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Dissemination Of Demographic Statistics in St. Lucia and its Implications for
the *Demographic Yearbook*

By

Edwin St. Catherine
Central Statistical Office
St. Lucia

A. Source of demographic and social statistics

1. The St. Lucia Statistical Office publishes data on almost all of the aggregates collected within the *Demographic Yearbook*. Various sources, which we have developed over the years, are used to compile demographic information.

2. The sources of information are:
 - i) The Labour Force Survey: This survey began in October of 1992 and continued on a bi-annual basis from 1992 up until 2000. From 2002 to the present this survey is collected on a quarterly basis with the redesign of the sample frame to reflect seasonal demographic and labour force patterns in the population. Because of the requirements for weighting the sample the entire set of tables produced for publication is prepared within an excel spreadsheet. This enables the rounding of labour force aggregates, for example, unemployed, employed, seekers and non-seekers of work to ensure consistence with totals generated for all equivalent summary indicators. For dissemination purposes, the Excel spreadsheet is sent by e-mail to our more sophisticated users while a PDF version of this publication is available from our website <http://www.stats.gov.lc/> for use by the general public. On our website we also make it possible for users to view all of the key tables immediately without the need for the download of the full publication.

 - ii) The vital registration system: The compulsory registration of births and deaths as reported by Kuezynski (1953) was introduced in 1868 by an Ordinance ‘for the Registration of Births and Deaths (No. 2 of 1868)’. This was repealed in 1877 by the ‘Civil Status Ordinance 1876”. Published data on births and deaths were recorded in the St. Lucia Gazette from 1890 to the second decade of the last century. Thereafter, the annual report of the registrar of Civil Status provided information until 1964. The Statistics Department has maintained a series from the early sixties to the present time and annually publishes the Vital Statistics Report in hard/paper copy format and also in PDF format downloadable from our website. This publication covers life tables, infant mortality, births and deaths, teenage pregnancy, marriages, divorces, cause of death etc..

 - iii) The population and housing census: In May 2001 St. Lucia conducted its population and housing census. Using optical scanning and handwriting recognition software, the census data was captured and was converted into an electronic database very rapidly. This database has been converted into several formats for ease of use of persons who use it to generate publications. The census is available in SPSS format and is fully labeled and weighted by enumeration district based on comparison of household counts and numbers of questionnaires completed.

3. The Census database was also converted into Redatam (Retrival of Data on Small Areas by Microcomputer), a software developed by Centro Latinoamericano de Demografía. Naciones Unidas (CELADE), the Economic Commission for Latin America and the Caribbean (ECLAC), to allow the generation of a secured database for use with the Redatam webserver. User friendly Internet browser interfaces were created and are still being developed, using a high level

language ASCII file, by which users can interact with the secure/encrypted census database on the web so they may obtain exactly the information they need within the confines established by the Central Statistical Office. The user interface is entirely under the control of the Central Statistics Office and the Office decides exactly what dynamic interface to present to the user, what variables to expose, etc. It is the intension of the Statistics Office to move all of its datasets to this environment to allow dynamic, secure access to the data over the Internet.

4. This idea of the dynamic dissemination of data is very much linked to the concept of structured data collection through the use of eforms, an approach that is described in another paper prepared on data collection for the *Demographic Yearbook*. Software like Cardiff LiquidOffice can streamline internal operational processes; accelerating delivery of data to backend server data systems; reducing administrative costs; and eliminating data errors with validation and user control processing. Once the data is collected in an organized and secure way in a backend database like SQL Server then the dynamic web interface can be built on it enabling the user to query the database in a controlled environment as is described above.

i) Other administrative sources: The National Insurance Corporation collaborates with the Central Statistical Office in the collection of data requested on occupation status of employees within the population. This information is also collected in the labour force survey. It is regularly updated and can, therefore, be of benefit to the *Demographic Yearbook* especially in the inter-censal period.

ii) Geographic information systems: The Central Statistical Office of St. Lucia makes intensive use of geographic information systems for the dissemination of the census data. Data particularly on housing conditions from the census and also from variables which can be accumulated from the person to the housing level, such as number of unemployed persons have been linked directly to the building point on spatial data maps maintained in Arcview 8.3 at the Statistics Office in St. Lucia. Because all the buildings were geo-coded and linked using the building number to each census questionnaire, it was possible to transfer this information to the spatial dataset for the country. Using this foundation we can disseminate census data on virtually any area delineated by our users. Therefore, in addition to the traditional enumeration districts (EDs), parish, political and community boundaries, data can be disseminated by any ad hoc area definition specified by the user. However, to maintain confidentiality we do limit the size (in terms of households) of an area which can be specified.

5. More importantly however, using the publisher extension to ESRI's Arcview, we are able to publish a map using the Portable Map Format (PMF) format. This is analogous to the Portable Document Format (PDF) for the publication of documents. The PMF allows us to package for the user on CD ROM or over the Internet, an interactive map with fully enabled zoom, pan and identification features which they can use to generate and print maps from a controlled set of spatial information we supply within the map using the free ArcReader software. This, therefore, represents a possible means of disseminating interactive GIS data on the *Demographic Yearbook* to users.

B. Recommendations for the *Demographic Yearbook*

- i) Consider the use of eforms for the collection of data required for the *Yearbook* based on a structure described in another paper on eforms. This will streamline internal operational processes; accelerating delivery of data to backend server data systems; reducing administrative costs; and eliminating data errors with validation and user controlled processing.
- ii) Consider creation of a secure/encrypted online database with *Demographic Yearbook* data to be queried by users in an interactive and dynamic way through the use of a web server, like Redatam or Microsoft Cube technology.
- iii) Consider publication of interactive maps using the PMF format to allow the interaction of users with a dynamic map document disseminated through a website and viewed by a free map reader like ArcReader.