

立法會
Legislative Council

LC Paper No. CB(1)390/13-14(08)

Ref: CB1/PL/FA

Panel on Financial Affairs

Meeting on 2 December 2013

Background brief on the plan for 2016 Population By-census

Purpose

This paper sets out the background of the Administration's plan for conducting the 2016 Population By-census ("16BC") and summarizes the major views and concerns expressed by Members on matters relating to the last census/by-census (i.e. the 2006 Population By-census ("06BC") and the 2011 Population Census ("11C")).

Background

2. In line with the established practice, population censuses have been conducted in Hong Kong at 10-year intervals since 1961, and by-censuses are carried out in the middle of the intercensal period. The aim of conducting population censuses/by-censuses is to obtain up-to-date benchmark information on the socio-economic characteristics of the population and on its geographical distribution. They provide benchmark data for studying the direction and trend of population changes, which are key inputs for making projections concerning population, household, labour force and employment. Population censuses/by-censuses differ from other general household sample surveys in their sizable scale which makes it feasible to provide statistics of high precision, even for population sub-groups and small geographical areas. Census information is vital to the Government for planning and policy formulation and important to the private sector and academia for business and research purposes. The Census and Statistics Department ("C&SD") will conduct the 16BC in mid 2016.

Approach for conducting population censuses and by-censuses

Sampling

3. A population by-census differs from a census. A population census comprises a complete enumeration of all persons on their basic characteristics such as age and sex and a large sample on the detailed characteristics of households and persons. A by-census focuses enquiry on the detailed characteristics of a large sample of the population. The size and characteristics of the entire population are inferred from the sample results in accordance with appropriate statistical theory.

4. The sampling fractions adopted in the 1966 and 1976 by-censuses were 1% and one-tenth respectively, whereas those for the 1986 and 1996 by-censuses were both one-seventh. For the 06BC, the sampling fraction was reduced to one-tenth with a view to reducing resources requirements without compromising the precision of the survey findings.

Mode of data collection

5. In all the past by-censuses, data were collected by the "interviewer" method under which enumerators visited the sampled households and directed questions to each and every person in such households to complete the questionnaires.

6. Following the advancement of technology and changing lifestyle of the Hong Kong people, and to be in line with the latest recommendation of the United Nations, the Administration has adopted for the 11C a multi-modal data collection approach, including introducing electronic means, postal returns and conventional face-to-face interviews. According to the Administration, the positive experiences of other countries/territories shows that the "self enumeration" approach is becoming one of the most important means of data collection in population censuses. With the increase in the number of households in Hong Kong over the years, the Administration considers that the multi-modal data collection approach will re-engineer the census operation for productivity gain.

Data collection period

7. Since the 1981 Population Census, data collection was conducted in a 9 to 13-day period in March of the respective census/by-census years and the census/by-census period was declared school holidays¹. After taking into account a number of factors, such as availability of manpower resources, weather conditions and project cost, and to avoid disruption to the normal school calendars, the 06BC data collection work was conducted in an 18-day period during school summer holidays from mid July to early August 2006. The data collection period of the 11C was extended to 45 days².

Data topics

8. The census/by-census data topics are reviewed before the conduct of each census/by-census to ensure that they remain relevant and meet users' needs. Consultation with users is an integral part in determining the by-census data topics. The stakeholders include policy bureaux, government departments, prominent organizations and relevant faculties/departments in academic institutions.

9. According to the Administration, factors considered in deciding the topics for a census/by census include usefulness of data, willingness and ability of the respondents to answer, ability of the enumerators to comprehend, existence of other data source/data collection channel, processing efforts, comparability of data with previous censuses/by-censuses, keeping the interviewing time within reasonable length, and recommendations of the United Nations, and international practices.

10. A total of 41 topics were adopted for the 06BC as shown in **Appendix I**. The list of data topics for 11C was basically the same as that of the 06BC, but with suitable refinements to classification.

¹ The data collection work of census/by-census requires many temporary field workers (mostly teachers and students) and some school premises as field centres. In the past, there were some concerns from different sectors on the declaration of school holidays in March to facilitate the population census/by-census because of disruption to the normal school calendars.

² After electronic means has been introduced for both the simple enumeration (short form) and the long form questionnaire, the data collection period for 11C was *45 days*, with the first stage allowing self-enumeration by the households through postal return or the Internet, followed by data collection through face-to-face interviews in the second stage.

Computer equipment and services for conducting census/by-census

11. In line with established practices, the Administration will examine the feasibility of re-using the computer systems developed in previous population censuses/by-censuses to support the fieldwork operation and data processing work in planning for each census/by-census. Major enhancements have been made to the computer system in past years in order to adapt to changes in system requirements (e.g. changes in the mode of operation, scale and scope of census/by-census, statistical estimation method, digital map and technological developments), to improve data accuracy and field operational efficiency, and to add new functions (e.g. e-booking for interviews, e-questionnaires, e-Reporting mechanism, e-recruitment and training, etc).

12. The Administration sought the approval of the Finance Committee ("FC") for a new commitment of \$32.314 million for acquiring the computer equipment and services required for the 06BC at the meeting on 25 June 2004; and a new commitment of \$85.273 million for acquiring the computer equipment and services required for the 11C at the meeting on 19 June 2009.

Measures to improve data quality assurance mechanism of C&SD

13. In view of public concern arising from press reports on reliability of data for some surveys conducted by C&SD in January 2013, the Government established an Investigation Task Force on Statistical Data Quality Assurance on 10 January 2013 to examine the authenticity of statistical data and the existing data quality assurance mechanism. The Task Force released its report in March 2013 putting forward six recommendations. During the examination of the Estimates of Expenditure 2013-2014, some Members have enquired about the resources allocated for following up the recommendations of the Task Force. The details of Members' enquiries and the Administration's responses are hyperlinked in **Appendix II**.

Major views and concerns expressed by Members

14. The major views and concerns relating to the 06BC and 11C expressed by Members at meetings of the Panel on Financial Affairs ("FA Panel") on 2 April 2004, 5 January and 4 May 2009, and at FC meetings on 25 June 2004 and 19 June 2009 are summarized in the ensuing paragraphs.

Sampling

15. Members have enquired about the impact of the reduction of the sampling fraction of long form from one-seventh to one-tenth of the population for the 11C, and whether reference has been made to the sampling practices in population censuses conducted by other places. As advised by the Administration, the sampling fraction of long form in Korea was also one-tenth while both Canada and Singapore adopted the fraction of one-fifth, and the United States adopted the fraction of one-sixth. The fraction adopted would hinge on the extent of variation in population characteristics and the details required for data analysis. According to the experience of conducting the 06BC, a sampling fraction of one-tenth of the population could provide the required precision for supporting relevant statistical inference and analysis.

Data collection period

16. Noting that the data collection period would be changed from the usual March to July/August, some members expressed concern that a lot of people might leave Hong Kong for summer holidays and would not be available for household interviews. The Administration advised that as the data collection period were extended from the usual 9 to 13 days in the past by-censuses to 18 days for the 06BC, and further to 45 days for the 11C, the number of households/persons making trips outside Hong Kong throughout the whole period should be small and it should be easier to make arrangements for interviews with the sampled households.

Data collection approach

17. Some members expressed concern about the reliability of data collected through electronic means as compared to those collected through face-to-face interviews, and suggested that the Administration should explore other convenient and cost-effective modes of data collection, such as telephone interview.

18. The Administration advised that C&SD did not have ready information of the telephone numbers of all households. Moreover, in conducting visits to the households, opportunity was taken to update the Register of Quarters, i.e. the list of addresses of permanent quarters in built-up areas. The number and complexity of questions in the long form might also make it difficult for enumerators to complete the interview over the telephone.

Data topics

19. Some Members urged that the Administration should collect more information on the underprivileged, such as people living in poverty, new arrivals, ethnic minorities, sexual minorities and people with disabilities. The Administration advised that thematic reports on the socio-economic characteristics of different population sub-groups were prepared in past population censuses/by-censuses. Topics like disabilities and sexual orientations were not included in view of their sensitivity and the requirement for more sophisticated interviewing skills. To collect information on specific population sub-groups, C&SD would conduct surveys separately.

20. There were suggestions that the Administration should collect information from the 11C on topics such as elderly Hong Kong residents staying in the Mainland, Hong Kong residents working, getting married and raising their families in the Mainland, as well as children born in Hong Kong to Mainland parents. Such information would be useful for the formulation of related policies and measures.

21. The Administration explained that data relating to movement of people to and from the Mainland for work, study and retirement would be collected through the population census if the individuals concerned or their family members had a regular residence in Hong Kong and they were present to provide the information during household visits. However, people who normally resided outside Hong Kong would be categorized as non-Hong Kong residents for statistical purpose. As for information on children born in Hong Kong to Mainland parents, C&SD had conducted the first round of survey in 2007 through interviewing these parents at the Births Registries to gather information on their plans for the newborns to reside and/or study in Hong Kong. The second round of survey had just commenced to gather the latest information on the plans of Mainland parents for their newborns.

22. There were views from members that the Administration should capture data in the census/by-census to facilitate different purposes of analysis, such as data on monthly household income for working out the Gini Coefficient, and detailed categorization of jobs and retirement schemes to reflect the situations of employment and retirement protection. The Administration advised that the 11C would provide comprehensive information on monthly household income to facilitate compilation of Gini Coefficient, and make reference to the occupation classification of the United Nations. Where practicable, the 11C would collect data on retirement schemes.

Council Questions

23. Two written questions relating to the 11C were raised at the Council meetings of 26 May 2010 and 30 November 2011. Issues covered in the questions include measures to ensure protection of privacy of the data collected from the households by self-enumeration via electronic means, failure for the Administration to confirm receipt of the e-questionnaire completed by households and duplication of enquiry efforts, and measures for checking the identity of enumerators by households and protecting the personal safety of enumerators. The details of the questions and the Administration's responses are hyperlinked in **Appendix II**.

Latest position

24. The Administration will seek views of the FA Panel on the plan for conducting the 16BC at the meeting on 2 December 2013.

Relevant papers

25. A list of relevant papers is in **Appendix II**.

Council Business Division 1
Legislative Council Secretariat
28 November 2013

二零零六年中期人口統計 的數據項目

Data Topics for the 2006 Population By-census

人口及社會特徵

出生年份和月份
性別
婚姻狀況
慣用語言
使用其他語言／方言的能力
國籍
種族
出生地點

Demographic and social characteristics

Year and month of birth
Sex
Marital status
Usual language
Ability to speak other languages/dialects
Nationality
Ethnicity
Place of birth

教育特徵

就學情況
教育程度(最高就讀程度)
教育程度(最高完成程度)
修讀科目
上課地點
前赴上課地點的交通方式

Educational characteristics

School attendance
Educational attainment (highest level attended)
Educational attainment (highest level completed)
Field of education
Place of study
Mode of transport to place of study

內部遷移特徵

點算時刻身在何處
在港居住年期
五年前居住的地方

Internal migration characteristics

Whereabouts at reference moment
Duration of residence in Hong Kong
Place of residence 5 years ago

經濟特徵

經濟活動身分
行業
職業
是否有兼職
主要職業收入
兼職收入
其他現金收入（包括以現金形式收取的租金）

工作地點
前赴工作地點的交通方式

Economic characteristics

Economic activity status
Industry
Occupation
Whether having secondary employment
Earnings from main employment
Earnings from secondary employment
Other cash income (including cash income from rent)
Place of work
Mode of transport to place of work

房屋特徵

屋宇單位類型
居所類型
屋宇單位住用情況
居所內廳房數目（包括客／飯廳、睡房、其他房間、廚房、浴室／廁所）

單位住戶數目（引申得出）
單位居住人數（引申得出）
居所租住權
租金（包括差餉、地租及管理費）

按揭供款或借貸還款

Housing characteristics

Type of quarters
Type of accommodation
Occupancy of quarters
Number of rooms in the residence (including living / dining rooms, bedrooms, other rooms, kitchens, bathrooms / toilets)
Number of households in quarters (derived)
Number of occupants in quarters (derived)
Tenure of accommodation
Rent (including rates, government rent and management fees)
Mortgage payment or loan repayment

住戶特徵

住戶類型
是否住戶成員
與住戶其他成員的關係
住戶人數（引申得出）
住戶結構（引申得出）
住戶收入（引申得出）

Household characteristics

Type of household
Whether a member of the household
Relationship to other members of the household
Household size (derived)
Household composition (derived)
Household income (derived)

Appendix II

List of relevant papers

Date	Event	Paper/Minutes of meeting
2 April 2004	Meeting of the Panel on Financial Affairs ("FA Panel")	<u>Administration's paper</u> (LC Paper No. CB(1)1393/03-04(07)) <u>Minutes</u> (LC Paper No. CB(1)2084/03-04)
June 2004	-	<u>Information paper on "Computer Equipment and Services for the 2006 Population By-census in the Census and Statistics Department"</u> (LC Paper No. CB(1)2076/03-04(01))
25 June 2004	Meeting of the Finance Committee ("FC")	<u>Administration's paper</u> (FCR(2004-05)19) <u>Minutes</u> (FC110/03-04)
12 April 2007	Special meeting of the FA Panel	<u>Administration's paper</u> (LC Paper No. CB(1)1284/06-07(01)) <u>Minutes</u> (LC Paper No. CB(1)2009/06-07)
5 January 2009	Meeting of the FA Panel	<u>Administration's paper</u> (LC Paper No. CB(1)487/08-09(04)) <u>Minutes</u> (LC Paper No. CB(1)857/08-09)
March 2009	Special meeting of FC for examination of Estimates of Expenditure 2009-2010	<u>Written question raised by Hon Cyd HO</u> (Reply serial number: FSTB(FS)033)

Date	Event	Paper/Minutes of meeting
4 May 2009	Meeting of the FA Panel	<u>Administration's paper</u> (LC Paper No. CB(1)1184/08-09(01)) <u>Background brief</u> (LC Paper No. CB(1)1407/08-09) <u>Minutes</u> (LC Paper No. CB(1)2092/08-09)
19 June 2009	FC Meeting	<u>Administration's paper</u> (FCR(2009-10)21) <u>Minutes</u> (FC14/09-10)
26 May 2010	Council Meeting	<u>Written question raised by Hon Jeffrey LAM on 2011 Population Census</u>
30 November 2011	Council Meeting	<u>Written question raised by Hon Abraham SHEK on 2011 Population Census e-Questionnaire</u>
March 2013	-	<u>Report of Investigation Task Force on Statistical Data Quality Assurance</u>
April 2013	Special meeting of FC for examination of Estimates of Expenditure 2013-2014	<u>Minutes (paragraphs 3.30 to 3.32)</u>