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CONSIDERATIONS FOR IMPLEMENTING REDATAM DATA SERVICES \*/

(Summary of the Spanish version)

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CONSIDERATIONS FOR IMPLEMENTING REDATAM DATA SERVICES  
(Summary)

A study in 1983 found that census information for specific small geographical areas often was not available from the population and housing censuses in the Latin American and Caribbean countries because the political and administrative boundaries used in the census frequently do not correspond to the particular areas of interest and because it is not possible to publish all possible tabulations for all minor divisions available in the census data. Furthermore, it was found that most statistical offices also were not able to reprocess the large census files rapidly and at low cost on their mainframe computers to obtain the desired information.

The interactive, user-friendly, REDATAM 1/ system was created to solve the problem of providing small area population census and housing information by using an IBM or compatible microcomputer to store the microdata (the values of each variable of each individual) of an entire census thereby permitting any tabulation to be produced for any area often down to city blocks or smaller. The census (or survey) data is stored in compressed form in a database that makes it possible to access directly the data for a given small area without having to process the remainder of the data. A programmer is not required. Spanish and English versions of the system and manual are available.

The REDATAM system has been employed by the national statistical offices of Chile, Saint Lucia, Costa Rica and Uruguay with their 1980 population and housing censuses and by Guyana for a demographic survey. Chile stores its entire census of around 12 million persons on optical laser disks while the others with smaller populations utilize a hard disk.

Based on experience to date, the installation of REDATAM in a statistical office to provide small area population and housing data services may have some or all of the following implications, which should be considered when establishing such services:

Global considerations:

- a) Users frequently will require assistance in defining their needs.
- b) The service will require a significant input in human resources (medium-level non-programmers), as the number of requests for service grows.
- c) It is necessary to define a policy concerning costs to users and the

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1/ REDATAM = REtrieval of DATA for small Areas by Microcomputer.

requests to be answered: will all be accepted or will they be filtered?

d) It is desirable to gain experience using REDATAM to provide disaggregated data services with the 1980 census before planning the 1990 census.

Operational concerns:

a) Adequate publicity must be distributed concerning the REDATAM services if a wide range of governmental and private final users are to be reached.

b) Cartographic information must be provided by the statistical office to permit users to identify the specific geographical areas of interest.

c) It is likely that the microcomputer employed with REDATAM, which may be used for other purposes as well, will soon be dedicated full-time to REDATAM.

Internal organization:

a) It will be necessary to have a policy on whether to use the microcomputer or the mainframe computer when requests are made for information on areas with large populations, e.g., 500,000 cases or more.

b) The ease and rapidity of obtaining results on the microcomputer may lead to overloading it with respect to more conventional processing equipment.

c) Printing of tables may be a limiting factor when many are requested.

d) The possibility of obtaining results from the data without the need for programmers may lead to problems among departments in the statistical office.

Generation of services:

a) The ease with which data for very small areas may be obtained may lead to problems of data confidentiality.

b) The possibility of providing sub-databases for specific regions or cities opens up many possibilities for information decentralization, while also creating problems of data confidentiality.

c) REDATAM permits the provision of small area data services before the standard tabulations are obtained and published.

d) It may be reasonable to publish tables only for major areas, since tabulations for specific small areas can be made available through REDATAM services or by providing sub-databases.

e) It is necessary to decide whether researchers, who generally return many times to a dataset, will be given sub-databases, taking into consideration problems of confidentiality.

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