Sixth Management Seminar for the Heads of National Statistical offices in Asia and the Pacific

(28 – 30 May 2007, Hong Kong, China)

G.Y.L. Fernando.
Director (Sample Surveys),
Department of Census & Statistics,
SRI LANKA.
Sixth Management Seminar for the Heads of National Statistical offices in Asia and the Pacific

28 – 30 May 2007, Hong Kong, China

1. Introduction:

Department of Census & Statistics (DCS) as the Central agency responsible for collection, analysis and dissemination of Statistics in Sri Lanka, very well recognized the importance of using Information and Communication Technology, (ICT) for providing high Quality data in a timely manner. Our institution was one of the few institutions in Sri Lanka, which introduced main frame computers for large scale data handling, as far back as 1970’s. Since then DCS kept on modifying their ICT strategies to be in line with the latest developments in this field.

2. History of IT Usage

Main frame computers were first introduced at the DCS for large scale Censuses & Surveys in early 70’s. Data entry at that time was done through punch card machines. After about 30 years period, presently several clusters of modern computers, connected through advanced servers are being used for data entry. Nevertheless the time spent in data entry is thought be still relatively high, as the data entry is still done thro, data entry stations using key boards. So there is need to introduce more sophisticated technology to expedite the process.

3. Improving Quality and Minimising Delays

The responsibility of conducting a Census or a Survey is vested with the respective subject matter Division in the Department. The data entry (using data entry stations with key boards) of any such large scale census/survey is done centrally at the Head Office in
Colombo. The staff of the Data Processing Division is responsible for the preparation of data entry programmes and data editing programmes.

3.1 Minimising Delays at computer editing stage

Few years back, the hard copy error prints generated at the time of computer editing at the Data processing Division (DPD) were sent to the subject matter divisions for correction and after the corrections were indicated by the subject matter division, the corrections were done at the DPD again. This was identified as the main cause of delay in releasing the Household survey data and an on-line error correction process was introduced for Household survey data editing. This online error correction is done at the subject matter division itself and as the officers having a good knowledge of data are handling this work, the quality and timeliness of the data was improved significantly.

3.2 Minimising Delays at the Tabulations stage

Earlier, tabulations needed for a subject matter Division, using a clean data set produced, was also handled by the DPD. DCS experienced delays in the process and after the officers at the subject matter divisions were adequately exposed to the use of personal computers (PC’S), they undertook the tabulation aspect as well. These officers have a better knowledge of data and again both quality and timeliness of the data was improved.

3.3 Scanning of Filled Questionnaires

Time taken to do the data entry using data stations with key boards, was also identified as a major contributing factor to delays in releasing data, as experienced in Census of Population 2001. Data collected at the Agriculture Census – 2002 was captured using Scanning Machines and the time taken for data capturing was significantly minimized. DCS experiences constraints in terms of availability of equipment, for introducing scanning for other large scale Censuses & Surveys. (eg. Census of Population – 2001)
3.4 De-centralized Data Entry

For the maintenance of high quality of the data collected at the field and to expedite the data editing, a pilot project was undertaken to do the data entry at few of the selected district offices. This was introduced for Household Income & Expenditure Survey (HIES) 2006/2007 and it is expected to expand the de-centralized data entry programme for all other household surveys and ultimately for the Census of Population 2011. The constraints experienced by DCS for implementing this project need to be overcome.

4. DCS Website (www.statistics.gov.lk)

A group of officers at the Information unit of the DCS under the able direction of the Deputy Director in – charge, is responsible for the maintenance of the DCS website. All the latest publications of the DCS, including the descriptions of current statistical activities, Survey /Census instruments etc are available for reference and downloading. The time taken to provide the printed version of a survey publication has been very much reduced, as such publications have been made available in the website for easy reference for users of data throughout the world.

5. Availability of ICT Training

The minimum qualification for all levels of technical officers recruited to the DCS, is a university degree and as all the universities in Sri Lanka now provide at least basic computer training at their courses, new entrants have the basic ICT knowledge to improve on. The Training Division of the DCS organizes in-service training programmes to introduce new software etc. for the benefit of the officers at different levels. High level ICT courses are available at the universities but access to such courses is limited. There is need to provide specifically designed ICT courses to suit the requirements of the Department. (e.g.(i) Survey Data processing (ii) Web Designing etc.)
6. Conclusion

As explained earlier in different sections of the paper, the DCS always make attempts to use the information and Communication Technology as widely as possible to improve the quality, timeliness and easy and quick access of the data to the users. In conclusion, as constraints which need to be overcome, for further improvement of the statistical undertakings of the DCS, following can be mentioned.

(i) Need to provide equipment for better data capturing (Scan machines, portable data entry equipment etc.)
(ii) Need to provide training on ICT for DCS officers at different levels.
(iii) Need to introduce speedy data transmission between the central office and the regional offices.
(iv) Need to establish a Central Data Base.