Introduction

The Barbados Population and Housing Census was conducted in 2010 by the Barbados Statistical Service (BSS). Census day was 1st May 2010, with the actual enumeration starting on the 2nd of May 2010 and extending until the end of August 2010. Subsequently, the Department’s field staff continued additional field work to finish some incomplete areas. All field work was concluded around October 2010.

The majority of the processing staff for the Census Office commenced work from September 2010. The contract term for these temporary staff was extended from their termination date of 2011/06/30, to the end of September 2011. Some of these staff were re-engaged in January 2012 until the end of April 2012. However, the data capture was not concluded by that time.

Some permanent BSS staff were deployed to finish the data capture. This exercise was concluded at the end of July 2012. The processing task continued afterwards - i.e. data editing and cleaning. After the production of the initial tables, the need for additional data editing and data cleaning became evident. This process extended into 2013.

The resignation of the Department’s IT Officer during 2011 and the loss of the Census Office temporary staff contributed to delays in the final processing of the census results.

The Census publication was finalised and presented on the Department’s Website on 2013/10/15, Caribbean Statistics Day.
Challenges

Challenges were encountered at the enumeration phase, the post-enumeration phase, the data verification phase, the data editing and data cleaning phase and the tabulation phase of the 2010 Census. The major ones can be categorised as follows.

- Shortage in the recruitment of enumeration personnel: 568 enumerators were assigned to EDs at the start of the exercise, while 583 EDs existed. The shortfall of 15 EDs was covered by enumerators who finished their assignments early. There was also attrition of the temporary staff. This contributed to the extension of the time taken to complete this phase.

- Inadequate stock levels of questionnaires during the enumeration: this was a result of breakdowns in the designated local printing press. In addition, there were resource shortages during the Department’s in-house printing of the majority of the Census questionnaires.

- Inclement weather also wreaked havoc with the timing of the enumeration process; causing the extension of the enumeration period beyond 2010/06/30, the original ending date.

- The discovery and correction of errors, during the data capture and processing phase of the Census, significantly slowed down the processing of the Census.

- The loss of our Census Office staff at the end of September 2011 and again at the end of April 2012, contributed to delays in the completion of the data capture and the processing of the Census results.

- With the loss of a trained IT Officer during 2011, and the Census Statistician going on training leave from 2012-2013, processing was dependent on the services of the 1 remaining IT Officer in the Department. Thus, a shortage of skilled resources, coming to the end of the processing exercise, contributed to the extended delays in the final production of the Census publication.

Issues

Some issues that became apparent during this Census were the following:

- Increasing uncooperativeness of the population, compared to past Censuses; the undercount was estimated at 18% (compared to 5% in 2000).
- Concurrent household surveys (by other agencies) were in the field, or being concluded, just before the start of the 2010 Census enumeration. This information was discovered by Census enumerators during the enumeration.
These phenomena resulted in a noticeable increase in the non response during the 2010 Census. That is, the difference between the tabulated population and the estimated population.

**Solutions implemented**

The Department had to use staff members, from other areas of the office, to complete the data capture exercise.

Some data consistency checks, on age, sex and relationship to head, were instituted at the database level, before ED files were exported to CSPro; and continued as each ED was verified and the database updated. However, after the database was completed, additional data editing and cleaning was undertaken, using information from other administration sources (e.g. electoral register).

In the future, additional publicity would be required to sensitise users and householders about the need for their cooperation as respondents in any census, in order to improve the census response rate and the reliability of census results.