

THE ECLA PROGRAMME OF POPULATION RESEARCH AND THE IMPROVEMENT  
OF STATISTICAL INFORMATION

Introduction

ECLA has requested the United Nations Population Fund for several research posts to supplement its own limited staff resources in conducting interdisciplinary studies designed to explore all the important relationships between population variables and development, and to insure that such variables are given the importance they deserve in the whole range of action-oriented economic and social investigations for which ECLA is responsible.

It is important to stress that this objective can be achieved only very imperfectly through the statistical information now available for most of Latin America. No amount of ingenuity in working out hypotheses and projections can replace reliable and up-to-date data. There is a risk that the results will be seriously misleading if conclusions for an enormous region undergoing many kinds of rapid change are drawn from statistics which are mainly derived from censuses a decade in the past and have many imperfections and lacunae, and from vital statistics and current statistics concerning educational, health and other services that are incomplete or unreliable.

In this respect the next few years will be crucial. A new round of censuses is beginning, but there are reasons to fear that several countries will hold their censuses late or not at all because of budgetary and political problems. From past experience, it is probable that full tabulations of the censuses will be very slow; some countries have not yet published the full tabulation of their 1960 censuses. Any effective aid that can now be given in the organization of the censuses themselves and, still more, in the prompt tabulation of data, particularly through sampling, will be repaid with interest by providing a sounder basis for population policy. It is for this reason that ECLA is accompanying its request for assistance in population research with a request for the financing of advisory services and expert meetings designed to help the countries obtain full value from their censuses as well as to improve their current statistics. Though development of



statistical activities is primarily a national responsibility for the countries involved, regional activities can and should supplement national programmes. Therefore the following proposals are submitted (in thousands of US dollars):

	1970	1971	1972	1973	1974
Regional advisers <sup>a/</sup>	37	150	150	150	90
Regional meetings and related activities	20	28	25	13	33
Pilot and demonstration project				50	
Infrastructure		10	14	14	14
<b>Total</b>	<b>57</b>	<b>188</b>	<b>189</b>	<b>227</b>	<b>137</b>

#### Background information

Since the establishment of the post of Regional Statistician for Latin America in 1960, ECLA has collaborated with the Statistical Office of the United Nations in the improvement of demographic statistics in the region. In this respect the various activities resulting from ECLA's resolutions 154(VIII), 196(IX) and 290(XIII) and from resolutions adopted by the United Nations Statistical Commission should be mentioned:

- Second Inter-American Seminar on Civil Registration (Lima, Peru, 30 November - 11 December 1964)
- Seminar on the Organization and Conduct of Population and Housing Censuses (Santiago, 20-31 May, 1968)
- Regional adviser on civil registration (August 1962- February 1963; January - December 1969)
- Regional adviser on vital and demographic statistics including population census (June - September 1963; June 1964 - December 1967)

<sup>a/</sup> Based on the new standard cost of \$ 28 000 a year per expert plus an additional travel allowance of \$ 2 000 a year per expert. In 1970 only three months.

- The regional adviser on sampling who has been assigned to ECLA since 1962 has done a great deal of work on demographic statistics at the request of countries of the region.

The results obtained at the meetings and in technical assistance missions indicate that many countries have made progress in their endeavours to present reliable and timely information on population and related social questions. This progress, however, has been insufficient and has proceeded by fits and starts. Promising beginnings have come to nothing owing to lack of continuous support from the Governments themselves and from international organizations. A dependable level of technical assistance is as necessary as ever. Unfortunately, owing to ever increasing restrictions on the availability of resources and to the great pressure of other priority fields, ECLA has been forced to reduce its operational activities in statistics, including population censuses and **vital statistics**.

Other United Nations activities in this field have included several technical assistance missions of experts in the country programmes of Peru, Panama, the Dominican Republic, missions of an interregional adviser, and meetings of the Central American Statistical Coordination Subcommittee and its Working Groups.

Activities of other organizations include meetings convened by the **Inter-American Statistical Institute (IASI)** and missions of experts through the United States Agency for International Development. The Subcommittee on Demographic and Housing Statistics of IASI's Commission on the Improvement of National Statistics held two sessions, in January 1966 and in December 1968. At the first, recommendations were formulated for the 1970 Population and Housing Censuses and at the second, the situation of current population statistics and the Inter-American Basic Statistics Programme on this subject were discussed. These activities, limited mainly to standard-setting and very short advisory missions, satisfied only a very small part of the needs of the region.

The main objectives of the ECLA request within the context of its programme of policy oriented population research are:

- (1) To assist countries in the conduct of population and housing censuses in the early 1970's and in the prompt presentation of the census results; and
- (2) To provide national statistical services with assistance in the improvement of their demographic and vital statistics.

Therefore, the projects presented refer partly to population censuses and partly to current population statistics. In this respect it should be mentioned that the year 1970 has been established by international and regional bodies as the reference year for the population and housing censuses. All censuses held within the period 1966 to 1974 are considered to belong to the 1970 census round. According to recent information the following countries have carried out or are planning to carry out their censuses during 1970: Argentina, Barbados, Brazil, Chile, Cuba, The Dominican Republic, Guyana, Jamaica, Mexico, Panama and Trinidad and Tobago; during 1971: Peru and Venezuela; during 1972: Bolivia, Colombia, Ecuador, Paraguay and Uruguay; and during 1973: Costa Rica. No census year has yet been fixed for El Salvador, Guatemala, Haiti, Honduras and Nicaragua, though interest has been expressed in taking their censuses in 1970. Haiti has indicated its willingness to conduct a census on a sample basis but without mentioning a specific year.

#### Description of projects

The assistance requested calls for up to five regional experts through the years 1971-1974, one pilot and demonstration project in 1973, several meetings in the period 1970-1974, and some limited assistance in the form of local staff during these years. Though not included as a special project, attention should also be drawn to the desirability of including at least one statistician in the proposed multinational and interdisciplinary advisory missions to be set up jointly by Headquarters and ECLA. This need could be satisfied, at least in part, by the regional advisers.

The projects proposed for financing by the United Nations Fund for Population Activities are presented in some detail in the following pages.

In summary they are:

1. Regional advisers:
  - (a) Two regional advisers on population censuses (October 1970-December 1973)
  - (b) One regional adviser on computer methods (October 1970 - December 1974)
  - (c) One regional adviser on sampling (October 1970 - December 1974)
  - (d) One regional adviser on vital statistics (October 1970 - December 1974)
  
2. Regional meetings on:
  - (a) Methodology of a population and housing census
  - (b) Preparation and utilization of population and housing census tabulations
  - (c) Promotion of current demographic statistics
  - (d) Computer methods
  
3. A pilot and demonstration project
  
4. Infrastructure: one general service assistant in 1971 and two assistants in the years 1972-1974, for assisting in the preparation of meetings and in the collection and presentation of data; one secretary for the regional advisers 1971 - 1974; also additional travel money for ECLA Staff is requested, to the amount of \$ 2 000 a year.

### Regional advisers

In view of the fact that regional advisers are able to provide countries with assistance in their special fields at relatively short notice under a flexible programme, advantage should be taken of the possibility that one expert may serve several countries. It is, however, impossible for one expert to serve more than about five countries in any useful way. Nor can the regional adviser be a substitute for a country programme expert, who assists the national authorities on a more permanent basis. However it will be impossible to recruit a sufficient number of experts to satisfy all potential requests under country programmes. The regional advisers should therefore be considered as a most welcome supplementary solution to the problem the countries are facing. A special advantage of this type of assistance is that a regional adviser will easily be able to transmit the experience he has obtained in several countries of the region to other countries. As the regional advisers should start their missions as soon as possible, the proposal includes three months of 1970 under this heading.

The regional advisers suggested under this proposal should not only work on individual missions as requested by the Governments, but also as a team when so required. They should have regular contact on the most important questions encountered during their missions **in order to avoid giving countries conflicting advice**, and should also participate in the meeting on **minimum census requirements** suggested for the end of 1970. The most urgent project in which the advisers could help countries as a team would be the obtaining of samples of about 500 000 census returns, representative for the population of each country with the aim of (a) obtaining advanced general results within six months after the holding of the population and housing census; and (b) elaborating tables with detailed cross classifications of the information obtained which would be specially useful for demographic analysis. This project, in which CELADE is interested for its research purposes, will probably be executed for Chile with the help of USAID and in other countries, **supplementing financing budget might be forthcoming from the United Nations Fund for Population Activities.** Its cost would be about \$ 50 000 per country, but the regional advisers could help in the preparation and conduct of the

sample and in the elaboration of the data by modern data processing methods.

The regional advisers requested are the following:

(1) Two regional advisers on population censuses. Even in the countries of the region which are statistically relatively more advanced, advice on specific problems in the conduct of population censuses will be most welcome. Technical assistance will be and in fact already is being requested on practical aspects of preparation of census plans, the preparation of questionnaires and enumeration instructions, the training of enumerators, supervisors and other field and office staff, and the preparation of tabulation plans. In view of the importance of the 1970 regional population and housing census round for providing a new basis for purposes of analysis and study, two regional advisers on this subject are requested through 1973. One adviser should be stationed in Santiago and the other one at ECLA's Mexico Office in order to serve the Central American countries and possibly one or more Caribbean countries.

(2) One regional adviser on computer methods and problems related with the data processing aspect of population censuses. Modern electronic equipment is a powerful tool for data processing, specially for dealing with the huge demand of information arising out of a population census. However, little experience exists in the countries of the region in the solution of specific problems which arise in the use of electronic data processing equipment in the elaboration of the population census data. Only by an efficient use of the **available equipment can the main objective** of timely results be obtained. The regional adviser **should assist in the** selection of most appropriate input procedure in those countries which have not yet taken a decision on this aspect; he should advise on all computer procedures related with the population census, including, if necessary, the design of the requested tabulation forms, the preparation of the programme and the training of the necessary personnel.

(3) One regional adviser in sampling for demographic statistics. Statistical sampling can be applied to several phases of the population census and to



demographic surveys. There are various occasions on which it should be applied in order to limit the cost implied by a complete enumeration. Sampling serves also for investigating the quality of the data obtained in a full enumeration, for obtaining advance results, and for other purposes as well. Though Latin American countries have trained sampling experts in many cases, they have not yet acquired sufficient working experience to solve all the practical problems which arise when applying the theoretical principles to detailed work procedures. Therefore a regional adviser on statistical sampling would be very useful. (Although one regional adviser on sampling has been assigned to ECLA under the United Nations regular technical assistance programme, he has been unable to give adequate attention to demographic questions owing to demands for advice in the application of sampling to many other areas of statistics).

(4) One regional adviser on vital statistics. One of the most important uses of vital statistics, which may be obtained from registration records or from other sources, is for demographic analysis, which is an important aid in planning for economic and social development. Vital statistics yield information on the rate and trend of population growth and on the behaviour of its components. The vital statistics available in Latin American countries are not of such quality as to enable them to serve this purposes and **improvement** is urgently needed. The regional adviser would assist countries in improving the production and presentation of statistics on births, deaths, marriages, divorces, etc. He could also advise on the topics to be investigated in a vital statistical system and the methods of investigation. The activities of this adviser should be related with the activities on the promotion of current demographic statistics in Latin America, proposed in another project.



Project for an expert meeting on methodology of a minimum population and housing census

Though they have expressed the wish to carry out a population and housing census during the 1970 round, several countries have no **approved** budget for financing all the corresponding activities. It is considered that some action by the United Nations to relieve this situation would be timely. The purpose of the proposed meeting would be to discuss the practicability and methodology of holding a minimum population and housing census, at the lowest possible cost, and to investigate alternative methods of carrying out the inquiries to obtain the necessary basic information. Other relevant points to be discussed would include the use of sampling and experiments in sampling for census purposes as a substitute for censuses in developing countries.

The agenda would cover the following points:

(a) Minimum programme for a population and housing census, also taking into consideration the international recommendations and regional experience; basic elements of census cartography; consideration of all available resources as potential collaborators in the census.

(b) Possibility of using alternative methods, including special surveys, for obtaining the desired information.

(c) Application of sampling:

(i) Discussion of methods and procedures to be applied in the countries of the region;

(ii) Possibility of obtaining advance results by sample for immediate demographic analysis;

(iii) Discussion of the results obtained in demographic sample surveys of Guanabara, Cauquenes and **Valdivia**.

Several existing United Nations and ECLA documents may be used advantageously at the meeting. Furthermore, the cosponsors (the Statistical Office, ECLA, CELADE and IASI) may prepare additional documents on the subject to be discussed.

The meeting should be held for two weeks in Santiago or San José de Costa Rica during the last quarter of 1970. About fifteen to twenty participants

from Latin American countries should be invited mainly from the countries that have the most serious difficulties in financing their 1970 censuses. The participation of a consultant in sampling and two other experts with experience in the subject would also be necessary for about one month.

In addition, the budget for the meeting should provide for the participation of a staff member from the Statistical Office of the United Nations and of the Interregional Adviser on Demographic Statistics and Population Censuses. The United States Bureau of the Census and the Canadian Dominion Bureau of Statistics would be invited to send one or two participants also.

The budget would amount to \$ 20 000.

Project for an Inter-American Seminar on the preparation  
and utilization of population and housing census tabulations

During 1971 eleven ECLA countries will be confronted with the task of processing the census data, and the other half will have started to conduct population and housing censuses from 1971 to 1973. The purpose of the proposed seminar would be to discuss the appropriate and timely presentation of the census results; the types of analyses to be prepared from the tabulations; the census publication programme and possibly other related subjects.

The seminar agenda would cover the following subjects:

- (a) Discussion of a basic set of census tabulations, at several levels of priority and geographical distribution;
- (b) Formulation of plans for census analysis, which include an evaluation of the quality of the census, a general and complete analysis of the main census characteristics and, if possible, a specialized analysis in a special bulletin;
- (c) Discussion on the use of electronic computers for obtaining the census tabulations.

Besides the already existing documentation on the subjects to be discussed at the seminar,<sup>1/</sup> some additional working documents and discussion guides would have to be prepared.

The participants would consist of one or two representatives from all the member and **associated member countries of ECLA**, one chosen from the permanent staff of the national statistical servival services with technical responsibility on the planning of population and housing censuses, and the other representing the users of the census data. The seminar should be sponsored by ECLA, the United Nations Statistical Office, CELADE and IASI and **representatives** of the ILO, FAO, UNICEF and other specialized agencies of the United Nations would be invited.

It is suggested that the seminar should be held in Santiago during the second half of 1971 and last two weeks.

The budget for this meeting, considering that these would be some thirty to thirty-five country participants and simultaneous interpretation, would amount to US\$ 28 000, including a reserve for documentation, etc.

Project for the promotion of current demographic statistics  
and civil registration in the American countries

International organizations, and particularly the Statistical Office of the United Nations, have been concerned with the adequate function of the civil registration system in the American countries as a source for vital statistics and related data, which are indispensable for population

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1/ United Nations, Principles and Recommendations for the 1970 Population Censuses (Statistical Papers, Series M, N° 44, New York, 1969)

- United Nations, Seminar on Evaluation and Utilization of Population Census Data in Latin America. (Santiago, Chile, 30 Nov. 18 Dec. 1959) E/CN.9/CONF. 1/1/Rev. 1-ST/TAO/SER.C/46.
- United Nations, National Programmes of Analysis of Population Census Data as an Aid to Planning and Policy-Making. A study to assist Governments in utilizing census results for purposes of planning in economic and social fields, and formulation of policy. ST/SOA/Series A/36.

studies. Two Inter-American Seminars on Civil Registration have taken place, in 1954 and 1964. Both Seminars exhaustively discussed the technical and methodological aspects of all the elements involved in the organization, establishment, function and control of a civil **registration system**. In view of the little practical progress made since the last Seminar, it is considered that the most appropriate action would now be:

- (a) To make a fundamental study of the most appropriate steps to be taken to obtain reliable and timely current demographic statistics and of the role of civil registration in attaining this aim in countries at a specific level of development;
- (b) Intensive promotion of the most appropriate methods for providing the countries of the region with the necessary statistical tools for their population policies.

For this purpose, it is suggested that the interested international organizations should co-ordinate their activities and establish a joint integrated programme for obtaining current demographic statistics in Latin America. As a first measure a permanent working group should be established in order to discuss and interchange ideas on methods and procedures to obtain reliable and timely vital statistics. This should include the discussion of the methodological result of the pilot sample surveys held in several countries, the possible establishment of registration areas as a means of controlling vital events, and the training of the personnel responsible for the elaboration of vital statistics.

For this purpose a first meeting should be held in Santiago in 1972. At a second stage a standing committee should be appointed in order to discuss the practical aspects of the promotion activities. These would take place during 1973 and 1974 and would consist in several missions throughout the region to discuss with high level authorities the measures to be taken for the establishment of **appropriate** civil registration services, or other means of obtaining vital events enumeration.

The budget requested for this project would be as follows:

Meeting of working group in Santiago .....	US\$ 25.000
Meeting of standing committee .....	5.000
Promotion campaign including extensive travel during 1973 and 1974 .....	8.000 (for each year)

Seminar on computer methods applied to  
demographic and social statistics

The use of computer methods both for information purposes and for scientific analysis will open a new era in the field of population and social statistics. Computers will undoubtedly be increasingly employed. Many problems have, however, to be solved if the most efficient use is to be made of the facilities offered by modern computers. It is considered important to hold a meeting on computer methods in demographic and social statistics at which these problems would be discussed and communication between subject matter statisticians and computer specialists would be encouraged.

It is expected that in 1971, under the co-operation programme of the German Foundation for Developing Countries, a seminar will be held on data processing of **population** and housing censuses for Latin American countries. Pending the results of the 1971 seminar and the development of demographic and social statistics in the next few years, the proposed seminar, which might be held in 1974, should be kept in mind. A detailed presentation will be made at a later date. As far as can be seen at present, the cost can be estimated at \$ 25 000.

Pilot and demonstration project

A **pilot** and demonstration project is envisaged on sample registration areas as a base for a modern civil registration service. Concurrently with the promotion activities mentioned under the heading, "Meetings and Seminars", this project would have the double purpose of **making a decisive impact** on the country where the project is carried out and showing other countries