Knowledge Management – The Case of the Population and Housing Census

Caribbean Thematic Conference: Managing a Statistical Organisation in Times of Change

Barbados, 25 – 27 November, 2019
Overview

- Introduction
  - The Regionally-Coordinated Approach to Census-taking in CARICOM
  - The Regional Strategy for the Development of Statistics and the Regional Census Strategy – as a basis for an Integrated Statistical System and Innovations

- Knowledge Management relative to the Census:
  - Key Uses of Census Data - Human Capital, SDGs, Strengthening of National Statistical System (III, IV, VII, VIII, XI); Census and Data Visualisation – Use of GIS (VIII). Changes in the way of conducting Census- expanded use of CAPI and Regional Online Census Portal (V, XIV).

- Use of Population Registers and the Census (XIV)
• Member States and Associate Members will commence the conduct of the 2020 Round of Population and Housing Census from May 2020 and continuing in 2021 and 2022:

• [Barbados, The Bahamas], Belize, Saint Lucia and the Cayman Islands are scheduled to conduct their Census exercises in 2020

• The CARICOM Secretariat traditionally prepares a Regional Census Strategy to coordinate and support countries in the conduct of their Census;

• The Census in its own right underpins the development of an integrated National Statistical System and should find its rightful place in the Handbook;

• On the other hand, CARICOM countries are expanding or commencing the use of IT-based/ innovative approaches, inter alia - CAPI, LIDAR/Satellite Imagery/Drones, Online web-based facility for execution and Regional Coordination of Census/ Support to countries.
The Proposed Schedule for the Conduct of the 2020 Round of Population and Housing Census for 18 of the 20 CARICOM countries is:-

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NO. OF COUNTRIES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>5</td>
<td>[Barbados], Belize, [The Bahamas], Saint Lucia, Cayman Islands</td>
</tr>
<tr>
<td>2021</td>
<td>10</td>
<td>Antigua and Barbuda, Dominica, Jamaica, St. Vincent and the Grenadines, Grenada, Montserrat, St Kitts and Nevis Anguilla, British Virgin Islands, Trinidad and Tobago</td>
</tr>
<tr>
<td>2022</td>
<td>3</td>
<td>Suriname, Guyana, Turks and Caicos Islands</td>
</tr>
</tbody>
</table>
CARICOM has a long tradition of using a regionally-coordinated approach to Census taking dating back to the post-emancipation period (1840);

The current more formalised approach commenced in 1980 with the recommendation by the Commonwealth Statisticians Conference to the Community Council of Ministers of CARICOM to establish the Regional Census Coordinating Committee (RCCC);

The RCCC reports to the *Standing Committee of Caribbean Statisticians* that was established by the Common Market Council in 1974 and endorsed at the Inaugural Meeting of the Conference of Heads of Government of CARICOM in that same year;

The CARICOM Secretariat has been mandated by the Community Council of Ministers (Council) since the 1980 Census Round, to organise and coordinate the meetings of the RCCC and to develop and execute a Regional Census Strategy to support all CARICOM countries.
The regionally coordinated approach is well established and a proven strategy for the use of uniform concepts and definitions, common core questions on the census questionnaires which will be used by all countries.

Collaboration among International Development Partners (IDPs) and with the CARICOM Secretariat is a key feature of regional coordination.

The regional approach to census taking is situated within the wider regional integration efforts of the Community, namely functional cooperation;

It recognizes the value of economies of scale that can be achieved in coordinating for the census, in working together to solve common problems, facilitating a rich exchange of experiences and best practices, undertaking regional training and networking and technical and material support among countries and through the Secretariat.
The regionally-coordinated approach has some important benefits including:

- Significant *cost savings* resulting from the sharing of facilities, expertise and other resources;

- the opportunity to identify and examine common census problems and to have collective inputs in devising strategies for their solution;

- the comparability of the census data for participating countries, achieved through the use of a common questionnaire and other instruments of data collection, including a common core of questions, and uniform concepts and definitions;
The overall objective of the Regional Census Strategy for the 2020 Census Round is to provide support in enabling the availability of timely, high quality and comparable Census Data for Planning and Decision-Making in the Caribbean Region from the conduct of the Population and Housing Census 2020 Round.

Key Results to be achieved include:

- Census Management and organisation: a Project Management Framework prepared with relevant Manuals and training conducted;
- Mapping preparation and GIS: a common approach to mapping developed and training delivered;
- Data Capture and Processing: Preparation of a management framework in the use of Computer Assisted Personal Interviewing (CAPI) produced and Training delivered/good practices identified to enable readiness for the use of IT-based and innovative data capture method in the Census;
- Upgrading of the web-based regional census-e-portal to incorporate existing data sets and a GIS enabled system;
- Preparation of census dissemination products including user-friendly briefs and analytical products, national census reports and regional special topic monographs prepared;
Location of Census within the CARICOM RSDS – Highlights of Strategic Priorities/Drivers:

Census and Integrated Statistical System

- The CARICOM RSDS incorporates as a vital activity the Population and Housing Census as an integrated programme that is a key source of data for the entire national statistical system;

- As an integrated programme the Census provides benchmark data for other supplementary data sources, and for the establishment of sample frames for household and establishment surveys, conducted during the inter-censal years.
RSDS and the Regional Census Strategy

Location of Census within the CARICOM RSDS – Highlights of Strategic Priorities/Drivers:

1. Census and Innovation

The Census provides opportunities for enabling the pursuit of innovations in statistics including in Information Communication Technology: relative to the use of state-of-the-art approaches to collecting, processing, analysing and disseminating the census results.

Example of these include:

- The use of technologies in data capture such as scanning software applications,
- Computer Assisted Personal Interviewing (CAPI), online data collection,
- Methodological approaches to collecting data on Persons with Disabilities and on Unpaid Housework and Care;
- Use of LiDAR (Light Detection and Ranging) technology, Drones and Satellite Imagery in Mapping;
- Geospatial data through the incorporation of GIS;
- Innovations in deriving and Urban-Rural dichotomy (based on developmental work in Dominica).
Knowledge Management relative to the Census

- Highlights of Analytical Uses of Census

- Human Capital Development:
  - The Census provides accurate, timely and reliable information on the human capital of countries, including at the level of small geographic areas, as well as for CARICOM as a whole to inform evidence-based policies/interventions;
  - It is a valuable asset in the monitoring of Human Resource Development (HRD) strategies by providing information on Education, Training, Economic Activity and other concerns and issues that are related to human capital.
  - Provides the basis for monitoring of changes in population growth relative to the stage of the population of a country’s demographic transition due to changes in birth and/or death rates;

- Sustainable Development/SDGs/GIS:
  - The Census provides the basis for measuring Sustainable Development, including the main characteristics of the population and housing stock such as: Education, Health, Economic Activity, Geographic and Migration Statistics, Fertility levels and Mortality;
  - With regard to the housing stock, the census provides information on the type and state of the living quarters, the ownership/tenure, number of rooms, the main source of drinking water, among other characteristics;
  - This data can be used in the assessment of family structures, living conditions of households, access to/use of ICTs and in baseline analysis of special population groups such as persons with disabilities,
  - It is critical in identifying populations/housing units most of risk in the event of a natural disaster.
Knowledge Management relative to the Census

- Census Data dissemination/coordinating:

- Dissemination:
  - Upgrading of Census –e-portal (CDB supported);
  - Use of Redatam at the National Level for data dissemination as well as successor applications to CensusInfo/DevInfo;
  - Analysis of Census Data
Knowledge Management relative to the Census

- Census Data dissemination/coordinating:

- Development of an **Online Census Facility** to support the implementation of the Census Strategy:
  - Networking - **Blog** for exchange/interaction on Census issues
  - Knowledge base component - **enable knowledge development** – availability of census manuals and guidelines
  - IDPs- **coordinating** request for support on Census
  - In addition a WhatsApp mechanism for mobile contact of the CARICOM Census group of census personnel.
Knowledge Management relative to the Census

- Use of Population Register:

- This issue has been debated at CARICOM Meetings including whether these methods are fully-compliant with the essential features of a Census in terms of – Individual Enumeration, Universality within a defined area, Simultaneity and Defined periodicity.

- Consideration must also be given to - Statistical Registers versus Administrative Registers and this issue was recently brought to the attention of CARICOM relative to a Government Ministry verbally requesting that a consent form for individuals responding to the census be appended. This issue has been posted on the blog and countries/IDPs are encouraged to read and post.

- Consideration of the reverse scenario, that is, access to Administrative data for statistical purposes that must be given by law can be used in the development of the population register.
The Secretariat proposes inclusion of the following re the Census in the Handbook Chapters indicated:

- Census as a *core programme* underscoring an *Integrated Statistical System* across the entire National Statistical System – in terms of a key data source – *[Data sources, collection and processing in Handbook]*;

- It therefore effectively impacts almost all areas of the Handbook – *[Self-explanatory]*;

- The Secretariat recommends – leveraging lessons learnt and best practices from the Census in specific areas of the Census including:
  - Innovations such as in *CAPI data capture* *[Data collection and capture modes, Information technology management]*;
  - Innovations in *mapping/ GIS* *[Geospatial data, LiDAR, Satellite Imagery, Drones]*
Conclusions

The Secretariat proposes inclusion of the following re the Census in the Handbook Chapters indicated:

- Leveraging lessons learnt and best practices from the Census in (continued):

  - Analytical value of census data **[Methods and systems of analysis]**;

  - IT-based dissemination mechanisms-such as Census e-Portal, Redatam **[Dissemination by data portals, Information technology management, Basic information technology infrastructure needs and skill requirements]**;

  - CARICOM Regional Online knowledge base /census support facility **[Data, information and knowledge management as it pertains to the Census, Basic information technology infrastructure needs and skill requirements]**

  - Development of methodological innovations such as Urban-Rural Classification **[Methods and systems of analysis]**

- Population Register-based Census- Statistical Registers **[Data sources]**
QUICK DEMO ON REGIONAL ONLINE CENSUS FACILITY
The End