)	5 651 (4.1)	10 952 (4.2)	20 021 (3.3)	1 663 (4.2)	40 679 (3.7)	218 325 (5.8)
Total	M	31 665 (47.8)	66 562 (48.5)	133 235 (51.2)	307 210 (50.8)	20 438 (51.2)	559 110 (50.4)	1 948 230 (51.6)
	F	34 649 (52.2)	70 739 (51.5)	126 826 (48.8)	298 063 (49.2)	19 493 (48.8)	549 770 (49.6)	1 825 160 (48.4)
	T	66 314 (100.0)	137 301 (100.0)	260 061 (100.0)	605 273 (100.0)	39 931 (100.0)	1 108 880 (100.0)	3 773 390 (100.0)

Note : (1) In this table, population excludes persons whose place of residence five years ago was outside Hong Kong and persons who were not usually residing in the households.

**Table 7.4 Sex Ratios of Population<sup>(1)</sup> Aged 5 and Over by Age, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991**

Age Group	<i>Sex Ratio (males per 1 000 females)</i>						<i>Not Having Moved</i>	<i>Total Population</i>
	<i>Having Moved</i>					<i>Overall</i>		
	<i>Hong Kong Island (Central and Western/ Wan Chai)</i>	<i>Hong Kong Island (Eastern/ Southern)</i>	<i>Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>			
5 - 14	1 029	1 097	1 129	1 104	1 150	1 106	1 072	1 080
15 - 24	825	902	805	910	743	870	1 107	1 060
25 - 34	739	770	895	911	890	879	1 131	1 040
35 - 44	1 113	1 134	1 422	1 346	1 454	1 315	1 048	1 109
45 - 54	1 199	1 200	1 556	1 405	1 693	1 408	1 186	1 222
55 - 64	1 241	962	1 357	1 035	1 575	1 128	1 096	1 100
65 and over	613	720	696	675	678	683	813	793
Overall	914	941	1 051	1 031	1 048	1 017	1 067	1 056

Note : (1) In this table, population excludes persons whose place of residence five years ago was outside Hong Kong and persons who were not usually residing in the households.

**Table 7.5 Population<sup>(1)</sup> Aged 5 and Over by Educational Attainment, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991**

Educational Attainment	Having Moved					Total	Not Having Moved
	Sector of Destination						
	Hong Kong Island (Central and Western/Wan Chai)	Hong Kong Island (Eastern/Southern)	Kowloon and New Kowloon	New towns	Other areas of the New Territories		
	Number (percentage share in brackets)						
No schooling/Kindergarten	3 943 (5.9)	12 049 (8.8)	24 134 (9.3)	59 913 (9.9)	4 028 (10.1)	104 067 (9.4)	514 871 (13.6)
Primary	11 847 (17.9)	30 426 (22.2)	73 422 (28.2)	198 809 (32.9)	9 786 (24.5)	324 290 (29.3)	1 219 003 (32.4)
Lower secondary	9 394 (14.2)	21 901 (16.0)	57 563 (22.1)	137 203 (22.7)	7 865 (19.7)	233 926 (21.1)	751 124 (19.9)
Upper secondary	19 064 (28.7)	38 626 (28.0)	68 687 (26.4)	140 611 (23.2)	10 650 (26.7)	277 638 (25.0)	834 952 (22.2)
Matriculation	5 258 (7.9)	9 874 (7.2)	11 364 (4.4)	22 075 (3.6)	2 092 (5.2)	50 663 (4.6)	144 998 (3.8)
Tertiary :							
Non-degree courses	5 351 (8.1)	11 006 (8.0)	12 973 (5.0)	25 984 (4.3)	2 584 (6.5)	57 898 (5.2)	163 973 (4.3)
Degree courses	11 457 (17.3)	13 419 (9.8)	11 918 (4.6)	20 678 (3.4)	2 926 (7.3)	60 398 (5.4)	144 469 (3.8)
<b>Total</b>	<b>66 314</b> (100.0)	<b>137 301</b> (100.0)	<b>260 061</b> (100.0)	<b>605 273</b> (100.0)	<b>39 931</b> (100.0)	<b>1 108 880</b> (100.0)	<b>3 773 390</b> (100.0)

Note : (1) In this table, population excludes persons whose place of residence five years ago was outside Hong Kong and persons who were not usually residing in the households.

**Table 7.6 Labour Force Participation Rates<sup>(1)</sup> by Age, Sex and Whether Having Moved within Hong Kong within the Past Five Years, 1991**

<i>Age Group</i>	<i>Labour Force Participation Rate (%)</i>			
	<i>Male</i>		<i>Female</i>	
	<i>Having moved</i>	<i>Not having moved</i>	<i>Having moved</i>	<i>Not having moved</i>
15 - 24	61.8	60.2	58.7	55.9
25 - 34	98.2	97.0	63.9	70.8
35 - 44	98.1	97.5	56.8	56.0
45 - 54	94.3	93.2	53.6	47.6
55 and over	48.6	47.7	14.1	15.7
Overall (Crude rate)	86.0	77.3	53.3	47.4
Overall (Standardised rate) <sup>(2)</sup>	79.9	79.2	48.4	50.0

Notes : (1) In this table, figures exclude persons whose place of residence five years ago was outside Hong Kong and persons who were not usually residing in the households.

(2) Using the 1991 age distribution of the male population and that of the female population as the standard population in the derivation of the standardised overall labour force participation rates for males and females respectively.

**Table 7.7 Working Population<sup>(1)</sup> by Occupation, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991**

Occupation	Having Moved					Total	Not Having Moved
	Sector of Destination						
	Hong Kong Island (Central and Western/Wan Chai)	Hong Kong Island (Eastern/Southern)	Kowloon and New Kowloon	New towns	Other areas of the New Territories		
	Number (percentage share in brackets)						
Managers and administrators	8 828 (20.5)	14 325 (17.5)	17 817 (11.5)	27 164 (8.4)	4 348 (18.5)	72 482 (11.5)	157 238 (8.1)
Professionals	4 451 (10.3)	6 719 (8.2)	5 790 (3.7)	9 145 (2.8)	1 471 (6.3)	27 576 (4.4)	59 068 (3.1)
Associate professionals	6 884 (15.9)	13 945 (17.1)	17 537 (11.3)	34 591 (10.7)	3 163 (13.5)	76 120 (12.1)	192 123 (9.9)
Clerks	7 492 (17.3)	15 730 (19.2)	24 067 (15.5)	53 535 (16.5)	3 109 (13.3)	103 933 (16.6)	315 789 (16.3)
Service workers and shop sales workers	5 875 (13.6)	9 134 (11.2)	25 257 (16.2)	42 936 (13.2)	2 681 (11.4)	85 883 (13.7)	258 021 (13.4)
Craft and related workers	2 179 (5.0)	6 262 (7.7)	24 496 (15.8)	59 024 (18.3)	2 639 (11.3)	94 600 (15.1)	291 882 (15.1)
Plant and machine operators and assemblers	1 456 (3.4)	4 997 (6.1)	17 446 (11.2)	52 196 (16.1)	2 299 (9.8)	78 394 (12.5)	273 612 (14.2)
Elementary occupations	5 991 (13.9)	10 227 (12.5)	22 818 (14.7)	44 193 (13.6)	3 001 (12.8)	86 230 (13.7)	364 009 (18.8)
Others	29 (0.1)	406 (0.5)	177 (0.1)	1 282 (0.4)	729 (3.1)	2 623 (0.4)	20 954 (1.1)
Total	43 185 (100.0)	81 745 (100.0)	155 405 (100.0)	324 066 (100.0)	23 440 (100.0)	627 841 (100.0)	1 932 696 (100.0)

Note : (1) In this table, working population excludes persons whose place of residence five years ago was outside Hong Kong and persons who were not usually residing in the households.

**Table 7.8 Domestic Households Having Moved within Hong Kong within the Past Five Years by Household Composition and Sector of Destination, 1991**

<i>Household Composition</i>	<i>Sector of Destination</i>					<i>Total</i>
	<i>Hong Kong Island (Central and Western/Wan Chai)</i>	<i>Hong Kong Island (Eastern/Southern)</i>	<i>Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	
	<i>Number (percentage share in brackets)</i>					
One person	6 297 (25.3)	5 939 (13.0)	21 069 (22.4)	23 017 (11.3)	3 048 (20.7)	59 370 (15.5)
One unextended nuclear family	13 920 (55.8)	30 024 (66.1)	54 814 (58.3)	142 587 (70.0)	8 876 (60.1)	250 221 (65.3)
One vertically extended nuclear family	1 472 (5.9)	4 324 (9.5)	6 825 (7.2)	18 001 (8.8)	907 (6.2)	31 529 (8.2)
One horizontally extended nuclear family	462 (1.9)	926 (2.0)	1 967 (2.1)	3 958 (1.9)	347 (2.4)	7 660 (2.0)
Two or more nuclear families	642 (2.6)	2 042 (4.5)	2 578 (2.7)	6 919 (3.4)	466 (3.2)	12 647 (3.3)
Related persons forming no nuclear family	617 (2.5)	1 248 (2.7)	3 884 (4.1)	6 131 (3.0)	393 (2.7)	12 273 (3.2)
Unrelated persons	1 487 (6.0)	1 019 (2.2)	3 026 (3.2)	3 301 (1.6)	696 (4.7)	9 529 (2.5)
<b>Total</b>	<b>24 897 (100.0)</b>	<b>45 522 (100.0)</b>	<b>94 163 (100.0)</b>	<b>203 914 (100.0)</b>	<b>14 733 (100.0)</b>	<b>383 229 (100.0)</b>

**Table 7.9 Domestic Households Having Moved within Hong Kong within the Past Five Years by Household Size and Sector of Destination, 1991**

Household Size	Sector of Destination					Total
	Hong Kong Island (Central and Western/ Wan Chai)	Hong Kong Island (Eastern/ Southern)	Kowloon and New Kowloon	New towns	Other areas of the New Territories	
Number (percentage share in brackets)						
1	6 297 (25.3)	5 939 (13.0)	21 069 (22.4)	23 017 (11.3)	3 048 (20.7)	59 370 (15.5)
2	6 266 (25.2)	10 404 (23.0)	22 256 (23.7)	41 809 (20.5)	3 826 (26.0)	84 561 (22.1)
3	4 706 (18.9)	9 940 (21.8)	19 318 (20.5)	45 376 (22.3)	2 774 (18.8)	82 114 (21.4)
4	3 996 (16.1)	10 080 (22.1)	16 781 (17.8)	52 290 (25.6)	2 658 (18.0)	85 805 (22.4)
5	2 176 (8.7)	5 711 (12.5)	8 975 (9.5)	26 562 (13.0)	1 496 (10.2)	44 920 (11.7)
6 and over	1 456 (5.8)	3 448 (7.6)	5 764 (6.1)	14 860 (7.3)	931 (6.3)	26 459 (6.9)
Total	24 897 (100.0)	45 522 (100.0)	94 163 (100.0)	203 914 (100.0)	14 733 (100.0)	383 229 (100.0)
Average Household Size						
	2.8	3.3	2.9	3.3	3.0	3.2

**Table 7.10 Domestic Households<sup>(1)</sup> by Type of Living Quarters, Whether Having Moved within Hong Kong within the Past Five Years and Sector of Destination, 1991**

Type of Living Quarters	Having Moved					Total	Not Having Moved
	Sector of Destination						
	Hong Kong Island (Central and Western/Wan Chai)	Hong Kong Island (Eastern/Southern)	Kowloon and New Kowloon	New towns	Other areas of the New Territories		
	Number (percentage share in brackets)						
<b>Permanent housing</b>							
<b>Public and aided rental blocks</b>							
Housing Authority rental blocks (Group A)	29 (0.1)	5 828 (12.8)	10 766 (11.4)	76 548 (37.4)	139 (1.0)	93 310 (24.4)	355 847 (31.1)
Housing Authority rental blocks (Group B)	- (-)	580 (1.3)	3 299 (3.5)	1 532 (0.8)	- (-)	5 411 (1.4)	90 836 (7.9)
Housing Society rental blocks	103 (0.4)	565 (1.2)	1 807 (1.9)	1 628 (0.8)	20 (0.1)	4 123 (1.1)	24 315 (2.1)
Housing Authority home ownership estates	- (-)	4 162 (9.1)	9 483 (10.1)	37 703 (18.5)	- (-)	51 348 (13.4)	63 427 (5.5)
<b>Private housing blocks</b>							
Self-contained quarters	22 032 (88.6)	32 121 (70.6)	59 475 (63.3)	68 474 (33.6)	1 629 (11.1)	183 731 (48.0)	483 398 (42.4)
Non self-contained quarters	7 (0.0)	- (-)	124 (0.1)	15 (0.0)	10 (0.1)	156 (0.0)	996 (0.1)
Villas/Bungalows/Modern village houses	81 (0.3)	235 (0.5)	199 (0.2)	5 847 (2.9)	8 220 (56.3)	14 582 (3.8)	32 457 (2.8)
Simple stone structures	27 (0.1)	96 (0.2)	287 (0.3)	1 191 (0.6)	2 028 (13.9)	3 629 (0.9)	27 566 (2.4)
Other permanent housing <sup>(2)</sup>	2 511 (10.1)	1 161 (2.6)	3 798 (4.0)	5 007 (2.5)	560 (3.8)	13 037 (3.4)	15 538 (1.4)
<b>Temporary housing</b>							
Roof-top structures	77 (0.3)	43 (0.1)	858 (0.9)	249 (0.1)	6 (0.0)	1 233 (0.3)	3 541 (0.3)
Other temporary housing	30 (0.1)	731 (1.6)	4 067 (4.3)	5 720 (2.8)	2 007 (13.7)	12 555 (3.3)	46 115 (4.0)
<b>Total</b>	<b>24 897 (100.0)</b>	<b>45 522 (100.0)</b>	<b>94 163 (100.0)</b>	<b>203 914 (100.0)</b>	<b>14 619 (100.0)</b>	<b>383 115 (100.0)</b>	<b>1 144 036 (100.0)</b>

Notes: (1) In this table, figures exclude domestic households living on board vessels, domestic households whose heads' place of residence five years ago was outside Hong Kong and domestic households whose heads were not usually residing in the households.  
(2) Other permanent housing includes boarding houses, staff quarters buildings and quarters in non-residential buildings.

**Table 7.11 Median Monthly Household Income of Domestic Households<sup>(1)</sup> by Sector of Destination<sup>(2)</sup> and Whether Having Moved within Hong Kong within the Past Five Years, 1991**

<i>Sector of Destination</i>	<i>Median Monthly Household Income (HK\$)</i>		
	<i>Having moved</i>	<i>Not having moved</i>	<i>Overall</i>
Hong Kong Island (Central and Western/Wan Chai)	16,035	12,000	12,800
Hong Kong Island (Eastern/Southern)	16,200	12,000	12,600
Kowloon and New Kowloon	9,650	9,000	9,000
New towns	9,250	9,000	9,044
Other areas of the New Territories	12,282	7,000	8,000
Overall	10,000	9,500	9,755

Notes : (1) In this table, figures exclude domestic households whose heads' place of residence five years ago was outside Hong Kong and domestic households whose heads were not usually residing in the households.

(2) For households which had moved, the term 'Sector of Destination' refers to their present sector of residence.

**Table 7.12 Movers<sup>(1)</sup> within the Past Ten Years by Present District of Residence and When Last Changed Residence before Census, 1991**

<i>Present District of Residence</i>	<i>When Last Changed Residence before Census<sup>(2)</sup></i>							
	<i>1990 - Mar 1991</i>		<i>1988 - Mar 1991</i>		<i>1986 - Mar 1991</i>		<i>1981 - Mar 1991</i>	
	<i>Number</i>	<i>As percentage of population</i>	<i>Number</i>	<i>As percentage of population</i>	<i>Number</i>	<i>As percentage of population</i>	<i>Number</i>	<i>As percentage of population</i>
Central and Western	16 085	7.3	32 057	14.6	42 811	19.5	53 701	24.5
Wan Chai	13 266	8.7	27 221	17.8	35 758	23.4	43 486	28.4
Eastern	30 919	6.1	70 771	13.9	108 863	21.4	142 372	28.0
Southern	10 347	4.5	33 914	14.8	45 712	19.9	58 014	25.2
Yau Tsim	6 259	6.4	13 438	13.7	18 528	18.9	24 201	24.7
Mong Kok	10 969	7.1	23 196	15.0	33 328	21.5	43 289	27.9
Sham Shui Po	18 308	5.3	39 114	11.2	57 293	16.4	79 957	23.0
Kowloon City	24 740	7.0	52 120	14.6	72 645	20.4	93 235	26.2
Wong Tai Sin	18 766	5.1	39 372	10.8	58 644	16.0	78 875	21.5
Kwun Tong	15 633	2.9	36 244	6.7	58 090	10.7	135 871	25.0
Kwai Tsing	30 383	7.3	71 219	17.2	100 143	24.2	129 403	31.2
Tsuen Wan	25 540	10.3	55 609	22.5	68 044	27.5	90 533	36.6
Tuen Mun	43 404	12.1	79 613	22.1	114 312	31.8	207 588	57.7
Yuen Long	12 281	5.8	30 035	14.3	41 823	19.9	52 286	24.9
North	19 025	12.3	30 081	19.4	41 060	26.5	65 384	42.2
Tai Po	25 323	13.3	43 094	22.7	73 461	38.6	111 030	58.4
Sha Tin	47 064	9.9	119 896	25.2	185 008	38.9	325 372	68.3
Sai Kung	30 397	25.4	82 210	68.6	85 769	71.5	87 972	73.4
Islands	2 508	6.7	5 644	15.0	7 284	19.3	8 804	23.4
<i>Plus Marine</i>	138	1.4	306	3.1	425	4.3	565	5.7
The whole territory	401 355	7.7	885 154	17.0	1 249 001	24.0	1 831 938	35.2

Notes : (1) In this table, figures exclude those persons whose last district of residence was outside Hong Kong in the past ten years.

(2) Residence is regarded as having been changed only if the district of previous residence and the district of present residence belong to different District Board districts.

## **Chapter 8    New Town Population**

### **Introduction**

To reduce urban congestion, comprehensive plans for the systematic and co-ordinated development of new towns began with the establishment of the New Territories Development Department in 1973. Since then, the New Town Development Programme has been carried out extensively leading to the rapid development of new towns in the past two decades. However, Tsuen Wan/Kwai Tsing was developed before the New Town Development Programme.

At the time of the 1991 Population Census, there were eight new towns in Hong Kong, namely Tsuen Wan/Kwai Tsing, Sha Tin, Tuen Mun, Tai Po, Fanling/Sheung Shui, Yuen Long, Tseung Kwan O and Tin Shui Wai. However, Tin Shui Wai was still being developed at that time and there were yet no residents.

In 1991, over 2 million persons or 37% of the resident population were living in the new towns. In this report, Tsuen Wan and Kwai Tsing are analysed separately because they fall into two different District Board districts and also for the purpose of defining internal movement (Table 8.1).

All the new towns are situated in the New Territories. The growth of the new towns owed very much to the redistribution of population from the older urban areas on Hong Kong Island, and in Kowloon and New Kowloon (see Chapter 7 on Internal Movement for details).

The analysis that follows highlights the major features of the new towns. Interesting characteristics of the population in the new towns are also identified for comparison with their counterparts in the older urban areas (defined here as Hong Kong Island, Kowloon and New Kowloon) and in the other areas of the New Territories which exclude the new towns but include marine anchorages throughout Hong Kong.

### **Population size and density**

In 1991, the new town population was about 2.1 million. This more than doubled the corresponding figure of almost 1 million in 1981 (Table 8.1). In terms of the size of the resident population, Sha Tin was the largest new town with about half a million persons while Tseung Kwan O was the smallest with only 86 600 persons (Table 8.2).

The new towns were less densely populated than the older urban areas which had an average population density of 27 000 persons per km<sup>2</sup> of land area in 1991. The population density of the new towns ranged from 4 900 persons per km<sup>2</sup> in Tseung Kwan O to 23 000 persons per km<sup>2</sup> in Tsuen Wan. Among the new towns, Tsuen Wan and Kwai Tsing have now reached a mature stage of development, and their respective population density closely resembled that of the older urban areas (Table 8.2).

## **Age and sex structure**

The population in the new towns was much younger than that in the older urban areas. The median age of the new town population was 29, as compared with 33 for the older urban areas. Over one quarter of the new town population were aged below 15, while the corresponding proportions for the older urban areas and the other areas of the New Territories were 18% and 22% respectively. On the other hand, only 6% of the new town population were aged 65 and over, lower than the proportions in the older urban areas (10%) and the other areas of the New Territories (11%). As a result, the new towns had a higher child dependency ratio but a much lower elderly dependency ratio as compared with the rest of the territory (Tables 8.3 and 8.4).

Among the new towns, the age structures of the populations in Tsuen Wan and Kwai Tsing were very similar to that of the older urban areas. This is understandable because they were the two oldest new towns and had a very much longer history of development (Table 8.3).

The sex ratio for the new town population (1 034 males per 1 000 females) was about the same as that for the population in the older urban areas, and was lower than that for the population in the other areas of the New Territories (Table 8.5).

## **Educational attainment**

Educational attainment of the population aged 15 and over in the new towns was in general lower than that of its counterpart in the older urban areas. There were relatively higher proportions of population aged 15 and over having education at or below lower secondary level but lower proportions of such population having education at or above upper secondary level in the new towns than in the older urban areas. Compared with the population in the other areas of the New Territories, the educational attainment of the new town population was generally better (Table 8.6).

In general, the school attendance rates for the population aged 3-16 in the new towns were at about the same level as those for the older urban areas. Compared with the other areas of the New Territories, school attendance rates were generally higher in the new towns except for the age group 6-11 where the rate was 100% for all areas in the territory (Table 8.7).

## **Labour force characteristics**

### ***Labour force participation rate***

Males aged 25-54 in the new towns had a slightly higher labour force participation rate than their counterparts in the older urban areas. The opposite happened for males of younger ages 15-24 and those of older ages 55 and over. In particular, the labour force participation rate for males aged 65 and over was very much lower in the new towns than elsewhere in the rest of the territory (Table 8.8).

For females, the labour force participation rate for each age group was lower in the new towns than in the older urban areas. The difference was particularly significant at ages 25-44 (Table 8.8).

### ***Industry pattern***

One third of the working population in the new towns were engaged in the 'Manufacturing' industry. The corresponding proportions in the older urban areas and in the other areas of the New Territories were considerably lower. 'Wholesale, retail and import/export trades, restaurants and hotels' and 'Community, social and personal services' were the next two largest sectors, each engaging almost one fifth of the working population in the new towns. These proportions were, however, lower than the corresponding ones in the older urban areas. On the other hand, only 8% of the new town working population were in the 'Financing, insurance, real estate and business services' sector, as compared with a corresponding figure of 12% for the older urban areas (Table 8.9).

### ***Occupational structure***

A high proportion of the working population in the new towns was production and related workers. Over one third of the working population in the new towns were craft and related workers, plant and machine operators and assemblers, as compared with nearly one quarter in the older urban areas and the other areas of the New Territories. On the other hand, the proportion of 'Managers and administrators', 'Professionals and associate professionals' was markedly lower in the new towns (19%) than in the older urban areas (26%). The proportion of 'clerks' and 'service workers and shop sales workers' in the new towns were close to the corresponding figures in the older urban areas (Table 8.10).

### ***Income from main employment***

The distribution pattern of monthly income from main employment for the working population in the new towns was broadly similar to that for the working population in the older urban areas, except that the proportion earning \$10,000 and above was somewhat lower in the new towns. For both the new towns and the older urban areas, the median monthly income from main employment of the working population was \$5,000 (Table 8.11).

## **Household characteristics**

### ***Household composition***

In 1991, there were some 561 800 domestic households in the new towns, accounting for some 36% of 1 582 200 households in the whole territory. The majority (68%) of households in the new towns were composed of unextended nuclear families. This proportion was relatively lower in the older urban areas and the other areas of the New Territories. On the other hand, the proportion of one-person households was much lower in the new towns. Other than these two significant differences, the composition of domestic households in the new towns was broadly similar to that in all other areas (Table 8.12).

### ***Household size***

The average size of domestic households in the new towns was 3.6 in 1991. This is higher than the corresponding averages of 3.3 for the older urban areas and 3.5 for the other areas of the New Territories. While the average number of adults per domestic household was the same in the different broad areas, the slightly larger household size found in the new towns was related to the presence of more children under age 15 there. On average, there was 0.9 child per household in the new towns. The corresponding figures for the older urban areas and the other areas of the New Territories were 0.6 and 0.8 respectively (Table 8.13).

### ***Household income***

The median monthly income of domestic households in the new towns was \$9,050 in 1991. This is 11% lower than the median for the older urban areas but 13% higher than that for the other areas of the New Territories. The income bracket \$6,000 - \$9,999 stands out as a significant modal class with about one third of the domestic households in the new towns falling into it. The modal class is less conspicuous in the household income distributions for the older urban areas and other areas of the New Territories (Table 8.14).

## **Housing characteristics**

### ***Type of housing***

Some 54% of the 2.1 million new town population were in public and aided housing and another 13% in Housing Authority home ownership (HOS) estates. These proportions were much higher than those in all other areas. On the contrary, there were less than 30% of the new town population in private housing, while the corresponding proportions were 57% in the older urban areas and 70% in the other areas of the New Territories. These observations are expected as the government is the architect of the New Town Development Programme and has been fully supportive of the programme through public housing construction there. Under the programme, population was redistributed from the crowded and older urban areas to the more spacious new towns, thus improving the living environment and housing conditions of the whole territory (Table 8.15).

All the new towns except Tsuen Wan and Yuen Long had a higher than the territory-average proportion (41%) of population in public and aided housing. Kwai Tsing recorded the highest proportion (71%), followed by Fanling/Sheung Shui (61%). On the other hand, Tsuen Wan and Yuen Long had a larger sector of private housing providing accommodation for 63% and 57% of their populations respectively. These proportions were much higher than those in the other new towns, which mostly fell in the range of 20-30%. The proportions for HOS estates also varied significantly among the new towns. The highest proportion was in Tseung Kwan O (38%), a new town which is still being developed and hence the housing mix could change in due course. The other new towns had HOS estates, ranging from 5% of the population in Kwai Tsing to 20% in Tuen Mun, except Tsuen Wan and Yuen Long which had no HOS estates (Table 8.15).

### ***Housing conditions***

The 2.1 million new town population belonged to some 561 800 domestic households. Nearly half of these households were housed in public and aided rental blocks and one quarter in private housing blocks occupying a whole flat/floor/house. Those inadequately housed in temporary housing and those occupying a room/bedspace in private housing blocks constituted just about 6% of households in the new towns. This compares with a corresponding figure of 14% in the older urban areas, suggesting that housing conditions in the new towns appeared to be better (Table 8.16).

### ***Monthly household rent***

Overall, the median monthly household rent for households in the new towns was slightly lower than that for households in the older urban areas. However, the comparison varied among different types of living quarters. For households in public and aided rental blocks in the new towns, they paid a median monthly household rent of \$692, which was slightly higher than that paid by households in public and aided rental blocks elsewhere in the territory (Table 8.17). After a period of embargo against sale or lease as from the date of first purchase, HOS flats were available in the market for lease. Those situated in the new towns fetched a median monthly rent of \$950, very much lower than the corresponding figure of \$4,000 for HOS flats in the older urban areas. As for a whole flat/floor/house in private housing, there was no difference between the median monthly rent in the new towns and that in the older urban areas. However, for villas/bungalows/modern village houses, the median monthly household rent in the new towns was only \$2,200, whereas the corresponding figure for the older urban areas was \$5,450 (Table 8.17).

Similar to all other areas, new town renter households (i.e. non-owner occupiers) occupying a whole flat/floor/house in private housing on average paid almost a quarter of their income on housing, according to the median rent-income ratio. For households in public and aided rental blocks, the median rent-income ratio was 8.5% in the new towns and 7% in the older urban areas, whereas for those in the Housing Authority cottages/temporary huts, the ratio was about 2% in both cases. For households in the HOS estates, the median rent-income ratio was 6.3% in the new towns, compared with 19.3% in the older urban areas. On the other hand, renter households in all permanent housing in the new towns, except those occupying a HOS flat or a room/bedspace in private housing, generally paid a higher proportion of their income on housing than their counterparts in the older urban areas (Table 8.18).

**Table 8.1 Resident Population by Broad Area, 1981, 1986 and 1991**

Year	<i>Hong Kong Island, Kowloon and New Kowloon</i>		<i>New towns</i>		<i>Other areas of the New Territories</i>		<i>The whole territory</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1981	3 731 030	73.0	959 908	18.8	418 874	8.2	5 109 812	100.0
1986	3 550 904 (-180 126)	64.6 (-8.4)	1 568 728 (+608 820)	28.6 (+9.8)	375 856 (-43 018)	6.8 (-1.4)	5 495 488 (+385 676)	100.0
1991	3 281 676 (-269 228)	57.8 (-6.8)	2 101 823 (+533 095)	37.1 (+8.5)	290 615 (-85 241)	5.1 (-1.7)	5 674 114 (+178 626)	100.0

Note : In this table, figures in brackets represent intercensal change.

**Table 8.2 Resident Population and Population Density by New Town, 1991**

	<i>Resident Population</i>	<i>Population Density (number of persons per km<sup>2</sup> of net land area)<sup>(1)</sup></i>
All new towns	2 101 823	14 155
Sha Tin	505 970	14 654
Kwai Tsing	440 798	22 040
Tuen Mun	363 820	17 440
Tsuen Wan	269 857	22 959
Tai Po	192 600	6 337
Fanling/Sheung Shui	124 558	15 935
Yuen Long	117 651	21 326
Tseung Kwan O	86 569	4 913
Hong Kong Island, Kowloon and New Kowloon	3 281 676	26 954
Other areas of the New Territories	272 995	350
Land total	5 656 494	5 385
Marine	17 620	..
The whole territory	5 674 114	..

Note : (1) In this table, net land area excludes surface area of reservoir.

**Table 8.3 Population by New Town and Age, 1991**

	Age Group							Total	Median Age
	Under 15	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 and over		
	Number (percentage share in brackets)								
All new towns	523 794 (25.6)	313 464 (15.3)	445 745 (21.7)	343 459 (16.7)	162 228 (7.9)	135 684 (6.6)	128 137 (6.2)	2 052 511 (100.0)	29.0
Sha Tin	123 153 (24.9)	74 333 (15.1)	104 546 (21.2)	89 419 (18.1)	38 253 (7.7)	31 795 (6.4)	32 367 (6.6)	493 866 (100.0)	30.0
Kwai Tsing	88 604 (20.5)	83 158 (19.3)	85 450 (19.8)	62 284 (14.5)	42 895 (10.0)	36 964 (8.6)	31 497 (7.3)	430 852 (100.0)	29.0
Tuen Mun	111 972 (31.4)	46 134 (12.9)	75 678 (21.2)	69 084 (19.4)	22 398 (6.3)	15 221 (4.3)	15 952 (4.5)	356 439 (100.0)	28.0
Tsuen Wan	50 161 (19.1)	46 305 (17.6)	60 216 (22.9)	40 681 (15.5)	26 346 (10.0)	21 939 (8.4)	16 998 (6.5)	262 646 (100.0)	30.0
Tai Po	54 572 (28.9)	23 650 (12.6)	43 417 (23.1)	32 530 (17.3)	11 896 (6.3)	10 354 (5.5)	11 829 (6.3)	188 248 (100.0)	29.0
Fanling/Sheung Shui	38 686 (32.3)	12 988 (10.8)	27 759 (23.1)	19 803 (16.5)	6 733 (5.6)	6 874 (5.7)	7 220 (6.0)	120 063 (100.0)	28.0
Yuen Long	31 786 (28.0)	16 283 (14.4)	26 496 (23.4)	15 854 (14.0)	7 615 (6.7)	7 631 (6.7)	7 688 (6.8)	113 353 (100.0)	28.0
Tseung Kwan O	24 860 (28.5)	10 613 (12.2)	22 183 (25.5)	13 804 (15.9)	6 092 (7.0)	4 906 (5.6)	4 586 (5.3)	87 044 (100.0)	29.0
Hong Kong Island, Kowloon and New Kowloon	567 107 (17.8)	479 718 (15.0)	672 490 (21.1)	510 857 (16.0)	304 537 (9.5)	330 973 (10.4)	323 836 (10.2)	3 189 518 (100.0)	33.0
Other areas of the New Territories	61 015 (21.8)	46 659 (16.6)	60 053 (21.4)	36 716 (13.1)	20 893 (7.5)	24 849 (8.9)	30 067 (10.7)	280 252 (100.0)	30.0
The whole territory	1 151 916 (20.9)	839 841 (15.2)	1 178 288 (21.4)	891 032 (16.1)	487 658 (8.8)	491 506 (8.9)	482 040 (8.7)	5 522 281 (100.0)	31.5

**Table 8.4 Age Dependency Ratios by New Town, 1991**

	<i>Age Dependency Ratio</i>		
	<i>Child (Aged under 15)</i>	<i>Elderly (Aged 65 and over)</i>	<i>Overall (Aged under 15 and aged 65 and over)</i>
All new towns	374	91	465
Sha Tin	364	96	460
Kwai Tsing	285	101	386
Tuen Mun	490	70	560
Tsuen Wan	257	87	344
Tai Po	448	97	545
Fanling/Sheung Shui	522	97	619
Yuen Long	430	104	534
Tseung Kwan O	432	80	512
Hong Kong Island, Kowloon and New Kowloon	247	141	388
Other areas of the New Territories	323	159	482
The whole territory	296	124	420

**Table 8.5 Sex Ratios by Age and Broad Area, 1991**

<i>Age Group</i>	<i>Sex Ratio</i>			
	<i>Hong Kong Island, Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	<i>The whole territory</i>
Under 15	1 087	1 079	1 090	1 084
15 - 24	1 042	1 038	1 181	1 048
25 - 34	1 017	933	1 163	991
35 - 44	1 060	1 089	1 246	1 078
45 - 54	1 139	1 336	1 236	1 205
55 - 64	1 089	1 081	1 105	1 087
65 and over	799	741	814	784
Overall	1 033	1 034	1 116	1 038

**Table 8.6 Population Aged 15 and Over by Educational Attainment and Broad Area, 1991**

<i>Educational Attainment</i>	<i>Hong Kong Island, Kowloon and New Kowloon</i>		<i>New towns</i>		<i>Other areas of the New Territories</i>		<i>The whole territory</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
	No schooling/Kindergarten	338 486	12.9	171 990	11.3	46 821	21.4	557 297
Primary	628 420	24.0	415 693	27.2	56 486	25.7	1 100 599	25.2
Lower secondary	455 722	17.4	341 200	22.3	40 808	18.6	837 730	19.1
Upper secondary	712 470	27.1	409 072	26.8	47 729	21.8	1 169 271	26.7
Matriculation	145 105	5.5	60 318	3.9	9 154	4.2	214 577	4.9
Tertiary :								
Non-degree courses	154 029	5.9	72 542	4.7	8 341	3.8	234 912	5.4
Degree courses	188 179	7.2	57 902	3.8	9 898	4.5	255 979	5.9
Total	2 622 411	100.0	1 528 717	100.0	219 237	100.0	4 370 365	100.0

**Table 8.7 School Attendance Rates of Population Aged 3-18 by Age, Sex and Broad Area, 1991**

<i>Age Group</i>	<i>Sex</i>	<i>School Attendance Rate (%)</i>			
		<i>Hong Kong Island, Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	<i>The whole territory</i>
3 - 5	M	95	95	92	95
	F	95	95	91	95
6 - 11	M	100	100	100	100
	F	100	100	100	100
12 - 16	M	92	92	85	92
	F	96	96	91	96
17 - 18	M	58	52	34	54
	F	65	61	47	63

**Table 8.8 Labour Force Participation Rates by Sex, Age and Broad Area, 1991**

<i>Sex and Age Group</i>	<i>Labour Force Participation Rate (%)</i>			
	<i>Hong Kong Island, Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	<i>The whole territory</i>
<b>Male</b>				
15 - 24	60.1	59.7	64.0	60.2
25 - 34	96.4	97.5	90.4	96.5
35 - 44	96.8	97.7	91.3	96.9
45 - 54	93.1	93.2	88.9	92.9
55 - 64	69.2	66.2	60.8	68.0
65 and over	24.0	18.5	24.7	22.6
Overall	78.0	80.8	73.7	78.7
<b>Female</b>				
15 - 24	57.7	55.6	58.5	56.9
25 - 34	74.2	60.6	62.9	68.4
35 - 44	60.1	52.1	58.4	57.0
45 - 54	49.2	48.6	51.8	49.1
55 - 64	24.9	22.6	28.7	24.4
65 and over	8.3	5.6	7.0	7.5
Overall	50.6	48.0	47.4	49.5

**Table 8.9 Working Population by Industry and Broad Area, 1991**

Industry	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
Manufacturing	425 926	26.1	315 518	33.1	26 677	20.6	768 121	28.2
Construction	100 311	6.1	76 153	8.0	11 387	8.8	187 851	6.9
Wholesale, retail and import/export trades, restaurants and hotels	400 453	24.5	188 094	19.7	22 839	17.7	611 386	22.5
Transport, storage and communication	149 287	9.1	104 192	11.0	12 207	9.4	265 686	9.8
Financing, insurance, real estate and business services	202 158	12.4	75 651	8.0	9 359	7.2	287 168	10.6
Community, social and personal services	334 722	20.5	176 527	18.6	27 874	21.7	539 123	19.9
Others <sup>(1)</sup>	21 705	1.3	15 171	1.6	18 892	14.6	55 768	2.1
Total	1 634 562	100.0	951 306	100.0	129 235	100.0	2 715 103	100.0

Note : (1) 'Others' include such industries as 'Agriculture and fishing', 'Mining and quarrying', 'Electricity, gas and water' and industrial activities inadequately described or unclassifiable.

**Table 8.10 Working Population by Occupation (ISCO-88 Classification\*) and Broad Area, 1991**

Occupation	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
Managers and administrators	175 230	10.7	64 020	6.7	9 997	7.7	249 247	9.2
Professionals	70 901	4.3	24 348	2.6	4 082	3.2	99 331	3.7
Associate professionals	182 700	11.2	87 694	9.2	9 515	7.4	279 909	10.3
Clerks	270 736	16.6	146 985	15.5	13 930	10.8	431 651	15.9
Service workers and shop sales workers	219 186	13.4	124 078	13.0	16 055	12.4	359 319	13.2
Craft and related workers	216 450	13.2	164 638	17.3	16 904	13.1	397 992	14.7
Plant and machine operators and assemblers	186 496	11.4	164 715	17.3	14 615	11.3	365 826	13.5
Elementary occupations	307 651	18.9	170 824	18.0	25 357	19.6	503 832	18.5
Others	5 212	0.3	4 004	0.4	18 780	14.5	27 996	1.0
Total	1 634 562	100.0	951 306	100.0	129 235	100.0	2 715 103	100.0

Note : \* See item (68) in 'Definition of Terms' for some important remarks about occupational classifications.

**Table 8.11 Working Population<sup>(1)</sup> by Monthly Income from Main Employment and Broad Area, 1991**

Monthly Income from Main Employment (HK\$)	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
Under 2,000	105 238	6.5	63 495	6.7	13 882	11.3	182 615	6.8
2,000 - 3,999	337 129	20.8	189 778	20.2	30 459	24.8	557 366	20.8
4,000 - 5,999	468 216	29.0	292 808	31.0	33 938	27.6	794 962	29.6
6,000 - 7,999	265 593	16.4	177 801	18.9	17 609	14.3	461 003	17.2
8,000 - 9,999	129 583	8.0	84 297	9.0	7 646	6.2	221 526	8.3
10,000 - 14,999	151 631	9.4	82 862	8.8	8 503	6.9	242 996	9.1
15,000 and over	159 650	9.9	50 511	5.4	10 954	8.9	221 115	8.2
<b>Total</b>	<b>1 617 040</b>	<b>100.0</b>	<b>941 552</b>	<b>100.0</b>	<b>122 991</b>	<b>100.0</b>	<b>2 681 583</b>	<b>100.0</b>
	<i>Median Monthly Income (HK\$)</i>							
	5,000		5,000		4,750		5,170	

Note : (1) In this table, working population excludes unpaid family workers.

**Table 8.12 Domestic Households by Household Composition and Broad Area, 1991**

Household Composition	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
One person	158 310	16.8	59 947	10.7	15 666	20.6	233 923	14.8
One unextended nuclear family	550 440	58.2	383 978	68.3	41 080	54.0	975 498	61.6
One vertically extended nuclear family	103 525	11.0	58 791	10.5	7 227	9.5	169 543	10.7
One horizontally extended nuclear family	17 965	1.9	9 334	1.7	1 514	2.0	28 813	1.8
Two or more nuclear families	47 388	5.0	22 489	4.0	5 308	7.0	75 185	4.8
Related persons forming no nuclear family	44 456	4.7	20 365	3.6	2 929	3.9	67 750	4.3
Unrelated persons	22 304	2.4	6 931	1.2	2 268	3.0	31 503	2.0
<b>Total</b>	<b>944 388</b>	<b>100.0</b>	<b>561 835</b>	<b>100.0</b>	<b>75 992</b>	<b>100.0</b>	<b>1 582 215</b>	<b>100.0</b>

**Table 8.13 Domestic Households by Household Size and Broad Area, 1991**

Household Size	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
1	158 310	16.8	59 947	10.7	15 666	20.6	233 923	14.8
2	182 656	19.3	90 833	16.2	15 224	20.0	288 713	18.2
3	184 378	19.5	110 092	19.6	11 903	15.7	306 373	19.4
4	194 290	20.6	149 227	26.5	12 318	16.2	355 835	22.5
5	125 260	13.3	91 102	16.2	9 021	11.9	225 383	14.2
6 and over	99 494	10.5	60 634	10.8	11 860	15.6	171 988	10.9
Total	944 388	100.0	561 835	100.0	75 992	100.0	1 582 215	100.0
<i>Average Household Size</i>								
Average number of adults per household	2.7		2.7		2.7		2.7	
Average number of children per household	0.6		0.9		0.8		0.7	
Average number of persons per household	3.3		3.6		3.5		3.4	

**Table 8.14 Domestic Households by Monthly Household Income and Broad Area, 1991**

Monthly Household Income (HK\$)	Hong Kong Island, Kowloon and New Kowloon		New towns		Other areas of the New Territories		The whole territory	
	Number	%	Number	%	Number	%	Number	%
Under 2,000	46 204	4.9	19 131	3.4	10 217	13.4	75 552	4.8
2,000 - 5,999	187 680	19.9	112 569	20.0	17 498	23.1	317 747	20.1
6,000 - 9,999	212 502	22.5	171 521	30.6	16 211	21.3	400 234	25.3
10,000 - 14,999	180 748	19.1	122 157	21.7	11 474	15.1	314 379	19.9
15,000 - 19,999	108 132	11.4	61 580	11.0	6 694	8.8	176 406	11.1
20,000 - 29,999	102 669	10.9	47 085	8.4	6 746	8.9	156 500	9.9
30,000 and over	106 453	11.3	27 792	4.9	7 152	9.4	141 397	8.9
Total	944 388	100.0	561 835	100.0	75 992	100.0	1 582 215	100.0
<i>Median Monthly Household Income (HK\$)</i>								
	10,143		9,050		8,000		9,964	

**Table 8.15 Population<sup>(1)</sup> by New Town and Type of Housing, 1991**

	<i>Type of Housing</i>											
	<i>Public and aided housing</i>		<i>Housing Authority home ownership estates</i>		<i>Private housing</i>		<i>Temporary housing</i>		<i>Institutions</i>		<i>Total</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
All new towns	1 106 677	53.8	267 869	13.1	602 877	29.4	67 355	3.3	7 733	0.4	2 052 511	100.0
Sha Tin	260 488	52.8	89 807	18.2	127 801	25.9	14 048	2.8	1 722	0.3	493 866	100.0
Kwai Tsing	306 288	71.1	23 416	5.4	85 773	19.9	12 057	2.8	3 318	0.8	430 852	100.0
Tuen Mun	200 734	56.3	69 901	19.6	79 355	22.3	4 974	1.4	1 475	0.4	356 439	100.0
Tsuen Wan	86 649	33.0	-	-	164 305	62.5	11 458	4.4	234	0.1	262 646	100.0
Tai Po	90 333	47.9	33 244	17.7	57 906	30.8	6 215	3.3	550	0.3	188 248	100.0
Fanling/Sheung Shui	72 719	60.6	18 211	15.2	20 226	16.8	8 764	7.3	143	0.1	120 063	100.0
Yuen Long	45 076	39.8	-	-	64 702	57.0	3 494	3.1	81	0.1	113 353	100.0
Tseung Kwan O	44 390	51.1	33 290	38.2	2 809	3.2	6 345	7.3	210	0.2	87 044	100.0
Hong Kong Island, Kowloon and New Kowloon	1 120 666	35.1	149 542	4.7	1 813 265	56.9	77 676	2.4	28 369	0.9	3 189 518	100.0
Other areas of the New Territories	7 381	2.7	-	-	189 052	70.3	57 708	21.4	15 009	5.6	269 150	100.0
Land total	2 234 724	40.5	417 411	7.6	2 605 194	47.3	202 739	3.7	51 111	0.9	5 511 179	100.0

Note : (1) In this table, population excludes persons living on board vessels.

**Table 8.16 Domestic Households<sup>(1)</sup> by Type of Living Quarters and Broad Area, 1991**

<i>Type of Living Quarters</i>	<i>Hong Kong Island, Kowloon and New Kowloon</i>		<i>New towns</i>		<i>Other areas of the New Territories</i>		<i>Total<sup>(2)</sup></i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
<b>Permanent housing</b>								
Public and aided rental blocks	299 334	31.8	275 400	49.0	1 579	2.1	576 313	36.5
Housing Authority home ownership estates	41 641	4.4	74 088	13.2	-	-	115 729	7.3
<b>Private housing blocks</b>								
Whole flat/floor/house	441 252	46.8	140 670	25.0	3 963	5.4	585 885	37.1
Room/Bedspace, etc.	108 844	11.5	11 908	2.1	48	0.1	120 800	7.6
Villas/Bungalows/Modern village houses	2 758	0.3	17 834	3.2	30 171	40.9	50 763	3.2
Simple stone structures	4 065	0.4	9 586	1.7	18 538	25.1	32 189	2.0
Other permanent housing <sup>(3)</sup>	20 202	2.1	9 589	1.7	2 945	4.0	32 736	2.1
<b>Temporary housing</b>								
Housing Authority cottages/temporary huts	13 550	1.4	12 862	2.3	1 291	1.7	27 703	1.8
<b>Private temporary housing</b>								
Roof-top structures	3 998	0.4	1 015	0.2	21	0.0	5 034	0.3
Others	8 744	0.9	8 883	1.6	15 293	20.7	32 920	2.1
<b>Total</b>	<b>944 388</b>	<b>100.0</b>	<b>561 835</b>	<b>100.0</b>	<b>73 849</b>	<b>100.0</b>	<b>1 580 072</b>	<b>100.0</b>

- Notes : (1) In this table, figures exclude domestic households living on board vessels.  
(2) The data in this table are estimates derived from the sample enquiry while those in Table 6.3 are obtained from the complete enumeration. They are not necessarily identical. For example, the total count of domestic households living in 'Simple stone structures' in Table 6.3 was 32 200, whereas the corresponding estimate in Table 8.16 was 32 189.  
(3) Other permanent housing includes boarding houses, staff quarters buildings and quarters in non-residential buildings.

**Table 8.17 Median Monthly Household Rent of Domestic Households<sup>(1)</sup> by Type of Living Quarters and Broad Area, 1991**

<i>Type of Living Quarters</i>	<i>Median Monthly Household Rent (HK\$)</i>			<i>Total</i>
	<i>Hong Kong Island, Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	
<b>Permanent housing</b>				
Public and aided rental blocks	629	692	650	669
Housing Authority home ownership estates	4,000	950	..	1,350
<b>Private housing blocks</b>				
Whole flat/floor/house	3,500	3,500	7,000	3,500
Room/Bedspace, etc.	900	850	800	900
Villas/Bungalows/Modern village houses	5,450	2,200	1,900	2,253
Simple stone structures	400	600	400	502
Other permanent housing <sup>(2)</sup>	520	400	855	496
<b>Temporary housing</b>				
Housing Authority cottages/temporary huts	135	113	115	128
Private temporary housing	800	450	200	353
<b>Overall</b>	<b>732</b>	<b>700</b>	<b>507</b>	<b>709</b>

Notes : (1) In this table, figures exclude domestic households living on board vessels.

(2) Other permanent housing includes boarding houses, staff quarters buildings and quarters in non-residential buildings.

**Table 8.18 Median Rent-income Ratios of Domestic Households<sup>(1)</sup> by Type of Living Quarters and Broad Area, 1991**

<i>Type of Living Quarters</i>	<i>Median Rent-income Ratio (%)</i>			<i>Total</i>
	<i>Hong Kong Island, Kowloon and New Kowloon</i>	<i>New towns</i>	<i>Other areas of the New Territories</i>	
<b>Permanent housing</b>				
Public and aided rental blocks	7.0	8.5	8.7	7.7
Housing Authority home ownership estates	19.3	6.3	..	7.6
<b>Private housing blocks</b>				
Whole flat/floor/house	23.3	23.9	23.4	23.4
Room/Bedspace, etc.	17.4	16.3	8.4	17.2
Villas/Bungalows/Modern village houses	12.5	18.0	18.3	18.0
Simple stone structures	6.0	10.5	7.5	8.3
Other permanent housing <sup>(2)</sup>	3.8	4.1	3.8	3.9
<b>Temporary housing</b>				
Housing Authority cottages/temporary huts	2.4	2.1	2.3	2.3
Private temporary housing	11.9	7.7	3.8	6.0
<b>Overall</b>	<b>9.2</b>	<b>8.7</b>	<b>7.9</b>	<b>8.9</b>

Notes : (1) In this table, figures exclude domestic households living on board vessels.

(2) Other permanent housing includes boarding houses, staff quarters buildings and quarters in non-residential buildings.



## **Chapter 9      Census Procedures**

### **Introduction**

This chapter outlines how the 1991 Population Census was taken and describes the methodology and operational procedures of the Census.

### **Timing of the Census**

In the 1991 Population Census, enumeration of the land population and that of the marine population were both conducted during 15 to 24 March 1991. The timing of the 1991 Population Census accords with that of the 1971 and 1981 Censuses, ensuring the comparability of data over time. Practically speaking, taking a census in March also has the following advantages: weather in March is good with almost no chance of typhoon, and there is no long public holiday or festival in the month which could generate large population movements in and out of Hong Kong.

### **Coverage**

The 1991 Population Census covered the entire population including the land population, the marine population, transients, armed forces, institutional population and Vietnamese migrants. Information was also obtained on the age-sex particulars of those residents who were usual residents but temporarily away from Hong Kong on the Census reference date of 15 March 1991.

### **Survey design**

The 1991 Population Census adopted a survey design which comprised a simple but complete enumeration of the population by age and sex and a detailed one-in-seven sample enquiry of a broad range of their demographic, social and economic characteristics. Therefore, two types of questionnaires, viz. the 'Short form' and 'Long form', were used.

The 'Short form', which was used in the simple enumeration, covered only the basic questions on age, sex, type of household and type of living quarters. The 'Long form', which was used in the detailed sample enquiry, included not only those questions asked in the 'Short form' but additional ones on the socio-economic characteristics of the population and on the characteristics of households and living quarters. Details on the topics of enquiry are given in the following section on 'Census content'. Specimens of the two questionnaires are given in Appendices 1 and 2. Taken together, the common information collected in both the 'Short forms' and 'Long forms' gave the complete enumeration results on the basic characteristics of the population. The 'Long form' was the source for providing estimates on the detailed characteristics of the population.

This survey design has several advantages over a full enumeration enquiring every person in the population of their detailed characteristics. It was cheaper because the number of temporary census officers required was significantly less than that required for a full enumeration. The lower staff requirement made possible the selection of better quality enumerators and also facilitated better training, supervision and control of the temporary census officers. The time required for data processing was also less because only a fraction of the population were enquired in detail using the 'Long form'.

## Census content

The census questions included in 'Short form' and 'Long form' questionnaires can be seen from the specimens in Appendices 1 and 2 respectively. The topics of enquiry of these questionnaires are summarised below:

<i>'Long form'</i>	<i>'Short form'</i>
<i>A. Personal data</i>	
1. Name (for convenient referral in the interview only)	1. Name (for convenient referral in the interview only)
2. Sex	2. Sex
3. Year and month of birth	3. Year and month of birth
4. Relationship to head of household	4. Relationship to head of household
5. Marital status	-
6. School attendance	-
7. Educational attainment	-
8. Field of education	-
9. Usual language/dialect	-
10. Ability to speak other languages/dialects	-
11. Place of birth	-
12. Nationality	-
13. Previous district of residence	-
14. Duration of residence in present district	-
15. Duration of residence in Hong Kong	-
16. Place of residence five years ago	-
17. Activity status	-
18. Industry	-
19. Occupation	-
20. Monthly income from main employment	-
21. Monthly income from other employment	-
22. Other cash incomes	-
23. Whether having secondary employment	-

## *B. Household and living quarters data*

1.	Type of living quarters	1.	Type of living quarters
2.	Type of household	2.	Type of household
3.	Type of accommodation	-	
4.	Tenure of accommodation	-	
5.	Monthly household rent	-	

The above topics of enquiry were adopted in enumerating the land population. For the marine population, most of the topics in the 'Long form' were also applicable except 'Type of accommodation', 'Tenure of accommodation' and 'Monthly household rent'; in addition, the topic 'Type of living quarters' was replaced by 'Type of vessel'. Based on the information collected in the appropriate topics of enquiry, three additional items of information namely, 'Household size', 'Household composition' and 'Household income' were derived.

In deciding which topics of enquiry should be included in the Census, advice was obtained from various policy branches and departments of the Government. Some non-government organisations, which were the major users of Census data were also consulted. The topics of enquiry were finally chosen after taking into consideration factors such as the usefulness of data, objectivity and acceptability of the questions used, existence of other data source, comparability with previous censuses and the recommendations of the 'United Nations 1990 World Population and Housing Census Programme'.

Compared with the 1981 Census and the 1986 By-Census, the above topics for the 1991 Population Census include seven new ones, viz. 'Usual language/dialect', 'Ability to speak other languages/dialects', 'Nationality', 'Previous district of residence', 'Duration of residence in present district', 'Duration of residence in Hong Kong' and 'Whether having secondary employment'. On the other hand, topics on 'Year of first marriage', 'Number of children ever born', 'Place of origin', 'Disablement', 'Year of arrival in Hong Kong' and 'Secondary occupation', which were included in the 1981 Census or the 1986 By-Census, were excluded from the 1991 Population Census.

## **Planning**

A '1991 Population Census Office' consisting of four different sections was set up to prepare for and execute the 1991 Population Census. The Census Planning Sections (1) and (2) were responsible for the overall planning of all statistical and fieldwork related to the operation. The Census Field Section was engaged in updating the frame of quarters, organising fieldwork, training and deploying of temporary census officers and supervising the enumeration. The Census Administrative Services Section had the tasks of arranging accommodation, recruiting temporary staff and administering the accounts, stores and stationery, printing and publicity of the project. Data processing of the Census results was supported separately by the Data Processing Branch which looked after the computer services of the whole Department.

Preliminary planning for the 1991 Population Census started in 1987. After considering the past census experience and consulting various users on the topics of enquiry

and overseas statistics offices on the latest developments in Census data processing, a Census Plan was drawn up in November 1988 summarising the proposals on the contents of the Census questionnaires, the fieldwork operational procedures, data processing strategy and methods, staff requirements and the overall budget. The plan was approved by the Governor in Council in February 1989.

## **Frame of quarters**

The sampling frame for the Census was the 'Frame of quarters' which consists of two parts. For the built-up areas (including new towns), there is a list of permanent quarters each identified by a detailed address. Each address is unique with details on the house number, street name, building name, floor number and flat number. The list is stored in computer for easy updating and retrieval. It is known as the 'Computerized Frame of Living Quarters (COM-Q)', which was set up in 1984/85 for the 1986 By-Census. It is updated regularly so that every permanent living quarters in Hong Kong is included. The updating is based on information on the demolition of old buildings and the construction of new buildings, which is available from the Housing Department and the Buildings and Lands Department. For the non-built-up areas with temporary structures only, there is a list of area segments each of which contains a cluster of 8 to 15 temporary structures and is delineated by some permanent and easily identifiable boundaries such as footpaths, lanes and ditches. From September 1989 to April 1990, the Census Field Section conducted a full re-listing of all area segments. The work involved re-drawing the boundaries of area segments and recording the number and the location of temporary structures within them.

## **Enumeration method**

Broadly speaking, the 1991 Population Census consisted of different enumeration operations, viz. the land operation, the marine operation and the special class enumeration. The former two types of operations are described below, whereas special class enumeration is discussed separately in the next section due to its special nature.

The land enumeration comprised the simple complete enumeration and the detailed sample enquiry. The 'Self-enumeration' approach was adopted in the simple enumeration. The 'Short form' questionnaires were mailed out, about one week before the Census started, to all quarters in the built-up areas for householders to complete. They were then collected by enumerators during the Census period. For households which had completed the self-enumeration, enumerators would only check the information. For households which had difficulties in completing the questionnaires, enumerators would do the enumeration on site. About 50% of the households were able to complete the 'Short form' themselves. As for temporary structures in the area segments, 'Short forms' were not mailed to the householders beforehand but were all completed by enumerators during the visit. In the sample enquiry, the traditional 'Interviewer method' was adopted in data collection. The enumerators visited the quarters on their assignment list and enumerated all persons living in all the households found.

For the marine operation, enumeration was conducted using only the 'Long

form' similar to that used in the land operation. The traditional 'Interviewer method' was adopted. For operational convenience, the harbours and anchorages where the vessels were located were divided into small sections with reference to bearings on shore, at typhoon shelter and on other natural features. The chief enumerator, accompanied by a small team of enumerators, supervised the enumeration of the section for which he was responsible on a small boat and sent out enumerators at different parts of the section to carry out the work. Each vessel enumerated was identified by a red census label to ensure that vessels within a section were neither duplicated in nor omitted from the enumeration.

The 1991 Population Census was taken on a 'De facto' basis. Hence, it was necessary to fix a census moment for the enumeration. For households selected for the simple enumeration, it was fixed at 3:00 a.m. of 15 March 1991. However, for households selected for the sample enquiry, a shifting census moment was adopted, that is the census moment refers to 3:00 a.m. on the day of the first visit paid by an enumerator.

In this 'De facto' Census, all members of a household who were present in Hong Kong at the census moment were enumerated and enquired of their characteristics. Additionally, all households were asked to report the number of usual members of their household, and the age, sex and whereabouts of all absent usual members. This ensures that the basic characteristics of those residents who were temporarily away from Hong Kong were collected.

Although all enumerators in the land operation had to make at least four visits, if necessary, to each household at different times of a day and on different dates until all members of the household were interviewed, it was still possible to have some non-contact cases at the end of the operation. Therefore, in the evening of 24 March 1991 which was the last day of the Census period, a self-administered questionnaire (SAQ) was left with each of those households which could still not be contacted. They were asked to complete and return the SAQ by mail by 7 April 1991. A total of 57 500 SAQs were despatched and 17 100 (or 30% of the total) were completed and returned. These completed SAQs were then used to estimate the number, age-sex structure and geographical distribution of all the non-contact persons. For details on the treatment of non-contact cases and the adjustment made to allow for persons in non-contact households, please refer to Chapter 10.

## **Special class enumeration**

For operational convenience, special arrangements were made to enumerate street sleepers and special groups of persons living in those domestic households and institutions of restricted access. The special class enumeration covered the armed forces, trainees in training schools of police, fire services and customs and excise services, in-patients in hospitals, inmates in penal institutions, street sleepers, transients in hotels/hostels/boarding houses and Vietnamese migrants. These special populations except transients were enumerated by staff of the concerned institutions who were specially trained and appointed as temporary census officers for the operation. In the enumeration of transients staying in hotels, hostels and boarding houses, ordinary enumerators were deployed because no special problem was anticipated in the operation. The enumeration was, however, only a simple headcount without further enquiry on the other characteristics of the transients. Regarding the enumeration of Vietnamese migrants, it was a simple headcount as reported by the

## Pre-test and Pilot Census

A Pre-test and a Pilot Census were conducted to test the various aspects of the 1991 Population Census so that any deficiencies of the survey design could be identified and rectified in good time.

The Pre-test was held during 24 February to 5 March 1989 and covered 9 500 living quarters in four selected locations. Apart from testing the general organisational aspects of the Census, a major objective was to assess the feasibility of using the self-enumeration method for the simple enumeration and to test the effectiveness of the Optical Character Recognition (OCR) technique for data capture. Results showed that the self-enumeration method was practicable as 41% of households were able to complete the forms properly by themselves. The test results of using the OCR technique for data capture was also very encouraging.

The Pilot Census, which represented a rehearsal of the Census, was conducted during 3 to 12 November 1989 covering some 39 000 living quarters and 1 400 vessels. The sample for the Pilot Census covered seven District Board districts and four marine anchorages selected to represent the population. After the test, all aspects of the operation were evaluated and the experience gained led to many improvements in the procedures for the Census operation.

## Field organisation

There were 56 regular field staff working in the Census Field Section which was responsible for planning and executing the Census fieldwork. The fieldwork was organised on the following geographical basis:

<u>Area of responsibility</u>	<u>Line of responsibility</u>
Whole territory	1 Chief census and survey officer
↓	↓
5 Regions*	5 Senior census and survey officers
↓	↓
50 Districts	50 Census and survey officers
↓	↓
909 Divisions	909 Chief enumerators

\* The 5 regions were Hong Kong Island, Kowloon East, Kowloon West, New Territories East and New Territories West.

As illustrated above, the lowest work unit was a division. A division usually comprised a chief enumerator, two field editors, one checker and twelve enumerators (four for doing the 'Long form' and eight the 'Short form'). The chief enumerator was the head

of division, the field editors were for editing completed questionnaires, while the checkers had to conduct field checks to see if field visits had been completed and verify whether the information collected was accurate. The 'Short form' enumerators had to visit all living quarters in their assignment and to check and collect self-completed questionnaires from the households found. In case householders did not complete the self-enumeration, the enumerator had to interview members of the household and complete the questionnaires. The 'Long form' enumerators also had to visit all living quarters in their assignment and conduct personal interviews in all households found to collect detailed information based on the 'Long form'.

## **Recruitment**

Most of the temporary census officers for the Census were senior students of secondary schools, post-secondary students and school teachers. To facilitate students and teachers to participate in the Census operation, Census holidays were declared by the Education Department for the period of 14 to 26 March 1991. Some 260 serving staff of the Correctional Services Department, Hospital Services Department, Fire Services Department, Royal Hong Kong Police Force, all private and subvented hospitals and British Forces were recruited as temporary census officers. They helped to enumerate persons staying in the institutions and quarters at which they worked. Another 450 social workers of the Social Welfare Department were recruited to enumerate street sleepers.

As from late 1989, liaison with secondary schools, colleges of education and post-secondary colleges started, paving the way towards the recruitment of students as temporary census officers. Presentation talks and civic education programmes were launched to arouse the interest of students and their eagerness to participate in the Census. In total, some 48 600 applications were received.

## **Training and selection**

The training of enumeration staff was conducted in two phases. First, applicants were invited to attend a three-hour introductory training course. After a short test administered at the end of the training, suitable applicants were selected to attend an intensive training conducted in February and March 1991. The intensive course lasted for six hours for the 'Short form' enumerators and nine hours for chief enumerators, field editors, checkers and 'Long form' enumerators.

A top-down approach was adopted to train the large number of applicants recruited. Census and survey officers of the Census Field Section trained those teachers who would be recruited as chief enumerators first. The trained teachers in turn conducted training courses for students who would become enumerators.

In order to standardise the training, a set of twelve episodes of training film was produced with the assistance of Radio Television Hong Kong for the purpose. Training manuals and exercises were used in the course. Some 22 600 applicants were invited for the training and about 75% completed the courses. Successful applicants were offered

appointment as census officers, but the turn-up rate was slightly lower than expected. Hence supplementary courses had to be organised to provide sufficient manpower before the operation.

A final briefing session was held on 14 March 1991 immediately before the Census started. This helped temporary census officers review and recapitulate the methods of interviewing and enumeration and remind them the important aspects of the operation.

## **Publicity**

An extensive publicity programme was drawn up for the Census. At different times of the operation, the publicity work served different purposes. For example, around January 1991, the first Census poster appeared and the first Announcement of Public Interest (API) was broadcast on television, both of which aimed at informing the public the coming of the Census. Just before the operation, API on television solicited the support of the public in self-enumeration. During the operation, API changed focus cautioning the public on how to check the identity of enumerators. To ensure that the message permeated all sectors of the population, the publicity programme involved a wide range of media and methods. These included posters, newsletters, newspaper advertisements, tube cards on MTR compartments, radio interviews, television interviews, press interviews, APIs on radio and television, publicity film on television, luncheon talks and a special promotion programme in schools which aimed at encouraging students to urge their parents to cooperate in the Census.

All households living in permanent quarters were notified in writing in advance of the Census. A second letter giving the name and the identity number of the temporary census officer who would visit the household was sent to householders a week before the actual operation. Owing to the incomplete addresses of many temporary structures in area segments, such notification letters could not be sent to households living there. Near the end of the Census, an advertisement appeared on newspapers, urging the public to report to the Census Office if they were not visited by enumerators so that immediate arrangements could be made to recover any missing cases.

## **Quality control of data**

A comprehensive checking system was designed to control the quality of the data collected in the enumeration. It covered the following aspects:

- (i) The chief enumerator had to accompany and observe the enumerators under his supervision at work at the beginning of the operation and give them remedial training whenever necessary. Subsequently, those enumerators whose performance appeared weaker were given more attention and their work were inspected in greater detail.
- (ii) The field editor scrutinised all questionnaires submitted to ensure that they were properly completed and that the data were correctly coded.

- (iii) The checker revisited a random sample of the households enumerated and verified some of the key information recorded on the completed questionnaire. All living quarters reported as vacant, demolished, non-domestic or unoccupied were verified to confirm the status reported.
- (iv) The chief enumerator reviewed the work of each enumerator in his division at the end of the fieldwork operation to ensure that all their assignments were completed.

## Enumeration result

A total of 2 037 000 quarters (including vessels) were visited by the enumerators during the Census operation. The results of the visits are shown below:

<i>Result of visit</i>	<i>Number of quarters</i>	<i>Percentage</i>
Occupied living quarters	1 542 715	75.6
Unoccupied living quarters (including residential and non-residential quarters)	414 727	20.4
Merged (but not enumerated) quarters	14 635	0.7
Demolished quarters/Construction in progress	60 617	3.0
Vacant plots of land*	3 104	0.2
Non-quarters (that is unsheltered accommodation)	1 190	0.1
Total	2 036 988	100.0

\* in number of plots

## Post enumeration check

The purpose of conducting a post enumeration check (PEC) was to assess the reliability of the Census results. The PEC comprised two parts. The first part was a 1.2% sample check of all plots of land in the territory and of quarters within a plot (Note: A plot is a further subdivision of a street block) for any omission. The second part was a 0.25% sample check of the living quarters enumerated in the Census on the accuracy of some key information collected. It was carried out by the regular staff of the Census Field Section during 10 to 30 April 1991. The PEC was an independent exercise in which no reference was made to the original questionnaires completed in the Census. The results obtained from the PEC were then matched with the relevant information obtained in the Census to assess the accuracy of the Census enumeration. The PEC revealed that there was an undercount of

0.02% of living quarters and 0.5% of the population in the Census. For details of the PEC operation and its results, please refer to Chapter 11.

## **Data input and processing**

The information collected during the Census was recorded on both the 'Short form' and the 'Long form' questionnaires in long hand by enumerators. All the codes written on the 'Short form' were transcribed onto specially designed Optical Character Recognition (OCR) Input Forms by enumerators. The forms were then scanned by the OCR reader directly. The images captured by the reader were then converted into numerical codes by the machine. Images which could not be recognised after the scanning were displayed on computer screen, and were checked and corrected on-line.

Regarding the 'Long form' questionnaire, enumerators were responsible for coding all data items recorded, except 'Industry', 'Occupation', 'Place of residence five years ago' and 'Previous district of residence'. The item 'Industry' was coded by field editors at field centres during the Census. The other three items were coded by specially trained coders in the Census Office after the fieldwork operation. The traditional 'Key-to-disc' method was adopted to key in (with verification) the codes recorded on the 'Long form' into the computer.

The VAX 6440 minicomputer installed in the Census and Statistics Department was used to process the data. The data processing procedures followed three stages, viz. validation, imputation and tabulation.

At the validation stage, the input data passed through a series of checks which could identify such errors as duplication or omission of records, out-of-range values for data items and inconsistencies between the values of different data items. All errors identified were displayed on computer terminals for correction. Editors then corrected, using an on-line editing program, those errors found after cross-checking with the information recorded in the original questionnaires.

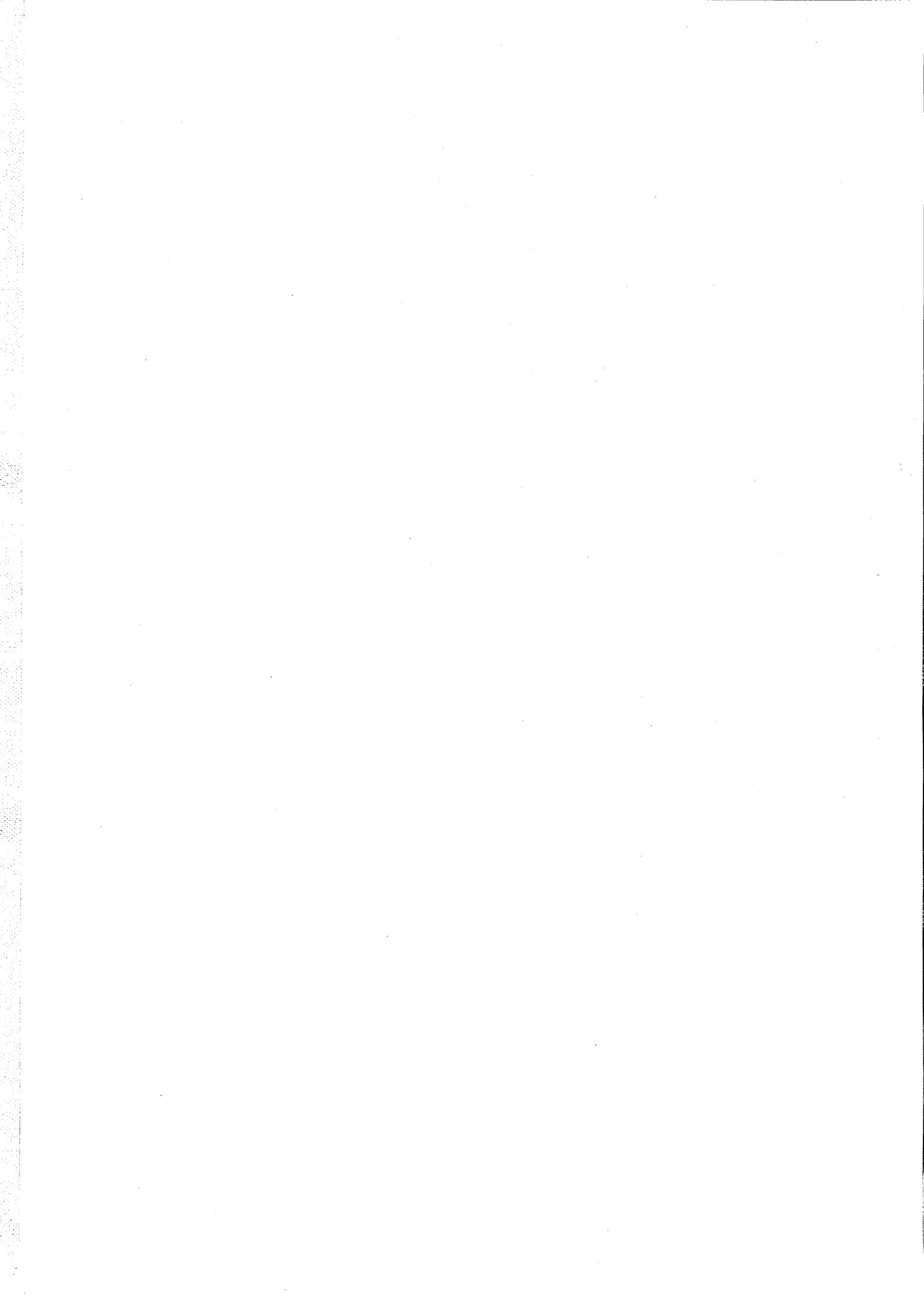
The imputation stage first involved identifying those inconsistencies between the values of different data items which could not be corrected manually. The inconsistent values would then be replaced automatically by new values generated by the computer in accordance with the logic and algorithm of some prescribed imputation rules.

Tabulations of the Census data were produced using the software packages CENST4 (developed by the International Statistical Programs Centre of the U.S. Bureau of the Census) and SAS (Statistical Analysis System) in conjunction with a set of tailor-made programs. The tabulations were produced by phase following a schedule which was worked out with reference to the publication time table, need of users and the complexity of the tables involved. There are three major categories of tabulations, viz. 'Basic tabulations', 'Summary tabulation' and 'Main tabulations'. 'Basic tabulations' are simple one-way tables which cover only basic data items on the geographical basis of Tertiary Planning Unit (TPU), District Board (DB) district and Constituency Area (CA). 'Summary tabulations' are multi-way tables which cover a broad range of socio-economic and demographic characteristics of the population by geographical areas including TPU, DB district and CA. 'Main tabulations' are three- to four-way cross-tabulations of related variables which could show the inter-

relationships among different characteristics of the population. These tabulations are open to the public for reference. Users who are interested in extracting detailed information on Census tabulations are welcome to visit the Census Planning Section of the Department at 2/F, Koway Court, 111 Chaiwan Road, Hong Kong.

## **Publications and data dissemination**

Apart from this 'Main Report', results of the 1991 Population Census are released in a series of publications as listed in Appendix 6. Besides published reports, results of the 1991 Population Census are also released on compact discs commonly known as CD-ROM. The CD-ROM contains a large number of tables on a broad range of demographic and socio-economic characteristics at different levels of geographical subdivision.



## **Chapter 10 Sample Design and Estimation Procedures**

### **Introduction**

In the 1991 Population Census, sampling was used to select from the population a large sample for the detailed enquiry on a broad range of demographic, social and economic characteristics. Living quarters which were not selected for the detailed enquiry, and hence every person in all the households therein, were subject to a simple enumeration. Thus two sets of questionnaires, viz. the 'Short form' and 'Long form', were used. The application of sampling to collect detailed population data was first adopted in the 1966 By-Census. Except for the 1971 Census, sampling was adopted for the detailed enquiry in the 1976 By-Census, the 1981 Census and the 1986 By-Census.

### **Sampling unit**

In the 1991 Population Census, a person is the fundamental unit of enquiry. However, for sample selection, quarters was the sampling unit in the built-up areas while 'area segment' was used in areas covering quarters where individual quarters cannot be identified using a district postal address. In practice, an 'area segment' is one which is delineated by some permanent and easily identifiable boundaries or landmarks, and which consists of 8 to 15 contiguous quarters.

The 'Frame of quarters' is the sampling frame for the 1991 Population Census. For more details on the 'Frame of quarters', please refer to Chapter 9.

### **Sample design**

The sample size for the detailed enquiry depended on the cost of enumeration and the level of precision required. Theoretically, the larger the sample, the smaller would be the sampling error but the cost would be higher. Analysis of the results of the 1981 Census and the 1986 By-Census gave a preview of the precision levels pertaining to different sample sizes.

Both the 1981 Census and the 1986 By-Census results indicated that using a uniform sampling fraction for the whole territory might not be the most cost-effective. A sampling fraction providing sufficiently precise estimates in the sparsely populated districts would be unnecessarily large for the densely populated districts. On the other hand, a smaller sampling fraction giving sufficiently precise estimates for the densely populated districts would be inadequate to provide the precision required in the sparsely populated districts. Hence in the 1991 Population Census, reference was made to the population of the districts concerned in determining the sampling fractions.

A one-stage stratified, replicated, systematic sample was selected from the sampling frame. Stratification was based on 'Whether built-up or segment areas' and 'District Board districts'. The first stratification factor had two strata, viz. built-up areas and area-

segments. The second stratification factor consisted of 19 strata, each referring to a District Board district. The stratification helps to improve the precision of the sample estimates, and to provide sufficiently precise estimates at the District Board district level for district administration and planning.

Based on the precision analysis, a sampling fraction of one-in-seven quarters was adopted for all the District Board districts, except that for the Sai Kung District and the Islands District which were sparsely populated, the sampling fraction was two-in-five quarters.

In the stratum of quarters in built-up areas, replicated sampling was used. For all the District Board districts other than Sai Kung and Islands, ten replicates of quarters were selected, with each replicate including one seventieth of all quarters in that district. As for the Sai Kung and the Islands Districts, ten replicates were selected, with each replicate covering one twenty-fifth of all quarters in each of these two districts.

In the stratum of quarters in area segments, area segment was used as the sampling unit. In District Board districts other than Sai Kung and Islands, two random starts were selected from an interval of 14 area segments, thus forming two replicates after the systematic sample selection. For Sai Kung and Islands, two random starts were selected from an interval of five area segments and two replicates were formed after the selection.

## **Estimation procedures**

Two estimation procedures were executed before the raw data were tabulated and analysed. These were described below.

### ***Treatment of non-contact cases***

By law, every person had to respond to the Census questions. Missing information was related to non-contact cases. A household was classified as a non-contact case only if an enumerator had visited it for more than four times at different times on different days during the Census period. Vacant living quarters were not classified as non-contact cases. The rate of non-contact was about 2.5% of all quarters covered in the Census operation.

For each non-contact household, regardless of whether it was selected for simple enumeration or detailed enquiry, a self-administered questionnaire (SAQ) was left for the householder to complete. The householder was requested to return the completed SAQ by 7 April 1991 to the Census Office by mail. To encourage response, the SAQ only contained those basic questions asked in the simple enumeration. After the prescribed period allowed for receiving the SAQs, 17 100 SAQs (or about one third of the total number despatched) were returned. These returned SAQs were then grouped together by District Board district. A weighting factor was attached to each returned SAQ for grossing up the age and sex characteristics of the population in those non-contacted households in that district which did not return the SAQs.

### *Estimation based on sample enquiry*

The 'ratio estimation method' was adopted to estimate parameters of the population, households and living quarters based on the sample. When applying the method, population counts classified by age and sex, household counts by type of living quarters and living quarters counts by type of living quarters at the District Board district level as obtained from the complete, simple enumeration were taken as control totals,  $N$ , for the grossing up. The numbers of persons, households and living quarters obtained in the sample enquiry were post-stratified into similar categories giving sample statistics,  $n$ . The grossing-up factors were derived by dividing  $N$  by  $n$ .

The ratio estimation method was preferred to a simple blow-up using the reciprocal of the sampling fractions because:

- (a) The ratio estimation method removed any inconsistency between the sample estimates and the complete enumeration counts for the population by age and sex, the number of households by type of living quarters and the number of living quarters by type of living quarters. If a simple blow-up were used, inconsistencies would occur between the sample estimates and the corresponding complete enumeration counts even on those basic variables.
- (b) As the ratio estimation method utilised additional information from the complete enumeration, more precise estimates were produced. In particular, there were considerable gains in precision for those variables of the population which were related to age and sex, and for those variables on household and living quarters which were related to type of living quarters.

The grossing-up factors for ratio estimation were usually not integers. If they were straightly applied in the grossing-up process, the estimates would contain fractions. This problem could not be overcome by rounding the grossing-up factors as it would lead to inconsistencies between the totals derived from the sample enquiry and the corresponding totals obtained from the complete enumeration. To overcome the problem, two integral grossing-up factors were introduced, viz. 'Factor  $a$ ' and 'Factor  $a+1$ ', where ' $a$ ' was the integral part of the factor  $N/n$ . These factors were randomly assigned to individual records in the sample enquiry in such a proportion that their sum coincided with the required total  $N$ .

### **Estimation of standard errors**

Different estimators were used in the estimation process, depending on whether the variables were count total or ratio of two variables, and whether the variables referred to built-up areas or area segments.

**(A) For count variables**

Let  $N_k$  be the complete enumeration total for the  $k^{\text{th}}$  category (both in quarters in built-up areas and in area segments)

$n_k$  be the corresponding sample enquiry total for the  $k^{\text{th}}$  category (both in quarters in built-up areas and in area segments)

*(i) For built-up areas*

Let  $Y_p$  be the population total having characteristic Y in quarters in built-up areas

$Y_{pk}$  be the population total for the  $k^{\text{th}}$  category having characteristic Y in quarters in built-up areas

$y_{pk}$  be the corresponding sample enquiry total for the  $k^{\text{th}}$  category having characteristic Y in quarters in built-up areas

Then  $Y_p = \sum_k Y_{pk}$  is estimated by

$$\hat{Y}_p = \sum_k y_{pk} \frac{N_k}{n_k}$$

with variance

$$\text{Var}(\hat{Y}_p) = (1-f) \frac{r}{r-1} \sum_{i=1}^r (\hat{Y}_{pi} - \frac{\hat{Y}_p}{r})^2$$

where  $f$  = sampling fraction  
(2/5 for Sai Kung and Islands Districts,  
1/7 for the other 17 districts)

$r$  = number of replicates = 10

$\hat{Y}_{pi}$  = value of Y in the  $i^{\text{th}}$  replicate

*(ii) For area segments*

Let  $Y_s$  be the population total having characteristic Y in area segments

$Y_{sk}$  be the population total for the  $k^{\text{th}}$  category having characteristic Y in area segments

$y_{sk}$  be the corresponding sample enquiry total for the  $k^{\text{th}}$  category having characteristic Y in area segments

Then  $Y_s = \sum_k Y_{sk}$  is estimated by

$$\hat{Y}_s = \sum_k y_{sk} \frac{N_k}{n_k}$$

with variance

$$\text{Var}(\hat{Y}_s) = (1-f) \{\hat{Y}_{s1} - \hat{Y}_{s2}\}^2$$

where  $f$  = sampling fraction  
(2/5 for Sai Kung and Islands Districts,  
1/7 for the other 17 districts)

$\hat{Y}_{s1}$  = value of Y in the 1<sup>st</sup> replicate

$\hat{Y}_{s2}$  = value of Y in the 2<sup>nd</sup> replicate

(iii) *Overall counts*

Let  $Y$  be the overall population total having characteristic Y

Then  $Y = Y_p + Y_s$  is estimated by

$$\hat{Y} = \hat{Y}_p + \hat{Y}_s$$

with variance

$$\text{Var}(\hat{Y}) = \text{Var}(\hat{Y}_p) + \text{Var}(\hat{Y}_s)$$

**(B) For ratios of two variables**

Let X be another characteristic of interest

(i) *For built-up areas*

Let  $X_p$  be the population total having characteristic X in quarters in built-up areas

$X_{pk}$  be the population total for the k<sup>th</sup> category having characteristic X in quarters in built-up areas

$x_{pk}$  be the corresponding sample enquiry total for the k<sup>th</sup> category having characteristics X in quarters in built-up areas

Then  $X_p = \sum_k X_{pk}$  is estimated by

$$\hat{X}_p = \sum_k x_{pk} \frac{N_k}{n_k}$$

The ratio  $R_p = \frac{Y_p}{X_p}$  is estimated by

$$\hat{R}_p = \frac{\hat{Y}_p}{\hat{X}_p}$$

with variance

$$\text{Var}(\hat{R}_p) = (1-f) \frac{r}{r-1} \frac{1}{\hat{X}_p^2} \sum_{i=1}^r (\hat{Y}_{pi} - \hat{R}_p \hat{X}_{pi})^2$$

(ii) *For area segments*

The corresponding ratio for area segments  $R_s = \frac{Y_s}{X_s}$  is estimated by

$$\hat{R}_s = \frac{\hat{Y}_s}{\hat{X}_s}$$

with variance

$$\text{Var}(\hat{R}_s) = 2(1-f) \frac{1}{\hat{X}_s^2} \sum_{i=1}^2 (\hat{Y}_{si} - \hat{R}_s \hat{X}_{si})^2$$

(iii) *Overall ratios*

The overall ratio  $R = \frac{Y}{X}$  is estimated by

$$\hat{R} = \frac{\hat{Y}_p + \hat{Y}_s}{\hat{X}_p + \hat{X}_s}$$

with variance

$$\text{Var}(\hat{R}) = \frac{1}{(\hat{X}_p + \hat{X}_s)^2} \{ \text{Var}(\hat{Y}_p + \hat{Y}_s) + \hat{R}^2 \text{Var}(\hat{X}_p + \hat{X}_s) - 2\hat{R} \text{Cov}(\hat{X}_p + \hat{X}_s, \hat{Y}_p + \hat{Y}_s) \}$$

where

$$\begin{aligned} \text{Cov}(\hat{X}_p + \hat{X}_s, \hat{Y}_p + \hat{Y}_s) &= \text{Cov}(\hat{X}_p, \hat{Y}_p) + \text{Cov}(\hat{X}_s, \hat{Y}_s) \\ &= (1-f) \frac{r}{r-1} \sum_{i=1}^r (\hat{X}_i - \frac{\hat{X}}{r})(\hat{Y}_i - \frac{\hat{Y}}{r}) + 2(1-f) \sum_{i=1}^2 (\hat{X}_i - \frac{\hat{X}}{2})(\hat{Y}_i - \frac{\hat{Y}}{2}) \end{aligned}$$

by assuming  $\text{Cov}(\hat{X}_p, \hat{Y}_p) = \text{Cov}(\hat{X}_s, \hat{Y}_s) = 0$



# Chapter 11 Assessment of Quality of the Census Data

## Introduction

The 1991 Population Census is a large scale and complex exercise. Although every effort was made to ensure that the enumeration, data validation and processing were complete and the final results accurate, there remains a chance that some errors, however small, may still be found in the Census data. Hence, it is essential to evaluate the data quality and throw light on the source and magnitude of such errors. This will provide users with some indication of the level of confidence with which the data can be used.

## Sources and classification of errors

'Errors' found in the Census data consist of sampling errors and non-sampling errors. Sampling errors are inherent in every sample survey where statistics are obtained from a sample. They refer to the variation of a sample estimate if samples were drawn repeatedly using the same method. They are the recognisable and controllable elements of variability in the sampling process. Sampling errors depend on sample size and sampling method. In general, for a given sampling method, a larger sample will produce estimates with smaller sampling errors. In the Census, all sample estimates of the detailed characteristics of the population, households and living quarters are subject to sampling errors. However, the choices of sample design, sample size and sampling method for the Census ensure that the sample estimates for most variables would be sufficiently precise for most practical purposes.

Non-sampling errors are not related to sampling variability. Incomplete geographical records and maps, careless omission of households or persons in the enumeration, problems in the questionnaire design, obscurity in the instruction manuals, failure to gain full cooperation of householders in giving accurate answers, inaccurate recording of information collected and coding errors, etc. were possible sources of non-sampling errors in the Census. During the data processing stage, data transcription errors and improper data capture in the 'Optical Character Recognition' and 'Key-to-disc' processes were the main sources of non-sampling errors. Non-sampling errors could affect the count totals of the population, households or living quarters. They could also affect the classification of individual characteristics. They could cause bias in the results. In the Census, a number of measures were adopted to help reduce non-sampling errors. These included the preparation of a complete and up-to-date sampling frame, thorough and comprehensive training of temporary census officers, tight fieldwork control, comprehensive checking of completed questionnaires, proper treatment of non-contact cases, good quality control in the 'Optical Character Recognition' process, punch-and-verify all data input in the 'Key-to-disc' process, and computerised data validation and editing.

## Sampling errors

The particular sample selected for the 1991 Population Census is one of all possible samples of that size which could have been selected from the same population using

the same sampling method. Estimates derived from different samples would differ from each other. Sampling error is measured by the standard error, which is an average measure of the squared deviations of all sample estimates from their average value. It reflects the precision of the estimation. The magnitude of the standard error of a variable depends on the sample size, the sampling method and the intrinsic variability of the characteristic concerned. For the 1991 Population Census, the sample design and the formulae for estimating the standard errors are given in Chapter 10.

The precision of a sample estimate can also be reflected by its 'confidence interval'. Thus, for example, the 95% confidence interval of a given sample estimate, with its upper and lower limits given respectively by about two standard errors above and below the sample estimate, would have a 95% probability of covering the population parameter. In other words, if similar confidence intervals were constructed for each of 100 different samples of the same size selected using the same sampling method, one would expect that 95 of them would cover the population parameter.

Tables 11.1 and 11.2 show the sample estimates, the estimated standard errors and the 95% confidence intervals of some variables. They illustrate the range of precision of a spectrum of variables at various degrees of details for the 1991 Population Census.

## **Non-sampling errors**

Despite the introduction of various precautionary measures, non-sampling errors were inevitable. It is therefore usual practice to assess the magnitude of non-sampling errors so that users can take them into account in interpreting the statistics. Some of these assessments are the by-product of precautionary measures such as treatment of non-contact households. Others such as the post enumeration check are specifically done for the assessment purpose. In the latter case, no rectification would be done. Six assessment studies are presented below:

### ***Non-contact households***

Control measures were implemented to ensure completeness of enumeration. The assignment list for enumerators was supplemented with detailed location maps to facilitate field visits. All living quarters reported to be vacant were revisited by checkers. A sample of occupied living quarters was also revisited by checkers to verify the completeness of enumeration and correctness of the data collected.

Although the enumerators were instructed to make several visits if necessary to locate households for enumeration at different times of a day and on different days, some households still could not be contacted during the Census period. At the end of the Census operation, a self-administered questionnaire (SAQ) was left with each of those non-contact households. Householders were asked to return the completed SAQ to the Census office by mail. A total of 57 500 SAQs were despatched and about 30% were completed and returned. An adjustment has been made based on the returned SAQs on the age-sex structure and geographical distribution of the population to allow for persons in non-contact households. This is made on the assumption that those who responded to the SAQs could represent those who did not respond in respect of such characteristics.

### ***Coding errors***

Before the detailed characteristics of the population collected using the 'Long form' could be stored in computer, information recorded in long hand on the questionnaires had to be transcribed into numerical codes. Although the coders were trained before coding and closely supervised during the coding process, some coding errors were inevitable. These coding errors were reviewed in the computer editing process and rectified. To assess the extent of coding errors, a 3.5% sample of the 'Long form' questionnaires were checked for the accuracy of the original coding of the data items. Table 11.3 shows the results.

### ***Errors related to OCR application***

Capturing data recorded in the 'Short form' into computer involved the use of the 'Optical Character Recognition (OCR)' technique. This included a number of steps. First, information on a questionnaire was transcribed onto a specially designed OCR input form by enumerators in the field centre. A specimen of the OCR form is in Appendix 3. The layout of the form was very similar to the questionnaire so as to facilitate accurate data transcription. Completed OCR forms were checked by field editors in the field centre to ensure that the data were transcribed properly and accurately.

The completed OCR forms were then scanned by OCR machines. Characters which could not be recognised because of poor or soft hand-writing were rejected by the machine. The images of the rejected characters were displayed on the computer terminal for editors to amend them. This amendment process, which was based on visual inspection, was monitored by supervisors. Those images which could not be amended would be handled in the subsequent computer editing process.

In the 'OCR' process, three types of errors were possible, viz. data transcription error when OCR forms were being completed, substitution error at the stage of image scanning and recognition, and amendment error during the image amendment process. However, amendment errors should be minimal since the image amendment process was closely monitored by team supervisors and the amendment clerk was allowed to skip characters which were uncertain.

The rate of data transcription error was assessed on the basis of a 0.5% sample of the completed OCR forms selected using a two stage stratified sampling method. The selected forms were matched with their corresponding 'Short form' questionnaires data item by data item. Table 11.4 shows the results. On the whole, the data transcription error rate is low.

From the same sample, the codes recognised and captured by the OCR machine were extracted. They were compared character by character with the corresponding codes on the OCR forms. The comparison indicates an overall OCR machine substitution error rate of 1.47%. A breakdown of the error rate by numeral is shown in Table 11.5.

### ***Recording errors***

Any recording or coding error left undetected after passing through all the quality control measures would, to a certain extent, be identified in the computer editing

process. The process consisted of two phases, viz. data validation and data imputation. Data validation aimed at ensuring that (a) the structure of the data record was correct and no records were omitted, duplicated or out of sequence; (b) all codes had values within the acceptable ranges; and (c) information recorded for some basic characteristics such as age of a person was consistent with other characteristics such as educational attainment and activity status. Whenever an error was detected, the data item would be rejected by computer. An editor would amend the rejected items on a computer terminal after checking against the original questionnaire. Table 11.6 shows the magnitude of the errors associated with the latter two types of validation checks. The study was based on one sixth of all data items recorded in computer.

The data imputation process was completely automatic. After identifying all the inconsistencies among data items of a record in the data validation run, the imputation process removed the old values and assigned new values to the concerned data items according to some prescribed imputation rules. The imputation rate provides a measure of the quality of the Census results. Table 11.7 shows the imputation rates for some selected data items.

### *Post enumeration check*

The post enumeration check (PEC) consisted of two checking operations. The first was a coverage check on the 'Frame of quarters'. It served to identify any quarters which were not covered by the frame and hence were not enumerated in the Census. The second was a check for any omission in enumeration. It served to assess the accuracy of the counting of quarters, households and persons in the Census. Both operations were carried out by the regular field staff during 10 to 30 April 1991.

For the coverage check, 162 plots of land (a plot being a small geographical unit for identifying a group of buildings) were randomly selected from a total of 14 000 plots in the territory. In the 162 plots selected, 174 314 quarters were found in the PEC to be existing as at the Census reference date of 15 March 1991. This was 27 quarters more than that found in the Census. Thus there was an undercount of 0.02% of quarters in the Census.

As for the check for omission in enumeration, a multi-stage stratified sample was used. The sampling unit was 'Enumerator block' (EB) which is a set of living quarters/area segments in the assignment of the enumerators. A sample of 261 EBs (or 2.5% of the total) was first selected. Within each EB selected, 10% of quarters/area segments were selected for revisit. This gave a 0.25% sample of all quarters in the territory for the omission check. The regular field staff revisited the selected quarters to conduct a simple household and person count. To ensure that the PEC interview was independently completed, the regular field staff were not given any information recorded in the original questionnaires. After the operation, information from the PEC was matched with that from the Census on individual questionnaire basis. For those quarters which were occupied at the time of both the Census and the PEC, the information was matched on a person-to-person basis. The check showed that there was an undercount of less than 0.5% of the population in the Census.

### *Independent population estimate of children aged under 5*

Under-enumeration of infants and young children is quite common in a population census. As the PEC interview was conducted using the same approach and questionnaire structure as the original Census operation, the tendency to under-report infants during the Census operation would remain in the PEC. Therefore an independent population estimate of children aged under 5 is compared with the Census count to assess the extent of any such under-enumeration. This independent estimate can be obtained by counting the number of births minus the number of deaths, plus net migration in the relevant age group for the five-year period before the reference date of the 1991 Population Census. Such independent estimation is possible as civil registration of births and deaths is virtually complete in Hong Kong and population movements are accurately recorded. The estimate so obtained was larger than the 1991 Population Census count of children aged under 5 by some 20 000. Table 11.8 shows the detailed comparison.

**Table 11.1 Sample Estimates<sup>(1)</sup> of Selected Proportions and Rates, their Estimated Standard Errors and 95% Confidence Intervals, 1991**

<i>Variable</i>	<i>Sample estimate</i> %	<i>Estimated standard error</i> %	<i>Ratio: Standard error to estimate</i> %	<i>95% Confidence Interval</i>	
				<i>Lower limit</i> %	<i>Upper limit</i> %
Proportion of persons born in Hong Kong	59.7	0.10	0.2	59.5	59.9
Proportion of females aged 15 and over ever-married	71.0	0.09	0.1	70.8	71.1
Proportion of females aged 20-24 never married	82.9	0.19	0.2	82.5	83.3
Proportion of ever-married males divorced/separated	1.7	0.03	1.8	1.7	1.8
Proportion of population aged 5 and over with English as usual language/dialect	2.2	0.01	0.5	2.2	2.2
Proportion of population with no schooling/kindergarten education only	17.8	0.04	0.2	17.7	17.9
Proportion of persons aged 17-18 studying full-time	58.4	0.20	0.3	58.0	58.8
Proportion of persons in Tuen Mun District aged 17-18 studying full-time	51.8	1.14	2.2	49.5	54.0
Crude labour force participation rate for the whole population	64.3	0.05	0.1	64.2	64.4
Labour force participation rate for females aged 30-34	59.5	0.30	0.5	58.9	60.1
Headship rate of persons aged 30-34	36.4	0.16	0.4	36.1	36.8
Headship rate of persons aged 60-64	58.1	0.23	0.4	57.6	58.5
Proportion of 'one unextended nuclear family' households	61.7	0.07	0.1	61.5	61.8
Proportion of households with income between HK\$ 8,000 - 9,999	11.5	0.06	0.5	11.4	11.6
Proportion of households who were owner-occupiers	42.6	0.07	0.2	42.5	42.7
Proportion of population in Tai Po New Town who have moved in during the past 5 years	32.2	0.40	1.2	31.4	33.0

Note : (1) In this table, figures exclude population and households living on board vessels.

**Table 11.2 Sample Estimates<sup>(1)</sup> of Selected Totals, their Estimated Standard Errors and 95% Confidence Intervals, 1991**

<i>Variable</i>	<i>Sample estimate</i>	<i>Estimated standard error</i>	<i>Ratio: Standard error to estimate %</i>	<i>95% Confidence Interval</i>	
				<i>Lower limit</i>	<i>Upper limit</i>
Never married males aged 15 and over	805 615	4 238	0.5	797 308	813 922
Never married males aged 30-34	100 329	1 048	1.0	98 275	102 383
Persons studying full-time	1 268 956	2 544	0.2	1 263 971	1 273 941
Persons attending secondary school full-time	417 390	1 746	0.4	413 968	420 812
Population with matriculation education	214 545	1 021	0.5	212 544	216 546
Population with tertiary degree education	255 978	1 539	0.6	252 962	258 994
Labour force aged 15-19	130 524	896	0.7	128 767	132 281
Working population	2 708 210	4 339	0.2	2 699 706	2 716 714
Self-employed	143 719	1 166	0.8	141 433	146 005
Employees	2 380 733	3 672	0.2	2 373 535	2 387 931
'One unextended nuclear family' households	974 357	1 421	0.1	971 571	977 143
'One unextended nuclear family' households with elderly persons aged 60 and over	208 986	1 050	0.5	206 928	211 044
Domestic households with elderly persons aged 60 and over	517 768	1 312	0.3	515 196	520 340
Domestic households in public and aided housing with 4 persons	151 832	828	0.5	150 209	153 455
Households with income between HK\$ 10,000 - 14,999	314 009	1 033	0.3	311 984	316 034
Domestic households occupying whole flats in private housing blocks	585 885	1 243	0.2	583 448	588 322
Owner-occupier households	673 067	1 136	0.2	670 841	675 293
Owner-occupier households in private housing blocks	481 348	1 081	0.2	479 230	483 466
Persons moving into Tseung Kwan O New Town	69 686	367	0.5	68 966	70 406
Professionals and associate professionals	379 231	2 055	0.5	375 204	383 258
Physical, mathematical and engineering science professionals	30 132	440	1.5	29 270	30 994
Working population in manufacturing industry	767 941	2 319	0.3	763 395	772 487
Working population in import and export trade	120 703	885	0.7	118 968	122 438
Population aged 5 and over with English as second language/dialect	1 287 757	3 855	0.3	1 280 201	1 295 313

Note : (1) In this table, figures exclude population and households living on board vessels.

**Table 11.3 Coding Errors of Selected Data Items, 1991**

<i>Variable</i>	<i>Coding Error (%)</i>
<b>Household Data</b>	
Type of accommodation	6.1
Tenure of accommodation	6.6
Monthly household rent	6.7
<b>Personal Data</b>	
School attendance and educational attainment	4.3
Field of education	0.9
Place of birth	0.8
Nationality	1.4
Duration of residence in Hong Kong	3.9
Duration of residence in present district	3.0
Usual language/dialect	0.8
Industry	3.7
Monthly income from main employment	1.2
Monthly income from other employment	3.3
Other cash income	2.3
Whether having secondary employment	2.5

**Table 11.4 Analysis of Data Transcription Error, 1991**

<i>Variable</i>	<i>Percentage</i>
<b>Household Data</b>	
Type of living quarters (QRTYP)	0.62
Listing of quarters	0.60
Occupancy of quarters	0.76
Result of final visit	0.99
Type of household (HH)	0.45
Number of persons <sup>(1)</sup>	1.40
<b>Personal Data</b>	
Person serial number	0.20
Whereabout of person (P3)	0.22
Whether usual member { (P4)	0.15
{ (P5)	0.42
Sex (P6)	0.53
Month of birth	0.57
Year of birth	0.90
<b>Overall</b>	<b>0.52</b>

Note : (1) The field 'number of persons' was used for field checking only. It was not used for counting population in the final result.

**Table 11.5 Substitution Error in Scanning and Recognition of Images, 1991**

<i>Numeral</i>	<i>Percentage</i>
0	1.22
1	0.80
2	1.64
3	2.21
4	1.93
5	2.13
6	2.23
7	3.18
8	3.05
9	1.84
Overall (0-9)	1.47

**Table 11.6 Analysis of Validation Errors, 1991**

<i>Type of Error</i>	<i>Percentage of Error by Type of Questionnaire</i>	
	<i>Short form</i>	<i>Long form</i>
Codes out of acceptable ranges	1.43	0.65
Data item inconsistent with others	0.18	0.67

**Table 11.7 Analysis of Imputation Rates for Selected Data Items, 1991**

<i>Data Item</i>	<i>Imputation Rate (%)</i>
<b>Household Data</b>	
Type of living quarters	1.2
Type of household <sup>(1)</sup>	..
Type of accommodation	1.1
Tenure of accommodation	0.8
Monthly household rent	1.5
Imputation rate for all fields of household records	1.2
<b>Personal Data</b>	
Sex <sup>(1)</sup>	..
Age <sup>(1)</sup>	..
Marital status <sup>(1)</sup>	..
School attendance	0.8
Educational attainment	0.7
Field of education	1.3
Usual language/dialect	0.7
Place of birth	0.1
Nationality	0.8
Previous district of residence	6.1
Duration of residence in present district	7.3
Duration of residence in Hong Kong <sup>(1)</sup>	..
Place of residence five years ago	0.8
Activity status <sup>(1)</sup>	..
Industry	4.3
Occupation	2.0
Monthly income from main employment	2.3
Monthly income from other employment	1.9
Other cash income	1.3
Whether having secondary employment	0.9
Imputation rate for all fields of personal records	2.1

Note : (1) No imputation was carried out on the data items of 'type of household', 'sex', 'age', 'marital status', 'duration of residence in Hong Kong' and 'activity status'. They are thus excluded in calculating the overall imputation rates.

**Table 11.8 Comparison of 1991 Population Census Estimate of Population Aged Under 5 and the Independent Estimate**

	<i>Age in Complete Years in the 1991 Population Census</i>					
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Total</i>
	<i>(Number in thousands)</i>					
<b>a. Independent estimate</b>						
(1) Birth periods for respective birth cohorts	15.3.90- 14.3.91	15.3.89- 14.3.90	15.3.88- 14.3.89	15.3.87- 14.3.88	15.3.86- 14.3.87	
(2) Number of births	67.7	68.3	76.4	69.6	71.1	353.1
(3) Number of deaths for respective birth cohorts during 15.3.86 to 14.3.91	0.4	0.5	0.6	0.6	0.6	2.7
(4) Surviving births = (2)-(3)	67.3	67.8	75.8	69.0	70.5	350.4
(5) Net migration	1.0	2.1	2.4	3.3	4.6	13.4
(6) Estimated number of children aged 0-4 = (4)+(5)	68.3	69.9	78.2	72.3	75.1	363.8
<b>b. 1991 Population Census count</b>						
Enumerated resident population aged 0-4 <sup>(1)</sup>	63.7	68.4	72.5	68.4	70.8	343.8
<b>Difference</b>						
(b)-(a)	-4.6	-1.5	-5.7	-3.9	-4.3	-20.0

Note : (1) Residents going to China/Macau on PIC \*\*\* (Hong Kong Permanent Identity Cards with 3 asterisks)/Hong Kong travel documents other than Documents of Identity are included because they are not counted in the net migration figure for deriving the independent estimate.

# Definition of Terms

## Definition of Terms (in alphabetical order)

- (1) **Ability to Speak a Language/Dialect:** If a person is able to conduct a short conversation with a particular language/dialect in everyday life activities such as asking for direction or shopping, he is deemed able to speak the language/dialect.
- (2) **Activity Status:** The population can be divided into two main groups, economically active population (that is the labour force) and economically inactive population as follows:

*Economically active population:* This comprises the employed (that is the working population) and the unemployed.

The working population refers to persons aged 15 and above who performed some work for wage/salary or were on leave/holiday during the seven days before enumeration in the 1991 Population Census. The working population can be distinguished into:

*Self-employed:* A person who works on his own account, neither employed by someone else nor employing others.

*Employer:* A person who works on his own account and employs one or more persons to work for him.

*Employee:* A person who works for wage/salary in local/overseas government, private company or government subsidised organisation. Domestic helpers working for wage are included in this category.

*Unpaid family worker:* A person who lives with his family and does work (not domestic work) as part of the family enterprise in return for food and lodging.

The unemployed persons refer to persons aged 15 and above and not of independent means who were not at work during the seven days before enumeration in the Census but were seeking work and available for work. This excludes those who were on leave/holiday during the reference period.

*Economically inactive population:* This comprises persons who did not have a job and were not at work during the seven days before enumeration in the Census, excluding persons who were on leave/holiday during the seven-day period and persons who were unemployed. The economically inactive population can be distinguished into:

*Home-maker:* A person who looks after the home without pay.

*Student:* A person who is studying full-time in school or other educational institution. Persons who are self-studying, or studying informal courses in miscellaneous training institutes or studying evening courses and were not working during the seven days before the enumeration of the Census are also included in this category. Student workers are classified as economically active persons and are not included in this group. For the 1981 Population Census, only students studying full-time are included.

*Retired person:* A person who has worked previously but is not currently working because of old age.

*Inmate of institution:* A person who is under care or custody in either a penal, medical, mental or charitable institution.

*Others:* Economically inactive persons not elsewhere classified such as unpaid religious workers and persons who do not have to work for a living or who cannot work or do not seek work because of sickness or disablement.

- (3) **Age:** The number of complete years a person has passed since birth.
- (4) **Age Dependency Ratio:** The number of persons aged under 15 and 65 and over per 1 000 persons aged between 15 and 64.
- (5) **Age-sex-specific Labour Force Participation Rate:** The percentage of the economically active population (that is the labour force) of a specific age and sex group to the total population in that group.
- (6) **Age-sex-specific Death Rate:** The number of deaths occurring among 1 000 persons for a given sex in a given age group in a given year.
- (7) **Age-specific Fertility Rate:** The number of live births occurring among 1 000 women in a given age group in a given year.
- (8) **Age-specific Headship Rate:** The percentage of household heads among the total number of persons of a specific age group living in domestic households.
- (9) **Average Annual Growth Rate:** When population increased over a period of more than one year, the average annual growth rate is computed using the following formula:

$$\frac{P_2}{P_1} = (1 + r)^n$$

where  $P_1$  = population at the beginning of a period  
 $P_2$  = population at the end of a period  
 $r$  = average annual growth rate  
 $n$  = number of years in the period

The average annual growth rate of domestic households is calculated using the same formula.

- (10) **Average Class Size:** The ratio of the total number of pupils/students enrolled to the total number of classes.
- (11) **Average Domestic Household Size:** This refers to the average number of persons per domestic household. It is calculated by dividing the total number of persons who were found in domestic households on the Census reference date by the total number of domestic households.
- (12) **Average Number of Domestic Households per Living Quarters (or Degree of Sharing):** This is calculated by dividing the total number of domestic households by the total number of living quarters occupied by at least one domestic household.
- (13) **Average Number of Occupants per Living Quarters:** This is calculated by dividing the total number of persons enumerated in occupied living quarters on the Census reference date by the total number of occupied living quarters.
- (14) **Average Number of Working Members:** The total number of persons in domestic households who are working divided by the total number of domestic households. For the definition of 'working', please see **Activity Status** in (2).
- (15) **Child Dependency Ratio:** The number of persons aged under 15 per 1 000 persons aged between 15 and 64.
- (16) **Cohort:** A group of persons all born during the same year being analysed as a unit through their lifetimes.
- (17) **Crude Birth Rate (Birth Rate):** The total number of live births occurring among 1 000 persons in a given year.
- (18) **Crude Death Rate (Death Rate):** The total number of deaths occurring among 1 000 persons in a given year.
- (19) **Crude Labour Force Participation Rate:** Please see **Labour Force Participation Rate** in (46).
- (20) **De facto Population:** This refers to the total number of persons present in Hong Kong on the Census reference date of 15 March 1991. This includes residents present in Hong Kong, transients and Vietnamese migrants but excludes those residents who were temporarily away from Hong Kong on that date.
- (21) **Decile Distribution of Monthly Household Income:** This refers to the grouping of domestic households into ten equal groups according to the relative rank of their monthly household incomes and then computing the proportion of the total household income earned by each group of households.

- (22) **District Board District:** These geographical districts are declared by the Governor in Council under the District Board Ordinance, Chapter 366 on 24 July 1990 for District Board elections. There is a total of 19 districts: four on Hong Kong Island; six in Kowloon and New Kowloon and nine in the New Territories.
- (23) **Domestic Household:** A domestic household consists of a group of persons who live together and make common provision for essentials for living. These persons need not be related. If a person makes provision for essentials for living without sharing with other persons, he is also regarded as a household. In this case the household is a one-person household.
- (24) **Domestic Household Having Moved within Hong Kong:** A household whose head now living in a district/new town (at the time of the Census) that was different from the one in which he lived five years ago. A move is defined as a change of residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, that is from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa.
- (25) **Duration of Residence in Hong Kong:** The total number of complete years for which a person has lived in Hong Kong. Any period of temporary absence from Hong Kong for six months or more was not counted in reckoning the duration.
- (26) **Duration of Residence in Present District:** The number of years before the Census for which a person has lived in the present district of residence.
- (27) **Economically Active Population:** Please see **Activity Status** in (2).
- (28) **Economically Inactive Population:** Please see **Activity Status** in (2).
- (29) **Educational Attainment:** The highest level of education ever attained by a person in school or other educational institution, regardless of whether he had completed the course. Only formal courses are counted as educational attainment. A formal course shall be one that lasts for at least one academic year, requires specific academic qualifications for entrance (with the exception of the degree courses offered by the Open Learning Institute of Hong Kong) and includes examinations for assessment purpose. The different levels of educational attainment are as follows:

*No schooling:* Including those who had never attended a formal course.

*Kindergarten:* Including all classes in kindergarten.

*Primary:* Including Primary 1 - 6 in all schools.

*Lower secondary:* Including Middle 1 - 3 in Chinese schools or Form 1 - 3 in English or Anglo-Chinese schools.

*Upper secondary:* Including Middle 4 - 5 in Chinese schools or Form 4 - 5 in English or Anglo-Chinese schools, and craft/apprenticeship courses in technical institutes.

*Matriculation:* Including Middle 6 in Chinese schools or Form 6 - 7 in English or Anglo-Chinese schools.

*Tertiary (Non-degree courses):* Including all certificate/diploma and higher diploma/endorsement certificate courses in technical institutes/polytechnics, associateship and other non-degree courses in polytechnics and other post-secondary colleges. Certificate/diploma courses in colleges of education and in the Hong Kong Technical Teachers' College and nurse training courses are also included in this category.

*Tertiary (Degree courses):* Including all first degree courses and post-graduate courses in tertiary educational institutions in Hong Kong and overseas.

- (30) **Elderly Dependency Ratio:** The number of persons aged 65 and over per 1 000 persons aged between 15 and 64.
- (31) **Enumerated Resident Population:** Residents who were present in Hong Kong on the Census reference date of 15 March 1991, not including transients, Vietnamese migrants and residents who were temporarily away from Hong Kong on that date.
- (32) **Expectation of Life at Birth (Life Expectancy):** The average number of years of life that a person born in a given year can expect to live, if he were subjected to the prevalent mortality conditions as reflected by the set of age-specific death rates for that year.
- (33) **Fertility:** The level of reproductive performance of a population as indicated by different measures like crude birth rate, general fertility rate, age-specific fertility rate and total fertility rate. It should be distinguished from fecundity, which indicates that physical capacity to reproduce.
- (34) **Field of Education:** This refers to the subject of the courses to which a person's highest level of education was related. If a person had completed courses in more than one field of education, only the field which he considered the most important was recorded.

*Arts and social science:* Including studies in music; drawing and painting; sculpturing; drama; handicrafts; photography and cinematography; literature; languages and linguistics; history; philosophy; theology; religion; archaeology; anthropology; economics; sociology; criminology; pure psychology; clinical psychology; demography; geography; political science and regional studies.

*Pure science:* Including studies in mathematics; biology; chemistry; geology; physics; astronomy; meteorology; oceanography; statistics and actuarial science.

*Education:* Including studies in colleges of education and Hong Kong Technical Teachers' College; certificate/diploma of education courses and university degree courses in education.

*Business, commercial and computer studies:* Including studies in banking; marketing; finance and investment; valuation; purchase and supply; insurance; secretaryship; company secretaryship; public and business administration; accountancy; shorthand; typing; book-keeping; computer programming and system analysis; electronic data processing; business machine and computer operation.

*Medical and health related studies:* Including studies in medicine (except Chinese herbal medicine); nursing; dentistry; psychiatry; radiology; pharmacy, dental and medical technology; physical and occupational therapy; speech therapy; anatomy; physiology; immunology; pathology and forensic medicine.

*Architecture and construction engineering:* Including studies in architecture, town planning and environmental design; transport studies; building technology such as surveying, carpentry, bricklaying, plastering and tiling, plumbing and pipe-fitting, sewerage; water supply and treatment; civil and structural engineering; building services engineering; soil mechanics; draughtsmanship; interior design; land, building and estate management.

*Mechanical, electrical, electronic and marine engineering:* Including studies in mechanical engineering; mining engineering; motor mechanics; vehicle technology; production engineering; plastic mould technology; tool and die technology; industrial engineering; electrical and electronic engineering; refrigeration and air-conditioning; television/radio mechanics and servicing; telecommunication; marine electronics; ship building and repairs and naval architecture.

*Textile, design and other industrial technology:* Including studies in textile technology/clothing technology such as dyeing, fabric, printing, garment and leather manufacturing; printing technology; industrial design; basic, graphic and 3-dimensional design; chemical engineering; watch and clock making and optics.

*Other vocational studies:* Including studies in law and jurisprudence; journalism; radio and television broadcasting; public relations; library sciences; social work; agricultural programmes; Chinese herbal medicine; tourism; hotel management; laboratory technicianship; civil security; military; vocational counselling and other service trades.

- (35) **General Fertility Rate (GFR):** The number of live births occurring among 1 000 women in the age group 15-49 in a given year.
- (36) **Gini Coefficient:** A figure showing the degree of inequality of distribution in mathematical terms by expressing the area between the Lorenz curve and the diagonal as a proportion of the total area under the diagonal. The value of a Gini coefficient lies between 0 and 1, with 0 indicating complete equality and 1 complete inequality. A Lorenz curve of household income distribution is a commonly used mathematical curve to show the cumulative percentage of household income against that of the cumulative percentage of all domestic households.
- (37) **Head of Domestic Household:** The person acknowledged by members of the household to be responsible for making major decisions affecting the household.
- (38) **Headship Rate:** The proportion of household heads among the enumerated population living in domestic households.
- (39) **Household Composition:** Household composition is derived from the information on relationship to the head of household of each person and the identification of spouse and parent-child relationships among members who were found in the household on the Census reference date. It shows the structure of a household in terms of the number of family nuclei and the relationship between a family nucleus and other related household members. A family nucleus is a married couple without children, a married couple with one or more never married children or one parent (either father or mother) with one or more never married children. The different categories of household composition are as follows:

*One person:* A household in which only one person was found on the Census reference date.

*One unextended nuclear family:* A household comprising one family nucleus without other related persons.

*One vertically extended nuclear family:* A household comprising one family nucleus with one or more related persons not of the same generation. It may or may not include other related persons of the same generation.

*One horizontally extended nuclear family:* A household comprising one family nucleus with one or more related persons of the same generation but without any other related persons of a different generation.

*Two or more nuclear families:* A household comprising two or more family nuclei whose members may or may not be related in any way.

*Related persons forming no nuclear family:* A household comprising related persons who do not form a family nucleus.

*Unrelated persons:* A household comprising unrelated person(s) with or without one or more related person(s).

- (40) **Household Size:** The number of persons found in the domestic household on the Census reference date.
- (41) **In-movement of Population:** The number of persons aged 5 and over living in a District Board district or new town, or in other areas of the New Territories in the 1991 Population Census, who moved into the present residence during the past five years (a) from another District Board district; (b) within a District Board district in the New Territories, that is from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa.
- (42) **Industry:** The main kind of goods or services produced by the establishment in which a person worked during the seven days before enumeration in the Census. The classification used follows the major divisions of the Hong Kong Standard Industrial Classification (1991). The coverage of the industrial sectors presented in the table are defined as follows:

*Manufacturing:* Including spinning of cotton and other yarn, weaving and knitting of cotton and other fabrics; bleaching, dyeing, finishing; manufacturing of wearing apparel, knitwear and other made-up textile goods, carpets, cordages, ropes and twines, food, beverage, tobacco, footwear, leather products, rubber products, plastic products, wood products, printed matters and paper products, metal products, machinery, chemicals, chemical products, glass and pottery.

*Construction:* Including building construction, civil engineering, plumbing, electrical wiring, air-conditioning installation and repair.

*Wholesale, retail and import/export trades, restaurants and hotels:* Including wholesale and retail trade; import and export trade; peddlers; Chinese general brokers; other commercial agents; restaurants; cafes; hotels and rooming houses.

*Transport, storage and communication:* Including land transport, water transport and air transport; services allied to transport; storage and warehousing; and post and telecommunications.

*Financing, insurance, real estate and business services:* Including financing; insurance; real estate; offices of lawyers, accountants, auditors, architects, surveyors and advertising agents and data processing services.

*Community, social and personal services:* Including government services; the armed forces; educational service; medical, dental and other health services; sanitary services; welfare institutions; religious organizations; cinemas and theatres; radio and television broadcasting; libraries and museums; electrical repair shops; automobile repair garages and other household and personal services.

*Others:* Including such industries as 'Agriculture and fishing'; 'Mining and quarrying'; 'Electricity, gas and water' and industrial activities inadequately described or unclassifiable.

- (43) **Institutions:** These include hospitals, prisons, old people's homes, religious houses and British forces barracks.
- (44) **Internal Movement (Move):** This refers to the change of residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, that is from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa.
- (45) **Labour Force:** Please see **Activity Status** in (2).
- (46) **Labour Force Participation Rate:** The percentage of economically active population (that is the labour force) in the total population aged 15 and over.
- (47) **Living Quarters:** Living quarters include (a) units of accommodation which are built for residential purpose irrespective of whether there are anybody living there; and (b) quarters which are built for non-residential purposes but normally have one or more persons living there or were occupied on the Census reference date. Figures in this report refer to occupied living quarters, i.e. living quarters with occupants present on the Census reference date irrespective of their usage.
- (48) **Marital Status:** The marital status of a person was recorded according to the status reported by respondents in the Census. There was no check on whether the marriage or divorce had undergone any legal registration or ceremony.
- (49) **Median Age:** The average age so calculated that 50% of the total number of persons were above that age and the other 50% were below it.
- (50) **Median Monthly Household Income:** The average monthly household income so calculated that 50% of the total number of domestic households had incomes above that figure and the other 50% had incomes below it. Zero income households are included in the calculation.
- (51) **Median Monthly Household Rent:** The average monthly rent so calculated that 50% of the total number of domestic households paid more than that amount and the other 50% paid less than that. Zero rent households are excluded in the calculation.

- (52) **Median Monthly Income from Main Employment:** The average income from main employment so calculated that 50% of the working population excluding unpaid family worker had income above that figure and the other 50% had income below it.
- (53) **Median Rent-income Ratio:** The average percentage of household income paid on household rent so calculated that 50% of the total number of domestic households paid more than that percentage and the other 50% paid less than that. All zero income households and zero rent households are excluded in the calculation.
- (54) **Mode of Study:** The way in which a person is studying. Generally it can be distinguished into: studying full-time and studying part-time. Please see **Whether Studying** in (98).
- (55) **Monthly Household Income:** The total income (including earnings in cash from all employments and other cash incomes) for February 1991 of all persons who were found to be in the household on the Census reference date.
- (56) **Monthly Household Rent:** This is the amount paid by a household for occupying an accommodation in March 1991. It includes rates for that month but excludes payments for water, electricity and management fee. For a main tenant, rent is the net amount he paid after deducting the rent he received from his sub-tenant(s) for subletting part of the living quarters. Zero rent households include households living in their owned living quarters, households living in accommodation of friends or relatives without paying any rent with or without permission, main tenant households with total rental receipts from sub-tenant(s) greater than or equal to rent paid, and those households whose living quarters were provided free by employers.
- (57) **Monthly Income from Main Employment:** For employers or self-employed persons, this is the amount earned excluding expenses incurred in running their main business. For employees, this is the total amount earned from their main employment including salary or wage, bonus, commission, overtime, housing allowance, tips and other cash allowances. New Year bonus and double pay are excluded. The amount recorded refers to the income for February 1991.
- (58) **Mortality:** Please see **Crude Death Rate** in (18).
- (59) **Nationality:** Nationality is a legal concept. It is usually identified with a person's travel document or birth certificate. It is not necessarily related to his ethnicity, race or place of origin.
- (60) **Natural Increase:** The balance of births and deaths that occur in a specified period.
- (61) **Net Internal Movement:** The balance of in-movement and out-movement of population in a District Board district or new town, or in other areas of the New Territories.

- (62) **Net Migration:** The balance of movements into and out of Hong Kong in a specified period of time.
- (63) **New Town:** The delineation of the areas in the New Territories into new towns is adopted from the boundaries developed by the Planning Department and Territory Development Department for new town development purposes. There are nine new towns defined for the purpose of analysis in this report, namely Kwai Tsing, Tsuen Wan, Tuen Mun, Yuen Long, Tin Shui Wai, Fanling/Sheung Shui, Tai Po, Sha Tin and Tseung Kwan O. Tin Shui Wai was uninhabited at the time of the Census.
- (64) **Non Self-contained Quarters:** Living quarters without internal piped water supply and a flush toilet system.
- (65) **Non-working Members (in domestic household):** Persons found in the domestic household on the Census reference date who were unemployed or economically inactive during seven days before enumeration.
- (66) **Number of Working Members (in domestic household):** The number of persons found in domestic household on the Census reference date who performed some work for wage/salary during the seven days before enumeration.
- (67) **Occupant:** A person found in a living quarters on the Census reference date.
- (68) **Occupation:** This refers to the kind of work a person performed during the seven days before enumeration in the Census. The classification basically follows the major groups and the sub-major groups of the International Standard Classification of Occupations (1988) or (ISCO-88) for abbreviation, with local adaptation in Hong Kong.

*Managers and administrators:* Including administrators, commissioners and directors in government service; consuls; councillors; directors, chief executive officers, presidents, general managers, functional managers, branch managers and small business managers in industry, commerce, import and export trade, wholesale and retail trade, catering and lodging services, transport, electricity, gas, water and other services and agricultural and fishery sectors.

*Professionals:* Including qualified professional scientists, doctors, dentists and other medical professionals; architects, surveyors and engineers; vice-chancellors, directors, academic staff and administrators of university, polytechnic and post-secondary college; principals and teachers of secondary school; statisticians; mathematicians; system analysts and computer programmers; lawyers and judges; accountants; business consultants and analysts; social workers; translators and interpreters; news editors and journalists; writers; librarians and members of religious orders.

*Associate professionals:* Including science technicians, nurses and midwives, dental assistants and other health associate professionals; architectural, surveying and engineering technicians; optical and electronic equipment controllers; ship pilots and air traffic controllers; principals and teachers of primary and pre-primary school; statistical assistants; computer operators; law clerks; accounting supervisors; public relation officers; sales representatives; designers; estate managers; social work assistants; superintendents, inspectors and officers of the police and other discipline services; performers and sportsmen.

*Clerks:* Including stenographers, secretaries and typists; bookkeeping, finance, shipping, filing and personnel clerks; cashiers and tellers; receptionists and information clerks.

*Service workers and shop sales workers:* Including air hostesses and travel guides; house stewards; cooks and waiters; baby-sitters; hairdressers and beauticians; rank and file of the police and other discipline services; transport conductors and other service workers; wholesale and retail salesmen in shops; shop assistants and fashion models.

*Craft and related workers:* Including miners and quarrymen; bricklayers, carpenters and other construction workers; metal moulders; blacksmiths; machinery, electric and electronic instrument mechanics; jewellery workers and watch makers; potters; typesetters; bakers, food and beverage processors; painters; craft workers in textile, garment, leather, rubber and plastic trades and other craft workers.

*Plant and machine operators and assemblers:* Including well drillers and borers; ore smelting furnace operators; brick and tile kilnmen; sawmill sawyers; paper makers; chemical processing plant operators; power-generating plant and boiler operators; asbestos cement products makers; metal finishers and electroplaters; dairy and other food processing machine operators; printing machine operators; machine operators for production of textile, rubber and plastic products; assemblers; drivers; seamen and other plant and machine operators.

*Elementary occupations:* Including street vendors; domestic helpers and cleaners; messengers; private security guards; watchmen; freight handlers; lift operators; construction labourers; hand packers; agricultural and fishery labourers.

*Others:* Including farm workers, animal husbandry workers and fishermen, members of the armed forces and occupations unidentifiable and inadequately described.

## Notes on the classification of occupations based on ISCO-68

Since 1971, the classification of occupations for the population censuses and by-censuses in Hong Kong has been modelled on the 1968 International Standard Classification of Occupations (ISCO-68). Due to the emergence of many new types of jobs and increasing complexity of jobs in certain occupations, a new classification was promulgated by the International Labour Organisation in 1988, known as the 1988 International Standard Classification of Occupations (ISCO-88). The classification used in the 1991 Population Census is modelled on this.

Both in ISCO-68 and ISCO-88, 'type of work performed' is the basic criterion for classifying occupations. However, there is much greater emphasis placed on the differentiation of skill level and skill specialisation of jobs in ISCO-88 than it was in ISCO-68 in assessing 'type of work performed'.

To illustrate the difference between the two classifications of occupations, a few facts are provided below:

- (a) Under ISCO-68, managers in the wholesale, retail, import and export trades were included in the group 'Sales workers' and managers in the catering and lodging services in the group 'Service workers'; they are included in the group 'Managers and administrators' under ISCO-88.
- (b) 'Associate professionals' under ISCO-88 comprises essentially 'Technical and related workers' under ISCO-68. However, this group also includes some occupations from the groupings 'Clerical and related workers', 'Sales workers', 'Service workers' and 'Production and related workers, transport equipment operators and labourers' under ISCO-68. Take for example, insurance representatives under 'Sales workers' and production controllers under 'Production and related workers' are 'Associate professionals' under ISCO-88.
- (c) 'Production and related workers, transport equipment operators and labourers' under ISCO-68 are further distinguished into 'Craft and related workers' and 'Plant and machine operators and assemblers' under ISCO-88.
- (d) Occupations which require very little skill are grouped together as 'Elementary occupations' under ISCO-88 instead of being scattered in such occupational groups as 'Clerical and related workers', 'Sales workers', 'Service workers', 'Agricultural workers and fishermen' and 'Production and related workers, transport equipment operators and labourers' under ISCO-68.

Since ISCO-88 involves greater disaggregation of occupations by skill level and skill specialisation, it is not possible to convert the 1981 and 1986 occupational data (classified on the basis of ISCO-68) to conform with it. On the contrary, it is possible to convert the 1991 data to conform with ISCO-68 to enable a comparison to be made of the data from the 1991 Population Census with those from the 1981 Population Census and 1986 By-Census.

- (69) **One-person Household:** Please see **Household Composition** in (39).
- (70) **Out-movement of Population:** The number of persons aged 5 and over living in a District Board district or new town, or in other areas of the New Territories in March 1986, who were living in a different District Board district or new town at the time of the 1991 Population Census.
- (71) **Place of Birth:** The place where a person was born.
- (72) **Population Density:** The ratio of the number of people to the total land area (in square kilometres) of the geographical division in which they were enumerated.
- (73) **Present District of Residence:** The District Board district in which a person was living at the time of the Census.
- (74) **Previous District of Residence:** The District Board district in which a person last resided before settling in the present District Board district during the past ten years.
- (75) **Pupil-teacher Ratio:** The ratio of the total number of pupils/students enrolled to the total number of teachers.
- (76) **Quintile of Households (of Median Monthly Household Income Distribution):** This refers to the grouping of domestic households into five equal groups according to the relative rank of their monthly household incomes and then computing the median monthly household income earned by each group of households.
- (77) **Rent-income Ratio:** The percentage of household income paid on household rent of a household. All zero income households and zero rent households are excluded in the calculation.
- (78) **Resident Population:** Residents who usually lived in Hong Kong, including those who were temporarily away from Hong Kong on the Census reference date of 15 March 1991.
- (79) **Residents Temporarily Away from Hong Kong:** This refers to residents who usually lived in Hong Kong but were temporarily away on the Census reference date of 15 March 1991.
- (80) **School Attendance Rate:** The percentage of population attending full-time schools or educational institutions.

- (81) **Secondary Employment:** This refers to the work performed by a person in addition to his main employment during the thirty days before enumeration. The work must be remunerated with compensation. Those work without compensation such as voluntary services and house work are not included. Business investment which does not require active participation in operation and management are not counted as secondary employment. Overtime work is not a kind of secondary employment.
- (82) **Secondary Industries:** These include three major industries namely 'Manufacturing', 'Electricity, gas and water' and 'Construction'.
- (83) **Sector of Destination (of Internal Movement):** The broad geographical area in which a person was enumerated in the Census. Hong Kong is distinguished into five sectors, viz. Hong Kong Island (Central and Western/Wan Chai), Hong Kong Island (Eastern/Southern), Kowloon and New Kowloon, new towns and other areas of the New Territories for convenience of analysis.
- (84) **Sector of Origin (of Internal Movement):** The broad geographical area in which a person lived five years ago. Hong Kong is distinguished into five sectors, viz. Hong Kong Island (Central and Western/Wan Chai), Hong Kong Island (Eastern/Southern), Kowloon and New Kowloon, new towns and other areas of the New Territories for convenience of analysis.
- (85) **Self-contained Quarters:** Living quarters with internal piped water supply and a flush toilet system.
- (86) **Sex Ratio:** The number of males per 1 000 females.
- (87) **Standardised Rate:** The rate derived by the standardisation technique which has the effect of eliminating the sex and age differences from the data for comparison purposes. The technique involves calculating a weighted average of the sex-age-specific rates with respective weights taken from the distribution of the standard population by sex and age. Standardised headship rate and labour force participation rate were derived according to this method for analysis.
- (88) **Tenure of Accommodation:** The terms or conditions under which accommodation is held by a household. The different terms are defined as follows:
- Owner-occupier:* A household which owns the living quarters it occupies.
- Sole tenant:* A household which rents the whole living quarters it occupies from someone who lives outside the living quarters without sharing it with other household(s) or subletting.
- Co-tenant:* Two or more households each rents part of a living quarters from someone who lives outside the living quarters.

*Main tenant:* A household which rents the whole living quarters it occupies from someone who lives outside the living quarters and sublets it to other household(s).

*Sub-tenant:* A household which rents part of a living quarters from someone who lives in the same living quarters.

*Rent free:* A household which occupies an accommodation free, with or without the owner's permission. This excludes households occupying accommodation provided by employers.

*Provided by employer:* A household occupies an accommodation provided by the employer of one of the household members. This also includes households occupying living quarters leased from employers at a nominal rent. If a household member uses housing allowance given by his employer for renting accommodation, the tenure is not considered as provided by employer.

- (89) **Tertiary Education:** Please see **Educational Attainment** in (29).
- (90) **Tertiary Industries:** These include four major industries namely 'Wholesale, retail and import/export trades, restaurants and hotels', 'Transport, storage and communication', 'Financing, insurance, real estate and business services' and 'Community, social and personal services'.
- (91) **Total Fertility Rate (TFR):** The average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing ages 15 to 49 experiencing the age-specific fertility rates prevailing in a given year.
- (92) **Transients:** Persons staying in hotels/hostels/boarding houses or on board ocean-going vessels/coasters in Hong Kong waters on the Census reference date of 15 March 1991. They must not be residents of Hong Kong.
- (93) **Type of Living Quarters:** Living quarters are classified according to the type of building in which the living quarters are located. The buildings are classified by the type of construction materials; the purpose for which they are built; and the sector responsible for their construction/management.

*Permanent housing:*

*Public and aided rental blocks:*

*Housing Authority rental blocks (Group A):*

These include housing estates previously known as Government Low Cost Housing and those built by the Hong Kong Housing Authority. Mark I and Mark II blocks of Group B rental blocks after conversion are also grouped under this category.

*Housing Authority rental blocks (Group B):* These are housing estates previously known as Resettlement Estates but have been put under the management of the Housing Authority since 1973. They can be further divided into Mark I to Mark VI blocks.

*Housing Society rental blocks:* These are rental blocks built and managed by the Hong Kong Housing Society.

*Housing Authority home ownership estates:* These are estates built under the Home Ownership Scheme or the Private Sector Participation Scheme of the Housing Authority.

*Private housing blocks:* These include tenements, apartments and all multi-storey blocks of private flats built mainly for residential purpose. Urban Improvement Scheme blocks of the Hong Kong Housing Society are also classified under this category. Private housing blocks are dichotomised as follows according to the availability of internal facilities:

*Self-contained:* Living quarters with internal piped water supply and a flush toilet system.

*Non self-contained:* Living quarters without internal piped water supply and a flush toilet system.

*Villas/Bungalows/Modern village houses:* These are houses of one to three storeys built with full facilities like bathroom and internal piped water supply.

*Simple stone structures:* These are houses built of stones and/or other permanent materials usually of one storey high which are not equipped with facilities like internal piped water supply and a flush toilet system. Traditional village houses are also grouped under this category.

*Institutions:* These include hospitals, prisons, old people's homes, religious houses and British forces barracks.

*Other permanent housing:* This includes hotels, hostels, staff quarters buildings and other non-domestic buildings like offices, factories, clinics, etc.

*Temporary housing:*

*Roof-top structures:* Structures built with non-permanent materials on the roof-top of a permanent building.

*Other temporary housing:* This includes Hong Kong Housing Authority cottages and temporary huts, and such private temporary housing as contractor's matsheds, nissen huts, derelict boats, huts and places not intended for residential purpose (such as landings, staircases, corridors, etc.) but were occupied on the Census reference date.

- (94) **Type of Tertiary Education:** Please see **Educational Attainment** in (29).
- (95) **Usual Language/Dialect:** The usual language/dialect the enumerated residents used in daily communication at home. This is not applicable to persons aged under 5 or dumb persons.
- (96) **Vietnamese Migrants:** These include Vietnamese refugees; Vietnamese migrants having been screened out and those pending determination of refugee status; ex-China Vietnamese illegal immigrants; Vietnamese migrants rescued by ocean-going vessels; and children born in Hong Kong to the above categories of Vietnamese migrants.
- (97) **Whether Having Moved within Hong Kong:** A person is defined as having moved if he/she had changed residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, that is from a new town to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa.
- (98) **Whether Studying:** The status of a person in acquiring education. It can be divided into two main groups, studying and had completed study/withdrew as follows:

*Studying:* It can be further classified by the mode of study:

*Studying full-time (Full-time student):* Persons studying full-time (that is excluding evening/part-time day release courses) at a kindergarten, a primary or secondary school, a post-secondary college, a polytechnic, a technical institute, college of education, the Hong Kong Technical Teachers' College, school of nursing, or at a university. Full-time students include student workers except where a person's economic activity status is considered.

*Studying part-time (Part-time student):* This refers to the part-time day release course or the evening course offered by evening schools and post-secondary institution (such as the polytechnics, technical institutes, colleges of education) and the extra-mural departments of the two universities which fulfill the criteria of a formal course. Persons taking correspondence course or distance learning course leading to a degree are also regarded as studying part-time course. All other correspondence courses are excluded from this category.

*Had completed study/withdrew:* A person is regarded as having completed a course of education if he has passed the related examination. Those who stop studying before completion of the course are considered as withdrawal from study.

**(99) Working Population:** Please see **Activity Status** in (2).

# **Technical Notes**

## Technical Note I Computation of Singulate Mean Age at Marriage

A common demographic technique used for studying nuptiality is the computation of the singulate mean age at marriage. This may be obtained by using data on marital status by age and sex available from the Census data. Another measure of the marriage situation can be obtained from marriage registration statistics where the age at first marriage for all brides and bridegrooms who got married in Hong Kong in a particular year are known. However, such statistics would relate only to those who married in Hong Kong, therefore are affected by the age structure of the population. Residents who got married elsewhere would be omitted from the statistics. While the age at first marriage from the marriage registration statistics refers to those who got married in Hong Kong in a particular year, the singulate mean age at marriage relates to the nuptiality prevailing pattern of the entire population. The latter is therefore a better indicator of the mean age at marriage.

The singulate mean age at marriage is an estimate of the mean number of years lived in the single state by a cohort of men or women (which refers to persons born in the same year) before their marriage at a certain age, where age 50 is usually taken as the limit. A basic assumption involved in the computation of the singulate mean age at marriage is that the difference in the proportion single from age  $x$  to age  $x+1$  is a measure of the proportion of a birth cohort who married at the age  $x+1$ .

An example below illustrates the steps involved in the computation with the statistics on proportion never married for females by age available from the 1991 Population Census results:

Age Group	Proportion never married for females, 1991 (%)
15-19	98.4
20-24	82.9
25-29	45.5
30-34	19.8
35-39	10.4
40-44	6.8
45-49	3.7
50-54	2.2

In the computation, it is assumed that no woman dies between her fifteenth and fifty-fifth birthday. This assumption would have only a negligible effect on the results as mortality in this age range is very low. The calculations below would yield the mean age at marriage for

women who marry before they reach 50. The computation is listed out step by step using a worked example with explanations as follows:

<u>Step (Explanation in Italics)</u>	<u>Worked example</u>
(1) Sum the proportions (in percentage) never married for women through age for each of the age groups from age 15 to 49 and multiply by 5 ( <i>starting with a cohort of 100 women, under the prevailing nuptiality pattern, the number of years in single state lived by them, from age 15 to 49</i> )	$(98.4 + 82.9 + 45.5 + 19.8 + 10.4 + 6.8 + 3.7) \times 5$ $= 267.5 \times 5$ $= 1\,337.5$
(2) Add 1 500 to the product obtained in (1) above ( <i>to add back 1 500 years of single state lived by this cohort of 100 women from age 0 to 14</i> )	$1\,337.5 + 1\,500$ $= 2\,837.5$
(3) Average the proportions never married for women in the age groups 45 - 49 and 50 - 54 ( <i>to obtain the proportion never married for women aged 50</i> )	$(3.7 + 2.2) \div 2$ $= 2.95$
(4) Multiply the result of (3) by 50 ( <i>to obtain the number of years lived in the single state by those women who had not married by age 50</i> )	$2.95 \times 50$ $= 147.5$
(5) Subtract the result of (4) from the result of (2) ( <i>to obtain the number of years lived in the single state by those women who had married by age 50</i> )	$2\,837.5 - 147.5$ $= 2\,690$
(6) Subtract the result of (3) from 100 ( <i>to obtain the number of women [out of this cohort of 100 women] who had married by aged 50</i> )	$100 - 2.95$ $= 97.05$
(7) Add on the number of years lived in the single state during their particular year of marriage by those who had married ( <i>these marriages are assumed to be evenly distributed over a year, therefore on average each of those who married in a particular year should have been in the single state for half a year before their marriages</i> )	$2\,690 + (97.05 \times 0.5)$ $= 2\,738.53$
(8) Divide the result of (7) by the result of (6) ( <i>to calculate the singulate mean age at marriage for women</i> )	$2\,739 \div 97.05$ $= 28.2$

In the above example, out of the cohort of 100 women, 97.05 had got married by age 50. Between them, they lived a total of 2 739 years in the single state before getting married. The singulate mean age at marriage is the average number of years lived in the single state by each of these 97.05 women.

## Technical Note II Computation of Net Annual Internal Movement Rate

Internal movement refers to persons aged 5 and over who had moved home within Hong Kong. A move is defined as a change of residence during the past five years (a) from a District Board district to another District Board district; (b) within a District Board district in the New Territories, from the new towns to other areas in the district or vice versa; or (c) from land to marine anchorages or vice versa. Those who moved home within (a) a District Board district; (b) a new town; or (c) other area in the same District Board district in the New Territories, were not regarded as having moved. Net internal movement is the balance of in-movement and out-movement of population over the past five years for a district, which in the context of this note, is a District Board district, a new town or a non new town part in the District Board district in the New Territories. The net annual internal movement rate of a district is defined as the average annual rate of change of the population due to internal movement in the district. It is computed using the following formula:

$$\frac{P_2}{P_1} = (1 + r)^n$$

where  $P_1$  = population at 1986, that is those who were enumerated in the district in the 1991 Population Census and were living in the district since 1986 (i.e. non-movers) plus those who were enumerated in other districts in 1991 Population Census but were living in the district in 1986 (i.e. out-movers)

$P_2$  = population at 1991, that is, those who were enumerated in the district in the 1991 Population Census and were living in the district since 1986 (i.e. non-movers) plus those who were enumerated in the district but were living in other districts in 1986 (i.e. in-movers)

$r$  = net annual internal movement rate

$n$  = 5 years, from 1986 to 1991



**CONFIDENTIAL**  
WHEN ENTERED WITH DATA**1991 Population Census**  
**一九九一年人口普查**填入數據後即成  
**機密文件**

Use this questionnaire for your household only. If there are other households at this address, the Census Officer will provide extra questionnaires when he/she calls to collect your completed questionnaire.

這問卷只供貴戶使用。如這單位內還有其他住戶，統計員上門收取這問卷時，當會給予額外問卷。

- \* A household consists of a group of persons who live together and make common provision for essentials for living. These persons need not be related. If a person makes provision for essentials for living without sharing with other persons, he is also regarded as a household.
- \* 住戶是指一群住在一起及分享生活所需的人士。他們之間不一定有親戚關係。自己單獨安排生活所需的個別人士亦當為一戶。

<p><b>H1 How many members are there in this household?</b> 請問這戶有多少名成員？</p> <p style="text-align: right;"><input style="width: 50px; height: 20px;" type="text"/></p> <p><small>* Make sure to include all babies and young children. Please note that live-in domestic helpers are also considered as members of a household. * 請留意包括所有嬰孩和小童。並請注意留宿傭工也作為住戶成員計算。</small></p>	
<p><b>H2 The Census counts people according to where they were at 3 a.m. on a specified date. How many members of this household were here at the census moment, i.e. 3 a.m. on 15 March 1991?</b> 人口普查是根據市民於指定日期的凌晨三時在何處來點算。在普查時刻即一九九一年三月十五日凌晨三時，這戶成員有多少名在本居所內？</p> <p style="text-align: right;"><input style="width: 50px; height: 20px;" type="text"/></p> <p><small>* Please note that the following members of this household should also be considered as being here: (1) Those who were on night duty at the census moment; (2) Those who were not in any other accommodation at the census moment, but who were in Hong Kong. * 請注意以下成員也當作「在本居所內」點算： (1) 在普查時刻當夜班工作的本戶成員； (2) 在普查時刻並不在其他居所內，但仍在香港的本戶成員。</small></p>	
<p><b>H3 In addition, were there any relatives or friends who were here at the census moment (i.e. 3 a.m. on 15 March 1991)?</b> 除以上人士外，在普查時刻(即三月十五日凌晨三時)還有沒有其他親戚朋友在本居所內？</p> <p style="text-align: right;">Please answer 'yes' or 'no' 請填「有」或「無」 <input style="width: 50px; height: 20px;" type="text"/></p> <p>If 'yes', how many? 如答「有」，請問有多少名？ <input style="width: 50px; height: 20px;" type="text"/></p>	

Record below details of members of this household (counted in H1) and other persons (counted in H3) who were present at the census moment:  
請就問題 H1 所點算的本戶成員及問題 H3 所點算的人士，記錄資料如下：

Person serial no. 個人序號	P1 Name 姓名	P2 Relationship to head of household 與戶主關係	P3 Where was the person at the census moment (i.e. 3 a.m. on 15 March 1991)? 在普查時刻(即三月十五日凌晨三時)在何處？ <small>1=here (This answer is applicable to all persons counted in H2 and H3) 本居所(本答案適用於問題 H2 及 H3 所點算的人士) 2=other accommodation in Hong Kong 香港其他居所 3=Mainland China/Macau 中國大陸/澳門 4=other places 其他地區</small> (Please circle answer) (請圈出答案)	P4 Did the person live here throughout the past three months? 在過去三個月，是否一直在本居所內居住？ <small>1=Yes 是 2=No 否</small> (Please circle answer) (請圈出答案)	P5 Will the person usually live here in the coming three months? 在未來三個月，會否經常在本居所內居住？ <small>1=Yes 是 2=No 否</small> (Please circle answer) (請圈出答案)	P6 Sex 性別	P7 Date of birth 出生日期(西曆)  Month/Year 月份/年份
		Head 戶主	1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/
			1 2 3 4	1 2	1 2		/

If the above space is not enough for filling in particulars of all persons, obtain extra questionnaires from the Census Officer.  
如以上方格不足填寫所有人士的資料，請向統計員索取額外問卷。

**FOR OFFICE USE ONLY 不用填寫此欄**FORM S  
D.C.S. 443C

P3:

1	2	3	4	Total

IND/FU	FE	CHK	CE	DS

# CENSUS AND STATISTICS DEPARTMENT

Harbour Centre Sub-office

14/F & 15/F, Harbour Centre, 25 Harbour Road, Wan Chai, Hong Kong.



## 政府統計處

海港中心分處

香港灣仔港灣道 25 號海港中心 14 樓至 15 樓

1 March 1991

Dear Householder(s),

### 1991 Population Census

The 1991 Population Census will be conducted from 15 to 24 March 1991. The purpose of the Census is to obtain up-to-date benchmark information on the population of Hong Kong — its size and distribution and a broad range of its demographic, social and economic characteristics. This information is vital to the Government for planning, particularly in such fields as housing, education, transport, medical care and social services, and to the private sector for formulating business strategies.

The Census requires the participation of each and every member of all households in Hong Kong. Some households have been selected for detailed enumeration but for yours, members will only be asked simple questions on age, sex and relationship to head of the household. I am writing to seek your cooperation in providing the required information.

At the back of this letter is a questionnaire for the Census. Please read carefully the instructions contained therein, and complete it with the required information. Please do **not** return the completed questionnaire by post. A Census Officer from this Department will visit your household **between 15 and 24 March 1991** to collect it. He/She will carry a certificate issued by this Department for proving his/her identity. You will be informed of the name of the Census Officer nearer the time.

The Census is taken under the authority of the Census and Statistics (1991 Population Census) Order 1990, made by the Governor in Council under section 9(1) of the Census and Statistics Ordinance (Laws of Hong Kong, Chapter 316). Under this Ordinance, persons specified to give information for the purpose of the census are obliged to do so. The same Ordinance stipulates that their answers are to be treated in strict confidence. No information regarding individual persons or households will be released to any person not performing functions relating to the Census.

If you have any enquiry about the Census or the identity of the Census Officer, please telephone us at 827 1234.

Yours faithfully,

(Benjamin N. H. MOK)  
Commissioner for Census & Statistics

戶主先生：

一九九一年人口普查

**Specimen Form**

本港將於一九九一年三月十五日至二十四日期間進行一九九一年人口普查，以蒐集人口總數和分佈情況，與及人口的社會及經濟特徵等最新資料。這些資料有助政府策劃建設，特別是對房屋、教育、交通、醫療及社會服務的籌劃提供依據。另一方面，香港的工商各業機構亦會運用這些資料釐定業務方針。

人口普查需要全港住戶的參與。本處已抽選部份住戶答覆較詳細的問題，但就貴戶而言，只須回答較簡單的問題，內容包括有關住戶成員的年齡、性別、與戶主關係等。敬請貴戶合作，提供所需資料。

本信背面印有問卷。請小心閱讀問卷上的指示，然後填上所需資料。填妥問卷後，請勿寄回本處。本處統計員將於一九九一年三月十五日至二十四日期間到府上拜訪，收集填妥的問卷。該名職員會帶備由本處發出的統計員身份證，以供查閱。至於統計員的姓名，將於稍後通知貴戶。

人口普查是按照一九九零年普查及統計(一九九一年人口普查)令的規定而進行。該法令是由總督會同行政局根據香港法例第三一六章普查及統計條例第九(一)條而制定。根據該條例，指定的人士必須向本處提供資料，而本處必須對個別住戶或個別人士的資料，予以保密，不得向與普查無關的任何人士洩露。

如對人口普查有任何不明之處，或欲證實統計員身份，請致電八二七 一二三四向本處查詢。

政府統計處處長莫乃鏗

一九九一年三月一日

**FOR OFFICE USE ONLY 不用填寫此欄**

ER                      OR

Sheet No.

HH      Total      Page      ORTYP

For enquiry, please quote the above reference  
查詢時，請說明上述編號

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Listing of quarters (vs assignment)	Occupancy of quarters
1. Normal (In assignment list) 2. Unlisted/Attached 3. Split 4. Merged (Enumerated) 5. Merged (Not enumerated) 6. Demolished/Construction in progress 7. Unsheltered 8. Vacant land	1. Occupied 2. Unoccupied (Residential) 3. Unoccupied (Non-residential) 9. N.A. (Listing of quarters = 5, 6, 8)

Total no. of HH in LO	Result of final visit	Type of HH	No. of persons
	1. Enumerated (By enumerator) 2. Enumerated (By household) 8. Non-contacted 9. N.A. (Occupancy of quarters = 2, 3, 9)	1. Domestic 2. Collective 9. N.A. (Result of final visit = 8, 9)	_____
			H1+H3

Tel. No.: \_\_\_\_\_

**3 PERSONAL INFORMATION**

**SECTION A: Applicable to all persons**

P0	Person serial no.						
P1	Name						
P2	What is your relationship to the head of household?	Head					
P3	Whereabouts at census moment Here Mainland China/Macau Other accommodation in HK Other places						
P4	Whether lived here throughout the past three months						
P5	Whether usually live here in the coming three months						
P6	Spouse's serial no.						
P7	Mother's or father's serial no.						
P8	Sex						
P9	In what month and year were you born?	Month					
		Year					
P10	What is your current marital status? (Show prompt card)						

**SECTION B: N.A. for P3 ≠ Here**

P11	Are you attending a school/educational institution?  If 'yes' ▷ a) In what class are you studying? b) Is it a full-time or part-time course? ..... → If 'no' ▷ a) What level did you reach? b) Did you complete that course? ..... →	FT/PT	FT/PT	FT/PT	FT/PT	FT/PT	FT/PT
		C/NC	C/NC	C/NC	C/NC	C/NC	C/NC
P12	What is/was your major field of study at _____? (If P11 = Matriculation education or below, record 'N.A.')						
P13	Where were you born?						
P14	What nationality do you claim?  If 'Stateless' → P16  If 'Chinese' ▷ What is your place of domicile? ..... →  If 'British' ▷ Does the British nationality you claim carry with it a right of abode in anywhere outside HK? .....	HK/not HK					
		Yes/no	Yes/no	Yes/no	Yes/no	Yes/no	Yes/no
P15	Besides the nationality you have just mentioned, do you claim any other nationality?  If 'Chinese' ▷ What is your place of domicile? ..... →  If 'British' ▷ Does the British nationality you claim carry with it a right of abode in anywhere outside HK? .....	HK/not HK					
		Yes/no	Yes/no	Yes/no	Yes/no	Yes/no	Yes/no
P16	For how many years have you been living in HK? (excluding any period of absence of six months or more)						
P17	Your address is in _____ district, have you ever lived outside this district during the past ten years?  If 'yes' ▷ Where did you live before you last moved to this district?  If 'no' → P19 (If P4 and P5 = 'No', record 'N.A.' and skip to P20.)						
		Same as head					
P18	In what year did you last move to this district?						

<b>1</b>	2	3	4	Total Entry

P3:

P0	Person serial no.						
P19	What was your address five years ago? (i.e. March 1986)	Same	Same/same as head				
P20	What language/dialect do you usually speak at home?						
P21	Can you speak any other languages/dialects in conversation in daily matters, such as asking for direction or shopping?  If 'yes' ▷ What are they?						

**SECTION C: N.A. for P3 ≠ Here/children born in or after March 1976**

P22	Did you work in the past 7 days for wage or profit, including private tuition and work for hourly wage? If 'yes' → P29						
P23	Did you have a job in the past 7 days? If 'yes' → P29						
P24	Did you work without pay in your family's business in the past 7 days? If 'yes' → P30b						
P25	Were you seeking work during the past 30 days? If 'yes' → P27						
P26	Why were you not seeking work? If 'waiting to take up new job or business/expected to return to original job/believed suitable work not available' ..... → P27 If other reasons (specify) → P34b						
P27	Were you available for work in the past 7 days? If 'yes' → P34b						
P28	Why were you not available for work? (Skip to P34b)						
P29	Were you an employer, self-employed or employee? If 'employee' ..... → P30a If 'employer' or 'self-employed' ..... → P30b						
P30a	What kind of industry, business or service was carried out by your establishment at the location where you worked?						
P30b	What kind of industry, business or service was carried out by you/your family?						
P31	What was your occupation?						
	What are the main tasks or duties you have to perform in that occupation?						
	What educational or professional qualifications are required by that job?						
P32	What was your earnings, including housing allowance, you received from your main employment in February?						
P33	Did you have a secondary employment during the past 30 days? If 'yes' → P34a If 'no' → P35						
P34a	What was your earnings from all other employment in February?						
P34b	What was your earnings from all employment in February?						
P35	Did you have any other cash incomes in February like income from interest, dividend, rent, social welfare payment, old age allowance etc.? (Show prompt card)						



政府統計處  
1991 Population Census  
一九九一年人口普查

CONFIDENTIAL 填入數據後即成  
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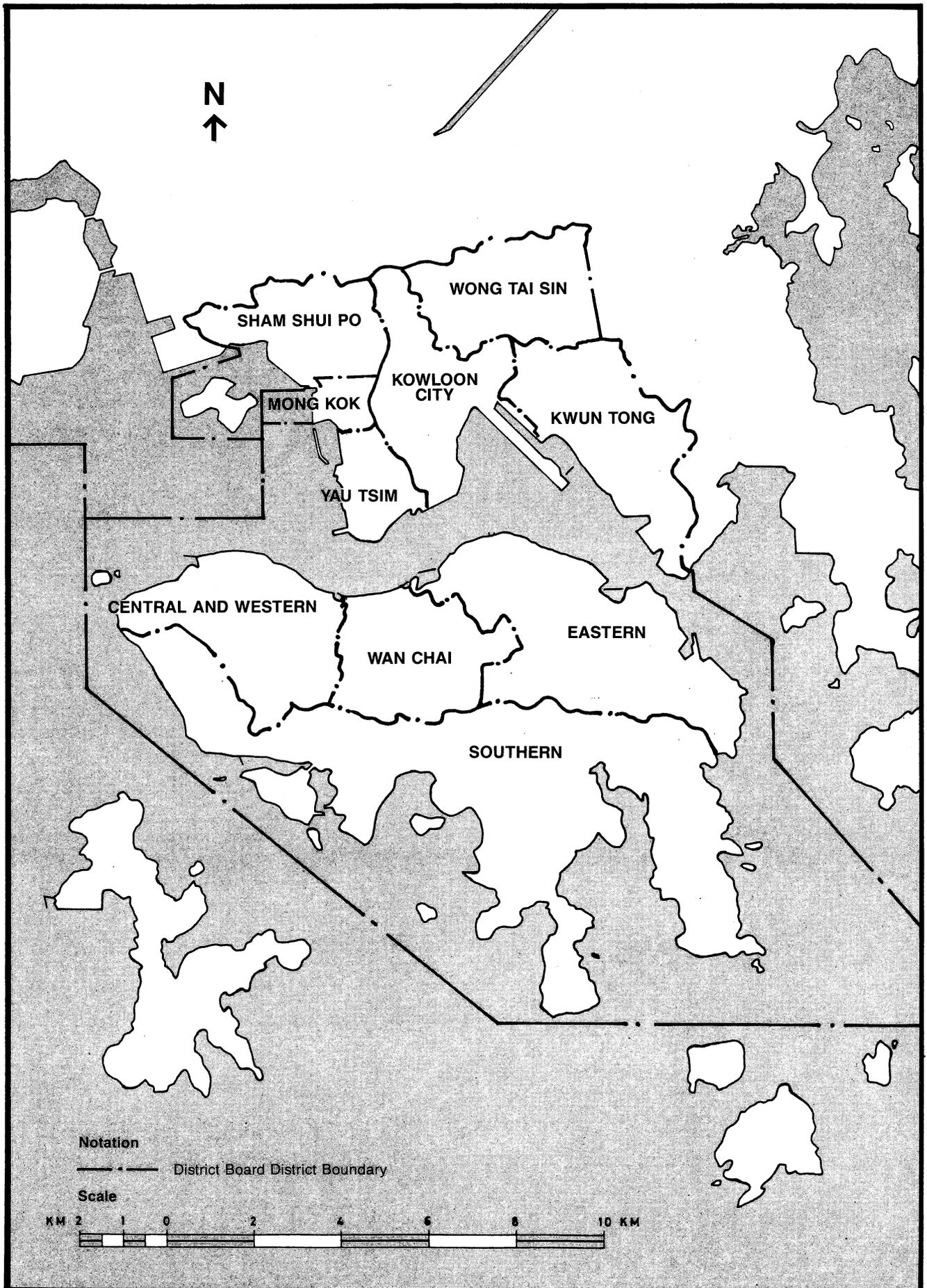
Person Serial No. 個人序號	P3				P4		P5		P6		P7			
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Specimen Form

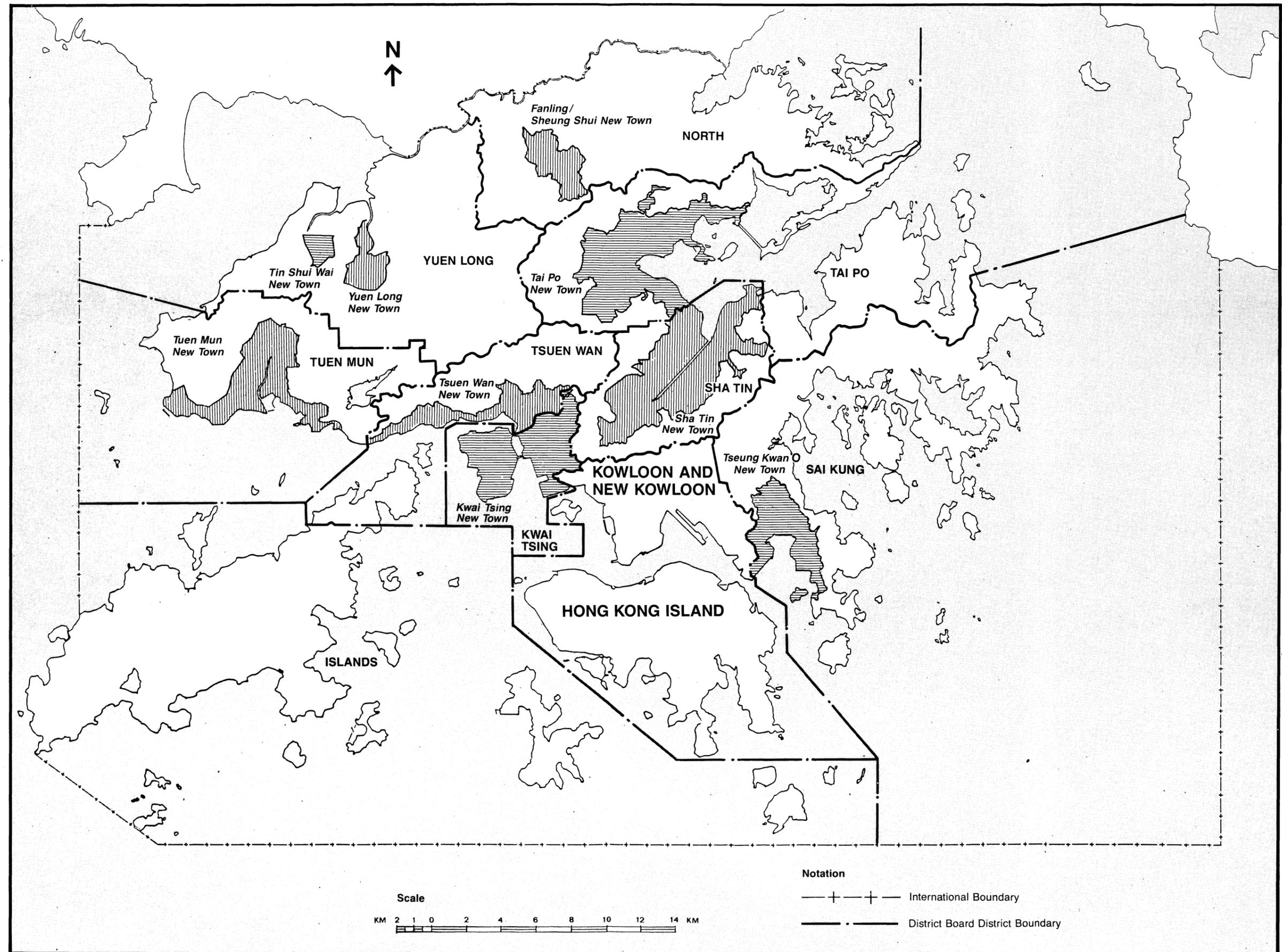
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ER	OR	HH	Total 總數 Page 頁數
Stick gummed label here 貼上地址膠貼於此格內		Complete this part for the first input form of a household. 如屬本住戶首張 入機表格， 請填寫此欄	
		<input type="text"/>	<input type="text"/>
		Listing of quarters 屋宇單位資料	Occupancy of quarters 屋宇單位住用情況
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Result of final visit 最後訪問結果	Type of HH 住戶類型	No. of persons 總人數	



Appendix 4 District Board District Boundaries: Hong Kong Island, Kowloon and New Kowloon









# List of 1991 Population Census Publications

- Summary results**  
contains 35 tables, 3 charts and commentaries summarising the findings on demographic, educational, economic, household, housing, geographical and internal movement characteristics of the 1991 Population Census  
(Both English and Chinese versions are available for this publication)
- \* **Tabulations for Tertiary Planning Units:**  
**Population by Age and Sex**  
contains age and sex distribution of population by quinquennial age group up to 75 and over in each tertiary planning unit
  - \* **Tabulations for District Board Districts and Constituency Areas:**  
**Population by Age and Sex**  
contains age and sex distribution of population by single year of age up to 75 and over in each District Board district and age and sex distribution of population by quinquennial age group up to 75 and over in each constituency area
  - \* **Tabulations for Tertiary Planning Units:**  
**Living Quarters, Households and Population by Type of Living Quarters**  
contains distribution of occupied living quarters, domestic households and population by type of living quarters in each tertiary planning unit
  - \* **Tabulations for District Board Districts and Constituency Areas:**  
**Living Quarters, Households and Population by Type of Living Quarters**  
contains distribution of occupied living quarters, domestic households and population by type of living quarters in each District Board district and constituency area
  - \* **Boundary Maps Complementary to Tabulations for Tertiary Planning Units**  
contains 5 maps showing the geographical boundaries of each tertiary planning unit
  - \* **Boundary Maps Complementary to Tabulations for District Board Districts and Constituency Areas**  
contains 22 maps showing the geographical location of each District Board district and their constituency areas
  - \*\* **Basic Tables for Tertiary Planning Units (in 3 volumes covering Hong Kong Island, Kowloon and New Kowloon and the New Territories)**  
contains summary statistics and basic tables providing the population profile and information on the detailed characteristics, including age, sex, language, marital status, educational attainment, activity status, occupation, industry and income of the population and household size, composition, income, rent and tenure of accommodation of domestic households in each tertiary planning unit
  - \*\* **Basic Tables for District Board Districts**  
contains summary statistics and basic tables providing the population profile and information on the detailed characteristics, including age, sex, language, marital status, educational attainment, activity status, occupation, industry and income of the population and household size, composition, income, rent and tenure of accommodation of domestic households in each District Board district
  - \*\* **Main Tables**  
contains 108 statistical tables relating to the whole range of census topics and presents the final results of the 1991 Population Census in detailed form, providing cross-tabulations covering population, households and living quarters in the whole territory
  - \* **Graphic Guide**  
contains 29 charts and one map providing a visual presentation of the population profile as revealed by the Census in graphic form
- Main Report**  
contains 11 chapters and 112 tables presenting data from the Census in the form of detailed analysis of specific topics on the demographic, household, education, economic and housing characteristics of the population; internal movements and the characteristics of population in the New Towns are also discussed

Note : \* Report contents are in bilingual form.

\*\* Report contents are mostly presented bilingually in the same or adjacent pages. For the more elaborate tables, terms used are presented in a bilingual glossary.



## Order Form for Publications on the 1991 Population Census

(Either this form or its photostatic copy may be used)

To: Publications (Sales) Office,  
Information Services Department,  
1 Battery Path, G/F.,  
Central,  
Hong Kong.

Title of Publications	Code Number	Price*	No. of Copies	Total Amount
		HK\$		HK\$
1. Summary Results (English version)	J33540200E1	32	.....	.....
2. Summary Results (Chinese version)	J33540200C0	24	.....	.....
3. Tabulations for Tertiary Planning Units: Population by Age and Sex	J33540401E0	22	.....	.....
4. Tabulations for District Board Districts and Constituency Areas : Population by Age and Sex	J33540501E0	31	.....	.....
5. Tabulations for Tertiary Planning Units: Living Quarters, Households and Population by Type of Living Quarters	J33540402E0	22	.....	.....
6. Tabulations for District Board Districts and Constituency Areas : Living Quarters, Households and Population by Type of Living Quarters	J33540502E0	24	.....	.....
7. Boundary Maps Complementary to Tabulations for Tertiary Planning Units	J33540301E0	72	.....	.....
8. Boundary Maps Complementary to Tabulations for District Board Districts and Constituency Areas	J33540302E0	48	.....	.....
9. Basic Tables for Tertiary Planning Units: Hong Kong Island	J33540601E0	48	.....	.....
10. Basic Tables for Tertiary Planning Units: Kowloon and New Kowloon	J33540602E0	52	.....	.....
11. Basic Tables for Tertiary Planning Units: The New Territories	J33540603E0	78	.....	.....
12. Basic Tables for District Board Districts	J33540700E0	30	.....	.....
13. Main Tables	J33540102B0	76	.....	.....
14. Graphic Guide	J33541000E0	14	.....	.....
15. Main Report	J33540101E0	46	.....	.....

\* Prices include postage for local mailings. Postage for overseas mailings will be advised upon receipt of orders.

I enclose cheque No. .... for HK\$ ..... for the payment of the above publications (cheque should be crossed and made payable to the Hong Kong Government).

Please mail the publications to:

Name: .....

Address: .....

Tel. No.: ..... Date: .....

