



香港統計學會

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## Editor's Foreword

We are very pleased to release the first issue of the Bulletin for the year 2010/2011 in this pleasant mid-autumn time.

In this issue, we have two articles on issues related to the upcoming 2011 Population Census. Miss Jessie CHOI of the Census and Statistics Department writes about the newly adopted multi-modal data collection approach in Hong Kong 2011 Population Census. The Editor, Ms Teresa NG, gives us a report on the census uproar across Canada this summer, and the census trouble in India.

We hope that you will find this special issue on Population Census interesting and informative. Your contribution and support to the Bulletin are very much appreciated. To help improve our Bulletin, your feedback is always welcome.

Happy reading!

Teresa NG

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# Multi-modal Data Collection Approach in the Hong Kong 2011 Population Census

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## Abstract

*The Hong Kong 2011 Population Census (11C) will be conducted in June to August next year, tentatively with a 43-day census operation period. The 11C is a once-a-decade project adopting for the first time a multi-modal data collection approach. It is aimed to provide respondents with a more client-oriented and cost-effective data collection method through integrating three different modes – field enumeration (face-to-face interview), self-enumeration through the Internet and via postal return.*

*In Hong Kong, all population censuses conducted since 1981 comprised a complete enumeration of all households on their basic characteristics and a large sample on the detailed characteristics of households and persons living therein. The upcoming population census will follow the same approach. With the introduction of the multi-modal data collection approach, it offers greater flexibility to the respondents as they can choose their preferred mode of enumeration according to their own needs.*



## Background

Since 1961, it has been an established practice for Hong Kong to conduct a population census every ten years and a by-census in the middle of the intercensal period. Population censuses were conducted in 1961, 1971, 1981, 1991 and 2001 while population by-censuses in 1966, 1976, 1986, 1996 and 2006. Following this practice, the next round of population census will be conducted in 2011. The planning work for the Hong Kong 2011 Population Census (11C) is now in full swing.

The aim of conducting population censuses/by-censuses is to obtain the up-to-date benchmark information on demographic and socio-economic characteristics of the population and on its geographical distribution. The census/by-census data also serve as a prime source of data for small areas and population sub-groups. Such information is vital to the Government for planning and policy formulation and important to the private sector for business and research purposes.

In the 11C, all households will be enumerated. Among them, nine-tenth households will be enumerated using a short form questionnaire to collect their basic characteristics (e.g. age and sex), whereas the remaining one-tenth households will be enumerated using a long form questionnaire for detailed enquiry on a broad range of socio-economic characteristics of the household and their members.



### **Motivation Behind the Multi-modal Data Collection Approach**

In previous censuses/by-censuses, data were collected basically through face-to-face interview, where enumerators visited all households to interview persons therein one by one and collect their information. In the 2006 Population By-census (06BC), apart from the traditional face-to-face interview, electronic questionnaires were also available upon request of the respondents so as to facilitate the public in providing the required information.

Following the advancement of technology, changing lifestyle of Hong Kong people, and to be in line with the latest recommendation of the United Nations, apart from the conventional field enumeration, self-enumeration through internet and postal return will also be made available in the 11C. This proposed arrangement is backed by positive experience of other countries which indicates that self-enumeration approach is becoming one of the most important means of data collection in population censuses.



### **Proposed Data Collection Strategy for Long Form and Short Form Enumeration**

Given that short form questionnaire only consists of a few simple questions on demographic characteristics, it is believed that households sampled for short form enumeration are able to fill in the questionnaire themselves without major difficulties. Therefore, three modes of enumeration – face-to-face interview, self enumeration through Internet and postal return will be made available for this type of households.

On the other hand, as for long form questionnaire which involves more data topics and complicated concepts, it is considered to be more effective and of better quality to collect the information either by face-to-face interview or by electronic means. For the former approach, through face-to-face interview by enumerators who are more experienced in collecting information from respondents after attending tailor-made training courses, it would save much of the respondents' effort in going through all the questions. For the latter approach, provision of online validation and skipping features could facilitate and navigate the respondents in furnishing the required information, thus safeguarding data quality.

### **Staggered Data Collection Arrangement**

To tie in with the multi-modal data collection approach in the 11C, it is planned to extend the census period from 9 - 18 days in previous censuses/by-censuses to around 34 days. A longer census period, coupled with the enhanced data collection approach, will increase the chance of enumerating households successfully during holiday season in the summer. There will be 3 major stages (including the pre-census stage) of the census operation.



#### ***Stage 1: Pre-census mailing of householder letters***

For all permanent quarters with complete addresses in the Register of Quarters maintained by the Census and Statistics Department<sup>1</sup>, householder letter containing activation key for electronic services for the 11C (registration for filling in electronic questionnaire and appointment booking for field enumeration) will be sent to the respondents through phased mailing before the census period. Guidance notes on how to complete questionnaires are also attached in the householder letter.

For households sampled for short form enumeration, a copy of short form questionnaire together with a prepaid returned envelope will also be attached together with the letter. On the other hand, those sampled for long form enumeration will only receive the householder letter.



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<sup>1</sup> For quarters with incomplete address, special arrangements will be made to inform the respondents the start of the 2011 Population Census.

### ***Stage 2: Self-enumeration through Internet or postal return***

In the first half of the census period, a wide range of publicity activities will be launched with a view to promoting the use of self-enumeration through Internet or postal return. For all households, no matter sampled for short form or long form enumeration, they can register for electronic service online using the password contained in the householder letter and fill in the electronic questionnaire accordingly. Furthermore, for households sampled for short form enumeration, they can also choose to fill in the short form questionnaire attached in the householder letter and mail it back to the 11C Office.

It is considered to be more operationally simple and convenient to start the self-enumeration mode of data collection first before activating field enumeration mode. By doing so, deployment of enumerators to visit households not having submitted their questionnaires can be arranged in a more optimal manner.

### ***Stage 3: Field enumeration***

For all households who do not return the completed questionnaires or have difficulties in completing the questionnaires, the traditional face-to-face interview will be offered to assist the respondents to complete the questionnaires. Starting from mid-July 2011, enumerators will visit these sampled quarters and enumerate persons living in the household. Households may also choose their preferred time slot of field visit using the appointment booking system.

## **Conclusion**

The Multi-modal Data Collection Approach, which provides respondents with extra options and convenience, is one of the highlights in the Hong Kong 2011 Population Census. Moreover, the data collection period is staggered into different stages, focusing on self-enumeration first and the more costly field enumeration later. In doing so, it is attempted to balance the needs of respondents and the cost of the whole census operation.

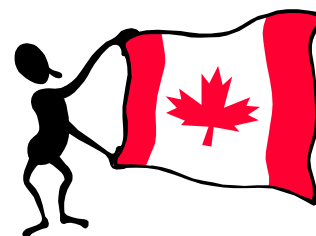


## Census Issues – from East to West

*The Editor*

While the Hong Kong Government is in full swing of preparing for the 2011 Population Census, Canada is debating the future of its Census, and India is considering amending its Census and asking respondents their family caste, or social status.

### Census Fight in Canada



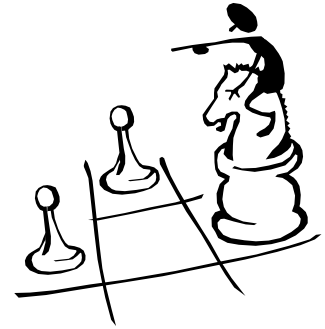
For decades, the national census conducted in Canada consists of two parts.

Statistics Canada (StatsCan) randomly selects 20 percent of households for filling out a long 40-page questionnaire, which includes questions about place of birth, migration, education, employment, income, housing, ethnicity, language, mobility, child care and family life. The remaining 80 percent of households must fill out a short census form, with basic questions about age, sex, marital status, household size, etc. Under the Statistics Act, anyone who refuses to respond to the census questions can be fined up to CAD\$500 or jailed for a maximum of 3 months.

The census data helps to build a national portrait; it provides a much more in-depth picture of the country than a mere population count. “It is the mother ship of all surveys,” says the senior economist at the Canadian Centre for Policy Alternatives. The data is widely used by governments and the broader public sector to tailor services to the population - from daycare, schools, hospitals, seniors care, to recreation services, police and fire protection, and public transit. Business also relies heavily on the census to make fundamental decisions on what products and services to market, to whom and where, down to the neighborhood level. The census also plays a role in new-product development, marketing campaigns, and pricing strategies.

## *A Move to Voluntary Census*

On Saturday June 26, 2010, it was published in the Canada Gazette that the federal government has planned to scrap the mandatory long, 61-question census form and replace it with a voluntary “National Household Survey”. To compensate for the fact that fewer respondents are likely to cooperate on a voluntary basis, the government plans to send the new survey form to one in three households. The mandatory basic short census form will be distributed to all household.



Government documents show that it will cost Ottawa more than CAD\$75 million on the new voluntary survey. The cost in 2006 was CAD\$45 million, and Ottawa will spend CAD\$30 million extra for advertising another promotions to convince Canadians to complete the voluntary questionnaire. On top of that, the government will print more of the voluntary questionnaires to compensate for the expected decline in responses from the public.

The Industry Minister Tony Clement has said the decision, to switch from mandatory long-form census to voluntary survey, was made simply responding to public complaints that the mandatory census is coercive and intrusive of privacy. As it happens, no one has gone to jail for refusing to fill out the census at all. Ottawa’s privacy commissioner has received only 3 complaints in the last 10 years about the census. In 2006, StatsCan received just 166 complaints arising from 12 million census forms. Liberal MP Marc Garneau said 95 percent of Canadians who received the form in the last census filled it out without any problem.

“The government does not think it is necessary for Canadians to provide Statistics Canada with the number of bedrooms in their home, or at what time of day they left for work, and how long it takes them to get there,” Clement said. “The government does not believe it appropriate to force Canadians to divulge detailed personal information through threat of prosecution.” Actually business and governments are keen to know how much lumber to order and gasoline to keep in stock, and what time to get the subways and buses rolling, and stop construction on the roads and highways to allow for a smoother flow of the daily traffic.



## *A National Controversy*

This census decision has upset a whole of people. The government has been facing harsh criticism since it announced the move of making the long-form census voluntary. All three opposition parties have been calling on the government to reinstate the mandatory nature of the long-form census.

Provincial and municipal governments, business and religious groups, educators and economists, urban planners and social scientists, statistician groups and minority - rights advocates, professional organisations, including the United Way of Canada, the Canadian Public Health Association, City of Toronto, Atlantic Provinces Economics Council, Canadian Association of University Teachers, Canadian Institute of Planners, Canadian Council of Social Development, Information and Communications Technology Council, Canadian Marketing Association, Canadian Research Data Centre Network, Canadian Association for Business Economics, which reply on detailed census data to plan for the future, have all come out against the move.

This technical statistical issue has become the subject of media discussion in the 2010 summer. There were about 600 emails from Canadians, over 72 hours, who opposed the decision to do away with the mandatory long-form census. “More than on any other issue recently,” Liberal House leader Ralph Goodale said.

“Census - taking around the world is under assault, thanks to concerns about privacy, cost and response rates,” wrote Stephen Fienberg and Kenneth Prewitt, former director of the U.S. Census Bureau.

“We view it as surprising that decisions are made limiting the ability of experts at Statistics Canada to carry out a mandate for the benefit of Canadian policy makers, educators, small business and science without consulting these same experts,” wrote the Statistical Society of Canada. “We respectfully submit that, in the interests of both cost and retention of the Canadian reputation for the quality of statistical information, the decision to replace the long form by a voluntary survey is revisited, rein formed and reversed.”



While the voluntary form may get filled out by more people, critics argue that doesn't mean better information. The President of the Institute for Research on Public Policy, Mel Cappe said, "You have an unreliable database – it's worse than having no database. I almost say it would be better to produce no number than to produce something unreliable."

Ivan Fellegi, former head of Statistics Canada said, "You do not compensate for selective non-response by increasing the sample at random. You do not correct for the non-responding new immigrants or aboriginals by increasing the sample of middle-class third generation Canadians."

Experts say making the census voluntary will undermine the credibility of the results and provide a much less valuable picture of Canadian Society. The results from the voluntary survey could not be overlaid on existing data, dating back decades. Don Drummond, former chief economist of TD Bank said the planned changes to the 2011 census would leave Canada "in the fog" for years. And there will be limited demand for the new database as it is less representative and incomparable with data collected over the last 35 years.

The National Statistics Council, the Government appointed advisory board that provides direction for Statistics Canada, also came out against the census change. "We believe that the changes will harm the integrity and quality of the Canadian statistical system," the Council said.

The National Statistics Council said it will become more difficult to assemble needed information on traditionally harder-to-reach groups such as immigrants, young people and aboriginals living in cities. The most vulnerable groups – the poor, new immigrants, aboriginals – are least likely to participate in a voluntary study, thus skewing the results and along with its future social policy.

The director of Toronto Public Health, Carol Timmings, said her department would never have been able to target the most vulnerable people in the city during the H1N1 pandemic without census data. "Without this information, Canada is stripped of an important resource to guide social interventions and investments to improve the health and well-being of Canadians," wrote Dr Paul Hebert, editor-in-chief of the Canadian Medical Association Journal.

The critics have been joined by religious leaders from across Canada. Bishop Pierre Morissette, head of the Canadian Conference of Catholic Bishops, says data from the census is important to religious groups. He says it helps pinpoint where worshippers live and helps churches focus their ministries. “This is one of the only ways in which we, at the national, regional and diocesan levels, can gain knowledge of the demographics and identify the geographic areas where our services are required,” he said. The Bishop says the long-form census is a reasonable way to obtain information, not buying the government’s argument that it’s too intrusive. Top Jewish leader, Bernie Farber, also warns that the loss of key demographic data on religion and ethnicity will hinder charitable efforts to help members of their own community. “The information from the long form is needed to continue seeing and analysing trends and patterns from 30 years ago to today so we can properly assess the community size, aging, locations, needs,” he said.

Business has also added voice in protest, and fight to save the long-form mandatory census. Environic Analytics Inc. says the long form census is an important business planning tool that ensures consumers aren’t deluged with inappropriate marketing materials.



When Robert E. Wood was running Sears, a department store chain that accounted for 1 percent of the U.S. economy, he committed to memory almost every page of the annual Statistical Abstract of the United States. Swiss Chalet has used census-based research to determine where to open its next restaurant or expand delivery service. A major theme park has used it to target email marketing messages to prospective visitors. Paul Jacobson, a top economist, has spent thousands of dollars every year to obtain census data on behalf of his business clients.

Seven years ago, the U.S. Census Bureau also looked at introducing a voluntary long-form census but in the end decided it would be less reliable and more expensive to implement. “A voluntary response makes for less useful data, less accurate data than you need to run a big complicated economy and government as both Canada and the U.S. do.” said the former director of the U.S. Census Bureau.

Tony Clement has also said if business or other who thinks the information generated by the voluntary survey data isn't credible, they can pay to get their own surveys done. The National Statistics Council says this is not possible as such surveys would be too small to produce usable information. Small-area data users such as public health planners, voluntary associations, towns and transportation planners usually don't have budget to do so. It would provide an unfair advantage to deeper-pocketed enterprises over small business, to say nothing of NGOs.

### *StatsCan Chief's Resignation*

Facing the uproar over his census decision, Tony Clement has been telling reporters that the move was made with the consultation and support of Statistics Canada officials. But Ivan Fellegi says he can't believe that. "I'm morally certain they would have said the opposite. I'm absolutely, 100 percent totally convinced about that fact." Fellegi said.

On Wednesday night, July 21, 2010, the head of Statistics Canada, Mr. Munir Sheikh, announced his resignation in protest over the government's changes to the census process. "This relates to the question of whether a voluntary survey can become a substitute for a mandatory census," he wrote. "It cannot. Under the circumstances, I have rendered my resignation to the Prime Minister." "We work neutrally and objectively, without interference or influence from any groups or individuals." It was his concern about neutrality and objectivity that prompted his resignation.

"All I am stating here is, the quality of the information produced under a voluntary survey would be less than that under a mandatory census," Munir Sheikh said during the commons committee hearing. "Every statistician on the planet would answer that question in exactly the same way." He told the MPs that a voluntary census leads to "biases" in the results that undermine the usefulness of the data for governments, businesses, social agencies and others.

During the hearing, Clement was further accused of misleading Canadians by giving the impression that Statistics Canada agreed that the voluntary survey could produce results of the same value as the mandatory census. He was accused of "manufacturing" a crisis over the census. Government documents, released at the request of the House of Commons industry committee, shows that Clement was well aware of the truth – the voluntary survey would not be as valuable to traditional users of census information as past surveys. In an email to the minister's advisers on

March 2010, a StatsCan official says a self-administered voluntary survey provides a response rate of 50 percent, with follow-up and interview support, the response rate can be increased to 65-70 percent, which is still not an acceptable outcome for a census. Government memos released also show that Clement’s office has tried to convince Munir to say StatsCan “is confident” that the new voluntary survey will meet “the needs of a broad range of users.” But Munir never delivered such an address, however, defending the integrity of the globally-respected agency, promptly resigned. Alex Himelfarb, who served as top bureaucrat for prime ministers called Sheikh’s decision “notable, unusual, sad and admirable.” Mr. Sheikh has defended the independence of an agency that commands the respect of most Canadians. This has also made the outpouring of opposition continue to snowball.

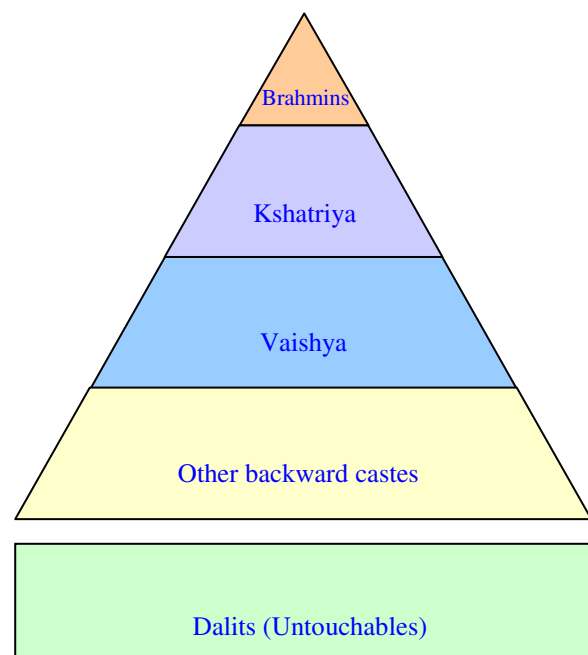
The census controversy in Canada is not about statistics, not in the least. It is about .....

### Census Trouble in India



India’s government is considering a plan to introduce additional questions on respondents’ family caste, or social status, in the future census. Actually this is an old practice that was dropped after the 1931 census when India was still a British Colony.

The centuries-old caste system of India consists of four social classes: “Brahmins” — scholars and politicians; “Kshatriya” — warriors; “Vaishya” — merchants; “Other backward castes (OBCs)” — labourers. “Dalits” or “untouchables”, falling outside the caste system, are those who are destined to menial jobs like cleaning streets and hauling human waste from toilets. Usually, Indian’s prospects in life are defined by their caste.



In 1950, India expanded a system of reservations that guarantee all caste a share of prestigious school placements and government jobs. For instance, the reservation system guaranteed 15% of all seats in parliament reserved for untouchables in 1950. It has been expanded through the years. Now, 27% and 22.5% of government jobs, placements in universities, and other social schemes are reserved for OBCs and Dalit caste members respectively.

A caste census would help to show how the low-caste population has expanded in the past decade. In turn, the government would likely reserve more seats for them. This appears to be an effort to expand opportunities for the low-caste community. But the reservation system has also stoked anger among upper-caste members. Some of the young members protest university seats being reserved for Dalits; some critics blame on the government to send wrong message to young Indians that, regardless of their skill or qualifications, it's their caste that will still matter. There's a lot of uncertainty around this issue. Congress is nervous; the decision is challenged but upheld at the Supreme Court.

Source: Toronto Star, July 2010

