# CENTRO LATINOAMERICANO DE DEMOGRAFIA

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#### A PROPOSAL FOR

#### A LATIN AMERICAN COMPUTERIZED FERTILITY BIBLIOGRAPHY

AND

CLEARINGHOUSE

Arthur M. Conning 30 de julio de 1973

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CELADL DHOMESTA MICROFILMASO DOCPAL

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#### I. INTRODUCTION AND GENERAL DESCRIPTION OF THE PROPOSED SYSTEM

As Walter Mertens has noted, there has been an explosion of research on fertility in Latin America. However, because researchers are often unaware of what is being done in other institutions, the work is not as cumulative as it ought to be. Furthermore, investigators not at centers with good population libraries are not in contact with main currents of research, in part, because they do not have access to work being done elsewhere and, in part, because their own work is not widely known. In addition, planners and others in government agencies often do not know what is available in their own countries and even less what has been produced elsewhere that is relevant to their problems.

CELADE, as the regional United Nations population studies center in Latin America and as the holder of the major demography library in the region, in cooperation with the Comisión de Población y Desarrollo de CLACSO, is uniquely placed to alleviate this situation in the field of fertility through the development of a bibliographic system that requires three coordinated actions. These involve (a) the development of a document library containing almost all materials (published or "semi-published") on fertility in Latin America; (b) the organization and publication of a qualative bibliography of these materials on a periodic basis in a demographic journal; (c) the provision, via a clearinghouse, of copies of the indexed materials to all persons requesting them.

The usual procedure of publishing annotated lists of items by author and possibly a few major subject categories is inadequate in a rapidly developing field, like fertility since the lists are soon out of date. Furthermore, if the lists are extensive, it is difficult to locate rapidly particular items of interest. Consequently, given the competence of computer programming and services at CELADE, it is proposed that a computerized bibliography system be developed. The normal bibliography information for each document would be stored on magnetic tape along with a set of "descriptor words" which would serve as a form of annotation. Special computer programs would allow the generation of a bibliography list by subjects, using the detailed descriptor words as the categories. If an elaborate set of descriptor words was developed to fit the needs of Latin American researchers, the bibliography would then become an easily used bibliographic tool dapted to the needs of its users. Naturally, the same information would be used to produce the standard author and

country lists. Printing out all descriptor words under each item would also provide annotation. The flexibility of such a system would permit the printing of completely updated cumulative lists at period intervals as well as providing investigators with special listings to meet particular requests.

Since such a bibliographic instrument would be of little value to persons outside CELADE if they could not read the documents that appear to be useful, it is necessary to associate a clearinghouse with the bibliography. This service, rapidly and at a low cost, would provide copies of documents requested.

The list of descriptor words and the overall system for manipulating the bibliography and clearinghouse should be developed in a manner that will permit the later addition of other fields in population such as migration, population policy, etc.

#### II. THE COMPUTERIZED FERTILITY BIBLIOGRAPHY

## II.A. Substantive Aspects

#### Content

Subject Scope: The bibliography should comprise all documents on non-medical aspects of human fertility or fertility related variables in Latin America in which these are taken as either the dependent or independent variables. The "fertility related variables" include the intermediate variables and various attitudes and other variables usually considered important in fertility studies. Thus, on family size preferences and on nuptiality, per se, should be indexed as should the various aspects of family planning programs, abortion studies, etc. Purely medical or biological studies of reproduction would be excluded since they would require specially qualified personnel to catalogue them.

The bibliography should take into account all work in fertility done in Latin America plus all work about Latin America. Initially 1970 might be set as the starting date, but later when the system is organized, the date might be pushed back to 1965.

Type of documents: In addition to all formally published articles, books, etc., an attempt should be made to get as complete a listing as possible of "semi-pu-blished" (e.g., mimeographed reports, working papers, etc.) from census, planning

research and other institutions in Latin America.

Since researchers often need to know where to find specific data, official census, vital statistics and national survey publications with one or more tables of information on fertility or fertility related variables would be indexed.

## Classification and Annotation

<u>Descriptor Words:</u> An organized set of detailed subject categories, sub-categories, etc., in Spanish will have to be developed. These will have varying levels of generality and must serve both as the categories for the subject index as well as the annotation when all the descriptor words are printed out together with the item. The organizing of such a list, while primarily a substantive problem, is also a technical one in information retrieval.

After the basic form of the descriptor word system is decided upon, persons with substantive knowledge at CELADE and other Latin American institutions will be asked to suggest categories that fit their empirical and theoretical needs. An information science specialist will assist in the purely technical aspects of the compilation.

#### II.B. Technical Aspects

#### Computer System

The bibliographic system should be flexible with the ability to compile cumulative updated, full and partial lists by author, country and subject, while providing a form of annotation using the descriptor words. These capacities depend upon the use of adequate information retrieval techniques and computer programs. It should be noted that CELADE already has experience with the computer known as KWICK which, with adaption, could probably fit the needs of the fertility bibliography.

An additional advantage of using computer procedures for the bibliography is that other large institutions in Latin America with computer access then could obtain the programs and updated tapes and use them for their own purposes. For example, individual investigators could search for work done on highly specific topics for which the published bibliography does not provide sufficiently detailed filtering.

## Integration of the Components of the System

A system such as that proposed must be designed properly from the start. The descriptor word system has to be technically correct from a cataloging standpoint and it must fit within the limitations of the computer program system developed. The latter, in turn, must be able to provide all the flexibility necessary to make the bibliography a useful research tool and not simply a sterile listing of items too long or too complex to be helpful. Finally, the system must facilitate the organization of the clearinghouse.

Since CELADE has no previous experience in developing a major bibliographic system and since it would be very costly and inefficient to learn from its errors, it is proposed that an information science consultant be invited to work at CELADE for a number of months. Naturally, such a person would be involved primarily in the technical problems and the training of catalogers and not in the substantive development of the descriptor words.

#### II.C. The Fertility Document Library and the Coding of Document Content

#### Collection of Documents

At periodic intervals, for example, every six months, all known investigators working on fertility related topics and all institutions in Latin America collecting or using fertility or fertility related data, will be requested to send CELADE a copy of any work that has been recently finished. When necessary, CELADE will pay airmail postage, copying costs (e.g., copying typewritten working papers) or purchase costs. Documents which can not be sent to CELADE would also be catalogued using the categories provided by the authors.

Articles, books, etc., published outside Latin America can probably be located from standard bibliographic sources, and then ordered. Information soliciting materials for the bibliography could be placed in the major international sociological, economic, demographic and other journals.

While the documents will be a part of the CELADE library, most will probably be kept separate from the main CELADE collection. They will not be allowed to circulate, since the material will often be irreplaceable and must be available for the clearing-house.

#### Cataloging

Each item in the bibliography will be coded in terms of the appropriate descriptor words. Since it is hoped that most documents in the bibliography will be available, professional catalogers at CELADE will be able to determine the final words used. This is desireable to insure uniformity. However, descriptor word lists also will be sent to all investigators so that they can suggest the words that they feel best describe their work.

#### II.D. Publication

At least onme a year a completely updated cumulative set of author, subject and country lists would be published and distributed to all those who may be actual or potential contributors and all others who might find the bibliography useful. Of course, all major libraries would receive copies.

Ideally the printing should be of a permanent nature so that the bibliography is treated with a certain respect by researchers and not easily mislaid. Hence, combining the bibliography with other information of a relatively permanent nature issued at regular intervals would be highly desireable. If CELADE's new journal Notas de Población becomes established on a regular basis with a wide circulation it might be the appropriate vehicle, particularly if it becomes the journal of population studies in Latin America.

The bibliography could be photocopied for publication directly from the computer outprint. Persons requesting updated lists between the yearly publication dates could be sent a printout.

## II.E. Administration

The success of the bibliography depends in large measure on authors and institutions making their work known and available to CELADE. To achieve this, the bibliography not only has to be useful but must become institutionalized within Latin America. This means it cannot be done in an <u>ad hoc</u> manner. Formally printed brochures should announce the bibliography (and clearinghouse when it is ready). Letters with follow-ups letters must be written to all potential sources and users of materials; CELADE and CLACSO on trips to other institutions must promote the bibliography. CELADE's status as a United Nations institution should help to provide some of the lrgitimacy necessary for institutionalization.

To provide continuity, a permanent part-time cataloguer and a permanent part time secretary would be associated with the project at CELADE. The general administration and development of the project would be in charge of the Fertility Sector at CELADE with computer library and publication services provided by other sectors. Eventually, the administration might be taken over entirely by the library Sector at CELADE. Of course, substantive assistance in the development of the descriptor word system, etc., would be expected from the other CLACSO members of the Comisión de Población y Desarrollo.

#### III. CLEARINGHOUSE

As noted above, because most institutions in Latin America have inadequate or no library facilities on population matters and normally do not have access to most "semi-published" documents, the bibliography will only be of value to Latin America if copies of the documents can be provided on request.

Institutions supplying documents would be asked to indicate the "reproduction status" of each document which would indicate the conditions under which it could be copies; this would be coded into the citation on the magnetic tape along with the number of pages required for copies. Presumably there are standard ways of dealing with copyrighted chapters from books or articles from journals without spending too much time on writing for permission to reproduce.

Since most Latin American investigators work on limited budgets it is proposed that they pay only part of the cost of copying and postage with the other part subsided by the project. Possibly, a 50 percent subsided might be sufficient to make required work available. Persons from developed countries requesting copies would have to pay the full cost.