CENSUS MANAGEMENT AND PLANNING WITH THE USE OF GEOGRAPHIC INFORMATION SYSTEM

This paper serves to outline the procedures followed in STATIN for Census Management and planning with the use of GIS.

The Statistical Institute of Jamaica (STATIN) has responsibility for the conduct of all Censuses in Jamaica. This is executed through the work of the Division of Censuses, Demographic and Social statistics under the management and guidance of the Director of the division. Planning for any Census in Jamaica begins approximately two years prior to its implementation. All related activities are streamlined and scheduled in accordance with agreed timelines to meet the desired objectives.

One of the main activities which drives the census and accounts to a large extent for its success is the Mapping. STATIN has extensive experience in the provision of maps for use in both censuses and surveys which have been carried out for over six decades. The production of these maps has largely been done manually. This continued even up to the 2000 Round of Population and Housing Censuses. Subsequently however, there has been a drive to modernize the generation of maps and this has resulted in the use of Geographic Information System (GIS) in a limited way, for the mapping activities related to the Census of Agriculture 2007.

In STATIN, the Geographic Services Unit is largely responsible for supporting the proper and efficient collection of data through the provision of advice on geographically related matters, the development and design of cartographic products as well as graphical representation of the data where required.

For the Agricultural Census, GIS was used to capture, maintain and produce maps used for data collection. This application and use of the GIS was limited to

the production of a selected group of maps in preparation for the Census. The GIS was not utilized to perform analysis or used for dissemination of data.

For the implementation of the Agricultural Census the island was divided into several Administrative Regions. There were seven (7) **AREAS** and each Area was divided into **SUPERVISORY ZONES**, totaling eighty seven (87) with a further division into **Enumeration Districts** numbering three thousand two hundred (3,200). Each of these units required that maps be provided for proper coverage. There were therefore maps for Interviewers, Supervisors and Managers to reflect coverage of Enumeration Districts (EDs), Supervisory Zones and Areas.

The preparation for the Census relied both on manual and digital forms of mapping for the creation of several mapping products. Three thousand two hundred (3,200) individual Interviewer (ED) Maps were produced manually while the GIS was used to produce the higher order census maps for the levels of Supervisor and Area Manager. The Area and Supervisory Zone Maps were done by digitizing from the 1:50,000 map sheets. Map sheets were acquired from the mapping department of the National Land Agency (NLA)

For the 2010 round of Population and Housing Censuses, the Geographic Services Unit is aiming to implement full use of the GIS in the management of the mapping component of the Census in Jamaica. To achieve this however, extensive training of the staff is required and this needs to be done as early as possible.