

***Promoting Wider Use of
Population and Household
Statistics***

H W FUNG

Commissioner for Census and Statistics

Hong Kong, China

Introduction

- High demand for different types of population and household statistics
- Stakeholders
 - General public
 - Government
 - Businesses
 - Academics
- Diverse needs
 - Levels of detailed breakdowns
 - Timeliness



Promote Wider Use of Population and Social Statistics

● Foundation

- A comprehensive population data system in place in HK

● Strategies

- More thematic studies on topics of public interest
- Leverage on strengths of the Internet
- Public sector engagement
- Partnership with business
- Assistance to researches of external parties



Framework of Population Data System in Hong Kong

Census / By-census

- Benchmarking population data
- Prime sources of data for small areas and population sub-groups

Other population and related data

- Statistical data from **administrative systems** (such as birth, death and passenger movement records)
- **Sample surveys** (for example, General Household Survey)
- Population **projections**



Population
Data System



Features of Population Data System in HK

- Wide variety of data sources (statistical surveys and administrative systems)
 - Data accuracy
 - Cost-effectiveness
- Integration of survey data and administrative data (through the use of calibration methods)
 - Achieve consistency
 - Enhance quality and timeliness



Features of Population Data System in HK

- A vast reservoir of administrative data particularly on passenger movement
 - Anonymous individual passenger movement records for each HK Permanent Residents obtained from the Immigration Department of the HKSAR Government
 - Over 13 million arrival/departure records a month
 - Enable estimation of the current size of the population and analysis on the mobility pattern

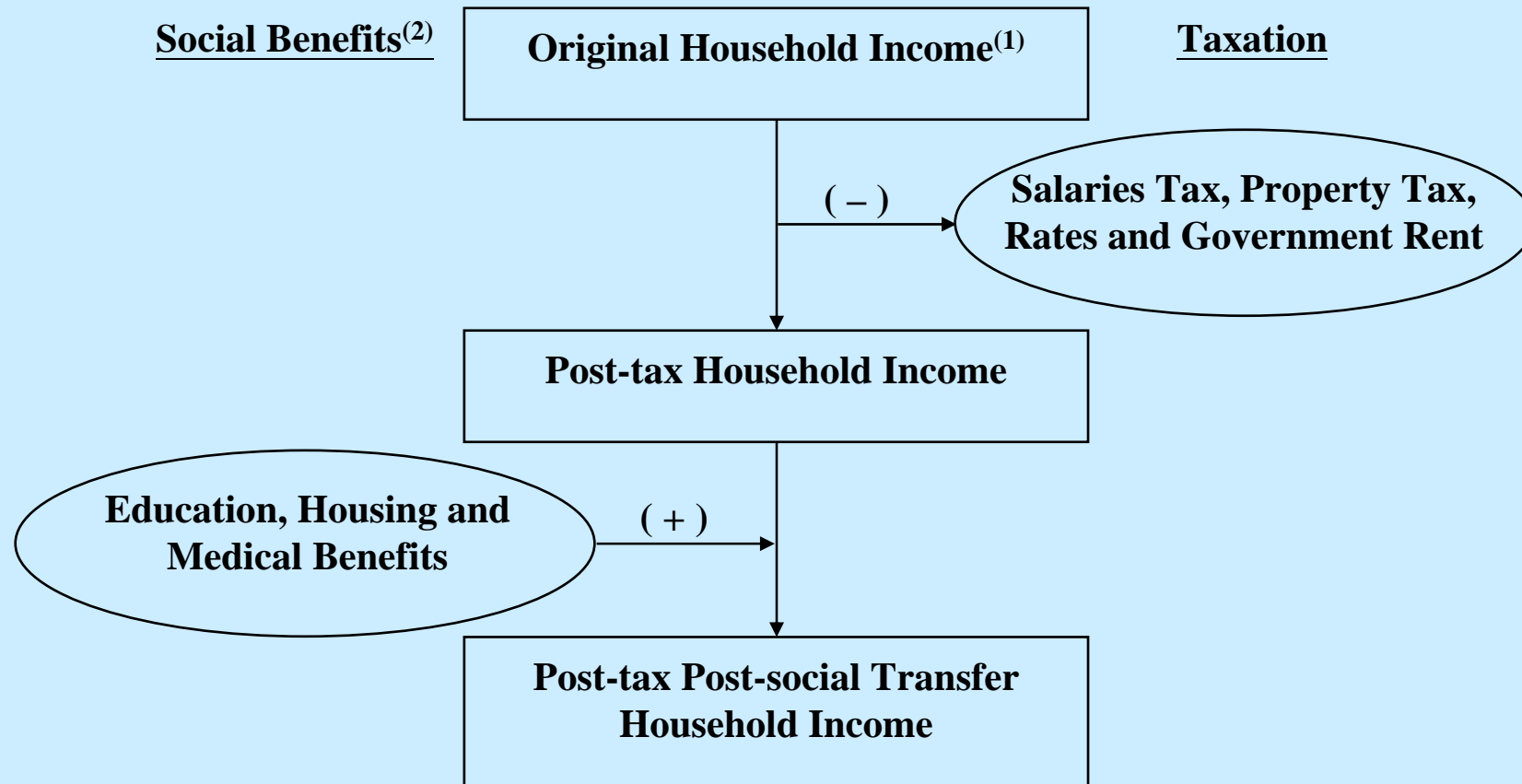


Strategy 1: More Thematic Studies

- Provide better information to the society in specific social topics of interest, comprising:
 - **Analyses on population subgroups**
 - E.g. youth, elderly, ethnic minorities, single parents, new arrivals from the mainland of China
 - **Thematic studies**
 - E.g. gender analysis & annual poverty indicators
 - E.g. Study on household income distribution in 2007 in response to the concerns of policy makers and academia in the community



Redistributive Effects of Government Intervention on Income



- Notes : (1) Referring to monthly domestic household income which includes income from work, income from investment (e.g. rental income, dividend and interest), and cash transfer.
(2) Covering such in-kind social benefits as education, housing and medical benefits.



Redistributive Effects of Government Intervention on Household Income - Household Income by Decile Group -

Decile group	Average monthly household income (HK\$)					
	1996			2006		
	Original	Post-tax	Post-tax Post-social Transfer	Original	Post-tax	Post-tax Post-social Transfer
1st	2,892	2,681 (92.7%)	5,261 (181.9%)	2,171	1,952 (89.9%)	4,909 (226.1%)
2nd	7,220	6,985 (96.7%)	10,010 (138.6%)	5,923	5,721 (96.6%)	9,303 (157.1%)
3rd	9,941	9,656 (97.1%)	12,987 (130.6%)	8,901	8,681 (97.5%)	12,438 (139.7%)
4th	12,734	12,383 (97.2%)	15,826 (124.3%)	11,881	11,634 (97.9%)	15,320 (128.9%)
5th	15,859	15,439 (97.4%)	18,783 (118.4%)	15,401	15,102 (98.1%)	18,704 (121.4%)

Note: Figures in bracket refer to the percentage to average original monthly household income.



Redistributive Effects of Government Intervention on Household Income

- Household Income by Decile Group -

Decile group	Average monthly household income (HK\$)					
	1996			2006		
	Original	Post-tax	Post-tax Post-social Transfer	Original	Post-tax	Post-tax Post-social Transfer
6th	19,276	18,706 (97.0%)	21,779 (113.0%)	19,381	18,969 (97.9%)	22,197 (114.5%)
7th	23,579	22,773 (96.6%)	25,731 (109.1%)	24,328	23,800 (97.8%)	26,786 (110.1%)
8th	29,577	28,204 (95.4%)	30,953 (104.7%)	31,258	30,294 (96.9%)	32,913 (105.3%)
9th	40,090	37,426 (93.4%)	39,695 (99.0%)	43,358	41,069 (94.7%)	43,469 (100.3%)
10th	116,020	103,759 (89.4%)	105,276 (90.7%)	115,005	102,220 (88.9%)	104,396 (90.8%)

Note: Figures in bracket refer to the percentage to average original monthly household income.



Redistributive Effects of Government Intervention on Household Income

- Gini Coefficient -

	1996	2001	2006
Original household income	0.518	0.525	0.533
Post-tax household income	0.508	0.515	0.521
Post-tax post-social transfer household income	0.466	0.470	0.475
Post-tax post-social transfer per capita household income	0.427	0.421	0.427



Study on Household Income Distribution in HK

- Increased Household Income Disparity
 - Growth in low-income households due to increasing no. of older-person households
 - Growth in high-income households due to (i) two-earner households & (ii) improvement in educational attainment
 - Reduction in average household size



Strategy 2: Leverage on strengths of the Internet

The Internet

- Convenient and efficient channel
- Support dynamic mode of dissemination
- Already a trend for government statistical offices to use it as a channel of data dissemination



Strategy 2: Leverage on strengths of the Internet

● Design of C&SD Website

- Customised corners for different users (the media, survey respondents, thematic site for census results, etc.)

● Free download policy

- Implemented since June 2006
- All C&SD publications and detailed statistical tables free of charge
- Promoting statistical literacy and informed decision making
- Downloads boosted from a few hundred per month to more than 60 000



Strategy 2: Leverage on strengths of the Internet

- Two new interactive applications to disseminate the results of 2006 Population By-census
 - “**Statistics on Map**” dashboards
 - Visualization through presenting the statistical data in a vivid manner
 - **Interactive Data Dissemination Service (IDDS)**



Strategy 2: Leverage on strengths of the Internet

● **IDDS** (August 2008)

- Free and dynamic access to detailed macro-data of the 2006 Population By-census
- Build statistical tables according to user's specification online
- Integrated data visualization tools such as charting and thematic map presentation
- A simple and user friendly step-by-step process



An example

Interactive Data Dissemination System

Building Table

Manipulating Table

Building and Manipulating Chart

Building and Manipulating Map





Interactive Data Dissemination System

2006 Population By-census

[Home](#) > [Build Table](#)

[Demonstration](#)

[繁體版](#)

[简体版](#)

[Select Variables](#)

[Help](#)

Step 1. Select Counting Unit

Please select a counting unit to build a table:

- Population
- Households
- Occupied Quarters

[Next](#)



Interactive Data Dissemination System

2006 Population By-census

Home > **Build Table**

Demonstration 繁體版 簡體版

Select Variables Help

Step 1. Select Counting Unit : Population

Step 2. Select Variables

Available Variables: Sort statistical variables by Select as Boundary Maps

Selected Variables: Reset

Statistical Variables

Demographic

Age

Sex

Marital Status

Nationality

Ethnicity

Place of Birth

Usual Language

Duration of Residence in HK

Second Language

Number of Languages spoken

Sex of Head

Nationality of Head

Educational

Economic

Housing

Geographical Breakdowns [\[Boundary Maps\]](#)

Broad Area

New Town

District Council Districts (DC)

District Council Constituency Areas (DCCA)

Large Tertiary Planning Unit Group, Small Tertiary Planning Unit Group

Small Street Block Group

Selected Variables:

Column

Row

Counting Condition

Glossary



Interactive Data Dissemination System

2006 Population By-census

Home > Build Table

Demonstration 繁體版 簡體版

Select Variables Help

Step 1. Select Counting Unit : Population

Step 2. Select Variables

Available Variables: Sort statistical variables by Boundary Maps

Statistical Variables

Selected Variables: Reset

Selected Variables:

Column

Broad Age Group (4G)

Marital Status (2G)

Row

District Council / Constituency Area

Coexisting Condition

Sex

Geographical Breakdowns [\[Boundary Maps\]](#)

1. Not every combination of the statistical variables is allowed to build a table. If a required variable is not available for selection after you have selected some variables, please try first to choose other groupings of the selected variables, in particular those with a broader breakdown. In case you still fail to build the required table from the system, you may contact the Demographic Statistics Section of the Census & Statistics Department for the table (tel: 2716 8345; email: population@censtatd.gov.hk).

Glossary

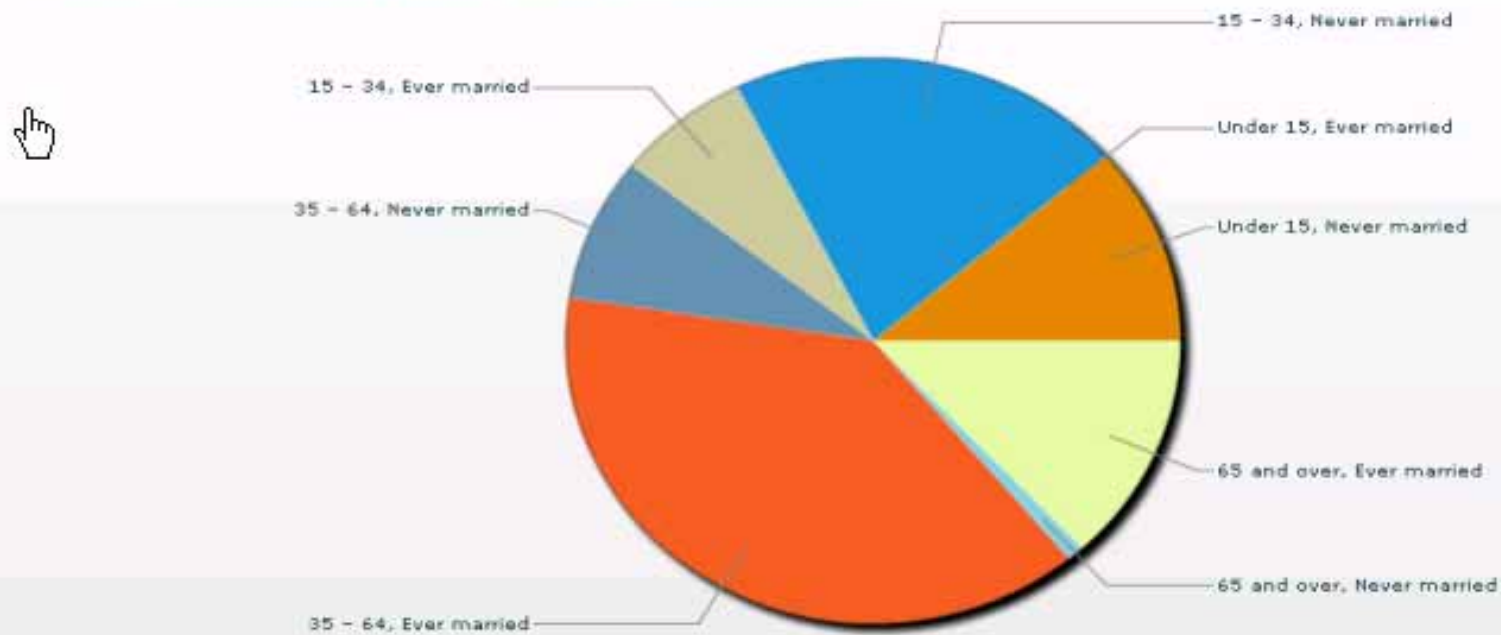


Hong Kong Resident Population (HKRP) by Broad age group (4G), Marital Status (2G), District Council / Constituency Area, 2006 [Footnote:(1)]

Broad age group (4G)	Under 15		15 - 34		35 - 64		65 and over	
	Never married	Ever married	Never married	Ever married	Never married	Ever married	Never married	Ever married
District Council / Constituency Area								
Central & Western - Chung Wan	1 791	-	3 313	1 116	1 294	6 078	142	-
Central & Western - Mid Levels East	2 393	-	3 582	1 216	2 154	7 667	143	-
Central & Western - Castle Road	2 707	-	3 171	1 612	1 678	7 603	130	-
Central & Western - Peak	3 546	-	3 364	1 569	1 559	9 267	80	-
Central & Western - University	2 151	-	3 990	1 270	1 429	7 727	150	-
Central & Western - Kennedy Town & Mount Davis	2 142	-	3 264	1 185	1 003	5 090	110	-
Central & Western - Kwun Lung	1 355	-	2 667	799	1 310	4 495	49	-
Central & Western - Sai Wan	1 778	-	3 419	1 156	1 139	6 165	70	-
Central & Western - Belcher	2 979	-	4 391	1 881	1 511	8 679	91	-
Central & Western - Shek Tong Tsui	1 939	-	3 808	1 069	1 218	6 138	140	-
Central & Western - Sai Ying Pun	1 849	-	3 878	1 460	1 349	6 786	196	-
Central & Western - Sheung Wan	1 861	-	3 969	1 327	1 301	6 406	110	-
Central & Western - Tung Wah	1 395	-	2 667	965	1 476	4 567	40	-
Central & Western - Centre Street	1 540	-	2 608	970	1 219	4 679	120	-
Central & Western - Water Street	1 950	-	3 195	916	1 219	5 733	91	-
Wan Chai - Hennessy	1 154	-	2 946	1 028	892	5 829	71	-
Wan Chai - Oi Kwan	1 220	-	2 919	660	1 367	5 521	106	-
Wan Chai - Canal Road	1 472	-	3 163	1 151	1 599	6 306	102	-
Wan Chai - Causeway Bay	960	-	3 281	992	1 616	4 920	184	-
Wan Chai - Tai Hang	1 658	-	3 199	858	1 460	5 440	217	-
Wan Chai - Jardine's Lookout	1 981	-	2 570	895	1 003	6 394	112	-
Wan Chai - Broadwood	2 112	-	2 815	1 023	1 052	5 616	125	-
Wan Chai - Happy Valley	1 151	-	2 642	1 360	1 362	5 202	138	-
Wan Chai - Stubbs Road	1 760	-	2 440	848	1 343	6 017	56	-



Hong Kong Resident Population (HKRP) by Broad age group (4G), Marital Status (2G), District Council / Constituency Area, 2006 [Footnote:(1)]



Legend

- | | | |
|-------------------------|------------------------|------------------------|
| Under 15, Never married | Under 15, Ever married | 15 - 34, Never married |
| 15 - 34, Ever married | 35 - 64, Never married | 35 - 64, Ever married |



Interactive Data Dissemination System

2006 Population By census

Home > Build Table

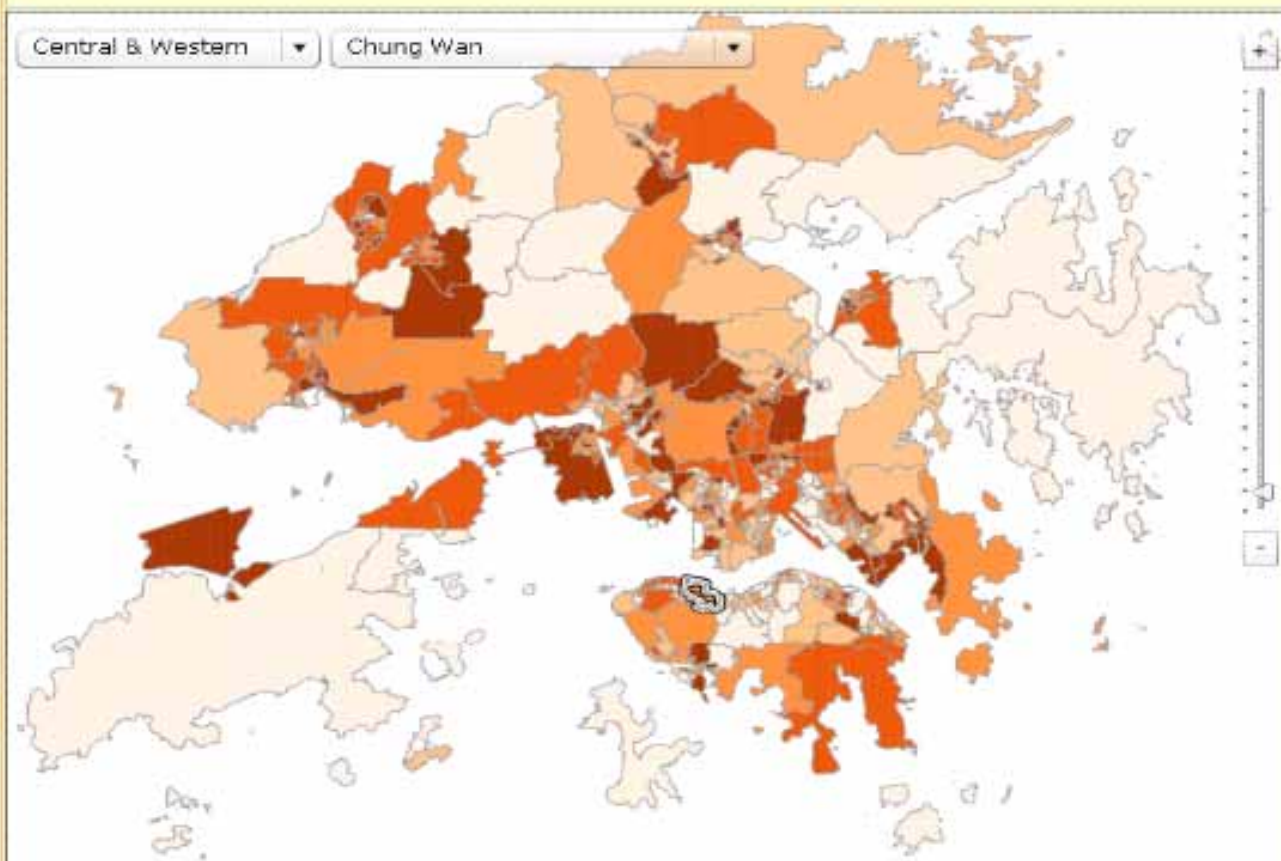
Demonstration 繁體版 简体版

Select Variables Table Chart **Map** Help

Hong Kong Resident Population (HKRP) by Broad age group (4G), Marital Status (2G), District Council / Constituency Area, 2006 [Footnote:(1)]

Central & Western

Chung Wan



Chung Wan

Hong Kong Resident Population (HKRP)
3 313

Colour Theme Brown

Colour Range

Colour	Range
1	< 2 831
2	2 831 - <3 274
3	3 274 - <3 761
4	3 761 - <4 481
5	>=4 481

Edit



Strategy 3: Public Sector Engagement

- **Inter-department Coordinating Committee on Population and Related Statistics (ICC)** set up in 2007
 - Chaired by the Commissioner for Census and Statistics
 - Senior officials from different government policy bureaux and departments as members
 - A channel for users to express data requirements



Strategy 3: **Public Sector Engagement**

● Objectives

- Coordinating data demands within the government
- Sharing data collection efforts
- Prioritising competing needs

● Other benefits of ICC

- Increase data ownership
- Promote proper usage



Strategy 3: Public Sector Engagement

● How C&SD can be benefited

- Better understand the data needs of policy makers
- Balance the competing needs of different parties
- Facilitate the role of C&SD as data compiler in obtaining related administrative data from other government departments



Strategy 4: Partnership with business

- Business community better understands market needs, thus promotes innovative use of statistics
- Leverage on strengths of business
 - Extensive/worldwide business network maintained by business partners) Enrich client base
 - With additional resources Overcome government resource constraint
- Fewer rules and standards, thus more flexible and timely deployment



Strategy 4: Partnership with business

- Some successful data applications
 - GIS application with a property agency
 - Formation of building group statistics based on census data
 - Online dissemination
 - Classification of customer segments with a marketing intelligence company
 - Advanced cluster analysis techniques
 - Classify local neighbourhoods into “upper echelons”, “emerging middle class”, “grass roots living”, ...
 - Small area statistics on the website of an online business directory



Census

Census & Statistics Department -
[Street Block](#) | **[Building Group](#)**
[Copyright](#) | [Disclaimer](#) | [Introduction & Definitions](#)

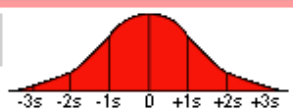
Demographic | Education | Economic | Household | **Housing / ...**

Household size
[1-3 persons](#) | [4 persons](#) | [5 persons and above](#) |
[Average household size](#)

Composition
[One person family](#) | [One unextended nuclear family](#) |
[Extended nuclear family & others](#)

Household income
[Upper quartile](#) | **Median** | [Lower quartile](#)

A B C D E All



10 record(s) found, (listed in descending order of **median monthly domestic household income**):

HK\$52705	WS0217: (Diamond Hill) Lung Poon Street - Galaxia Tower A-C (1990's)
HK\$50000	WS0218: (Diamond Hill) Lung Poon Street - Galaxia Tower D-E (1990's)

Community Centre |



10 20 30 40 m

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Strategy 5: Assistance to researches of external parties

- Easy, convenient and quick access to official statistics
 - IDDS enabling customisation of tables from the results of the 2006 Population By-census
 - Publications available free on the C&SD website
 - Standard tabulations available in electronic formats
 - Statistics at more detailed level than standard tabulations available upon request



Strategy 5: Assistance to researches of external parties

- Access to the sample datasets by external researchers
 - Identifiers removed
 - Other information coded (e.g. type of residents and district of residence)
- Access to full census dataset
 - Self-help tabulation service at the premises of C&SD
 - Provide computer programmes and request C&SD to apply them to the full dataset



Concluding Remarks

- On the tactical front
 - Multi-channel mode of information delivery
 - Leverage on the strengths of others
- On the methodological front
 - Further integrate/reconcile the population and household survey statistical systems
- On the technical front
 - User centric, business driven and ICT enabled



