

# Basic Training: Surveys Skills Development Course (SSDC)

## A First Step in the Bureau of Statistics (Guyana)

Attempting to Transition From a  
Traditional 'Silo' Approach to a 'Team  
Mobile' Approach (Statistics Canada)



**Presentation - Monday 16<sup>th</sup> November, 2015**

# Background & Introduction

The Bureau of Statistics (Guyana) is Guyana's Central Statistical Office. Guyana (pop: 747,884 – Census 2012 prelim.) achieved its Independence from the United Kingdom (UK) in May 1966 and is located on the north eastern shoulder of the South American continent. It is the only English speaking country on the South American continent.

Maps **1a** and **1b** that follow summarize Guyana's geographical location on the South American continent and relative to the rest of the Caribbean of which it is an integral part.

# Background & Introduction (cont'd)

Guyana is divided into ten (10) Administrative regions with the capital city Georgetown lying on the coastland. There are six (6) Coastal regions on the narrow coastal belt, the rest being Interior regions. Access from coastland to interior is very costly and challenging, a pertinent factor in all surveys.

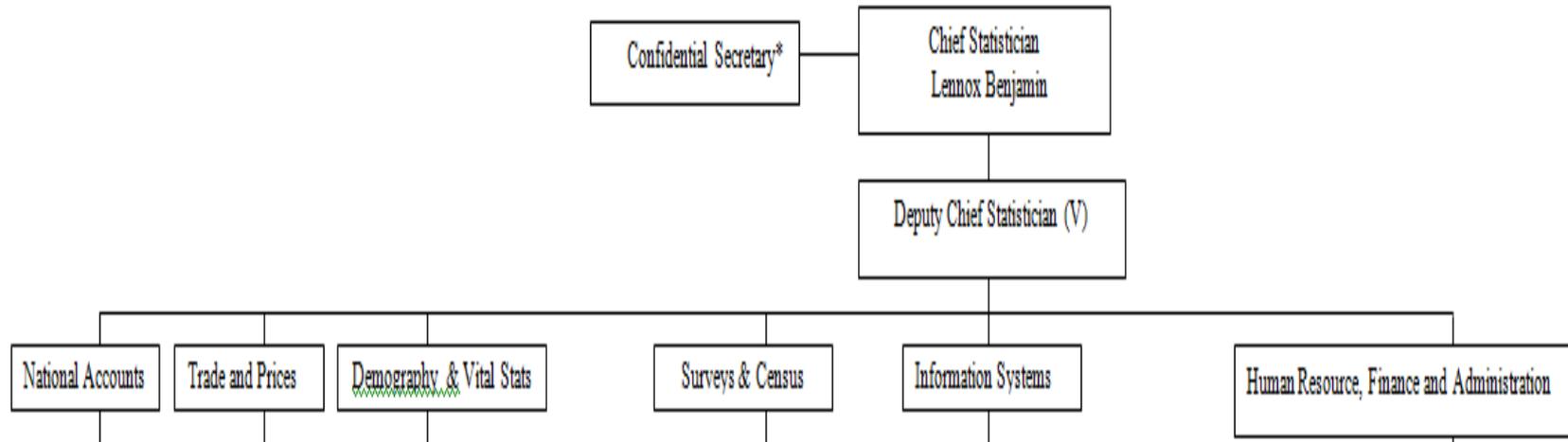
Guyana is also defined by its vastness of size relative to its CARICOM countries as depicted in map **1a**.

# Caribbean Guyana



# Background & Introduction (cont'd)

The Bureau established as a Department of Government in 1957, was incorporated as a semi-autonomous agency in October 1990. It has an establishment of 125 staff divided into six (6) main streams as shown below.



# Background & Introduction (cont'd)

Constraints both physical and skill-related have resulted in only 64% (80 staff) being on average employed at any period of time since establishment as a semi-autonomous agency.

Statistics offices like Guyana and other sister CARICOM offices, constrained by under-staffing are forced to stream their limited staff in the operational areas shown above for their entire or most of their entire careers at the offices. This 'Silo' approach is high-risk, the Bureau, for example lost its Head of National Accounts, in April 2013, after a sixteen (16) year career entirely in National Accounts resulting in an abrupt and sudden void.

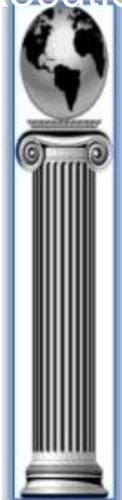
# A Strategy for Change

Preceding the example just given of the potential dangers of a 'Silo' approach, in November, 2012 the Chief Statistician and one (1) other Senior Officer, had the benefit of attending the International Statistical Fellowship Program (ISFP) forum hosted by Statistics Canada, at its headquarters, in Ottawa. One (1) area that impacted most and which we realized that we needed to initiate immediately was a movement away from our historical 'Silo' approach to the 'Team Mobile' approach practiced by Statistics Canada. The commitment was hastened on our return by the loss of the National Accounts Head and the vow to avoid such a recurrence.

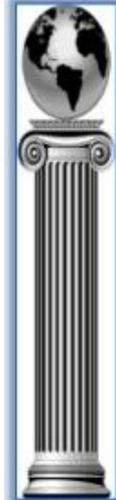
# “How does the SSDC fit in to the new thinking of adopting a “Team Mobile Approach?”

It is my unswerving contention, that a modern statistical office regardless of its size must operate on the basis of **three (3) foundation pillars** in which all staff must be proficient.

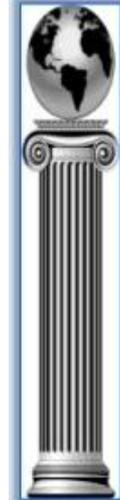
Surveys  
Design &  
Execution



Information  
Technology



Proficiency in  
Data Analysis



# “How does the SSDC fit in to the new thinking of adopting a “Team Mobile Approach?” (cont’d)

Looking at the first pillar, Guyana has a grossly under-developed system of administrative registers, so the reality is that for the medium to long term, Surveys Design and Execution will continue to be a major tool in the collection of data. This being so, we realized that both by constraint of the ‘Silo’ approach and the shortage of total skill-levels available in the Surveys Department, our number one (1) foundation pillar needed a lot of foundation work. Of the 64 staff on payroll, just about eleven (11) are assigned fulltime to surveys. When there is a national survey, staff are augmented by temporary appointees with the permanent staff serving as trainers and supervisors.

# “How does the SSSDC fit in to the new thinking of adopting a “Team Mobile Approach?” (cont’d)

The strength of the Surveys Unit, established in 1992, lies exclusively in the field execution of the survey instrument. However, it is woefully weak in the areas encompassing field execution, that is, surveys design including sample size determination that precedes execution and the analysis of the data after the field execution is complete. In all surveys since 1992, those two (2) important components have been contracted out. Just one (1) person, the Head of Department, has had any significant exposure and the development of expertise in surveys design and analysis.

# “How does the SSSDC fit in to the new thinking of adopting a “Team Mobile Approach?” (cont’d)

The intent to adopt the ‘Team Mobile’ approach and the identification of the Surveys Department as the priority area for development meant that before any consideration could be given to wider staff from other departments/units being exposed to work in the Surveys Department, they together with current Surveys staff had to be given the necessary skills training in the area of Surveys, the type that is mounted by Statistics Canada for its new entrants and during the course of their careers. Statistics Canada was therefore invited to pioneer such a training with the ultimate objective of developing a wider skill base in that area thereby giving Management the ability to move staff in and out of the Surveys Unit.

# Strategy of Implementation

To expose the widest cross-section of staff to the proposed training, the **first** challenge was to find a convenient time slot for training to accommodate the temporary reassignment of all staff selected from their normal duties. This period was determined to be within the **31-day period 6<sup>th</sup> November to 6<sup>th</sup> December**. Based on this determination, the decision was made with the StatCan Instructors to structure the training in three (3) parts viz:

**Part 1** – A period of 3 weeks from 18<sup>th</sup> November to 6<sup>th</sup> December dedicated to Classroom Labs:

encompassing all aspects of a survey from beginning to end, including field work preparations and visit to an eventual target area for survey training in the field.

# Strategy of Implementation (cont'd)

**Part 2** – Instructors return home over the December / January period and actual field enumeration take place in January, data edited and a predetermined set of tables run. Enumeration during January. The actual planning (Lab sessions) resulted in a predetermined sample size of 500 households due to constraints of time and resources. Enumeration subsequently took place on the 6<sup>th</sup> to 17<sup>th</sup> January in an area bordered by two (2) villages, Patentia and Bellvue. Data cleaning and running of tables were effected by IT staff during period 18<sup>th</sup> January to 9<sup>th</sup> February.

**Part 3** – The Consultants to return and conduct an intense one (1) week training in data analysis based on the tables generated. This was conducted by the Consultants in the work-week 10<sup>th</sup> to 14<sup>th</sup> February.

# Strategy of Implementation (cont'd)

Based on the above training plan, the **second** challenge was to determine a critical mass of staff for training, to make the efforts of the Instructors from Canada meaningful, while ensuring that the mandatory outputs of the office were not compromised. This number was determined to be **20 (25% of employed staff strength)** but **all staff selected had to commit to return to their desks at the end of every training day to check and clear any outstanding work or attend to any new/outstanding work.**

The **third** challenge, in preparation for the final phase of training that would target **data analysis**, was to ensure exposure of all selected staff to training or retraining in at least one (1) basic statistical package ahead of the training.

# Strategy of Implementation (cont'd)

Such training was done locally (on the SPSS package) during the period 6<sup>th</sup> to 11<sup>th</sup> November. Lab training commenced a week later on the 18<sup>th</sup>. The composition of the 20 participants, with respect to the six (6) operational areas shown at slide five (5) above were as follows:

- Surveys Department = 8 (1 since deceased)
- Demography = 4
- IT = 3
- Nat. Accounts = 3
- Trade & Prices = 2

# Strategy of Implementation (cont'd)

All 20 saw through the training from start to finish, so from Management's point of view, it was important to gauge the reactions of the participants. An opinion survey was conducted among the 19 remaining participants to determine:

- Their assessment of the materials and documentation prepared and delivered by the Instructors for the Course on a scale of 0=Poor to 10=Excellent. **Average Grade given = 8.32**
- Their rating of the quality of delivery of instructions by the Tutors on the same scale as above. **Average Grade = 8.37**
- The 12 participants who were not from the Surveys Department were asked whether the training widened their understanding of the basics of Sampling and Survey Design on a Scale of 0=Not at all to 10= Very Much. **Average Grade = 7.83**

# Success Factors And Challenges

The heartening response to Questions 1 to 3 were further bolstered by the clear indication by all participants that the training sparked an enthusiasm that made them want to go much further in the field of Survey applications. Survey staff indicated that they were exposed for the first time to areas of sampling techniques not known before. Non-survey staff that a substantial hole in their basic knowledge and understanding had been filled.

Expectedly there were shortfalls. The biggest was that participants did not get an opportunity to apply their new found knowledge to a live survey. In the aftermath of Census 2012 there was no immediate Survey activity. Those who did get an opportunity were as a result of ad hoc involvement in Surveys conducted by other ministries/departments.

# Success Factors And Challenges (cont'd)

Participants unanimously felt that the course was just too short and the particular areas of disappointment were:

- 1. At least an extra 2 weeks were needed for the areas of Sampling Techniques and determination of Sampling Weights to be fully mastered and an extra week for data analysis.**
- 2. In the material presentation, more illustrations and examples were necessary to facilitate hands-on practice.**
- 3. A greater inclusion of Guyana data sets and conducting of training on same was preferable (no fault of the Instructors) and**
- 4. The most resonant complaint was that because in the preparatory work in the design of the survey the class was divided into two (2) equal groups (for practical purposes), no single participant could be exposed to all aspects of the survey and sample design in the time available.**

# The Next Steps

The enthusiasm of staff for a further (continued) component of training is more than obvious, including a refresher on what had been already covered. However another training stint should not be mounted until:

- The Bureau is ready to start its own Survey programmes based on an updated population frame from the last Census of 2012. This should be circa: mid-2016. Training should be based on a real Survey to take the field and be a part of the Survey design and preparation.
- Within the delivery of training, some long-term serving members should be identified as 'Trainer of Trainers' and possibly be even given further exposure in training skills in order to return and train staff at the Bureau or partner with StatCan tutors.

# The Next Steps (cont'd)

- I consider that given the similarity of organisational structures of CARICOM Statistics Offices and similarities of organisational weaknesses, this SSDC template with marginal adjustments as identified is the ideal for adoption for other CARICOM Offices. Not only would it allow for similar institutional building and 'Team Mobile' capacities in other CARICOM offices, but it would facilitate the building of a cadre of eventual expertise in Survey Skills allowing for South-South skills transfer and technical support in that critical area among CARICOM countries and wider.
- Even though this has been one first and short step in capacity building and setting the platform for 'Team Mobility', achievements so far have been as a result of the work of two (2) excellent tutors, Messrs. Gavin Thompson and Hew Gough, whom staff really look forward to return again.



**THE END**

**THANK YOU!**