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C E L A D E

LATIN AMERICAN DEMOGRAPHIC CENTER

AN OUTLINE OF THE  
LATIN AMERICAN POPULATION DOCUMENTATION SERVICE  
(DOCPAL)

Project Duration: Two years

Starting Date: 1 November 1975

A Request to the  
Information Science Division of  
the International Development Research Centre (IDRC)  
Ottawa, Canada

Santiago,  
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## ABSTRACT

This proposal, which is an elaborated version of the one presented by CELADE to IDRC on 25 February, 1975, requests funds for two years (November, 1975 through October, 1977) to establish and operate a permanent Latin American Population Documentation Service (DOCPAL). The major objectives of the Service are to bring under bibliographic control (from 1970 onward) all published and unpublished documents treating any topic in the field of population and produced in Latin America or referring to it; make a major improvement in the flow of information from producers of documents to users; and participate in the development of the world population information system, IDEMSIS, being organized by CICRED.

DOCPAL is designed to take into account the population information needs not only of the well-endowed user and/or producer institutions in the region but, even more importantly, the more numerous poorly-endowed national centers which have little access to libraries or computers and have relatively inadequately trained staffs isolated from other national and international centers. Copies of all documents (estimated at around 8400 for 1970-75 and increasing at 1400 per year) will be acquired, informative abstracts written in free text and descriptors assigned when the Spanish-language thesaurus to be developed by DOCPAL is ready. Since CELADE is one of the two Spanish speaking centers which will work on the CICRED multilingual demographic thesaurus, the DOCPAL activities will be coordinated with world population information activities from the start; compatibility will further be assured by following UNISIST standards where possible.

User-oriented interactive demand searching will be available at CELADE and by mail to other centers; searching of the free text abstracts will be possible. An Abstract and Index Journal, periodically printed in highly readable form directly from computer output and sent to around 1500 persons and institutions, will make it possible for poorly endowed centers to have access to the published and unpublished literature through the abstracts. When full texts are required, the clearinghouse that will supply copies on request without charge.

Computer processing will be carried out using ISIS, entering information in upper and lower case letters and searching on a video display with an associated printer. The proposal considers only the utilization and adaptation of ISIS for DOCPAL and other CELADE purposes including the management of the library, control of the CELADE data bank holdings, the mounting of the retrieval sub-system in CELADE-San Jose for searching DOCPAL tapes, etc. The implementation, per se, of ISIS is not included although it is considered highly desirable that it be carried out before DOCPAL commences, since ISIS will be used to facilitate the acquisition process and since entry of approximately 2000 documents contained in the CELADE Library can start as soon as the bibliographic record is designed.

To assure that DOCPAL meets the real needs of users in Latin America and that users are, in fact, taking advantage of the service and receiving the intended benefits, an evaluation component is explicitly built into the work of the first two years.

## I. INTRODUCTION

The governmental representatives at the Second Latin American Meeting on Population held in Mexico earlier this year, stressed the importance of defining and implementing policies in the field of population within their development strategies taking as a general framework the World Plan of Action agreed upon at the World Population Conference of Bucharest, 1974<sup>1/</sup>. The success of the Latin American countries in formulating, implementing and evaluating policies involving population parameters will depend, in part, on national policy makers, technical staff and researchers ascertaining what is known about topics of interest in their own countries, locating necessary data and reviewing investigations and experiences from elsewhere. Yet the circulation of such information either among or within countries of Latin America is very limited. Existing data is not known or readily available to users, few documents are formally published, few copies of documents are printed and there is little or no bibliographic control over the literature so that it is difficult for potential users to find out, and obtain, what is available.

Since 1958 CELADE has played a significant role in the development of population research in Latin America and in March 1975 was officially declared by the governments of the region to be the permanent United Nations regional organization for population in Latin America with its own identity within the ECLA<sup>2/</sup> system. In each of the four major areas of its activity <sup>3/</sup> training, research, technical assistance and information services -- CELADE is now developing new programs to integrate and extend its activities to meet present needs of the region and to anticipate future ones. A program under consideration would coordinate all CELADE activities concerned with the provision and processing of information on population which include among others, summaries of national

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1/ Provisional Report of the Meeting of the Second Latin American Meeting on Population, Mexico, March 1975 (Doc. ST/CEPAL/Conf. 54/L9 7 March 1975).

2/ ECLA: Economic Commission for Latin America (CEPAL in Spanish).

3/ "Regional Population Program: A Note from the Executive Secretariat". Presented at the ECLA General Sessions in Port of Spain, 6-15 May 1975. E/ECLA/1002, 13 April 1975.

activities in various fields relating to population, the specialized CELADE library, data processing, the management of a large data bank and the population documentation service proposed here. The components which involve the provision of information to users or its processing will eventually be in a Latin American population information system.

The concern here is primarily with that aspect of the CELADE population information system which will involve the acquisition, processing, storage and retrieval of documents concerning population, although related aspects of the CELADE data bank and Library will be mentioned where relevant. This subcomponent of the CELADE information system dealing with documentation will be known as the Latin American Population Documentation Service (DOCPAL)<sup>1/</sup>.

The present outline of DOCPAL, which takes into account recent discussions with IDRC and is written at their request, is an elaborated version of the CELADE proposal to IDRC submitted on 25 February 1975; the later was based on the Kolbe consultancy report of 10 January 1975 (see Background in Appendix A). Funds are requested here for establishing the DOCPAL service and operating it for the first two years, covering approximately 1976 and 1977.

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<sup>1/</sup> DOCPAL Service: Servicio de Documentación sobre Población en América Latina.

## II. NEEDS AND CHARACTERISTICS OF THE USERS AND PRODUCERS OF LATIN AMERICAN POPULATION INFORMATION

The DOCPAL service must be designed in terms of the needs and characteristics of the users of population information in Latin America, the particular situation of CELADE, and the probable relationship with a world population information system. Since the system will endeavor to obtain full texts of all materials, producer characteristics are extremely important as well; of course, most producers are or should be users of information.

### User and Producer Institutions in Latin America

Administrators, policy makers, planners, technical assistance consultants, researchers, university professors and students, and secondary school teachers and their pupils in Latin America should benefit from a properly designed and promoted Latin American Population Documentation Service. To facilitate the design of DOCPAL, it is convenient to divide the institutions with which these users and/or producers of population documents are associated into two broad groups: well-endowed and poorly-endowed centers.

The well-endowed centers have access to relatively large libraries, to medium or large computers and have contact with other well-endowed centers inside and outside the region. Most important the personnel of these institutions are highly trained, many with advanced degrees from abroad, and have experience in the use of the literature in their field. A small number of Latin American institutions producing or using demographic data fall in this category, for example, ECLA, the Colegio de México, CEBRAP of Brazil, some of the central statistical organizations of the larger countries and CELADE. For them, access to unpublished material is particularly important since it is not in their libraries, as is the capacity to locate information rapidly on very specific topics.

Far more frequently found in the region are poorly-endowed centers which have very inadequate library facilities dealing with population or none at all, little or no access to computers, no contact with internationally known well-endowed centers and often are isolated from other centers within their own countries. Their staffs, which normally read only in their national language, have little advanced training and are unaccustomed to utilize varied information sources in their work. Unlike the staffs of the well-endowed centers, those in poorly-endowed institutions normally will have to be trained to realize benefits from the DOCPAL Service. The majority of governmental agencies, and certainly almost all provincial level centers in the region fall, in varying degrees, in this category, particularly in the poorer and smaller countries.

Neither type of institution presently has major access to information produced in the region, or even in their own countries, and both types produce most of their documentation in mimeographed unpublished form. If systematic access could be provided to the well-endowed centers using modern information retrieval technology, they will be able to take advantage of the research and planning tools provided to them. On the other hand, the far more numerous poorly-endowed centers, with many other immediate problems to solve, are likely to attach only minor importance to such access, although taking advantage of such facilities would assist them in reducing their isolation.

#### The Latin American Demographic Center (CELADE)

While the basic characteristics of CELADE fit the well-endowed center described above, its size, its regional United Nations population responsibilities and the fact that the Documentation Service will be located in it, lead to additional design requirements.

Approximately 200 persons (around 80 are professionals), work in the headquarters of CELADE in Santiago and another 50 persons (around 17 professionals) work in CELADE in San José, Costa Rica. CELADE's staff, an increasing number of whom have Masters degrees or doctorates, are involved in research, technical assistance to the countries and training courses which include CELADE's Master's Degree Program. Students (presently around 50) at CELADE are normally expected to conduct and write up research as part of their training. Most of the work done at CELADE would benefit enormously from a user oriented interactive documentation service with detailed searchable abstracts and readily available full texts; the ability to search documentation data bases from other regions would be extremely valuable since there is little transference between regions and some duplication of effort, particularly on demographic techniques and their uses.

#### A World Population Information System

Although DOCPAL has been planned primarily to meet Latin American needs and will be available for users elsewhere, it is anticipated that it will become a sub-system of the world system, IDEMSIS (International Demographic Science Information System) presently being coordinated by CICRED<sup>1/</sup>. It is likely that DOCPAL will be operational in Latin America before equivalent systems are created in Asia or Africa and much of the work on DOCPAL will take place before or parallel with the CICRED efforts on a multilingual thesaurus and IDEMSIS (see Appendix A). Hence, CELADE through its participation in the CICRED efforts and with the help of expert consultants, will have to make DOCPAL as flexible as possible so that it will be compatible with the world system.

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<sup>1/</sup> CICRED: Committee for International Coordination of National Research in Demography.

### III. OBJECTIVES

The general objectives of the Latin American Population Documentation Service are to:

(1) Bring under bibliographic control, in a single permanent system, all published and unpublished documents concerning all topics on population produced in or about Latin America (see subject scope in Section IV).

(2) Make a major improvement in the flow of the information concerning population within Latin America, taking into account the differing characteristics and needs of users of both well-endowed and poorly-endowed centers, as well as the special needs of CELADE.

(3) Participate in the development of the world population information system, IDEMSIS, and serve as the link between Latin America and the world system.

A fourth objective, that is not formally stated since funds to achieve it are not requested in this proposal, is to integrate the DOCPAL Service into a more general Latin American population information system at CELADE.

#### IV. SYSTEM DESIGN

To design the system (and calculate the budget) it is assumed that about 5600 documents per year must be processed in the first and second year. This is based on an estimated 8400 documents likely to be available from the six year 1970-1975 period, and 1400 new items per year for the first two years of the Service, 1976 and 1977 (see Appendix A for the five year 1970-1974 totals estimated by a consultant).

##### Coverage and Subject Scope

All documents concerning population, published or unpublished, from 1970 onwards, written in Latin America or written elsewhere concerning Latin America will be included. Latin America will be taken to comprise all Spanish, Portuguese or French speaking countries in the Western Hemisphere south of the United States.

The subject scope will be at least as wide as that of IDEMSIS<sup>1/</sup> and documents may treat population variables descriptively or as determinants or consequences of other factors, or both. See Table 1 for an outline of the subject scope.

Excluded will be material referring to clinical studies related to fertility or mortality since these are included in medical data bases of BIREME (Biblioteca Regional de Medicina, Sao Paulo, Brazil). Documents not specifically referring to population topics but indirectly relevant to population policy or theory will also be excluded; most of these are likely to be part of DEVSIS (Development Science Information System) which should be available eventually through CLADES<sup>2/</sup> of ECLA.

To meet the needs of very isolated poorly-endowed centers, it may be desirable to include important works, particularly those discussing methodological or theoretical advances, even though they are not produced in Latin America and do not refer to it.

##### Characteristics of the System

All the major design characteristics of the system proposed for the DOCPAL Service are shown in Table 2, which gives a subjective estimate of the importance of each of the characteristics according to the type of institution in which the users and/or producers are located. Only the

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1/ The subject scope of IDEMSIS should be decided in a September 1975 meeting organized by CICRED, in which CELADE will participate; hence, the IDEMSIS scope will be known before DOCPAL is established.

2/ CLADES: Centro Latinoamericano de Documentación Económica y Social.

Table 1

Outline of Probable DOCPAL Subject Scope

(Note that individual categories will not necessarily be constituted as shown; they are based on the categories used in Population Index).

1. General population studies; theory; and relations with other disciplines.
2. Regional population studies including historical studies and national and sub-national surveys, etc.
3. Spatial distribution including urbanization and ecological relationships.
4. Trends in population size and natural increase (past trends as well as projections).
5. Mortality.
6. Fertility, including attitudes and behavior of individuals and families; sterility, contraception, abortion; family planning programs and their evaluation; etc.
7. Marriage, divorce and the family.
8. International migration.
9. Internal migration.
10. Population characteristics including demographic, biological, psychological, economic, social and ethnic characteristics.
11. Population and economic interrelations including labor force, economic growth, resources, occupations and industry.
12. Population and non-economic interrelations including political, genetic health, education, housing, food and other social and non-social factors.
13. Population policy: formation, implementation or evaluation of implicit or explicit measures affecting population variables; policy statements.
14. Methods of research, evaluation and analysis (including computer programs).
15. Organization, implementation, administration and evaluation of population data collection systems and specific procedures.
16. Statistical publications.

rationale for important characteristics will be treated in this section.

Any documentation system for a developing region, particularly when the vast majority of the centers are poorly-endowed, must be able to provide full texts through a clearinghouse. To presume that user centers can write to producers for copies simply ignores the realities of the region. Furthermore, since a large percentage of the literature is unpublished, even the well-endowed centers would have difficulty in obtaining copies.

A number of other design characteristics follow from the decision concerning full texts. Most important is the provision of a detailed informative abstract since it often may replace the original document and minimize the requests, thereby reducing clearinghouse costs. So that the abstracts will be utilized widely by poorly trained users requires that the abstracts printed by computer, be visually clear, in natural language unconstrained by the need to employ fixed descriptors and in Spanish.

Both to permit the computer indexing of an Abstract and Index Journal and to facilitate demand searches, particularly those requested by mail, controlled vocabulary indexing for each document is required, in addition to the abstract.

Conformity to UNISIST standards is explicitly stated since the DOCPAL system will be functioning before the IDEMSIS world system is ready; using international standards from the start should insure general compatibility or convertibility.

TABLE 2

IMPORTANCE OF LATIN AMERICAN DOCUMENTATION SERVICE DESIGN CHARACTERISTICS TO USERS AND PRODUCERS OF VARIOUS TYPES DURING FIRST TWO YEARS OF OPERATION

DOCPAL DESIGN CHARACTERISTICS	LATIN AMERICAN USERS AND PRODUCERS			WORLD SYSTEM	OBSERVATIONS
	WELL-ENDEOWED CENTERS		POORLY ENDEOWED CENTERS		
	CELADE	OTHERS			
1. SUBJECT SCOPE INCLUDES ALL TOPICS IN POPULATION	VERY HIGH	VERY HIGH	HIGH	VERY HIGH	
2. ALL FUGITIVE AS WELL AS PUBLISHED MATERIALS INCLUDED	VERY HIGH	VERY HIGH	HIGH	HIGH	
3. FULL TEXTS AVAILABLE TO USERS (COSTS TO USERS MINIMIZED)	INTERMED <sup>A/</sup>	INTERMED <sup>A/</sup>	VERY HIGH	HIGH	<sup>A/</sup> IF HAVE ACCESS TO GOOD LIBRARY
4. ANALYTIC LEVEL OF PROCESSING (CHAPTERS WITHIN BOOKS OR REPORTS)	HIGH	HIGH	VERY HIGH	?	
5. INFORMATIVE ABSTRACTS WRITTEN IN FREE TEXT	HIGH	HIGH	VERY HIGH	HIGH(?)	
6. ABSTRACTS IN SPANISH; TITLES IN ORIGINAL LANGUAGE AND SPANISH	HIGH	HIGH	VERY HIGH <sup>A/</sup>	LOW(?)	<sup>A/</sup> FEW READ LANGUAGES OTHER THAN SPANISH. PROBLEMS MAY EXIST IN SOME BRAZILIAN CENTERS.
7. ABSTRACT AND INDEX JOURNAL	LOW <sup>A/</sup>	HIGH	VERY HIGH	?	<sup>A/</sup> ASSUMING INTERACTIVE SEARCHING IS POSSIBLE,
8. READABILITY MAXIMIZED (UPPER/LOWER CASE; SPANISH ORTHOGRAPHY) <sup>A/</sup>	INTERMED	INTERMED	VERY HIGH	?	<sup>A/</sup> ASSUMING PUBLICATION VIA PHOTOCOPYING OF COMPUTER OUTPUT.
9. THEASURUS INDEXING AND SEARCHING	HIGH	HIGH	VERY HIGH	HIGH	
10. FREE TEXT SEARCHING	VERY HIGH	HIGH <sup>A/</sup>	INTERMED-LOW	HIGH(?)	<sup>A/</sup> IF THE RETRIEVAL SYSTEM IS MADE AVAILABLE TO THEM; LESS SO, IF NOT.
11. COMPUTER BATCH SYSTEM PROCESSING	HIGH	VERY HIGH	VERY HIGH	?	
12. INTERACTIVE ENTRY AND SEARCHING	VERY HIGH	INTERMED <sup>A/</sup>	INTERMED	HIGH	<sup>A/</sup> HIGH IF CAN HAVE RETRIEVAL SYSTEM MADE AVAILABLE TO THEM
13. DATA BASES FROM OTHER REGIONS/SUBJECTS AVAILABLE FOR SEARCHING	VERY HIGH	HIGH	LOW	HIGH	
14. COMPUTER PROGRAM SYSTEM TRANSFERABLE TO MEDIUM SIZE OR LARGER COMPUTERS	VERY HIGH	HIGH	LOW	HIGH	
15. CONFORMITY TO UNISIST INTERNATIONAL STANDARDS	VERY HIGH	VERY HIGH	LOW	VERY HIGH	

## V. SYSTEM DEVELOPMENT AND OPERATION

The description of the major components of the system that follows deals only with key aspects related to the system design; it is assumed that decisions on technical details will be made with the aid of consultants (see Section IX). Some of the specific procedures that may be followed appear in the Kolbe report (see Appendix A).

### Inputs and Technical Processing

#### Acquisition

The acquisition of documents, with very high priority given to unpublished materials, is perhaps the most difficult aspect of the entire system since it is least susceptible to solutions via technology. As the facility with which a producer institution can make its documents available is likely to be directly related to its level of endowment defined earlier, there is no easy "solution" to the problem of acquisition, but efforts will be made to make it advantageous for institutions and individuals to provide materials because of the return benefits that the Documentation Service provides them. This will be done by promotion through brochures, early provision of output from the system, etc., but in most important cases it will be necessary to make personal visits to the countries by DOCPAL and other CELADE staff to collect documents and to locate key persons who will maintain the flow of materials. Advantage will be taken of informal information networks being developed by the population policy unit and PISPAL<sup>1/</sup>. CELADE also will collaborate with regional associations such as CLACSO<sup>2/</sup> and cooperative acquisition arrangements will be established with international organizations and institutions in developed countries. At present CELADE is compiling a list of possible producers (and users) which now has around 850 institutions and 600 persons explicitly identified.

Acquisition in the Central American countries will be carried out through CELADP's San Jose center, which is responsible for that subregion. This will reduce costs and take advantage of existing institutional relationships between CELADE-San Jose and the Central American nations. Documents will be sent to Santiago for processing, although as suggested in Section VI, the retrieval system of ISIS should eventually be mounted in CELADP-San Jose to provide more rapid service to that subregion.

<sup>1/</sup> PISPAL: Programa de Investigaciones Sociales sobre Problemas Relevantes para Políticas de Población. PISPAL is a consortium of various Latin American institutions with its central unit located in CELADE-Santiago.

<sup>2/</sup> CLACSO: Consejo Latinoamericano de Ciencias Sociales.

As many Latin American centers may not have additional copies of their documents and be unable to make copies, DOCPAL staff will travel with portable copiers or microfilming devices.

The ISIS computer information storage and retrieval system (see below) will be used from the beginning to manipulate the list of producers (and users) presently being made, to maintain control over the processes of locating and acquiring documents and update each item as additional information is obtained. The ability to produce by computer updated lists of documents organized by center and country will enable DOCPAL and other CELADE staff to travel with lists of documents to be located and documents that are already available from a given country. Such lists will also be helpful in impressing producers and users with the system being developed. It will be possible to begin data entry to ISIS as soon as the data fields and elements are defined because CELADE presently has approximately 2000 relevant items in its library and access to secondary sources.

A master file of all documents, none of which will be circulated, will be kept for producing clearinghouse copies (see below). A copier that can reduce oversize documents and place two pages on one (and copy on both sides when necessary) is budgeted, in part, to produce this master file and reduce costs of storage and postage.

#### Thesaurus Development and Use

All documents will be indexed with descriptor words from a Spanish language thesaurus. However, since no thesaurus with the subject scope of DOCPAL presently exists in any language and since the service must begin as rapidly as possible, only free text abstracts will be made for items entering early into the system; later the descriptor words will be added. Word frequency lists based on the abstract will aid in the identification of descriptors. Naturally existing, partial thesauri, e.g. of family planning, will be consulted.

CELADE will work on the development of a Spanish language thesaurus for DOCPAL and to meet its obligations as one of the two centers designated to do so by CICRED for the IDEMSIS world system (see Appendix A). According to the present CICRED time-table, descriptors of the IDEMSIS thesaurus should be classified around the end of July 1976.<sup>1/</sup> The proper moment to assign descriptors in DOCPAL without running the risk of having to make major changes later when the CICRED thesaurus is ready will have to be decided with the assistance of consultants.

1/ Viet, Jean. "Construction of a Thesaurus for the Processing of Demographic Data: Proposed Plan of Work, 1975-1978". Background paper No 2 for CICRED Conference on Demographic Information Storage and Retrieval, Colegio de México, 10-12, Sept. 1975.

## Abstracts

Bibliographic description will be prepared at the analytic level, that is, chapters of books or reports and articles within journals will be separately entered into the system.

Informative abstracts, no longer than 2000 characters and normally shorter, will be written by part time abstracters with university training in disciplines appropriate to the documents. They will be carefully supervised and evaluations of the work made on a random basis by CELADE demographers and other social scientists. To the extent possible, the abstract should substitute for the full text.

## Other Data Elements in the Bibliographic Record.

The relevant data fields recommended by UNISIST<sup>1/</sup> will be included and the UNISIST and ISO standards followed unless counterindicated by special regional needs. In addition, other data fields will provide information on the type of printing (typed manuscript, ditto, mimeographed, printed, etc.); availability of full text to users; number of pages when copied (for persons who may eventually have to buy copies from the clearinghouse), etc.

## Computer Processing Via ISIS

The ISIS system will be used for processing; the ISIS programs will be adapted where necessary for the specific purposes of the DOCPAL system. As explained above (see "Acquisition"), ISIS will be used almost as soon as work begins since it will facilitate the acquisition and processing of the documents. Editing via consistency programs will be immediate as data are entered via a CRT terminal using upper and lower case letters and then the data stored until printed out for further checking. Entry into the ISIS master file will be done only after a sufficient number of new items have been accumulated, thereby cutting costs.

It is assumed that the implementation of the ISIS system in Santiago will be funded separately and independent from this proposed Latin American Documentation Service. Since ISIS processing will be required very soon after the startup of DOCPAL, it is desirable that the implementation be completed around the beginning of the DOCPAL project.

As requested by IDRC<sup>2/</sup>, only costs of using ISIS for DOCPAL and other related applications at CELADE are included in this proposal.

1/ UNISIST: Reference Manual for machine-readable bibliographic descriptions, UNESCO: Paris 1974 (SC.74/WS/20).

2/ Cable from Michael Brandreth, Acting Director of the IDRC Information Science Division, to CELADE.

## VI. OUTPUTS OF DOCPAL

### Demand Searches

From the point of view of the needs of CELADE (and various other institutions in Santiago) interactive demand searches will be by far the most useful output if available on a regular, daily, direct access, basis. Because such users often will have very specialized needs, they will have to be able to make searches of the free text abstracts as well as with descriptors; furthermore, until the thesaurus is ready and the documents indexed, free text searching will be the only search procedure available. Searching will be done on the CRT used for entry with a printer available; batch will be used for long lists.

Demand searches will be offered as a service to institutions and individuals elsewhere; during the first two years of DOCPAL this service will be free.

### Abstract and Index Journal

For most of the poorly-endowed centers and many well-endowed ones as well, the major contact with the DOCPAL Service in the first years will be via an Abstract and Index Journal. This will have to be designed in a form that maximizes readability and facilitates use since the majority of persons receiving the Journal will have had little or no previous experience with such a research tool. They will have to be convinced by the Journal, itself and, where possible, through personal visits of DOCPAL and other CELADE staff.

If the total estimated number of available documents (11,200) for 1970 through 1977 were published in various issues of the Journal, the number of pages required might be over 2000 (assuming six abstracts to the page on average) and the costs of printing and postage correspondingly high. Hence, it has been assumed here that only documents since 1974, the year of the World Population Conference, will be issued in the Journal; the rest will be available only in demand searches.

During the two years of funding requested here, the Abstract and Index Journal will cover the documents from roughly three complete years, 1974, 1975 and 1976, and part of 1977. About 250-300 pages for 1400 abstracts and associated indices per year will be required. Hence, roughly 1000 pages will be printed in the initial two years of DOCPAL, and around 250-300 pages per year in future years.

Subject, author and geographical indices, organized to simplify searching and browsing, must be included, although the item will appear only once. The use of supplements, cumulative indices, etc., will have to be decided with great care, and with the assistance of consultants, because of the high costs involved and the importance of the Journal to the poorly endowed centers. To minimize costs, and reduce time lag, computer output, organized and typeset via ISIS, will be directly photocopied.

It will be highly desirable that the first issue of the Journal be issued very early to show producers and users a major output, thereby improving acquisition and general cooperation. To do so during the first year of cooperation, the first issue of the Journal will have to be produced without document indexing from a thesaurus since it will not be ready by then and the CICRED thesaurus will not be ready until early 1978. However, it should be possible to index documents in preliminary form using a small number of broad categories, perhaps those of Population Index. This will permit the first issue to be published although the documents will have to be re-indexed to facilitate demand searching when the thesaurus is ready.

Initially all producers and most potential users (approximately 1500 persons and institutions) will receive a copy of the Journal. Libraries and individual users in developed countries will be required to pay the costs, including postage, for the Journal as soon as it is established on a regular basis.

#### Clearinghouse

The clearinghouse will be one of the key services offered in conjunction with DOCPAL since most users will not have other means of obtaining the documents identified via demand searches or the Abstract and Index Journal. Beginning the second year of operation, users will be able to request documents and receive Xerox copies made from the master document file by return mail and without cost to them. Toward the end of the year, the policy of free clearinghouse copies will be reviewed.

#### Mounting XEROS for DOCPAL Retrieval in other Institutions,

Once the system is functioning smoothly at CELADE=Santiago, it probably will be desirable to permit qualified institutions elsewhere to carry out demand searches using DOCPAL data base tapes sent to them periodically. Such an arrangement would make the centers even more interested in promoting the acquisition of documents by DOCPAL in their countries.

CELADE would package a subset of the ISIS system for this purpose (input programs normally would not be provided) simplifying to a maximum its use, and providing the necessary documentation in Spanish. This could be incorporated into CELADE's normal program of technical assistance to the countries in other aspects of computer processing and system design in the field of population and would be carried out by the Programmer/Analyst in charge of ISIS at CELADE. Naturally, the transference of ISIS programs (or the complete system) would be done in accordance with the rules established for ISIS. No funds are budgeted for this in the present proposal.

It will be particularly important to mount the ISIS subsystem in CELADE-Costa Rica as soon as possible since it has good communication with the Central American countries, and will allow rapid services to be provided to those countries. Input to DOCPAL and the technical processing of documents would remain centralized in CELADE-Santiago.

### Other Possible Outputs

#### Selective Dissemination

When DOCPAL is fully functioning it may be desirable to institute the selective dissemination of abstracts, perhaps sending computer print-outs based on carefully constructed profiles to the relatively small number of professionals at CELADE and those at ECLA working on population related subjects.

A later project, after the first two years, might be to produce versions of the Abstract and Index Journal that suit a small number of different categories of users, for example, researchers, administrators and teachers, in subject fields of major interest.

#### Review of the Literature

The CELADE unit operating the DOCPAL service will not become involved in substantive analyses based on DOCPAL. However, reviews of the literature based on DOCPAL will be an important indirect output. CELADE presently conducts an annual review of family planning programs in the region, and is beginning work on reviews of governmental population policies; DOCPAL will facilitate the work of each of these. A "Program of Fertility and Social Change" submitted for external funding recently explicitly suggests the production of separate annual critical reviews in different subfields of fertility based on the proposed DOCPAL Service.

Non-technical summary reviews could be a major contribution of CELADE to improving information flow from researchers to decision makers (see the objectives, Section III). Such summaries would also be of immense value to teachers, students and other non-technical public. A unit recently formed at CELADE to write popularizations of technical reports might undertake the writing of the non-technical summary reports.

## VII. INSTITUTIONALIZATION AND EVALUATION OF DOCPAL

### Promotion

To be successful in meeting its objectives the DOCPAL Service must be institutionalized in Latin America so that a wide variety of persons and centers recognize its importance to their work, contribute to it and utilize it when they should. Institutionalization of DOCPAL will require active promotion in addition to good system design and execution. Among other promotional efforts planned are distinctive professionally designed brochures (two are budgeted, one to announce the Service and the other, at the end of the first year, to announce the clearinghouse); news items in national and international journals; articles describing the Service in major publications; and personal visits to users and producers by DOCPAL and other CELADE staff on missions. A distinctive and attractive cover must be adopted for all DOCPAL publications; the latter must have the look of permanence so that they are not thrown away before their recipients are "trained" to use them. Exceedingly important will be the early production of the first issue of the Abstract and Index Journal, the regularity of its publication and the rapidity of reply to demand searches and requests to the clearinghouse for full texts.

### Evaluation

Because so many of the users and producers are located at poorly-endowed centers in Latin America, it cannot be assumed that carrying out the above promotional efforts and providing the outputs as designed means that DOCPAL is meeting its objectives. Too low a percentage of the estimated fugitive material may be acquired, or the Journal be discarded by many recipients, or kept but not used, or used inadequately. An explicit evaluation component must be built into the DOCPAL Service and the findings used to make appropriate changes.

The best procedures for carrying out systematic evaluations, perhaps at the end of the first and second years, must be determined, but presumably will involve some form of mail survey to all users and producers plus on-site visits to properly selected sets of those who do and those who do not respond to the questionnaire. Costs of the questionnaire and mailing are included in this proposal but no funds are requested for travel since it is assumed that the work could be done within the anticipated travel for other purposes of DOCPAL and CELADE staff.

### VIII. RELATED APPLICATIONS OF ISIS IN CELADE

Since the DOCPAL Service is conceived as being part of a larger Latin American population information system including the CELADE data bank, it is important to mention a number of other possible applications of ISIS in CELADE. While for some applications the present ISIS system with little or no modification, may be suitable; for others, adaptations of ISIS or the addition of new sub-programs will be required. The Analyst/Programmer who will be in charge of ISIS will be responsible for developing the applications and making the modifications or additions necessary.

Only a brief list of possible applications will be given, some of which are extensions of DOCPAL.

- a). Data base of Investigations in Progress in Latin America with convenient updating by sending a printout of each study to the responsible investigator for corrections and additions (Possible extension of DOCPAL).
- b). Data base indicating where to find specific official tabulations in official publications; the tables would be indexed to provide information on variables, geographic location, time period, etc., with a way found to permit users interested in comparative research to locate tables with variables defined and coded in comparable form (Possible extension of DOCPAL).
- c). Storage of information on tabulations (not the tabulation itself) made at CELADE to avoid waste through the duplication of tabulations; each time a tabulation was made, the appropriate information would be stored, perhaps automatically, so that a person wanting a tabulation from a given data set could first search to see if it had been done before and by whom.
- d). Manipulation of information describing the contents of the CELADE data bank with search facilities concerning variables, geographic location, time period, etc., the same as in b.
- e). Use for searching for variables and data sets as an integral part of a proposed CELADE file management system that will permit interactive, user-oriented and accessed data manipulation, tabulations and other statistical operations on CELADE census samples and surveys stored on disc on a single data base (would replace d if the file management system is implemented).
- f). Use of ISIS in the management of the CELADE Library.
- g). Use of ISIS mailing list and user profile programs for varied CELADE purposes such as the distribution of publications (will be used in DOCPAL). This would replace a mailing list program developed in CELADE and presently in use.

- h). Development of a package and documentation for the retrieval of information on the DOCPAL data base at other institutions (see Section VI for more details).
- i). Use for various CELADE purposes such as inventories, personnel, recruitment, etc. This would replace various partial systems developed in CELADE and presently in use.

Naturally, not all these possibilities and others can be followed up in the near future since DOCPAL will have priority until it is running smoothly and the feasibility of any one will have to be considered before beginning work. While some of the applications might be better handled by more specialized systems, the advantage of developing all computerized search and information manipulation operations around a single user-oriented system is that users -- investigators, librarians, administrators, etc., -- need learn only the rules for one system. Consequently, since ISIS is a flexible system and will be used in DOCPAL, it should be utilized for all appropriate purposes at CELADE.

Computer time for developing any of the above applications is not included in this proposal. If any of the above applications, are found feasible and desirable, they will be financed by other funds. Any software work done will be fully documented and ISIS authorities informed of the proposed work and the results.

IX. STAFFING

The staff required is listed in Table 4 below; their functions are self-evident from their titles. The Head of the DOCPAL Service and the Analyst/Programmer will be recruited at the international expert level, and the rest of the professional and other staff locally recruited. The Head of the DOCPAL Service must have significant experience and be capable of becoming Head of the Library as soon as the DOCPAL is functioning on a routine basis. Until the permanent Head is recruited, the present Head of the Data and Information Processing Division, who assisted in the development of this proposal, will be Acting Head of DOCPAL.

The Analyst/Programmer will be in charge of ISIS for DOCPAL and other ISIS applications at CELADE, for the documentation in Spanish for users, modifications in the system, possible implementation of ISIS or subsystems of it in other institutions treating population (see Section VI) and for any associated training. He will be experienced in programming in Assembler, the language used in ISIS. To provide backup, the Head of the Computation Unit at CELADE and a programmer will learn to operate the system; their costs will be covered by CELADE.

Since it will take time to recruit an experienced person to head the DOCPAL Service, funds have been budgeted for consultants in the early stages of the project. Visits from consultants, expert in population documentation and in specialized ISIS system utilization, would be desirable the latter perhaps provided by IDRC personnel and carried out in coordination with any IDRC consultation to CLADES projects using ISIS. Costs of consultants from IDRC are not included in the budget.

It should be noted that the thesaurus development specialist will play a special role in assisting demographers and other social scientists at CELADE meet the Center's obligations as one of the two Spanish-speaking centers selected to participate in the international thesaurus development effort of CICRED (see Appendix A).

Table 3: Staff of DOCPAL  
(Full time unless indicated)

Head	Secretary
Acquisition Librarian	Clerk Typist
Technical Processing Librarian	Data Entry Operator
Thesaurus Development Librarian	(half-time)
Analyst/Programmer	Copier machine operator
	Abstractors (part-time working in their homes)

## X. INSTITUTIONAL FRAMEWORK

DOCPAL will be a separate unit of CELADE within the Data and Information Processing Division. It will work very closely with the CELADE Library. The Library naturally will continue to be the source of all documents loaned; DOCPAL will have a Master file of all documents used only for the clearinghouse or other utilization within the DOCPAL offices. As relevant uses of ISIS are implemented in the Library, the relationships will become even closer (no funds are requested here for Library use of ISIS).

Because the DOCPAL work will be computerized from almost the beginning, the DOCPAL unit at CELADE will maintain strong relations with the CELADE Computation unit, which presently has 9 experienced programmers and analysts in Santiago (and two in San Jose), some of whom will become conversant with ISIS to provide backup to the Programmer/Analyst in charge of ISIS at CELADE.

It is assumed that a separate proposal for the implementation of ISIS will be carried out. CELADE will coordinate and collaborate with CLADES to insure that each achieves the objectives of their individual projects and contributes to carrying out their respective work programs.

## XI. CALENDAR OF ACTIVITIES

It is assumed that DOCPAL will begin work at the beginning of November 1975. Recruitment of local personnel will take place in the preceeding one and a half to two months.

Since aspects of DOCPAL involving technical matters of documentation will be affected by the recommendations of consultants, which in turn may affect other activities, the calendar of activities shown in Table 4 can only show the approximate timing of the work. The notes explain how to read the table.

The calendar also is strongly affected by the necessity of eventually using a Spanish language thesaurus which is compatible with the final CICRED thesaurus. The latter tentatively is to be ratified at a General Meeting of the participating institutions in February 1978<sup>1/</sup>. Since CELADE will be part of the CICRED Working Group, it should be possible to obtain advance information from CICRED to permit indexing in sufficient depth for the publication of the Abstract and Index Journal in the second year of DOCPAL. However, as discussed previously concerning the Journal (Section VI), less adequate indexing may have to be used for the Journal during the first year of operation.

Another uncertainty concerns when ISIS will be ready for use by DOCPAL. It has been stated in this proposal that ISIS should be utilized as soon as the bibliographic record has been designed since there are around 2000 documents already at CELADE; they would be entered at first with little or no indexing since there will be no thesaurus, but with the full abstract and other information. Furthermore, it has been suggested that ISIS can assist in the acquisition process. For these reasons it was assumed in the calendar that ISIS will be implemented in the pre-DOCPAL period finishing at the latest around the end of the first month of DOCPAL.

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1/ Viet, Jean. "Construction of a Thesaurus for the Processing of Demographic Data: Proposed Plan of Work; 1975-1978." Background paper No. 2 for CICRED conference on Demographic Information Storage and Retrieval, Colegio de Mexico, 10-12, Sept. 1975.

TABLE 4: APPROXIMATE CALENDAR OF ACTIVITIES TO ESTABLISH AND OPERATE THE DOCPAL SERVICE IN FIRST TWO YEARS

NOTES: (A) FOR EACH ACTIVITY, THE WORD UNDERLINED INDICATES THE APPROXIMATE MONTH WHEN THE ACTIVITY BEGINS.

(B) "CONTINUE" INDICATES THE ACTIVITY IS A PERMANENT ACTIVITY OF DOCPAL.

SERIAL MONTH:	PRE-DOCPAL PERIOD	FIRST YEAR: NOV 1975-OCT 1976												SECOND YEAR: NOV 1976-OCT 1977												OBSERVATIONS								
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT									
		-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23	24						
1. RECRUITMENT	RECRUIT LOCAL STAFF	RECRUIT DOCUMENTALIST HEAD OF DOCPAL <sup>A/</sup>																												<sup>A/</sup> ACTING HEAD IS THE HEAD OF DATA AND INFO. PROCESS. DIVISION.				
2. THESAURUS DEVELOPMENT	(COLLECTION DESCRIPTORS)				ORGANIZE GENERAL INDEXING FOR JOURNAL			(CLASSIFY DESCRIPTORS)	BEGIN STRUCTURING	(STRUCTURING DESCRIPTORS)											MAKE CELADE AND CICRED THESAURUS COMPATIBLE						<sup>A/</sup> PARENTHESIS INDICATES TENTATIVE WORK PERIODS ON CICRED THESAURUS.							
3. ACQUISITION	COMPLETE PRODUCER/USER LISTS	BROCHURE XEROX CELADE LIBR. HOLDINGS		VISITS BY DOCPAL STAFF	PRINT ACQUISITION LISTS BY COUNTRY AND INSTITUTION AND CONTINUE																	VISITS BY DOCPAL STAFF											<sup>A/</sup> ACQUIS. AND PROMOTION BY REGULAR CELADE STAFF NOT SHOWN. <sup>B/</sup> FOR MASTER FILE OF DOCUMENTS.	
4. TECHNICAL PROCESSING	DESIGN BIBLIOGR RECORD	BEGIN ABSTRACTING AND CONTINUE		BEGIN GENERAL INDEXING AND CONTINUE UNTIL READY FOR DETAILED INDEXING						BEGIN DETAILED INDEXING AND CONTINUE												MAKE INDEX ENTRIES COMPATIBLE WITH CICRED THESAURUS											<sup>A/</sup> INDEXING FOR FIRST ISSUE JOURNAL BEFORE THESAURUS READY	
5. COMPUTER PROCESSING VIA ISIS	(IMPLEMENTATION)	ADAPTATION FOR DOCPAL		BEGIN OTHER ISIS ADAPTATIONS AND CONTINUE																		BEGIN POSSIBLE MOUNTING OF ISIS DOCPAL RETRIEVAL ELSEWHERE AND CONTINUE											<sup>A/</sup> ISIS IMPLEMENTATION IS NOT IN DOCPAL. <sup>B/</sup> INCLUDES KNOWN DOCUMENTS TO BE ACQUIRED.	
6. DEMAND SEARCHES								BEGIN DEMAND SEARCHES AND CONTINUE																									<sup>A/</sup> THE BROCHURE ANNOUNCING THE CLEARINGHOUSE WILL OFFER DEMAND SEARCHES.	
7. ABSTRACT/INDEX JOURNAL					PLANNING AND PREPARATION					PREPARATION												PREPARATION											<sup>A/</sup> TO SHOW DOCPAL OUTPUT EVEN THOUGH THESAURUS NOT READY. <sup>B/</sup> PUBLISH TWICE A YEAR.	
8. CLEARINGHOUSE										BROCHURE													BEGIN CLEARINGHOUSE AND CONTINUE											
9. EVALUATION								QUESTIONNAIRE SENT	FOLLOWUP LETTER														FOLLOWUP VISITS	ANALYSIS										
10. CONSULTANT VISITS	(VISITS)	VISIT			VISIT					VISIT																							<sup>A/</sup> IDRC: IMPLEMENTATION ISIS. <sup>B/</sup> IDRC: ADAPTATION ISIS.	

## XII. BUDGET

The Summary and Itemized Budgets shown in Appendix B present the request to IDRC for each year and the total; amounts are given in US dollars. The CELADE contribution for the two years also is shown but is not broken down by separate years. CELADE will contribute approximately 25 percent of the total estimated two year cost of DOCPAL.

It should be noted that the costs of computation have been very roughly estimated since CELADE has no experience with ISIS. As these figures may have to be re-estimated, full details have been given. Since the form of ISIS implementation has not been decided yet, it is assumed that the University of Chile IBM 370/145 with 1 megabyte will be used supposing "virtual machine 1370 facilities" as the operating system with a CRT and printer in CELADE connected by a dedicated telephone line. The University of Chile computer is presently the least expensive computer available to CELADE since an educational discount is provided. If implementation of ISIS is done elsewhere the costs may change.

Plans for a joint ECLA and CELADE computer have not yet materialized although agreement has been reached on the desirability of leasing a computer. If a computer should be leased (an IBM 370/135) in the future, the costs of computation for DOCPAL should fall, and IDRC will be informed of the change.

Appendix A

BACKGROUND

Around two years ago CELADE was asked by the Working Group on Population Reproduction Processes of CLACSO<sup>1/</sup> to prepare an annotated bibliography on Latin American fertility research. Since it was felt that such a bibliography had only limited value to persons working in the great majority of Latin American centers which are without access to the documents, and would soon be out of date, CELADE proposed that computer information retrieval techniques be used to create a permanent fertility documentation service providing bibliographies periodically and incorporating a clearinghouse and then extending it to other topics in population.

It soon became evident to CELADE that its intuitive ideas on the Documentation Service had to be supplemented by advice from information science consultants. Visits were made to North Carolina University, the Information Science Division of IDRC and George Washington University. At IDRC it was suggested that a Program Action Project (PAP) be requested to provide a consultant to determine the feasibility and form of the proposed documentation service. To this end, CELADE presented to IDRC "A proposal for a PAP to plan a Latin American Fertility Documentation Service" (4 July 1974). This was funded and Helen Kolbe, Deputy Director of the POPINFORM project of George Washington University was selected as the consultant. From 2-11 December 1974, she visited CELADE-Santiago, and on 13 December visited CELADE-San Jose (Costa Rica).

The Kolbe report<sup>2/</sup>, presented 10 January 1975, strongly recommended that a service be developed including all possible fugitive materials, "...since bibliographic control in Latin America is almost totally lacking and information dissemination, therefore, is very poor, and utilization of research findings very low" (p. 11). She estimated that a maximum of about 9300 documents were produced over the five year period 1970-1974 in all population fields of which approximately 2000 were in the CELADE library. She further estimated that the annual growth rate might be between 1000 and 2000 per year depending on the ability to obtain fugitive materials (p. 11). About one third of all documents were estimated to treat fertility.

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1/ CLACSO: Consejo Latinoamericano de Ciencias Sociales.

2/ "Report to IDRC and CELADE on Consultancy Regarding Proposed Establishment of a Latin American Fertility Documentation Service" Washington D.C., 10 January 1975 (page numbers given in parenthesis refer to this report).

A major recommendation in the Kolbe report was to extend the subject scope from fertility alone to all population as she felt that there would be little increase in cost (p. 7). After consideration, CELADE accepted this since it greatly increases the initial value of the service to Latin American users and lessens the possibilities of being accused of bias in the choice of subject matter.

Kolbe very strongly urged the use of a computer retrieval system (p. 5-6, 16) with free text as well as key-word searching and recommend the RECON system, a highly sophisticated and convenient system from the user point of view, but complex to mount and costly to use.

CELADE submitted the Kolbe report as its draft proposal to IDRC on 25 February 1975.

With the assistance of a PAP from IDRC to visit Mexico to see an ISIS system in operation, it was possible to compare the relative merits of ISIS and RECON. Since the newer versions of ISIS permit the manipulations considered necessary for DOCPAL and is much simpler and less expensive to mount and operate, CELADE accepted IDRC's recommendations that ISIS be utilized.

In late June, Mr. Abel Packer, an analyst/programmer at CELADE, visited IDRC in Ottawa to obtain details on ISIS. It has been agreed that for the most efficient use of the system it would be highly desirable for IDRC experts on the ISIS system to visit Santiago. It also was agreed that any experience that CELADE might gain in using ISIS for CELADE's internal purposes would be freely shared with CLADES of ECLA and visa versa.

CICRED<sup>1/</sup> has recently invited CELADE to participate in the International Meeting on Demographic Information Storage and Retrieval, to be held in Mexico in September, 1975; CELADE has designated the Head of the Data Processing and Information Division to be its representative. At the request of CICRED, CELADE has agreed to be one of the two Spanish speaking institutions participating in the development of the three-language thesaurus to be used in the proposed world demographic information storage and retrieval system, IDEMSIS (International Demographic Science Information System).

Around the end of June 1975, IDRC (cable 26 June) requested that CELADE submit an elaborated version of its proposal presented to IDRC on 25 February 1975, taking into account the decision to use ISIS instead of RECON and other matters discussed between IDRC and CELADE. It was clarified that only the use and applications of ISIS in CELADE be included, leaving the implementation of ISIS to a separate proposal.

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<sup>1/</sup> CICRED: Committee for International Coordination of National Research in Demography.

SUMMARY: BUDGET

LATIN AMERICAN POPULATION DOCUMENTATION SERVICE (DOCPAL)

(First two years of operation)

a) The CELADE contributions are for the two year period.

b) Costs are given in US dollars.

	Request to IDRC			Total CELADE contrib.
	1st year	2nd year	Total	
Staff salaries (including consultants) .....	80,350	74,400	154,750	93,000
Equipment .....	43,350	12,750	56,100	-
Supplies .....	2,350	2,350	4,700	4,000
Acquisitions .....	2,000	2,000	4,000	6,000
Publications and Distribution	9,170	10,170	19,340	4,000
Communications (telephone, cables, postage excluding promotion and distribution of Journal) .....	4,000	4,000	8,000	-
Computer Time .....	23,960	30,080	54,040	-
Office Space .....	-	-	-	8,000
Travel .....	8,400	8,400	16,800	5,000
Subtotal:	173,580	144,150	317,730	120,000
Administration (14 percent required by United Nations)	24,300	20,180	44,480	-
<b>T O T A L :</b>	<b>\$197,880</b>	<b>\$164,330</b>	<b>\$362,210</b>	<b>\$120,000</b>

ITEMIZED BUDGET

LATIN AMERICAN POPULATION DOCUMENTATION SERVICE (DOCPAL)

(First two years of operation)

- a) The CELADE contributions are for the two year period  
 b) Costs are given in US dollars.

Staff Salaries <sup>1/</sup>	Request to IDRC					Total CELADE contrib.
	1st. year	Person months	2nd year	Person months	Total	
Head (expert) <sup>2/</sup>	-	9 <u>2/</u>	-	12	-	70,000
Analyst/Programmer (expert) <sup>3/</sup>	20,200	12	20,600	12	40,800	-
Acquisitions Librarian (local)	6,000	12	6,300	12	12,300	-
Technical Processing Librarian (local)	6,000	12	6,300	12	12,300	-
Thesaurus Development Librarian (local)	6,000	12	6,300	12	12,300	-
Secretary, bilingual (local)	3,500	12	3,700	12	7,200	-
Clerk Typist, bilingual (local) <sup>5/</sup>	1,750	6	3,700	12	5,450	-
Data Entry operator (half-time, local) <sup>6/</sup>	1,500	4.5	2,000	6	3,500	-
Xerox Operator (local)	3,000	12	3,100	12	6,100	-
Abstractor/Indexers (\$4/abstract, 5600 doc. year)	22,400	-	22,400	-	44,800	-
Consultants (two visits including travel and per diem) <sup>7/</sup>	10,000	-	-	-	10,000	-
Analyst and Programmer backup <sup>4/</sup> (expert and local)	-	3.5	-	1.5	-	6,500
Advisor to the Library (expert)	-	3	-	2	-	12,500
CELADE Library staff (local)	-	6	-	2	-	4,000
<b>Subtotal:</b>	<b>80,350</b>		<b>74,400</b>		<b>154,750</b>	<b>93,000</b>

<u>Equipment</u>	<u>Request to IDRC</u>			<u>Total CELADE contrib.</u>
	<u>1st year</u>	<u>2nd year</u>	<u>Total</u>	
3 Lateral file cabinets (5 drawers each)	750	750	1,500	-
Office furnishing for six persons at \$250 each	1,500	-	1,500	-
2 Electrical typewriters	900	-	900	-
1 8-drawer card catalog and base	400	-	400	-
3 Shelving units	300	-	300	-
1 Xerox machine, leased, with size reduction (10 cents per page: average 10,000 pages per month) <u>8/</u>	12,000	12,000	24,000	-
2 Portable copiers <u>9/</u>	1,000	-	1,000	-
1 Information Display System (CRT and printer) <u>10/</u>	26,500	-	26,500	-
	<u>43,350</u>	<u>12,750</u>	<u>56,100</u>	-
<u>Supplies</u>				
250 Reams Xerox paper	1,000	1,000	2,000	-
Supplies for portable copier	200	200	400	-
5500 Manila folders	930	930	1,860	-
600 Hanging folders	220	220	440	-
General office supplies	-	-	-	4,000
	<u>2,350</u>	<u>2,350</u>	<u>4,700</u>	<u>4,000</u>
<u>Acquisitions</u>				
Normal CELADE Library acquisitions	-	-	-	2,000
Additional acquisitions for DOCPAL	2,000	2,000	4,000	-
Documents to be used by DOCPAL presently in CELADE Library	-	-	-	4,000
	<u>2,000</u>	<u>2,000</u>	<u>4,000</u>	<u>6,000</u>

<u>Publication and Distribution</u>	<u>Request to IDRC</u>			<u>Total CELADE contrib.</u>
	<u>1st. year</u>	<u>2nd year</u>	<u>Total</u>	
Brochure printing (an announcement of DOCPAL and an announcement of clearinghouse): single page, 2000 copies each	100	100	200	-
Printing Evaluation Questionnaires (one page, 1500 copies)	70	70	140	-
Printing Abstract and Index Journal (approx. 500 pages in each year; 1500 copies of each issue) <u>11/</u>	5,000	5,000	10,000	-
Mailing of two brochures and Abstract and Index Journal airmail to 1500 recipients <u>12/</u>	3,500	3,500	7,000	-
Computer produced labels	500	500	1,000	-
Clearinghouse airmail postage	-	1,000	1,000	-
Promotion through CELADE programs <u>13/</u>	-	-	-	4,000
	<u>9,170</u>	<u>10,170</u>	<u>19,340</u>	<u>4,000</u>
<u>Communications</u> (telephone calls, cables and postage excluding distribution of Journal and Brochures, but including evaluation questionnaires)	4,000	4,000	8,000	-
	<u>4,000</u>	<u>4,000</u>	<u>8,000</u>	<u>-</u>
<u>Computer Time</u> (excluding general implementation of ISIS; See text) <u>14/</u>				
Display System connection time (four hours per day, 22 days per month at \$5 per hour)	3,960 <sup>15/</sup>	5,280	9,240	-
Entry and Searches on IBM 370/145; time sharing at approx. \$400/hr. CPU for 4 hours per month; 5600 items entered per year	14,400 <sup>15/</sup>	19,200	33,600	-
Applications development (same costs as above); 1 hr. CPU per month	4,800	4,800	9,600	-
Dedicated telephone line (\$50/month)	600	600	1,200	-
Analyses of Evaluation Questionnaires	200	200	400	-
	<u>23,960</u>	<u>30,080</u>	<u>54,040</u>	<u>-</u>

	Request to IDRC			Total CELADE contrib.
	1st. year	2nd. year	Total	
<u>Office Space (rent and utilities)</u>	-	-	-	<u>8,000</u>
<u>Travel</u>				8,000
Transportation and per diem for DOCPAL staff excluding experts	8,400	8,400	16,800	-
Travel of other CELADE staff <sup>16/</sup>	-	-	-	5,000
	<u>8,400</u>	<u>8,400</u>	<u>16,800</u>	<u>5,000</u>
SUBTOTAL:	173,580	144,150	317,730	120,000
Administration (14 percent required by United Nations)	24,300	20,180	44,480	-
	<u>24,300</u>	<u>20,180</u>	<u>44,480</u>	<u>-</u>
T O T A L	\$197,880	\$164,330	\$362,210	\$120,000

16/7/75

APPENDIX B

Appendix B

SUMMARY: BUDGET

LATIN AMERICAN POPULATION DOCUMENTATION SERVICE (DOCPAL)

(First two years of operation)

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T O T A L :	\$197,880	\$164,330	\$362,210	\$120,000

ITEMIZED BUDGET

LATIN AMERICAN POPULATION DOCUMENTATION SERVICE (DOCPAL)

(First two years of operation)

- a) The CELADE contributions are for the two year period.  
 b) Costs are given in US dollars.

	Request to IDRC				Total	Total CELADE contrib.
	1st year	Person months	2nd year	Person months		
<u>Staff Salaries</u> <sup>1/</sup>						
Head (expert) <sup>2/</sup>	-	9 <sup>2/</sup>	-	12	-	70,000
Analyst/Programmer (expert) <sup>3/</sup>	20,200	12	20,600	12	40,800	-
Acquisitions Librarian(local)	6,000	12	6,300	12	12,300	-
Technical Processing Librarian (local)	6,000	12	6,300	12	12,300	-
Thesaurus Development Librarian (local)	6,000	12	6,300	12	12,300	-
Secretary, bilingual (local)	3,500	12	3,700	12	7,200	-
Clerk Typist, bilingual(local) <sup>5/</sup>	1,750	6	3,700	12	5,450	-
Data Entry operator (half-time, local) <sup>6/</sup>	1,500	4.5	2,000	6	3,500	-
Xerox Operator (local)	3,000	12	3,100	12	6,100	-
Abstractor/Indexers (\$4/abstract, 5600 doc./year)	22,400	-	22,400	-	44,800	-
Consultants (two visits including travel and per diem) <sup>7/</sup>	10,000	-	-	-	10,000	-
Analyst and Programmer backup <sup>4/</sup> (expert and local)	-	3.5	-	1.5	-	6,500
Advisor to the Library(expert)	-	3	-	2	-	12,500
CELADE Library staff (local)	-	6	-	2	-	4,000
Subtotal:	80,350		74,400		154,750	93,000

<u>Equipment</u>	<u>Request to IDRC</u>			<u>Total CELADE contrib.</u>
	<u>1st year</u>	<u>2nd year</u>	<u>Total</u>	
3 Lateral file cabinets (5 drawers each)	750	750	1,500	-
Office furnishings for six persons at \$250 each	1,500	-	1,500	-
2 Electrical typewriters	900	-	900	-
1 8-drawer card catalog and base	400	-	400	-
3 Shelving units	300	-	300	-
1 Xerox machine, leased, with size reduction (10 cents per page: average 10,000 pages per month) 3/	12,000	12,000	24,000	-
2 Portable copiers 9/	1,000	-	1,000	-
1 Information Display Sys- tem (CRT and printer) 10/	26,500	-	26,500	-
	<u>43,350</u>	<u>12,750</u>	<u>56,100</u>	-
<u>Supplies</u>				
250 Reams Xerox paper	1,000	1,000	2,000	-
Supplies for portable copier	200	200	400	-
5500 Manila folders	930	930	1,860	-
600 Hanging folders	220	220	440	-
General office supplies	-	-	-	4,000
	<u>2,350</u>	<u>2,350</u>	<u>4,700</u>	<u>4,000</u>
<u>Acquisitions</u>				
Normal CELADE Library acquisitions	-	-	-	2,000
Additional acquisitions for DOCPAL	2,000	2,000	4,000	-
Documents to be used by DOCPAL presently in CELADE Library	-	-	-	4,000
	<u>2,000</u>	<u>2,000</u>	<u>4,000</u>	<u>6,000</u>

Publication and Distribution	Request to IDRC			Total CELADE contrib.
	1st year	2nd year	Total	
Brochure printing (an announcement of DOCPAL and an announcement of clearinghouse); single page, 2000 copies each	100	100	200	-
Printing Evaluation Questionnaires (one page, 1500 copies)	70	70	140	-
Printing Abstract and Index Journal (approx. 500 pages in each year; 1500 copies of each issue) <u>11/</u>	5,000	5,000	10,000	-
Mailing of two brochures and Abstract and Index Journal airmail to 1500 recipients <u>12/</u>	3,500	3,500	7,000	-
Computer produced labels	500	500	1,000	-
Clearinghouse airmail postage	-	1,000	1,000	-
Promotion through CELADE programs <u>13/</u>	-	-	-	4,000
	<u>9,170</u>	<u>10,170</u>	<u>19,340</u>	<u>4,000</u>
<u>Communications</u> (telephone calls, cables and postage excluding distribution of Journal and Brochures, but including evaluation questionnaires)	4,000	4,000	8,000	-
	<u>4,000</u>	<u>4,000</u>	<u>8,000</u>	-
<u>Computer Time</u> (excluding general implementation of ISIS; See text) <u>14/</u>				
Display System connection time (four hours per day, 22 days per month at \$5 per hour)	3,960 <sup>15/</sup>	5,280	9,240	-
Entry and Searches on IBM 370/145; time sharing at approx. \$400/hour CPU for 4 hours per month; 5600 items entered per year	14,400 <sup>15/</sup>	19,200	33,600	-
Applications development (same costs as above); 1 hour CPU per month	4,800	4,800	9,600	-
Dedicated telephone line (\$50/month)	600	600	1,200	-
Analyses of Evaluation Questionnaires	200	200	400	-
	<u>23,960</u>	<u>30,080</u>	<u>54,040</u>	-

	Request to IDRC			Total CELADE contrib.
	1st year	2nd year	Total	
<u>Office Space (rent and utilities)</u>	-	-	-	3,000
				3,000
<u>Travel</u>				
Transportation and per diem for DOCPAL staff excluding experts	8,400	8,400	16,800	-
Travel of other CELADE staff <sup>16/</sup>	-	-	-	5,000
	8,400	8,400	16,800	5,000
SUBTOTAL:	173,580	144,150	317,730	120,000
Administration (14 percent required by United Nations)	24,300	20,180	44,430	-
T O T A L	\$197,880	\$164,330	\$362,210	\$120,000

1. United Nations proforma costs are given unless indicated. Proforma costs for "experts", who have international United Nations status, include \$2500 per year for travel on missions. Approximately 5 percent increase in salaries is assumed between first and second year.
2. First six months spent in recruitment. During this period CELADE will provide an Acting Head who will devote half his time to the project. The Proforma cost of the Head of DOCPAL is \$40,000.
3. Real cost because occupant known.
4. Approximately one and a half months Head of Computer Sector and two months CELADE programmer in first year. One half month and one month respectively in the second year.
5. To begin in seventh month.
6. To begin in fourth month.
7. Excludes possible consulting visits by IDRC staff.
8. Includes copying of CELADE library holdings for DOCPAL Master document file in first year and clearinghouse operations in second year.
9. Hard copy or photographic; for document acquisition during travel.
10. Cost based on IBM model although final decision on the make and model not yet made.
11. Documents from 1974, 1975 and 1976 and part of 1977 with approximately 1400 documents per publication year.

12. Airmail must be used because of the long delays by surface mail and the high percentage of loss.
13. It will be possible to promote the DOCPAL service through the CELADE journal Notas de Población, and other CELADE publication programs. The value is difficult to estimate; it has arbitrarily been valued at \$2000 per year.
14. Assumes purchase of time with educational discount from University of Chile IBM 370/145 with 1 megabyte. It is further assumed that "virtual machine 1370 facilities" will be used as the operating system with a CRT and printer in CELADE connected via a dedicated telephone line. See text. If ECLA and CELADE obtain their own computer, costs will be lower.
15. The equivalent of 9 months at four hours per day in the first year.
16. Most CELADE experts must travel extensively in Latin America for technical assistance missions and conferences. They will promote DOCPAL and assist in acquiring documents. An arbitrary value of \$2500 per year is given to this although the true value is probably much higher.

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