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CELADE MAIN CONTRIBUTIONS
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I. BRIEF BACKGROUND INFORMATION ON THE OPERATION OF CELADE

CELADE's activities, during its first seven years of operation,^{1/} were financed by funds from the United Nations Development Programme, the Population Council of New York, and the University of Chile.

United Nations funds, for the most part, covered salaries of the international staff while Population Council resources covered salaries of part of the local staff and some research programme expenditures. The University of Chile, on the other hand, provided quarters, equipment and supplies and covered the remaining local salaries.

Since 1964, financial sources have been strengthened by contributions from the Agency for International Development (AID). An initial contribution of 100 000 dollars was received in 1964, part of which was used during the 1965 fiscal year for the payment of salaries, travel expenses, fellowships and other smaller expenditures. A second contribution in the same amount was formalized during 1966.

The resources at the Centre's disposal were substantially increased when the Special Fund project rendering financial support for a five-year period, came into operation on May 1st, 1966.

CELADE has continued receiving contributions from the Government of Chile and further grants from AID. The expansion of CELADE's activities is shown in the following expenditure figures:

Year	Expenditures (thousands of US\$)
1958	106,5
1960	143,9
1962	221,0
1964	216,0
1966	330,3
1967	431,8
1968	495,4
1969	726,7

^{1/} CELADE was established through a technical assistance agreement between United Nations and the Government of Chile, represented by the University of Chile, signed on August 13th, 1957.

These figures represent expenditures incurred in teaching activities, technical assistance and the regular research programme. In order to carry out research projects of a more ample scope, involving field work and substantial expenses in data processing, CELADE obtained special grants from different international agencies, mainly from the Population Council and, later on, from the Ford Foundation.

Grants approved by the Population Council for these projects since 1963, amount to more than US\$390,000. From this figure, approximately 258,000 were assigned to work carried out in the countries, specially to expenditures in field work. The remaining 120,000 were assigned to expenditures in relation to these projects, under the direct administration of the Centre. About 30 per cent of these funds were not actually delivered to the Centre either because economies were made in some of the projects or because others are in the execution stage. The largest grant corresponds to the programme of rural fertility surveys, initiated in 1967. Next in importance and on an equal standing are the programmes of urban fertility (1963) and induced abortion and use of contraceptives (1967). Considerably lower amounts were granted for activities in relation to the Panamerican Conference on the Teaching of Demography in the Schools of Medicine (Bogota, 1968).

Towards the middle of 1968, the Ford Foundation granted 107,100 dollars for a two-year programme of activities. A major part of this amount was assigned to the continuation of various projects already underway, such as the Data Bank, processing of sample data from the 1960 censuses and experimental censuses, and analysis of survey data on immigration towards two metropolitan areas (Lima and Caracas). Part was also assigned to cover travel and living expenses of well known experts in a programme of visits to CELADE, and those of study missions abroad by personnel of the Centre. In relation to the above-mentioned study on migrations, the Foundation also covers the salaries of two investigators in the amount of 60,000 dollars.

In 1962, that is, five years after CELADE was founded, the staff was very small in relation to the aims of its programme. In addition to the Director, there were six professionals, while thirteen persons worked in administrative and secretarial functions and as assistant researchers. When the Special Fund financial assistance project came into operation, twenty-one professional posts were provided, thirteen financed by Special Fund resources (nine at Headquarters and four at the Sub-Centre, San Jose), four by AID funds, two associate experts paid by the Government of the Netherlands and an investigator provided by the University of Chicago.

At that time, local staff members numbered 48, including seven in professional and semi-professional posts.

During the last period -June 1st, 1968 to the present-the increase in the number of international personnel was relatively small, only four posts were added to those already mentioned, two of which were transfers of professionals who had previously held local posts. Three of these four professionals went to the Sub-Centre at San Jose and one to Headquarters. On the other hand, the activities of some of the sectors were affected by a relatively important movement of personnel (seven professionals ceased working in the institution and nine new professionals were recruited). These recruitments could not always be made with the desired speed due both to the qualifications required in some cases and to the bureaucratic recruitment procedure. In summary, as of March 31st, 1970, 17 posts covered by Headquarters funds were filled, in addition to a professional provided by the Ford Foundation; seven Sub-Centre posts were filled, totalling 25 professional posts at an international level.

It should be noted that this personnel includes experts from several fields: economists, sociologists, physicians, statisticians, demographers, etc., and also that ten of them had attended the courses of CELADE's regular training programme.

The increase in the number of locally recruited personnel was quite moderate -seven posts- totalling at present 55 persons. Eighty per cent of this personnel is financed by sources other than United Nations.

During its first years, the Centre operated in a small building provided by the University of Chile and in two small houses outside the University area. Since the end of 1966 it occupies new quarters which at the time, although not entirely, met the requirements of the institution. In fact, at a small distance from the main building, a private house had to be rented and fitted for the Editorial Department, as well as to provide offices for the professional staff, and fellows and for the installation of a class-room.

Possibly the most serious problem of the institution during these last two years has been the need for more ample and functional quarters. Specially critical is the greater space required by the library for shelves and a reading-room; facilities for improving and extending the volume of publications, also require an important expansion. In general, lack of space conspires against a more rational and productive organization of activities in all sectors, so that, for example,

rooms which would normally accomodate only one person must accomodate two or even three. In addition, facilities for holding work meetings, seminars and special courses are almost non-existent. Finally, storage space for supplies is also insufficient and adequate space for a cafeteria for the students and staff should also be considered.

II. TEACHING

When CELADE was founded in 1957, there was scarcely a handful of Latin American experts with knowledge and experience in the field of demography, acquired or completed at universities and training centres outside the region. About this time, on the other hand, United Nations and specialized regional agencies had taken a series of steps towards the promotion of population studies and particularly, the creation of training centres to satisfy the needs of developing countries as regards personnel trained in these subjects.^{2/} The rapid population growth in these countries, as a consequence of the decline in mortality after the Second World War, advances made in the knowledge of the interrelations between population and economic and social development and the increasing awareness of these problems on the part of the governments, for the first time posed the urgent need of making studies about the demographic situation based mainly on population censuses^{3/} and also special investigations on aspects not covered or only partially covered by censuses and vital statistics.

In view of the above-mentioned lack of trained personnel, CELADE had to devote its greatest efforts, during its first years of operation, to the training of personnel and, in general, the teaching of demography. When the Centre was established, top priority was assigned to the training of population data analysts in order to cover the needs of the bureaus of statistics, planning agencies and other government institutions, a yearly "basic course" being established in 1958 to fulfil this aim.

In view of its duration and the requirements for selection of the students, the aims of this "basic course" are limited to the teaching of data gathering and processing methods, basic techniques of demographic analysis, and providing a general view of the situation and of the main population problems. Although the

^{2/} Because of its direct connection with this subject, mention should be made of Resolution 571 (XIX) of May 1955 of the United Nations Economic and Social Council, requesting the Secretary-General of the Organization to explore the possibility of establishing centres in the main developing regions of the world for the study of population problems and for the training of personnel in demographic analysis techniques. Also, the Latin American Population Seminar, held in Rio de Janeiro at the end of 1955.

^{3/} The Programme for the Census of the Americas in 1950, was the first regional effort to organize census research on a modern scientific basis in the countries of the continent, providing the basic information which made possible the initiation of applied demographic studies.

policy of the Centre has been to admit post-graduate candidates, experience has shown that only part of the fellows selected could meet higher-level training requirements, among other considerations, because they had had sufficient previous studies in mathematics and statistics and had been trained in a related field, such as economics, sociology, etc. Addressed at these students, a twelve-months "advanced course" was established in 1959, with the purpose of training professionals in demographic research, at a level equivalent to a master's degree.

During its first years, the advanced training programme was almost exclusively devoted to research projects, and each student had to prepare several monographs on different subjects. The need for a more detailed study of the subjects covered by the basic course, of expanding the teaching of social research methods, of making the students familiar with the interrelations between population and social changes and between the latter and economic development, and of filling gaps in mathematical knowledge, led to the introduction of formal courses in the respective fields until, in 1967, the present structures was attained.

As a culmination of these studies, a "specialization course" was established in 1963, aimed at students from the "advanced course" with an adequate professional background in activities related to demography. During this third year of training, students take an active part in the Centre's training and research programmes, being trained to assume professional responsibilities in teaching, research and technical assistance, both at a national and an international level.

During the first twelve years (1958-1969) of this training programme (Santiago Headquarters Regular Training Programme) 208 technicians, investigators and administrators from government agencies, university centres and other institutions were trained, a good number of whom continue working in the field of demography, and, in some instances, hold key positions in their respective countries. Information is included in Appendix N° 1 about the activities in which an important number of ex-CELADE fellows participate. Of the above-mentioned total, 62 continued in the "advanced course" and, among the latter, 14 were trained in the "specialization course". In Table 1 of the Appendix I the students are separated by course, year, and country of origin and it is summarized the financial sources of fellowships granted. 82 per cent of these fellowships were financed by funds from the United Nations Development Programme.

Important as a regional training programme aimed at forming cadres of population analysts and high level demographers, may be the needs which should be covered by the teaching of demography are beyond the possibilities of this kind of programme. In fact, during the last few years the idea of introducing the teaching of demography in the Universities curricula has gained ground, particularly in the Schools of Social Sciences and Medicine, reflecting the increasing attention being paid to population studies. Interest in the teaching of demography is not restricted to undergraduate university careers, where this interest has only recently manifested itself; on the contrary, this need has most often been expressed in graduate courses in which demographic studies have been included. The Centre has followed this process with great attention and, as far as its financial resources have permitted, has carried out manifold activities to promote and facilitate the institutionalization of the teaching of demography in the university centers of the region and, more in a direct manner, has organized national courses and rendered assistance through demography lectures in regional and national courses organized by other institutions. These activities may be grouped as follows:

- i) Organization and implementation of national courses in demography;
- ii) Demography lectures in regional courses, organized or sponsored by international institutions;
- iii) Organization and participation in regional conferences on the teaching of demography, and
- iv) Demography classes in university departments.

The national courses are aimed at promoting interest in demographic teaching and research and, eventually, will be the basis for permanent courses financed by the countries. A first type of course, of a more ambitious character, was carried out at the Faculty of Economic Sciences of the National University of Cordoba (Argentina) during 1968, and a similar course at the Faculty of Economic and Social Sciences of the University of Zulia (Venezuela) in 1969. These are intensive courses of four-months duration, at a similar level to that of the basic course given in Santiago, but in a more condensed manner. The aims and contents of these courses are included in a special booklet. In both cases, the courses are part of an agreement in which CEBIAD is to render assistance to these universities in teaching and research. As a result of these agreements, in March of the present year, a second course was initiated at the University of Cordoba while a second course is also planned for 1971 at the University of Zulia. These courses

are attended by professionals from all over the country, attached to government agencies and university centres.

Since 1968, national courses of a more limited scope have been covered by personnel from the Sub-Centre at San Jose. These courses have been organized in Central American countries (El Salvador, Honduras, Nicaragua and Guatemala) and Panama, under the sponsorship of the national universities, except for Panama, where the course was sponsored by the Contraloría General de la República. These were short courses of six-weeks duration, and were addressed at middle-level technical personnel attached to government agencies interested in the subject.

Additional information about national courses is given in Table 4 of the Appendix. A brief booklet describing the aims and characteristics of these courses has also been prepared.

Since its first years of operation, CELADE has been in charge of demography lectures in the training courses organized by several international agencies in Santiago. This assistance has been sporadic and has depended on the requirements of these agencies. Among these, it may be mentioned the Inter American Centre for the Teaching of Economic and Financial Statistics (CIEF), the Inter American Centre for the Teaching of Statistics (CIENES), the Latin American Faculty of Sociology (FLACSO/UNESCO) and the Latin American Institute of Economic and Social Planning (ILPES), in its training courses in housing, education and human resources.

As a result of the interest awakened in family planning and in the interrelations between demographic phenomena and the health of the population, in the field of public health and in some branches of Medicine (Obstetrics, mother and child hygiene, etc.), in the last four or five years important teaching activities, including general studies on demography, have been addressed at medical and paramedical personnel. Due to the fact that three important Latin American programmes with similar objectives have their headquarters in Santiago, CELADE has had the opportunity of participating very actively in these programmes. Since 1966, the Course on Health and Population Dynamics addressed mainly at the teaching staff of the schools of public health has been given annually; this is a four-month programme devoting more than half of the lectures to the study of population and to methods of demographic data gathering and analysis.

Secondly, mention must be made of the Latin American Course on the Biology of Human Reproduction for investigators in this field (physicians and biologists), which is part of a more extensive programme carried out since 1967 in three countries (Argentina, Chile and Uruguay); the Chilean course is organized and carried out by CELADE in collaboration with two departments of the University of Chile and a hospital clinic.

The third of the above-mentioned courses is the Latin American Training Programme in Family Planning sponsored by the Chilean Association for the Protection of the Family. These courses have been given since 1965, and are repeated four or five times a year, and as in the two previously mentioned courses, is attended by professionals from different Latin American countries.

A clear indication of the importance of the assistance rendered by CELADE in the above-mentioned regional courses is given by the figures for the years 1966-1969 shown in Table 3 of the Appendix I. During this period, 718 professionals received training in demography in courses which covered 1 177 lecture hours. Naturally, Chile was the country receiving the greatest benefits from these programmes while medical and paramedical personnel was the group which participated most.

In the last two years important steps have been taken towards the institutionalization of the teaching of demography in university careers. The first regional initiative in this direction was the Pan American Conference on the Teaching of Demography in the Schools of Medicine, held in Bogota in June 1968. This meeting was the result of a movement initiated in some schools of medicine, where for several years brief courses on the use of contraceptives, family planning and other demographic subjects related to health have been given, in most cases at the departments of epidemiology, obstetrics and mother and child hygiene. This Conference was co-organized by CELADE, the Panamerican Health Organization and the Pan American Federation of Faculties of Medicine (FEPAFEM). One of the main recommendations of this Conference assigns an important responsibility to CELADE in the training of the teaching staff.

A year later, in November 1969, the schools of economics and sociology followed this example. Under the sponsorship of the Department of Social Affairs of the Organization of American States (OAS) and in collaboration with CELADE, El Colegio de México and the Centro de Estudios Económicos of the Universidad de los

Andes, a Seminar on the Teaching of Demography in the Schools of Economics and Sociology of Latin America was held in Bogota. As a preparatory work for this conference, an expert from CELADE visited schools in 8 cities of South America for the purpose of gathering information on the teaching of demography. A report based on this information was prepared and served as a basis for discussions. Different recommendations adopted by the Conference, in relation to programmes, bibliography and the training of the teaching staff, involve present and future activities of CELADE.

The schools of public health have also joined the movement towards the teaching of demography, in this instance, at the post-graduate level. As a matter of fact, these schools have a long tradition in the teaching of bio-statistics, but this has proved insufficient in view of the greater attention paid today to demographic phenomena in the field of social medicine and, particularly, in the face of lines of action involving decisions to be taken as regards population policies. In order to discuss subjects related to the role of the schools of public health in the study of interrelations between health and population, resources required to develop research in this field, and the training of teaching staff, a conference of these schools is being organized, to be held in November 1970. An organizing committee, including representatives of PAHO, of the Department of Preventive and Social Medicine of the University of Chile and CELADE, is in charge of the preparatory work.

Finally, CELADE has rendered assistance in the teaching of demography in university departments. Naturally, this assistance could be rendered only in Chile and Costa Rica, seats of the Centre's Headquarters and Sub-Centre, respectively. Details as to content of subjects, number of lecture-hours and other particulars about these courses would fill many pages; a list of the departments or the schools which requested and received teaching assistance is given in Table 4 of the Appendix I.

Finally, in order to complete this brief description of the activities connected with the teaching of demography, the recent organization of training seminars must be mentioned. The first of these seminars was held in Santiago from February 15th of this year, lasted three weeks, and was devoted to the study of theoretical populations. A group of ex-fellows, advanced course students and professionals working at CELADE participated in it. Although of a limited scope, this

seminar should be considered as an effort to bring up to date in this subject a group of well-qualified demographers.

Another training seminar of a six-week duration, for the evaluation of family planning programmes, will be held in Santiago next May and June. It will be attended by professionals working in activities connected with family planning and health programmes in the countries of the region.

In summary, the main teaching activities in demography carried out by CELADE were the following:

- a) Regular training programme courses (Basic, Advanced and Specialization Courses) initiated in 1958. The training of "research fellows" is a complement of this programme;
- b) National Courses, carried out since 1967, under the sponsorship -with one exception- of the national Universities of the respective countries: Guatemala (2), Honduras, Nicaragua, El Salvador, Argentina (2), Panama and Venezuela;
- c) In international courses organized in Santiago by other institutions: Course on Health and Population Dynamics (1966-1967-1968 and 1969); Latin American Course on the Biology of Human Reproduction (1967, 1968 and 1969), Latin American Training Programme in Family Planning (four to five courses per year, 1965, 1966, 1967, 1968 and 1969); several training courses (on housing, education and resources) of the Latin American Institute of Economic and Social Planning (ILPES); courses of the Inter American Centre for the Teaching of Statistics (CIENES); and on courses of the Latin American School of Sociology (ELAS);
- d) Undergraduate and post-graduate courses at universities in Chile and Costa Rica, a list of which is shown in Tables 3 and 4 of Appendix I;
- e) Training Seminars, the first of which was held at the beginning of 1970.

III. RESEARCH

1. Introduction

CELADE's research activities, during its first years of operation, were relatively modest due mainly to the small number of professionals in its staff and the priority assigned to teaching programmes. In spite of these limitations, quite a number of individual projects were carried out during this period.^{4/} On the other hand, students of the "basic" and "advanced" courses of the training programme prepared numerous monographs which are interesting contributions to the knowledge of the demographic situation in the countries of the region.^{5/} The preparation of teaching material adapted to the countries of the region and, above all, the search and application of an adequate methodology in relation to the poor quality or the lack of demographic data, represent another contribution which may properly be included in research work carried out by CELADE.

Field research was initiated in 1959. During the 1959-1962 period three surveys were carried out, in the following order:

i) Fertility survey and attitudes towards family size (Santiago, Chile); ii) Experimental demographic survey in Guanabara (Brazil) for the purpose of estimating demographic rates; and iii) Survey on immigration towards Great Santiago (Chile), for the purpose of studying trends, differentials and adaptation of the migrant population.

Since 1964, the research programme has been greatly strengthened. During that year, the programme of comparative surveys on urban fertility, covering seven cities in the region, was started; at the same time, a longitudinal study of the Cauquenes (Chile) health area was also initiated, having a similar purpose to that of the above-mentioned Guanabara study. In 1965, the experience of Great Santiago was repeated in Metropolitan Lima, thus continuing the study of internal migrations; subsequently, a similar survey was carried out in Caracas in 1967.

^{4/} Among these the following may be mentioned: "Análisis demográfico de la situación educativa en América Latina", "Población y mano de obra en Chile, 1930-1975", "Formas de asentamiento de la población en América Latina", "The population of Latin America", and "Algunos modelos teóricos y numéricos de población". (For further information see Series A of CELADE's List of Publications).

^{5/} During the first five years (1958-1962) students prepared more than a hundred monographs; at the end of 1969 these amounted to 281. As may be observed in the Centre's List of Publications, to date, 118 selected monographs have been published (Series C).

In 1966 and 1967, the Centre assumed new responsibilities in the surveys on fertility and induced abortion. The programme of comparative surveys on rural fertility was started in 1966 with the participation of the local institutions of two countries (Colombia, Mexico), two others having joined the programme subsequently (Costa Rica and Peru). Research on induced abortion was carried out in 1967, covering three cities (Bogota, Buenos Aires and Panama), being extended to include Lima in 1969.

More recently (1968-1969), the collaboration of CELADE has been requested in the evaluation of two family planning programmes of limited coverage, one of which is being carried out in the Santiago health area and the other in a geographic area of Chile including rural populations. These activities have been useful to gain experience in this field, in view of the increasing demand for assistance in the evaluation of programmes anticipated in the near future.

It should be mentioned that the purpose of the above-mentioned investigations is not restricted to the search for knowledge about the phenomena being studied, i.e., intensity, trends, variables, etc. In addition the aim has been to institutionalize demographic research among the groups participating as national counterparts, to transmit to them not only the experience gained by the Centre but also a set of procedures and techniques constituting a valuable tool to be used in their future activities. On the other hand, the accumulation of statistical information is a valuable complement to the Centre's training programme, shown by the use made of this material by the students of the regular courses, research fellows and other professionals who have carried out research work in the institution.

The utilization of population censuses and other sources of demographic data has been part of routine work. CELADE has gradually assumed the responsibility of keeping up-to-date information about the demographic situation of the countries of the region, permanently evaluating and adjusting basic data in order to prepare estimations and population projections. This work answers the needs of national users, international organizations and those of the Centre in relation to other investigations being carried out.^{6/}

^{6/} More detailed information about this work is presented in section IV on page 35.

In 1960, an ambitious project was undertaken with the aim of gathering card samples from the latest censuses, for purposes of analysis and in order to establish a Data Bank to be placed at the disposal of other users. Census samples from 16 Latin American countries were gathered. A programme of tabulations not included in the census information published, and not available in the respective countries, was specially designed to analyze subjects such as mortality, education, fertility, nuptiality, internal migrations and economically active populations. Part of this work has been carried out and some of its results have already been used in several studies.

The Centre has collaborated many times with other United Nations bodies and specialized agencies operating in Santiago, especially in the preparation of demographic information. For example, mention should be made, because of its duration and the amount of resources involved, of the joint research project with the United Nations Latin American Institute of Economic and Social Planning (ILPES), on "policies of economic development and manpower absorption", initiated in 1967.

Finally, this summary should include reference to the several dozens of documents prepared by the professional staff for their presentation to seminars and international conferences, for their publication in technical reviews or to be published by the Centre itself. In Table 1 of Appendix II a selection of works is listed for informative purposes.

In the following paragraphs a more detailed comment about some of the more important projects carried out from 1960 to 1969 is included.

2. Fertility Research

Without neglecting the study of other components of the demographic change, as may be seen from an examination of the work carried out by CELADE in other research areas (population and economic development; internal migrations; economically active population, projections, etc.), the Centre has particularly emphasized the study of the fertility variable in view of the fact that it is the main determinant of the present Latin American demographic structure and in view of the complicated interrelations between this variable and other phenomena: cultural, economic, social and even political. In this sense, the aim has been the maximum utilization of available data, both from censuses and from vital statistics, with the purpose of measuring fertility levels, underline some of the factors which may be determining differential levels of fertility and to attempt to discover and describe

trends in the recent past. These efforts have been complemented by field work aimed at the elucidation and quantification of aspects more specifically associated with fertility. The following paragraphs briefly describe the basic features of these investigations.

a) Programme of comparative fertility surveys (PECFAL)

The Programme of Comparative Fertility Surveys (PECFAL) was undertaken as a response to the pressing demands for data on a variable critical to the comprehension of the interaction of economic and demographic factors. Data for measuring the level and trends of fertility and understanding its behaviour and the relationship of the latter to social norms, to social and economic structure and to other components of population growth had been lacking in Latin America.

It was considered indispensable that the programme should have a coverage such that it would ensure the possibility of studying the various situations prevailing in Latin America, in connection with the fertility behaviour of different social and ethnic groups within countries at diverse stages of economic and social development and in some instances clearly differentiated as to their demographic history. In the first phase of the programme, surveys were conducted in seven metropolitan areas of an equal number of countries, six of which contained the national capital, namely, Bogota, Buenos Aires, Caracas, Mexico, Panama, Rio de Janeiro and San Jose. The cities included in the study differ not only in their general socio-economic context, but also in their internal ecological organization.

In a second phase, the surveys were extended to cover a national sample of small urban and rural areas in Colombia, Costa Rica, Mexico and Peru, four countries clearly differentiated as regards cultural background, and ethnic composition. Care has been exercised to ensure the comparability of the data collected to describe the various situations. This has been accomplished through a well planned effort to bring different Latin American research institutes together under the guidance and supervision of CELADE through regular sessions, methodological publications, continuous correspondence and personal visits of CELADE staff members, as well as through the use of the same basic sample design, identical questionnaire and coding systems with concomitant instructions. Operationally, this has been made possible through the signing of an agreement between CELADE and each of the national institutions in which mutual obligations and responsibilities were established; CELADE develops in consultations with the participating organizations, the basic research

tools, renders continuous technical assistance and provides copies of tabulations prepared for each country. The national organizations give local support to the surveys, conduct the field work, code the questionnaire and prepare a set of punch cards which are made available to CELADE in this form or on computer's tapes. Comparative international analyses, as well as publication of these are in care of CELADE, while the countries have the responsibility of publishing a national report incorporating some basic analysis of the data collected in the country. For the small urban and rural areas surveys, it is planned that CELADE will also furnish the countries with the computer's programme, which is being prepared for processing the data. Financially, POCFAL has been possible through the support given to it by the Population Council.

Following is a brief description of the two phases of the programme and the status of operations as of April 1970.

Metropolitan Areas Surveys. These were conducted with the close collaboration of the following institutions in the participating countries: the Centre for Economic Development (CEDE) of the University of Los Andes, Colombia; the Institute of Sociology of the University of Buenos Aires, and the Centre for Comparative Sociology of the Di Tella Institute, Argentina; the National Bureau of Statistics of Venezuela; the Institute of Sociology of the National University of Mexico; the National Bureau of Statistics of Panama; the UNESCO Latin American Centre for Social Research in Rio de Janeiro; the Central American Statistical Institute of the University of Costa Rica and the National Bureau of Statistics of Costa Rica.

The national directors of these surveys were, with one exception, former CELADE fellows which had completed the Advanced Course. They attended a workshop held in Santiago in July 1963, where agreement was reached regarding the objectives to be accomplished, the type of sample design to be adopted and the general methodology to be uniformly followed. This workshop was organized with the collaboration of the United Nations Economic Commission for Latin America and the Population Division, as well as Cornell University's International Population Program. In each city a self-weighted stratified cluster probability sample of around 2 200 women twenty to fifty years old was covered, thus making the total number of women interviewed in the 7 cities of more than 15 000. The field work was completed for the most part by the end of 1964.

A rather comprehensive programme of tabulations was prepared with the collaboration of the University of Chicago's Community and Family Study Center. Most of the basic ones have been incorporated in a summary volume which will be published during 1970 grouped under the following headings: Vital Events, Motivation for Family Planning, Attitudes towards Family Planning and Knowledge and Use of Contraception.

In the meantime, national reports have been published by Colombia, Costa Rica, Panama and Venezuela. While Brazil has not issued the report that was prepared, it has published several papers summarizing findings of the survey in Latin America, the review of the Center which conducted the study in Rio de Janeiro. Publication of partial comparative results have also been published by CELADE. Analysis of the data continues and several monographs are expected to be published during 1970, in addition to the studies already prepared which are listed in Annex II.

Small Urban and Rural Areas Surveys. The initiation of this phase of PECFAL was marked by the development of three working meetings in which the objectives, research tools and procedures to be adopted were agreed upon by CELADE and representatives from the participating countries. These activities were carried out between April and October, 1966. The launching of the national surveys was preceded by pilot surveys conducted during the first semester of 1967 in two different sites in three Latin American countries (Colombia, Chile and Mexico). The results of these pilot surveys were examined by the participating institutions in a workshop convened in CELADE in October 1967. Final decisions were then taken and on the basis of the agreements reached, CELADE started developing a set of documents to serve as guides in the execution of the surveys in the countries. They include the questionnaire, the description of the sample design, a Manual for the Interviewers, a Manual for the Supervisor and a Coding Manual. This set of documents represents one of the most complete and systematized contribution to the survey methodology ever published in Latin America.

The sample which includes women 15 to 49 years of age varies in size according to the country from 2,200 in Costa Rica to 3,000 in Colombia and Mexico. While some countries are more advanced in the work than others, field work had been completed in all countries by March 1970. Elaboration of the data is now proceeding and it is anticipated that CELADE will receive the first computers tapes not later than June, 1970. Since a computers programme is under preparation, tabulation of

the data could probably be initiated immediately. Plans for the analysis and publication of the results will be prepared following the availability of marginal totals on some of the most important variables investigated.

b) Programme of Comparative Studies on Induced Abortion and Use of Contraceptives.

This programme was initiated in answer to the concern expressed in different circles for the health and social problem presented by induced abortion. The main purpose of this research is directed towards finding out the actual extent of this practice and its relation to the use of contraceptives in different economic and social strata of the population of the Latin American countries. Additionally, a study will be made of the characteristics of women who practice contraception, methods used and attitudes towards it. The influence of induced abortion on birth-rate levels will also be examined.

For comparative purposes and for a better understanding of the phenomenon, in its relation to differential cultural features of the different countries, the project covers four cities: Bogota, Buenos Aires, Lima and Panama, which, in addition to social and economic differences, show different fertility levels and structures.

Research is carried out by means of retrospective surveys of a representative sample of 1500 fertile age women, duly stratified to interview 500 women in three social, economic, and cultural strata.

For the purpose of carrying out the surveys in the above-mentioned four cities, CELADE requested the collaboration of national institutions with which it signed technical assistance and financial aid agreements.^{7/} As regards the latter aspect, the Population Council gave a grant of about 80,000 dollars, amount which, in addition to field work and data processing in the countries, also covers the general administration of the project on the part of CELADE.

Technical assistance includes, mainly, the design of the sample and the elaboration of research instruments (questionnaires, handbooks for interviewers and

^{7/} The national institutions participating are: in Bogota, the National University and the Colombian Association of Faculties of Medicine (ASCOFAME); in Buenos Aires, the Ministry of Health; in Lima, the Centre of Population and Development Studies (CEPD); and, in Panama, the Bureau of Statistics and Census and the Chair of Gynecology and Obstetrics of the Faculty of Medicine of the University of Panama.

supervisors and coding handbook among other things), a course for the executive directors of the surveys and constant supervision of the progress of investigations.

Field work in the Bogota survey began in July 1967, the following year in Buenos Aires and Panama and at the end of 1969 in Lima. At present, card punching with survey data from the first three cities has been completed; in Lima interviews are being made.

Work in the near future will include the elaboration of standard tabulations and the publication of reports and studies on the different aspects covered by the investigation. In view of the extent of this work and taking into account personnel available in the Centre, it is considered that the analysis and publication of the corresponding monographs might take two or three years.

In addition, CELADE has received requests from several countries for technical assistance in research on incidence and general characteristics of induced abortion. To this effect a technical assistance agreement was recently signed between CELADE and the National Family Centre (CENEF) of Bolivia, to carry out surveys similar to those previously discussed, in La Paz, and in another city in this country. Financial assistance will be provided by AID.

On a similar basis, an agreement will be signed with the Faculty of Medicine of the National University of Asuncion (Paraguay) under the sponsorship of the Ministry of Public Health. This will be a less elaborate survey, programmed to collect, in a relatively short time, data on fertility, incidence of induced abortion and use of contraceptives.

The method used in the investigation of induced abortion has been subject of debate in the recent years; particularly the advantages and disadvantages of retrospective and prospective interviews have been discussed. In view of the methodological interest presented by this subject in relation to future studies, the Centre considered that a comparison of the relative merits of both procedures would prove useful. For this purpose, a longitudinal survey was begun in September 1969, in the North Health Area of Santiago, Chile, covering a sample of 800 women 20-44 years of age. When this survey is concluded, a retrospective survey of a second sample of women will be made. This project receives financial assistance from the Population Council.

c) Survey for the evaluation of a micro-programme of family planning (PLANFAM).

A family planning programme is in operation in the Western Area of Santiago since 1964. This programme is in charge of the Department of Preventive Medicine of the University of Chile and the National Health Service, being its main objective to substitute the practice of induced abortion by effective contraceptive methods.

The most used method was the intrauterine device (Lippes D). The official statistics of the N.H.S. and life tables for the intrauterine device were used in 1968 for the evaluation of the programme, with a view to analyzing the effectiveness of the method and its side-effects. Considering the great number of women who did not return to medical control, there was a clear need of having an overall view at the community level of the effects of the programme and the degree of knowledge of the population and their opinion about the programme and its methods.

The study is in charge of Chair B of Hygiene and Preventive Medicine of the University of Chile and CEBLAD. A representative sample of 1 200 women of the area, 18-37 years, was used.

The field work was carried out from November 1968 to January 1969. The tabulations plan is being prepared and the results of the analysis are expected to be ready at the end of July. This survey is financed with funds provided to the above-mentioned Chair by the Rockefeller Foundation.

3. Guanabara (Brazil) and Cauquenes (Chile) Surveys

Special mention should be made of the experimental demographic surveys of Guanabara and Cauquenes. Special characteristics set them apart from other field work carried out by CEBLAD. While, as a rule, the purpose of field work carried out by the Centre is to explore the concept of demographic variables, that is, the investigation of factors which, in a more or less direct manner, determine levels and trends (fertility, induced abortion or migrations), the aims of the surveys in question are more limited. These are, first, to establish the most common statistical measures of fertility and mortality, and, second, of migrations and nuptiality. In other words, their aims more properly belong to the field of Statistics than in the field of Social Sciences. A serious problem is to be met in the region as regards basic information for population studies: in most of the countries, there is a lack of trustworthy data on births and deaths occurring annually (and on migration and changes in marital status). It is not to be expected that the situation will

change in the next few years, in view of the fact that no progress is observed in 1970 as regards the 1960 situation, in spite of efforts and resources directed towards the improvement of vital records, which traditionally have been sources of information. Since its foundation, CELADE has been of the opinion that, for the purpose of carrying out population studies, an independent statistical instrument should be found to provide more timely and complete information, if demographical analysis is to progress further than what population censuses allow.

In the search for this statistical instrument, CELADE tested first in Guanabara in a typically urban area, and then in Cauquenes, under widely different conditions -since it is a predominantly rural area- a method of periodical surveys of a sample population, aimed at obtaining the basic statistical information required. The method, very similar to others employed in other regions for the same purpose, also presents original features, rendering it more economical, and, in CELADE's opinion, more effective than those used in Africa or Asia. Results from experimental surveys were encouraging in the sense that two very important points were verified, namely: 1) that results obtained were of an acceptable quality; 2) that the cost of the method was relatively low, within the limited means of the disposal of the countries in the region. These experiments, which in CELADE's opinion have rendered positive results, have not led statistical authorities of countries in the region to adopt the procedure at a non-experimental scale. In some of the countries other methods are being tested or widely used (their results have not yet been properly evaluated), in others -in spite of the unfortunate situation as regards knowledge about the demographic situation (annual births and deaths of the population are not known) - nothing can be done to obtain basic demographic information. Honduras, however, has evidenced an interest in organizing a national survey following guidelines proposed by CELADE and probably it will soon be in the execution stage.

Results from the two above-mentioned investigations have been published. The first, Encuesta Demográfica Experimental de Guanabara, (Serie A, N° 4, Rev. 2, Santiago, Chile, 1965) is part of the United Nations Population Studies Series (ST/SOA/A/35). The second is Encuesta Demográfica Experimental de Cauquenes, CELADE, Santiago, Chile, 1968. Methodology used in these studies is presented in CELADE's Basic Course as part of the course in Demographic Data Sources.

4. Research on migration towards metropolitan areas

Internal migrations in the developing countries is one of the subjects which has always been assigned top priority in the programmes of demographic studies approved by the United Nations Economic and Social Council, because of their role in relation to the urbanization and economic development of these countries.

A realistic approach to investigation in this practically unexplored field, made it advisable to start this research in the principal metropolitan areas of some of the countries. These areas frequently include more than a fifth of the total population of the country and in several instances almost a third, as in Great Santiago. On the other hand, it is the most dynamic sector in terms of its population growth rate and of the rapid changes occurring in its social structure and also because of the serious problems arising from these changes (in urbanization, medical assistance, education, labour, etc.). Research into these areas leads to the understanding of the characteristics of the migratory process as regards its mechanisms (motivation, volume, trend, etc.), adaptation, demographic differentials and effects, among others.

The fact that internal movements are strongly localized is well-known. In many Latin American countries the movement towards the principal metropolitan area is the most important as regards volume, characteristics of migrants, distance covered and regions affected. There is no doubt then about the scope and usefulness of the findings to be derived from the systematic study of migrant populations living in big cities.

Studies in this field began with the survey carried out in Great Santiago in 1962, with the collaboration of the Institute of Sociology of the University of Chile, in field work and data processing. The purpose of the survey was to obtain adequate statistical information for the study of the following subjects: i) measurement of volume, historical trends and certain structural characteristics of the movement towards Great Santiago (age of migration, geographic mobility of migrants, regions and places of origin); ii) motivations, type of predominant migration (individual, family, etc.) and conditions connected with economic activity at previous place of residence, etc.; iii) adaptation of migrant population, in relation to localization and housing conditions, professional mobility, employment problems, social participation, etc.; iv) effects on the receiving population, taking into account differentials in demographic and social characteristics of migrants and natives (sex, age, marital status, fertility, education, income, employment level etc.).

Several considerations made it advisable to use in this survey a probabilistic household sample. First, and fundamentally, because in a population such as that of Great Santiago, it was expected that one out of every two adults would be an immigrant, as in practice it occurred; second, because it was important to find out the characteristics of the person occupying the position of household "head" or other information important for this analysis. In consequence, for the purpose of gathering a sufficient number of immigrants and taking into account available data for the formation of the corresponding framework, it was not important to design a more complex but perhaps less reliable sample. Secondly, a household sample may be used for manifold purposes, because it allows the study of the various different subjects included among the purposes of this investigation; in addition, it provides the general reference framework of the population as regards size and characteristics of migrant population, and also allows the study of household characteristics in addition to those of individuals.

In consequence, over 2 000 families in a household sample of the Great Santiago area were interviewed. Data common to native or immigrants were investigated in a relatively simple collective questionnaire which included 26 questions, in addition to data on housing; information about immigrants who were adults on arrival, that is, over 14 years of age, was gathered by means of direct interviews using a more detailed questionnaire, which include, among other things, a migratory history.

This first experience may be considered quite successful, both because of the relatively low direct cost of the survey and the short time in which data were obtained, and also because of its results.^{8/} These results, in addition to providing quite acceptable measurements of the magnitude, trends and characteristics of the phenomenon, permitted the verification of a series of hypotheses in relation to mobility, origin of migrants (urban, rural, etc.), and some important differentials.

Similar surveys were subsequently made in Metropolitan Lima (1965-66) and in Caracas (1967), following the same general lines as regards type and size of the sample, subjects investigated, questionnaires and programme of tabulations. In both instances some changes were introduced in the subjects relating to opinions and social participation of immigrants, in order to simplify and above all make this

^{8/} A general report with results from the Great Santiago Survey was included in publication N° 15 of CELADE, Series A. A more extensive and complete analysis of this investigation is about to be published.

part of the questionnaire more objective, taking into consideration that it had not operated satisfactorily in the Great Santiago Survey.

The Santiago experience had shown that a sample of 2 000 households was not sufficient to make a relatively deep analysis of social conditions in those sectors with the greatest problems, as is that of immigrants who have arrived during the last few years and who belong to low economic and social strata. The general survey of Metropolitan Lima was supplemented by another survey of a similar size, covering only popular districts called "barriadas" and immigrants (approx. 2 000) who had arrived as adults during the last decade.

These studies were made with the collaboration of the national statistics and census bureaus of Peru and Venezuela, which contributed personnel, facilities and supplies in the different stages of field work and data processing. Both in Lima and Caracas, the financial contributions channeled through CELADE were relatively modest in relation to the importance of the work carried out and were mainly used to pay interviewers and finance two or three assistance trips.^{9/} The salary of one expert proposed by CELADE who worked in Lima for some six months, although financed by OAS funds, may also be included among these expenditures. Data from the Lima survey have been analyzed in a preliminary and partial manner. The division of demographic analysis of the Bureau of Statistics and Censuses of Peru, prepared three reports which were published opportunely by this institution in special documents.^{10/}

Equivalent reports on the Caracas survey have not yet been prepared, but a Venezuelan investigator has started analyzing available tabulations.

With the purpose of accelerating these studies in CELADE, in particular the analysis of the data from the Lima and Caracas survey and, finally, to carry out a comparative analysis of the three cities, at the beginning of 1969 an investigator and an assistant investigator (both sociologists) joined the Centre's staff. This was possible thanks to a grant from the Ford Foundation, which includes funds to cover salaries of this personnel for two years and also to cover data processing expenditures.

^{9/} The monetary contribution of CELADE to the Lima survey amounted to approximately 4 500 dollars. In the Caracas survey 10 000 dollars granted by the Population Council were spent.

^{10/} "Encuesta de Inmigración: Lima Metropolitana". Reports N^{os} 1, 2 and 3. Dirección Nacional de Estadísticas y Censos, 1966-1968.

During the last few months advances have been made in the outline of the programme of studies to be carried out, formulation of some theoretical frameworks, data cleaning and new tabulations and the drafting of reports on some of the subjects included in this programme. Due to the scope of available information and the great variety of subjects to be studied, the task of analysing and presenting results should occupy a working group during two or three years. With the experience gained during this stage of the work and a revision of recent bibliography on research in this field, the formulation is expected of a theoretical framework to serve as a guide for future investigation in this field in Latin America.

5. The OMUECE Programme of the Latin American Demographic Centre

Background information

The "Seminar on Evaluation and Utilization of Latin American Census Results" co-organized by the United Nations, the Government of Chile and the Inter American Statistical Institute, was held in Santiago, Chile from November 30th to December 18th, 1959.

"The Seminar was organized for the purpose of rendering assistance to countries in the region in the utilization of population census results, in the preparation of economic and social development programmes and in the formulation of policies in relation to these programmes".^{11/}

One of the subjects covered by the Seminar was the use of sampling procedures in population censuses. It was considered desirable that the countries taking population censuses should select samples from data gathered in order to:

- a) Extend the scope of the national tabulation programmes;
- b) prepare advanced tabulations, for the purpose of publishing certain results before the basic tabulation programme is concluded;
- c) prepare tabulations which, by their very nature, do not require the utilization of information corresponding to the total population;
- d) prepare tabulations which, although not included in the national programmes, may be used by certain institutions for the study of specific aspects of population within their special field of interest;
- e) ensure the future availability of basic and detailed information about aspects of demographic interest, and
- f) permit institutions interested in scientific research to carry out studies based on census data.

CELADE, acting as a representative of the United Nations, was in charge of the organization of the Seminar. It received this project with interest, and, starting in 1960, began an active campaign before agencies responsible for the censuses in the countries, in order that necessary steps should be taken to ensure the gathering of such samples. In addition, the Centre saw in this the

^{11/} Final Report of the Seminar United Nations, New York, 1961.

opportunity of collecting copies of these samples at Headquarters, for the purpose of carrying out demographic analyses, which would allow an adequate comparison between Latin American countries.

During the sixties, CELADE took the necessary action to obtain these samples, meeting with considerable success, thus giving rise to the OMUECE project ("Operation Census Samples").

Activities and achievements. Although all the countries were aware of the advantage of the sample, all census bureaus did not have personnel trained to select it in a satisfactory manner. Thus, at the same time it promoted the use of the sample. CELADE offered technical assistance in the proper selection of the sample, to countries requesting it.

This technical assistance was rendered mainly in the following manner:
a) exchange of letters, suggesting adequate procedures; b) personal technical assistance by a specialist from CELADE; and c) arranging for samplers from other institutions such as ECIA, for instance, who were rendering assistance to the national Statistical Bureaus in other aspects, to suggest the selection which would prove most feasible in each case.

The size of the sample selected by the different countries ranged from one to five per cent approximately, depending as a rule on the size of the population. However, CELADE at first considered that for the aims of demographic research a sample of about one per cent would be quite adequate hence, in some cases, the sample requested is a sub-sample of the national sample. Very soon, however, and once the first tabulations had been made for comparative purposes, it was seen that the sub-samples of a very small absolute size did not permit the proper sub-division of information. The respective countries were then requested to amplify the sample to the size of that originally selected for the country.

The samples now at CELADE's disposal include information from 17 population censuses, including those of Puerto Rico and the United States. With the exception of the countries which did not hold censuses during the sixties (Bolivia, Cuba and Haiti), only Nicaragua and Peru, for different reasons, were not able to provide CELADE with a copy of their samples. Their size, in absolute values, range from 18 818 people for Honduras to 900 000 for Brazil. In

relative values, the sampling rates range from 0,10 per cent for the United States to 5,44 per cent for Costa Rica.

Samples from the majority of the countries were received at CELADE in IBM punch cards; in a very few instances it was received in computer tapes. In view of the enormous amount of data to be processed in the OMUECE programme -for a total of approximately 3 500 000 persons- all the information gathered had to be converted into a single processing system, the tape system finally being adopted, which although at the beginning was more onerous, permitted a more intense and practically indefinite use of the sampling information. Today the data from all samples are stored in such tapes, the sole exception being the original sample of Argentina, country for which tapes with data from an amplified sample of 500 000 persons will shortly be received.

Original samples received at CELADE included the codes which had been used and punched in the established order in each country. To avoid the difficulties implied in such different procedures, a single standard coding system was adopted for all variables included in the OMUECE programmes, arranged according to a single order. However, as samples provided information not included in the OMUECE programme, it was decided that information from the countries would also be kept as originally received, in order that special tabulations based on these data may be elaborated in the future.

The tabulations anticipated for the OMUECE programme cover five main demographic subjects: a) nuptiality; b) fertility; c) schooling; d) migration, and e) economically active population. There is a project to include other subjects in the future, at the level of the countries or of the region, as, for instance, under-employment and household characteristics.

At present, the tabulations corresponding to nuptiality, schooling and economically active population for more than half of the countries for which samples are available have already been made. It is expected that the remaining countries will be finished in 1970 and that the fertility and migration tabulations will be started.

The main purpose of these tabulations "is to present statistics not tabulated by national censuses and likewise the standard treatment of data".^{12/}

^{12/} CELADE: Programa de Trabajo para 1970. Santiago, Chile, May 1969.

This means that in some cases the respective tables may have been previously included in the census tabulations; but have been included once again in the OMUECE programme in order to ensure the strict comparability with tables from other countries as regards classification categories.

In addition to tabulations which are being specially made for the OMUECE programme, samples have also permitted the elaboration of other useful tabulations for specific investigations. These tabulations have been of great use to the regular course students of the Centre, in their research projects. Requests from other agencies -for instance, ECLA- have been answered. In general, samples are at the disposal of all institutions or individuals interested in census information about the countries, in the form of specific tabulations or duplicates of certain samples. In the latter case, of course, previous consent by the Bureau which provided CELADE with the sample is required.

The acquisition of samples from the different countries and processing of the information have required expenditures not anticipated by United Nations funds. Hence, the greater part of direct costs of the programme have been financed by contributions from AID and the Ford Foundation.

Future Work

As has been previously mentioned, it is expected that during 1970 the tabulations of the five main demographic subjects will be finished, and probably other subjects will be investigated.

All these tabulations will be analyzed by CELADE experts, both as regards the evaluation aspect of the quality of the information, and also in terms of comparison of the demographic situation in the different countries of the region. Both the analyses and tabulations will be published in the regular series of CELADE publications.

The OMUECE programme is also to be continued in the future with the population censuses to be held during the seventies. To this effect, countries which are at present holding censuses or which plan to do so in the near future, have been approached as regards the inclusion of the sample in the census programmes.

In relation to the 1970 sample, CELADE is in favour of selecting complete household or family samples and not individual samples. The purpose of this is to study family size and composition of private households of special interest from the demographic and sociological point of view.

CELADE has also taken steps to expand the OMUECE programme, and has asked the different countries to send to the Centre complete information as regards all non-native Latin Americans who have been counted in the censuses of each country. This information is not only being requested in the Latin American countries, but also in the United States and some European countries as well. When this information is collected, a very valuable material for the study of international migrations of Latin America will be obtained.

As with the other population subjects, CELADE also plans to prepare specific tabulations in this case, which will be useful for the comparative analysis of the different countries.

6. Experimental Population Censuses

In the majority of Latin American countries demographic analysis is hindered to a large degree by the relative shortage of adequate information and in many instances, by the poor quality of available information.

Taking into account the fact that population censuses are the principal source of demographic information, CELADE welcomed the opportunity of participating in some experimental censuses taken with the national censuses of 1970, in view, in order to test new questions which might be included and to improve research methods in other subjects. The purpose of this was to extend their scope, provide for the better adaptation of the information to analytical purposes, and, naturally, improve the quality of data.

With these aims in view, CELADE has participated in three experimental censuses since 1968: In Cantón Grecia, Costa Rica, taken in March 1968; Belén (Catamarca), Argentina, taken at the beginning of 1969, and in two municipalities of Nicaragua in the middle of the same year. These experimental censuses were undertaken by the respective Bureaus of Statistics, and in the case of Costa Rica, by the Inter American Statistical Institute (IASI) and the Economic Commission for Latin America (ECLA), Mexico Sub-Centre, as well.

Experience acquired in the censuses of the sixties was of great use in these experimental censuses, which led to new ways of obtaining information about subjects already investigated wording the questions differently, changing the order of subjects and introducing new census subjects. In the experimental census of Costa Rica, the questionnaire did not include all the questions which it is anticipated will be included in the next national census. Excluding those

on which there is enough experience and which present no problems in their investigation. In this experimental census the possibility of investigating mortality was tested. To this effect, orphanhood of persons was investigated, as well as the number of children dead at the time of the census in proportion to total number of children born to the women. Preliminary analyses of orphanhood seem to suggest an under-registration of the total number of orphans in this census experiment.

Another concern of this experimental census was the investigation of under-employment. To this effect two questions were formulated: number of people employed in the establishment where the enumerated worker works and number of jobs of different kinds held successively in the last six months. By means of the first question, given an optimum organization and productivity in the different industries, an estimate of the surplus of workers in each of these industries could be made. The purpose of the second question was to find out the proportion of persons who change jobs frequently and who, it may be assumed, are not adequately qualified workers. Unfortunately, the characteristics of the census area prevented valid conclusions on this aspect.

Questions on fertility were also included in the experimental census of Costa Rica. The purpose of these was not only to find out its level, for which continuous vital statistics were also used, but likewise, and most particularly, to find out differentials according to schooling of the mother, type of activity of the mother, urban or rural place of residence, etc., aspects which would be difficult to obtain from vital statistics. Both questions concerning total number of children and children born during 1967, were not formulated as usual, on the assumption that, through them, the quality of information gathered will improve.

An innovation was also introduced in the subject of internal migration. Instead of investigating previous place of residence and whether this place was urban or rural, as had been done in the 1963 census, a question was included concerning place of residence five years prior to the taking of the census. The purpose of this was to avoid the manifold difficulties and poor interpretation of questions which had occurred not only in the 1963 census of Costa Rica, but as a rule in all the countries which included these questions in their censuses of the sixties.

Finally, information about census families and household was a special concern of this census. Based on the traditional question included in all censuses as regards connection or relationship with the head of the household, several tabulations were programmed to study the organization of the family.

These same guide-lines, but naturally adapted to previous census experiences were suggested by CELADE for the experiments carried out in Argentina and Nicaragua.

It should be added that these experimental censuses are already exerting some influence in the direction given to research on fertility and internal migration in the next population censuses to be carried out by some of the countries.

7. Data Bank

The extensive research programme which for several years CELADE has been carrying out, has led to the accumulation of a great deal of information on -above all- fertility and migrations towards capital cities. In the near future data on induced abortion corresponding to investigations being carried out at present in some cities of the region will also be available.

It is worthwhile noting that, in addition to the tabulations which have been prepared for specific analytical purposes, many of which have not yet been published, the original information, as gathered in the field surveys has also been kept. This allows new tabulations to be made at any time, in order to expand the scope of those originally made. This last is very useful for the carrying out of new investigations on the same subject, the aim of which is the study of changes occurring through time and also, as a permanent source of information for institutions and professionals interested in the study of subjects which have been investigated by CELADE. This great quantity of information which has been gathered in different investigations, together with the data from the OMUECE project, make up CELADE's Data Bank. As new investigations are carried out or data are obtained from other sources, they are included in the Data Bank, thus placing at the investigator's disposal a whole new range of possibilities.

At present the Data Bank includes the following material:

- a) Samples of the population censuses of 17 countries taken during the sixties not including Bolivia, Cuba, Haiti, Nicaragua, Peru, Canada

and other non Spanish-speaking countries and territories in the Caribbean, and Central and South America;

- b) Fertility surveys carried out in 9 Latin American cities from 1963 to 1965 (Bogota, Buenos Aires, Caracas, Mexico City, Guayaquil, Panama City, Quito, Rio de Janeiro and San Jose, Costa Rica);
- c) Population surveys to estimate mortality and fertility rates (Guanabara, Brazil, and Cauquenes, Chile);
- d) Pilot fertility surveys in small urban and rural areas (Chile, Colombia and Mexico);
- e) Surveys on immigration towards metropolitan areas (Santiago, Lima and Caracas);
- f) Evaluation survey of the family planning programme in the Western Health Area, Santiago, Chile; and
- g) Experimental censuses of Canton Grecia, Costa Rica and Belen, Argentina.

In the near future the following will also be included:

- a) Survey on induced abortion in four cities (Bogota, Panama, Buenos Aires, and Lima);
- b) Four national surveys on fertility in small urban areas and rural areas (Colombia, Mexico and Peru).
- c) Fertility survey in La Calera, Chile, 1965.
- d) Urban fertility survey (Guatemala City).

Samples from 1970 population surveys will of course be included in the Data Bank, as soon as they are received.

This project, in addition to expanding the research possibilities of CELADE's personnel and students, by giving them easy access to this documentation, will contribute towards the exchange of information with other data archives. In 1969 the Bank started the publication of an Informative Bulletin which will continue to be published. This information will also be at the disposal of other investigators and institutions interested in this material.

8. Policies of economic development and manpower absorption

This investigation was started in 1967 in collaboration with the United Nations Latin American Institute for Economic and Social Planning. (ILPES). It is an attempt to elucidate some of the interrelations between economic

development and demographic growth, and also to analyze the effect of population policies on manpower supply.

As an instrument of analysis a simulated numerical model has been prepared to operate with an IBM computer, which is applied experimentally to find out the effects of alternative development policies (substitution of imports, regional economic integration, etc.) on manpower supply. Particularly, two problems are considered which are basic to Latin American economies, that is, external strangulation and structural unemployment. Possible solutions have also been studied as regards the introduction of economic policies requiring mass labour employment, and as regards population policies, which, acting on natality and geographic distribution of population, lead to a manpower supply qualitatively and quantitatively more adequate for development.

Several analytical studies have been carried out for the purpose of establishing and improving information to feed the numerical model. In relation to demographic aspects, these studies have been developed following two main lines: i) estimations of under-employment using demographic criteria (age and education, eventually linked to economic characteristics of individuals), based on census samples from CELADE's Data Bank, and ii) explanation of the assumptions as regards economic and social development, included in the population projections of Latin American countries, carried out by CELADE, such as level of education, urbanization and women's participation in economic activities, among others.

The project covers investigations in countries, sub-regions and in Latin America as a whole. Several interested national institutions are taking part in the project.^{13/}

Several workshops have been held in relation to this project. Special mention should be made of the Seminar on Integration Studies, held in Santiago in July 1968. Several papers about the work carried out were presented at this

^{13/} "Instituto Torcuato Di Tella" (Argentina), "Centro de Estudios Matemáticos" (CEDEM) of the University of Chile, "Centro de Estudios de Desarrollo" (CENDES) (Venezuela) and "Universidad de Ingeniería" of Lima (Perú).

seminar.^{14/} A revised version of the reports presented at this seminar will probably be finished during the present year, thus bringing the project to an end.

^{14/} CELADE's participation is shown in two documents entitled "Ocupación y población" and "El modelo a emplear", which correspond to the II and III chapter, respectively, of the general document "Elementos para la elaboración de una política de desarrollo con integración en América Latina" (INST/S.3/L.3).

Mention should also be made of two recently other prepared reports: "El control de la natalidad y el argumento del ahorro y la inversión" and "Proyección de una población con características de mortalidad, fecundidad y participación en actividades económicas, propias de América Latina".

IV. TECHNICAL ASSISTANCE

In this chapter a brief summary is given of the work carried out by CELADE as regards rendering assistance in demographic matters to national or international agencies and to other institutions in the region devoted to demographic research.

In order to avoid repetitions no reference is made in this chapter to technical assistance connected with the teaching of demography (for example, national courses, of the type carried out in the National University of Cordoba, Argentina; introductory courses in demography, such as those delivered in Central American countries; lectures on special subjects, as, for instance, those delivered in the courses of El Colegio de México, or short courses such as, for instance, the "laboratorios" on health and population, in relation to the introduction of the teaching of demography in the schools or medicine). Neither is mention made of the activities carried out in the countries in relation to technical assistance rendered to national counterparts in investigations promoted by CELADE, such as, for example, the comparative fertility surveys programme.

Technical assistance, with the exception of the above-mentioned activities, depends to a large extent on the awareness of Governments, international agencies and other research institutions of the need, or simply, of the usefulness, of carrying out population studies; it is subject, to a lesser degree than teaching and research, to the initiative of CELADE itself. It is, to a considerable degree, subject to the changes of officials which from time to time occur in the above-mentioned agencies, which sometimes lead to the interruption of work programmes in the middle of their execution, or to the initiation of activities which until then had received no support at all.

To act in the technical assistance field, as above defined, a great deal of flexibility and energy is required. CELADE has always, since the first years of its existence, given high priority to technical assistance activities and has worked towards its expansion. It has joined efforts with other international agencies working in subjects connected with population, and this has occasionally led CELADE, to deal with subjects not strictly bearing on demographic analysis. Thus, for example, it has joined with the Interamerican Institute of Statistics (IASI) in the improvement of basic information gathered by population censuses, and with CEPAL or the Latin American Institute of Economic and Social Planning

(ILPES) in order to include demographic studies in planning activities. This chapter is divided into two sections, -technical assistance rendered to national organizations and assistance rendered to international institutions. It is not a matter of making a complete list of every mission carried out by CELADE's personnel in each country since 1958, or with each international organization, but rather to provide an illustration as regards the type of technical assistance rendered by the Centre.

1. To national organizations

Some examples of the type of technical assistance considered characteristic of the work carried out by CELADE in relation to organizations at the level of the countries in the region are presented here. As has been stated previously, these are illustrative examples.

a) Demography in planning work. In 1964, an agreement was signed between the National Planning Council (CONADE) of Argentina, and CELADE for the purpose of preparing a series of population studies which would be useful in the economic planning activities carried out by CONADE. The programme included work covering a wide field: from a critical study of basic statistical information, particularly the results of the population census held in 1960, to a detailed study of demographic characteristics of the economically active population. Field work was also included (such as, for instance, a survey on immigration towards Buenos Aires). Several technical reports of use to planners were elaborated and published. Work, however, was interrupted in 1966 when CONADE's authorities were changed. When in 1969, officials were once again substituted, the agreement came again into force. During that year, CELADE collaborated closely with the National Institute of Statistics and Censuses (INDEC), depending of CONADE, in preparatory work for the 1970 census (experimental census of Belen, design of the forms to be used in the national census, tabulations programme, training courses for census personnel) which demanded frequent visits from CELADE officials to Argentina and from INDEC officials to Santiago, Chile. At present, prospects that the agreement will continue in full force in the future look promising. In principle, the purpose is that national organizations, public and private, interested in population studies, join CELADE in a programme of demographic studies. This programme would follow along the lines set by the CONADE-CELADE agreement, but, would be more ambitious than it, since now other institutions would render their

cooperation (the Centre of Bio Statistics and Demography, the National Bureau of Migrations and the Centre of Social Studies of the Torcuato Di Tella Institute). CELADE's participation in this type of agreement consists in rendering assistance in the elaboration of the programme and in its execution. A frequent approach is to direct the activities of fellows in CELADE, belonging to the country with which the agreement has been signed, towards the goals pursued. It also collaborates in the obtainment of funds required to cover field work and likewise in the solution of problems occasionally arising in the publication of results. This is a typical example of the technical assistance which CELADE is in a position to render to planning agencies. Agreements similar to the above have been signed with other government planning institutes in the region. The fate of these agreements, as in the case of the Argentinian agreement, has varied according to the countries and to circumstances.

b) Demographic research. Also in Argentina CELADE is rendering another type of technical assistance, which is considered highly significant and which it would be desirable to extend to other countries: advisory services to a research institution (the Centre of Social Investigations (CIS) of the Torcuato Di Tella Institute). CELADE agreed to render assistance in the management and execution of the programme "Population and Society" which is being carried out by the CIS. A member of CELADE's personnel is co-director of this programme and is in charge of the elaboration of a monograph of the series included in the programme. In addition, technical personnel from CELADE answers specialized consultations in relation to demographic matters. The agreement was initiated in 1966, and technical assistance became most important during 1967 and 1968 when a monograph on mortality in Argentina from 1869 to 1960 was prepared (in press). It is still in force. The purpose of this kind of assistance is to provide support to the very few demographic research centres in the region. Technical assistance is of special importance at present when these research institutes are facing the serious problems of the lack of investigators specialized in this little-explored field. In addition to providing this assistance, CELADE granted a fellowship in an university of United States to a CIS investigator, thus contributing, through the training of personnel, to strengthen demographic research carried out by the CIS. CELADE wishes to promote the establishment of demographic research institutions in the region, similar to the CIS, even though work projects included in their programmes do not have the immediate practical usefulness of those normally included within a framework such as that of the CONADE-CELADE agreement. Both kinds of activities, scientific research and work projects directed towards practical purposes, are important and complement each other.

Centres mainly devoted to population research may be established within universities or similar institutions, and demographic work units to achieve practical aims, may be included in planning agencies or statistical bureaus.

c) Demographic variables in technical studies. An illustration of this type of assistance is the work carried out by CELADE in services rendered to the Superintendence of Social Security of Chile. In this case, it is not a question, as in the CONADE-CELADE agreement, of carrying out a programme of population studies which will be of use to planners; neither is it, as in the CIS agreement, a matter of promoting and carrying out demographic research for its own sake, but rather, something quite different: it is a question of including in a technical function -such as the study of the situation of the country in relation to social security- the demographic elements required by this study. Of course, this is only an example because a similar task should be carried out, not only in the analysis of technical aspects of social security, but also of education, health, human resources, etc. CELADE's assistance in this case consists in preparing technical documents together with Superintendence officials, in participating in technical meetings and seminars on social security subjects (such as that organized in 1969 by the Inter American Institute of Social Security in Mexico, and the seminar to be held in May 1970 in Santiago, organized by the Superintendence of Social Security of Chile itself).

2. To international organizations

a) Cooperation with ILPES. - Special mention should be made of the advisory services CELADE is in a position to provide to the countries which receive assistance from ILPES in economic and social planning matters. In the past, when ECLA was in charge of these assistance missions, a demographer from CELADE or from ECLA itself was frequently among its members. This practice was discontinued when ILPES replaced ECLA in the task of sending consultative missions in economic and social planning. However, once again steps have been taken to include a demography expert in these missions. As with national government authorities who circumstantially favour the inclusion of demographic variables in studies on development, so it has been with officials from certain international agencies, who in the past have shown a changing interest in population matters. At present, the trend is towards an increasing interest in these matters and in consequence, there is the prospect of a close collaboration in the field of technical assistance to countries in their development planning activities, (for example, the ILPES-CELADE project on page 32 of this report).

b) Cooperation with the CIAP. Since 1968 CELADE has been working with the OAS in the preparation of studies, by countries, of demographic aspects included in the analysis of the social and economic situation presented to the CIAP. These documents did not deal exclusively with demographic aspects but also covered others such as manpower, education, social security, health, etc. The CIAP-CELADE agreement is in full force.

c) Cooperation with the IASI. The programme of population censuses which will be taken during 1970 and during the next few years has led to a IASI-CELADE collaboration for the purpose of promoting census activities and to secure that the censuses taken in the countries be of use in the study of their social and demographic reality. Several projects, such as the experimental censuses, training courses or seminars in census techniques, meetings for the study of problems presented by census schedules and tabulations, etc. have been carried out (and are still being carried out) by the IASI and CELADE. The Centre has also sent staff members to the countries which had requested advice from the IASI in census matters, in an effort to coordinate activities of the organizations gathering information and those analysing it. It may be anticipated that these activities will be carried on in the next few years in view of the fact that census work will continue until 1973 or 1974.

d) The diffusion of demographic information. The Demographic Bulletin. The connection of CELADE with ECIA-ILPES as well as with the United Nations Population Division has, led, over the years to the repeated requests on the part of these organizations for demographic information. More specifically, and for the most part, these have been requests for population estimates by countries for past periods and demographic projections for the future. Results of elaborations made in answer to these requests are of interest to many users of demographic information and, in consequence, it was believed that they should be widely publicized. This gave rise to CELADE's Demographic Bulletin, issued twice a year since January 1968. Unlike other United Nations publications, the Bulletin presents processed information, that is to say, estimates that have been critically analyzed in order to eliminate possible inconsistencies and does not present official data from the countries, which may be either adjusted or raw. The widespread and increasing demand for the Bulletin is ample proof that this type of technical assistance is useful and valuable.

e) Cooperation with PAHO. - In the organization of the Pan American Conference on the Teaching of Demography in the Schools of Medicine and Public Health. A similar agreement, as regards the teaching of demography in the schools of sociology and

economics, was signed with the OAS (Bogota Conference, November 1969). (See Chapter II on teaching).

It seems unnecessary to give further particulars as regards cases in which CELADE has cooperated with other international organizations. The above examples are the most significant.

They also suggest that CELADE is in favour of such collaborations and that it will continue rendering assistance in the future.

V. PUBLICATIONS AND INFORMATION

From 1958 to 1964 the publications of the Centre were carried out in a scattered manner, being typed by the respective secretaries.

In 1964, the Section was given its present structure, with a minimum of human and financial resources at its disposal. Its publications neither attain an adequate distribution nor the desired graphic presentation. Both deficiencies are still present, though to a lesser degree, and in spite of the fact that they are in the process of being overcome they will only disappear when present facilities are improved and increased.

Since the Centre's establishment until December 31st, 1969, 323 titles have been published, distributed as follows: Series A: Reports on research carried out by CELADE: 95 publications; Series B: Text-books and other teaching material prepared by the teaching staff of the Centre: 27; Series C: Reports on research carried out by students of the Centre: 118; Series D: Translations, papers, conferences and others, prepared by visiting professors and experts: 50; Series E: Publication of books: 5; Series F: Demographic Bulletin: 5 volumes; Series G: Administrative documents: 22, and Series H: Extension Text-books: 1 volume.

Books published under Series E, which are fundamental for the study of population, have been so well received that it may be said that the Centre is one of the few organizations of this type obtaining profits from the sale of publications.^{15/} In relation to this Series E, we must mention that during 1969, preliminary work for the edition of seven other volumes, to be published during 1970, has been carried out.^{16/}

- ^{15/} Until December 31st, 1969, the following had been published:
 R. Freedman, K. Davis and J. Blake: "Factores Sociológicos de la Fecundidad". (In a joint edition with El Colegio de México).
 CELADE: "Encuesta Demográfica Experimental de Cauquenes".
 R. Gonnard: "Historia de las doctrinas de la población".
 J. C. Elizaga: "Métodos demográficos para el estudio de la mortalidad".
 A. J. Lotka: "Teoría analítica de las asociaciones biológicas".
- ^{16/} J. C. Elizaga: "Migraciones a las áreas metropolitanas de América Latina". (In binding).
 Alvaro Vieira Pinto: "El pensamiento crítico en demografía". (In press).
 R. Carleton: "Métodos para el estudio de la fecundidad". (In press).
 A. J. Lotka: "Manual de métodos estadísticos para demógrafos". (In translation).
 CELADE: "Compendio de estudios sobre temas demográficos". (Provisional title). (In composition).
 A. J. Lotka: "Compilación de diversos artículos". (In translation).
 B. Y. Smulevich: "Crítica de las teorías y políticas de población". (Translated from the Russian. The Spanish version is in revision).

The first volume of Series I: -Studies containing specific articles on countries- was published in January 1970. The selection and composition of this book, corresponding to Chile, was made during 1969, the same as that for Argentina, soon to be published.

Also during 1969, the preparation and selection of originals was made for the publication of an album on demographic subjects, in colours, containing 30x40 cms. illustrations, to be published during 1970. A considerable number of copies of this album will be printed in order to attain a wide distribution.

In 1969 data began to be gathered for the publication of a Demographers' Directory, to contain the names of persons connected with demography in the region.

All this editorial work was possible, to a large extent, due to the expansion and improvement of printing facilities of the Section, but it should be specially emphasized that, because of the increased activities of the Centre, part of the equipment can no longer satisfy its requirements. In addition, the Section does not have adequate premises nor a sufficient number of personnel. If all necessary facilities were available the Section would be in a position to begin printing documents of Series A, B, C, and D in offset, which would expand the marketing possibilities of these series, thus leading to a greater diffusion of the studies carried out by the Centre.

The above is considered a most important point in view of the fact that, at the end of 1969, a contract for the distribution of the books was signed between the Centre and Editorial Paidós of Buenos Aires -thus fulfilling a long-standing recommendation of the Board. A disadvantage presented by this contract is that it covers exclusively the distribution of books on account of the fact that business enterprises refuse to undertake distribution of the remaining documents, which are very poor as regards the quality of their printing.

At the end of 1967 the post of Informations Officer attached to this Section was established. The main purpose was to ensure the wide diffusion of the activities and studies carried out by the Centre, through press, radio and TV coverage, exhibitions and handbooks on population subjects aimed at the lay public, and -at the government and academic level- through publications similar to those of the Series I, already mentioned.

This work has not been carried out in the desired manner because of lack of personnel -only one Information Officer- and of economic and material resources. There is the paradoxical but nevertheless true, fact, that the great amount of interest awakened by population subjects does not benefit in a corresponding manner the publication of the Centre's studies, which, in view of their technical nature, and strict objectivity often present no news interest.

Brief news items are constantly sent to the most important newspapers in each of the Latin American countries, as well as articles with brief comments on documents bearing on demographic aspects of a particular country.

Permanent contact is maintained with United Nations Information Centres, which periodically receive news from CELADE in relation to the region.

In 1968 an Exhibition on demographic aspects of Latin America was held in the following cities: Caracas, Bogota, Quito, Lima, Santiago, (on the occasion of the VIII World Congress of the IPPF), Viña del Mar and Concepcion, Chile. In all these cities it received ample press, radio and TV coverage, and the number of visitors is estimated at about 80 000.

Also during 1968, CELADE agreed to send to the Population Reference Bureau articles on demographic subjects and comments on books and documents it publishes. The PRB issues these articles in Bogota and distributes them through all Latin America, to the amount of some 5 000 copies. A total of 18 articles have been sent in the course of two years.

CELADE's Information Bulletin is published quarterly, and distributed to the most important newspapers of Latin America and also to more than 600 persons.

Regular or special courses, seminars, etc., have received TV coverage, and on occasions, national and foreign journalists have visited CELADE for the purpose of interviewing the teaching and directive personnel.

APPENDIX I

Table 1

REGULAR TRAINING PROGRAMME

1. Participants by courses and countries. 1958-1969 period

Countries	Courses			
	Basic	Advanced a/	Specialization b/	Research fellows
<u>Total</u>	<u>196</u>	<u>62</u>	<u>14</u>	<u>11</u>
Argentina.	23	16	6	1
Bolivia	5	2	-	2
Brasil	10	2	-	1
Chile	29	8	4	-
Colombia	20	3	-	1
Costa Rica	5	2	1	1
Cuba	4	1	-	-
Dominican Republic	6	2	-	-
Ecuador	10	2	-	-
El Salvador	8	1	-	-
Guatemala	3	1	-	2
Haiti	4	1	-	-
Honduras	7	1	-	-
Mexico	12	4	1	3
Nicaragua	3	-	-	-
Panama	8	3	1	-
Paraguay	7	2	-	-
Peru	16	4	1	-
Puerto Rico	3	-	-	-
Uruguay	5	3	-	-
Venezuela	8	4	-	-

a/ These students are included among Basic Course participants.

b/ These students are included among Advanced Course participants.

Table 1 (continued)

2. Participants by courses and years

Years	Total	Courses			
		Basic	Advanced	Specialization	Research fellows
<u>Total</u>	<u>207^{a/}</u>	<u>196</u>	<u>62</u>	<u>14</u>	<u>11</u>
1958	12	12	-	-	-
1959	18	15	3	-	-
1960	16	11	5	-	-
1961	23	17	5	-	1
1962	27	18	7	2	-
1963	19	14	4	-	1
1964	21	8	9	4	-
1965	24	19	3	2	-
1966	28	19	5	-	4
1967	34	22	8	3	1
1968	23	16	6	1	-
1969	38	25	7	2	4

^{a/} This total is obtained by adding the second column (196) to the last (11), and represents the number of different persons who participated in the courses.

3. Financing of fellowships

	Totals	Periods		
		1958-1961	1962-1965	1966-1969
United Nations	222	66	80	76
AID	23	-	2	21
BID	9	-	1	8
OAS	9	-	3	6
Population Council	7	3	4	-
Others (WHO and CEPD)	6	-	-	6
Total fellowships granted	276	69	90	117

Table 1 (continued)

4. Report on ex-fellows activities in 1969

Main field of activity	Number of ex-course fellows ^{a/} (by level of attainment)			
	Total	Basic ^{a/}	Advanced	Specialization
Technical posts in national bureaus of statistics and censuses (Heads of departments, analysts, statistics experts, etc.)	51	40	9	2
Technical posts in national planning bureaus and other government agencies	25	19	6	--
Investigators in university departments, planning bureaus and other government agencies:				
i. In demography	18	13	4	1
ii. Economics and sociology	13	12	1	--
Teachers in centres of higher education				
i. In demography	15	3	10	2
ii. Economics, statistics, etc.	12	8	4	--
Technical posts in international agencies				
i. CELADE	14	2	8	4
ii. Others	6	2	2	2
Other activities related to population	4	1	1	2
Other activities non-related to demography	17	17	--	--
Deaths	2	--	1	1
No information	30	28	2	--
	207	145	48	14

^{a/} Includes 11 research fellows.

Table 2

NATIONAL COURSES IN DEMOGRAPHY
Organized by CELADE^{a/}

Country	Year	Participating National Institution	Number of students	Duration in weeks	Hours of Teaching
Guatemala	1967	Universidad Nacional	20	3	69
Honduras (Tegucigalpa)	1968	Universidad Nacional	20	3	69
Nicaragua (Managua)	1968	Universidad Nacional	23	5	95
El Salvador (San Salvador)	1968	Universidad Nacional	22	6	109
Argentina (Cordoba)	1968	Universidad Nacional de Córdoba	22	14	214
Venezuela (Maracaibo)	1969	Universidad Nacional del Zulia	15	15	235
Guatemala	1969	Universidad Nacional	26	6	120
Panama	1969	Contraloría General de la República	24	6	120

^{a/} In charge of the Sub-Centre personnel in San Jose, except for the course in Argentina which was in charge of Santiago Headquarters personnel.

Table 3

INTERNATIONAL COURSES (IN SANTIAGO)

1. Courses and hours of teaching in demography in charge of CELADE personnel
1966-1969

Courses and organizing institutions	Hours of Teaching				
	Total	1966	1967	1968	1969
a. Health and Population Dynamics (CELADE and Department of Public Health and Social Medicine of the University of Chile)	489	120	118	170	81
b. Latin American Course on the Biology of Human Reproduction (CELADE, Department of Public Health and Social Medicine and Department of Obstetrics and Gynecology of the University of Chile)	112	-	35	26	51
c. Latin American Training Programme in Family Planning (Chilean Association for the Protection of the Family)	380	63	85	112	120
d. Demography and Health (CELADE)	75	75	-	-	-
e. Training courses in housing (1966) education (1967), and human resources (1968) (Latin American Institute of Economic and Social Planning-ILPES)	43	16	5	22	-
f. Course in demography (Course in Planning of the Planning Institute of the University of Chile) a/	13	13	-	-	-
g. Course in demography (Centre for the Investigation of American History of the University of Chile)	24	-	24	-	-
h. Analysis of Population Censuses and Documentary Data (Latin American School of Sociology-UNESCO)	41	-	20	-	21
Total	1 177	287	287	330	273

a/ National post-graduate course.

Table 3 (continued)

INTERNATIONAL COURSES (IN SANTIAGO)

2. Participants by country of origin: 1966-1969

Country	Total	In courses of 20 hours or more in demography				In courses of less than 20 hours in demography 1966-1967
		1966	1967	1968	1969	
Argentina	57	6	21	16	9	5
Bolivia	24	-	4	13	5	2
Brasil	60	11	21	15	4	9
Chile	204	13	38	43	85	25
Colombia	53	9	13	11	16	4
Costa Rica	16	2	4	7	3	-
Cuba	14	3	2	-	3	6
Dominican Republic	13	2	3	6	-	2
Ecuador	32	3	4	7	16	2
El Salvador	12	2	6	1	3	-
Guatemala	15	-	5	4	4	2
Haiti	3	-	1	-	1	1
Honduras	16	-	4	6	5	1
Mexico	15	1	1	4	4	5
Nicaragua	18	1	2	9	5	1
Panama	7	3	1	1	1	1
Paraguay	29	5	-	8	12	4
Peru	77	35	12	14	11	5
Puerto Rico	1	-	1	-	-	-
Uruguay	23	2	6	6	4	5
Venezuela	24	2	7	4	6	5
Other non-Latin American countries	5	-	1	1	2	1
Total	718	100	157	176	199	86

Table 3 (continued)

3. Professional field of participants: 1966-1969

Professional field	Total	In courses of 20 hours or more in demography				In courses of less than 20 hours in demography 1966-1967
		1966	1967	1968	1969	
Medicine and Public Health	513	86	118	150	158	1
Sociology and other social sciences	83	1	35	14	29	4
Other fields ^{a/}	122	13	4	12	12	81 ^{b/}
Total	718	100	157	176	199	86

a/ Education, city-planning, etc.

b/ Housing (30), education (51).

Table 4

UNDERGRADUATE UNIVERSITY COURSES (IN CHILE AND COSTA RICA)

Teaching in demography in charge of CELADE's personnel

1. <u>In Chile</u> ^{a/}		<u>Year</u>
a) Sixth year of Medicine, in the Department of Obstetrics of the Catholic University, Santiago		1968
b) Third year of sociology, in the School of Sociology of the University of Concepcion		1968
c) Second year of technical statisticians, in the School of Economics of the University of Chile		1969
d) Fourth year of sociology, in the School of Sociology of the University of Chile		1960-1969
e) Courses for social workers and family education workers, in the University of Chile (Valparaiso)		1969
2. <u>In the National University of Costa Rica (San Jose)</u>		
a) Training Programme in Population Dynamics and Family Planning, in the Faculty of Medicine (monthly courses)		1968-1969
b) Demographic statistics, in the Faculty of Economic and Social Sciences (one semester)		1969
c) Sociological Aspects of Population Growth, in the Faculty of Sciences and Letters (one semester)		1968-1969

^{a/} Before 1968 and for several years, special courses in demography were given in the Schools of Economics and of Political and Administrative Sciences of the University of Chile.

APPENDIX II

Table 1

SOME STUDIES PREPARED BY CELADE PERSONNEL^{a/}

<u>Author</u>	<u>Title</u>
<u>1. Contemporary population problems</u>	
Carmen A. Miró	La población del mundo: Dos "bloques" claramente diferenciados. CELADE, Serie A, N° 51
	La población de América Central y Panamá: un ejemplo de multiplicación acelerada. CELADE, Serie A, N° 58
	Los cambios demográficos en América Latina y su influencia. CELADE, Serie A, N° 68
	La población de América Latina en el siglo XX. (Spanish edition of <u>Population Dilemma in Latin America</u>)
Robert O. Carleton	Aspectos demográficos de la infancia y de la juventud en la América Latina. CELADE, Serie A, N° 52
Jorge V. Arévalo	El crecimiento de la población en la América Latina y su implicación en el sector educativo. CELADE, Serie A, N° 50
<u>2. Mortality</u>	
Jorge L. Somoza	Niveles y tendencias de la mortalidad en América Latina, expresados en función de la edad. W.P.C., Belgrado, 1965
	Mortality in Latin America: Present level and projections. General Conference of the International Union for the Scientific Study of Population, Londres, 1969
<u>3. Fertility, birth control and related topics</u>	
Robert O. Carleton	Crecimiento de la población y fecundidad diferencial en América Latina. CELADE, Serie A, N° 60
	El efecto del mejoramiento educacional sobre las tendencias de fecundidad en Latinoamérica. CELADE, Serie A, N° 34
	Labour force participation: A stimulus to fertility in Puerto Rico. CELADE, Series A, N° 55

^{a/} Nearly all these documents were submitted to conferences and seminars, or published in technical journals.

<u>Author</u>	<u>Title</u>
Mariano Requena	Condiciones determinantes del aborto inducido. CELADE, Serie A, N° 61
	Correlación social y económica del aborto inducido en Santiago de Chile. CELADE, Serie A, N° 62
Jorge L. Somoza	Nivel y diferenciales de la fecundidad en la Argentina en el siglo XIX. Instituto Torcuato Di Tella, Serie Población y Sociedad, N° 45
Carmen Arretx	Nuptiality in Latin America. General Conference of the IUSSP, Londres, 1969
María Luisa García	Informe sobre el estado de los programas de Planificación Familiar en América Latina. CELADE, Serie A, N° 97
CELADE-Obstetrics Clinic of the University of Chile- Community and Family Study Center, University of Chicago	La fecundidad rural en Latinoamérica: Una encuesta experimental para medir actitudes, conocimiento y comportamiento. CELADE, Serie A, N° 56
<u>4. Spatial distribution and migrations</u>	
Juan C. Elizaga	Internal migration in Latin America. International Social Science Journal (UNESCO) Vol. VII 2
	Migración diferencial en algunas regiones y ciudades de la América Latina. CELADE, Serie A, N° 8
	A study of migration to Greater Santiago (Chile). Demography, Vol. 3, N° 2
	Population and migration: Latin America and the Caribbean. CELADE, Series A, N° 66
	Urban-Rural pattern of population distribution in Latin America. CELADE, Series A, N° 14
	Migraciones interiores en América Latina (Componentes de los cambios demográficos, Milbank Memorial Fund, 1965)
Julio Morales V.	Evaluation of the magnitude and structure of international migration movements in Latin America (1958-67). General Conference of the IUSSP, Londres, 1969
Zulma C. Camisa	Effects of migration on the growth and structure of population in the cities of Latin America. W.P.C., Belgrado, 1965
<u>5. Miscellaneous</u>	
Carmen Arretx and Jorge L. Somoza	Survey methods based on periodically repeated interviews, aimed at determining demographic rates. CELADE, Series A, N° 65

<u>Author</u>	<u>Title</u>
Carmen Arretx	Métodos para estimar tasas demográficas en regiones donde no se dispone de estadísticas vitales y censales. W.P.C., Belgrado, 1965
Carmen Arretx and (Eduardo Miranda)	Análisis de los cambios demográficos en el sistema de Seguridad Social. CELADE, Serie A, N° 90
Julio Morales	Análisis demográfico de la ilegitimidad en Chile. W.P.C., Belgrado, 1965
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Hildebrando Araica	Some factors limiting the study and calculation of households in Latin America. W.P.C., Belgrado, 1965
Juan C. Elizaga	Demographic aspects of employment and underemployment. W.P.C., Belgrado, 1965
	Investigaciones sobre recursos humanos en América Latina. CELADE, Serie A, N° 91
	Demographic aspects of women's labour force in Latin America. General Conference of the IUSSP, London, 1969
	Enseignement et recherche démographique en Amérique Latine. General Conference of the IUSSP, London, 1969
Carmen A. Miró	Experiencia y problemas en la promoción de la enseñanza y la investigación demográficas en los países en vías de desarrollo - El caso de América Latina. CELADE, Serie A, N° 53
	The Latin American Demographic Centre (CELADE). A Summary Evaluation of Accomplishments and shortcomings. CELADE, Series A, N° 79
	Principios y prácticas de enseñanza y adiestramiento en el Centro Latinoamericano de Demografía (CELADE). CELADE, Serie A, N° 21
Valdecir F. Lopes	Problemas que afectan la producción de datos demográficos en América Latina. CELADE, Serie A, N° 98
Thomas Frejka	Demographic aspects of the educational situation in Latin America. (In press)
CELADE	Enseñanza de la demografía en las Escuelas (Facultades) de Medicina. CELADE, Serie A, N° 87

Table 2

PROGRAMME OF COMPARATIVE URBAN FERTILITY SURVEYS

List of Studies prepared at CELADE

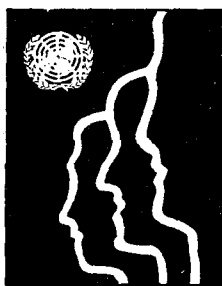
<u>Author</u>	<u>Title</u>
Enrique Brito	Argentina, México: Fecundidad diferencial por status socio-económico
Ives Blanchard	América Latina: Ideales de fecundidad y sus relaciones con determinadas variables. (PECFAL Urbano) 1963-1964
Enrique Carrasco	América Latina: Análisis del nivel y de las tendencias de la fecundidad en siete ciudades
María Helena Henriques	Brasil: La movilidad social y la fecundidad en Río de Janeiro
	América Latina: Tradicionalismo y fecundidad en tres ciudades latinoamericanas
Carmen A. Miró, Walter Mertens	Influence of some intermediate variables in the level and differentials of urban and rural fertility in Latin America
Carmen A. Miró	Un programa de encuestas comparativas de fecundidad en la América Latina. Refutación de algunos conceptos erróneos. CELADE, Serie A, N° 49
Carmen A. Miró, Ferdinand Rath	Resultados preliminares de las encuestas comparativas de fecundidad en 3 países latinoamericanos. CELADE, Serie A, N° 47
Manuel Rincón	Algunos aspectos diferenciales en niveles extremos de fecundidad, 1964. Bogotá, Buenos Aires
Ana María Rothman	La fecundidad en Buenos Aires según algunas características demográficas y socio-económicas, CELADE, Serie C, N° 99
	La participación femenina en actividades económicas en su relación con el nivel de fecundidad en Buenos Aires y México, CELADE, Serie C, N° 108
Olinto Rueda	Colombia: Migración y fecundidad en Bogotá, 1964
Martin Vaessen	Fecundidad diferencial según ocupación del marido en siete ciudades de América Latina

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