



UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL



GENERAL

E/CN.12/902
30 March 1971

ENGLISH
ORIGINAL: SPANISH

ECONOMIC COMMISSION FOR LATIN AMERICA

Fourteenth session
Santiago, Chile, 27 April to 8 May 1971

REPORT ON CELADE'S ACTIVITIES SINCE ITS
ESTABLISHMENT UNTIL 1970

Note by the secretariat

This document^{*} is distributed in connexion with item 10 (c) of the agenda of the fourteenth session of the Economic Commission for Latin America.

* English version issued by CELADE.

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I. BRIEF BACKGROUND INFORMATION ON THE OPERATION OF CELADE

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

Since 1964, financial sources have been strengthened by contributions from the Agency for International Development (AID). The Centre's resources were substantially increased when the Special Fund project rendering financial support for a five-year period, came into operation on May 1st, 1966.

The expansion of CELADE's activities is shown in the following expenditure figures:

<u>Year</u>	<u>Expenditures (thousands of US\$)</u>
1958	106,5
1960	143,9
1962	221,0
1964	216,0
1966	330,3
1968	495,4
1970	848,8

In order to carry out research projects of a more ample scope, involving field work and expenses in data processing, CELADE obtained special grants from different international agencies, mainly the Population Council and the Ford Foundation.

Grants approved by the Population Council for these projects since 1963, which have benefited CELADE directly, amount to 85 thousand dollars.

Towards the middle of 1968, the Ford Foundation granted 107 thousand dollars for a two-year programme of activities. In relation to the studies on migrations at present underway, the Foundation also covers the salaries of one investigator.

In 1962, that is, five years after CELADE was founded, the staff was very small in relation to the aims of its programme. However, thanks to the expansion of the available resources, this staff has been slowly increasing until it reached, at the end of 1970, the figures of 32 professionals and 68 non-professionals.

It should be noted that the professional staff includes experts from several fields, economists, sociologists, physicians, statisticians,

demographers, etc., among them some who attended the courses of CELADE's regular training programme.

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. The rapid population growth in developing 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 undertaking studies about the demographic situation based mainly on population censuses and also special investigations on aspects not covered or only partially covered by censuses and vital statistics.

In view of the lack of trained personnel, CELADE had to devote its greatest efforts, during its first years of operation, to the training of personnel. Therefore, top priority was assigned at the time 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 fulfill this aim.

In view of its duration, 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. Experience has shown that only part of the fellows selected could meet higher-level training requirements. 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 the preparation, under supervision, of research projects. Formal courses were introduced later on to deepen the studies given at the Basic Course, until the present structure was attained in 1967.

As a culmination of the programme of 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.

The programme of the Advanced and Specialization Courses was enriched during 1970 with the collaboration of world renowned specialists who conducted seminars and cycles of lectures on different subjects. As part of these activities, CELADE was visited by Professor Jean Bourgeois-Pichat, Director of the Institut National d'Etudes Démographiques in Paris; Dr. Abraham J. Jaffe, Director of the Bureau of Applied Social Research of the University of Columbia in New York; Dr. William Brass, from the Department of Medical Statistics and Epidemiology of the London School of Hygiene and Tropical Medicine and Dr. Roberto Bachi from the Hebrew University in Jerusalem, who dealt, respectively, with the following subjects: Theoretical Populations, Demographic Aspects of Manpower and Economic Development, Estimation of Demographic Indices with Census and Surveys Data and Methodological Aspects of the Study of Spatial Distribution of Population.

During the first thirteen years (1958-1970) of the Santiago Headquarters Regular Training Programme 236 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, as can be seen in Appendix I, which contains information on the activities of most CELADE former fellows. Of the above mentioned total, 68 continued in the Advanced Course and, among the latter, 15 were trained in the Specialization Course.

A programme of applied demographic research addressed at medium and high level professionals is also part of the regular training activities. This "research fellows" programme offers those professionals the possibility of engaging in the study of subjects related to their respective fields of work in which the use of techniques of demographic analysis is required. 15 researchers have undergone this training since the inception of the programme in 1961 until the end of 1970.

In Table 1 of Appendix I, the students are distributed by course, year and country of origin and the financial sources of fellowships granted are summarized. 82 per cent of these fellowships were financed with 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. CELADE 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 centres of the region and, more directly, has organized national courses and rendered assistance 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 with national resources. A first type of course, of a more ambitious character, was carried out at the Faculty of Economic Sciences of the National University of Córdoba (Argentina) during 1968, followed by a similar one in 1970. Another course of the same nature was organized 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. In both cases, the courses are part of an agreement in which CELADE is to render assistance to these universities in teaching and research, with the participation of professionals from all over the country, attached to government agencies and university centres. A special booklet describing the aims and contents of the courses was distributed at the time among those institutions.

Similar courses are expected to be organized at the Catholic University of Rio de Janeiro and the University of Havana during 1971.

Since 1968, national courses of a more limited scope have been covered by personnel from the Sub-Centre at San José. 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 2 of the Appendix I. A brief booklet describing the aims and characteristics of these courses has also been prepared.

The National Courses, of a rather limited scope, were considered to have already met the purposes they had been created for in the Central American area. They were therefore discontinued and replaced during 1970 by an Intensive Course of a longer duration, with similar characteristics to the courses already delivered in the Universities of Cordoba and Zulia. This Intensive Course for the Central American area and the Caribbean will be given again in 1971.

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. The Sub-Centre in Costa Rica has recently initiated the same type of collaboration, delivering in San José, during 1970, a series of lectures in the Central American Course on Basic Training in Demography and Sex Education addressed at high school teachers of the countries of the subregion.

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 related to these subjects and family planning have their headquarters in Santiago, CELADE has been invited to participate 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 the two previously mentioned courses, are attended by professionals from 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 1966-1970 shown in Table 4 of the Appendix I. During this period, 718 professionals received training in demography. 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 Bogotá in June 1968. This meeting was the result of a movement initiated in some schools of medicine, where for several years brief courses on demographic subjects related to health, use of contraceptives and family planning 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 Pan American 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 which might involve present and future activities of CELADE were adopted by the Conference, in relation to programmes, bibliography and the training of the teaching staff.

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 biostatistics, 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. A conference of these schools was held in November 1970 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. The organization of the Conference was in charge of a committee composed of representatives of the Pan American Health Organization (PAHO), the Department of Preventive and Social Medicine of the University of Chile and CELADE, which was also entrusted with the Executive Secretariat.

Finally, CELADE 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 5 of the Appendix I.

In order to complete this brief description of the activities connected with the teaching of demography and allied subjects, the organization of training seminars must be mentioned. The first of these seminars was held in Santiago during 1970, lasted four weeks and was devoted to the study of methods of evaluation of family planning programmes. It was addressed at professionals working in activities connected with family planning and health programmes in the countries of the region. A similar seminar will be organized during 1971, with a six-week duration.

CELADE also assumed in 1970 the main responsibility for the organization and development in Santiago of a six-week Seminar on Census Tabulations Systems (CENTS), with the purpose of assisting the countries in the processing of population census data. The U.S. Bureau of the Census rendered its collaboration providing the CENTS system. A similar Seminar will be conducted again during 1971 in San José.

The Sub-Centre in Costa Rica also had the opportunity to benefit from the contribution of one of the outstanding demographers who had previously visited Santiago Headquarters. In fact, Dr. Jean Bourgeois-Pichat conducted at the Sub-Centre a Seminar in which some of the main contributions to the study of fertility and mortality were discussed, with the participation of six former CELADE fellows, in addition to the Sub-Centre's staff.

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

a) Regular training programme courses in Santiago (Basic, Advanced and Specialization Courses) initiated in 1958, a complement of which is the training of "research fellows". This programme was initiated in San José during 1970 with the Intensive Course, to be replaced after 2 years by a Basic Course.

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 and San José by other institutions.

d) Undergraduate and post-graduate courses at universities in Chile and Costa Rica, a list of which is shown in Tables 4 and 5 of Appendix I;

e) Training Seminars on different subjects.

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, a number of individual projects were carried out during this period.^{1/} 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.^{2/} 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, namely:

- 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), to study 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 of the region, was started; at the same time, a longitudinal

^{1/} 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" and "Algunos modelos teóricos y numéricos de población". (For further information see Series A of CELADE's List of Publications).

^{2/} At the end of 1970 these amounted to 306. As may be observed in the Centre's List of Publications, to date, 126 selected monographs have been published (Series C).

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.

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 local institutions of Colombia and Mexico, Costa Rica and Peru having joined the programme subsequently. Research on induced abortion was carried out in 1967, covering three cities (Bogotá, 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 a family planning programme of limited coverage, carried out in a Santiago health area. 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 above mentioned investigations are 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.^{3/}

^{3/} Detailed information about this work is presented in Section IV

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 submission 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 1970 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 in Latin America (PECFAL)

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. 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 workshops, 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. This has been 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 or a computer tape which are made available to CELADE. Comparative international analyses, as well as publication of these are in care of CELADE. 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.

A summarized description of the two phases of the programme and the status of operations at the end of 1970 is given below.

Metropolitan Areas Surveys. These were conducted with the close collaboration of the following national institutions: 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 the surveys were, with one exception, former CELADE fellows. 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. 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.

National reports have been published by Colombia, Costa Rica, Panama and Venezuela. Brazil has published several papers summarizing findings of the survey in América Latina 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 studies have been published which are listed in Table 2 of Appendix II.

Small Urban and Rural Areas Surveys. The initiation of this phase of PEFAL 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. 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 represent 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. Field work had been completed in all countries by March 1970. Elaboration of the data is now proceeding and CELADE has already received the tapes from Colombia and Costa Rica. A meeting with representatives from the countries was held in October 1970, in order to define the basic plan of tabulations.^{4/} These tabulations and the required indices are at present being prepared at CELADE in order to be sent to the countries.

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

This programme was initiated in answer to the concern expressed in different circles for the health and social problem presented by induced abortion. This research is mainly directed towards finding out the actual extent of the practice and its relation to the use of contraceptives in different economic and social strata of the Latin American population. 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, the project covers four cities: Bogotá, Buenos Aires, Lima and Panamá, which, in addition to social and economic differences, show different fertility levels and structures. Research is carried out by means of retrospective

^{4/} See Document PECFAL-R No. 37.

surveys of a representative sample of 1 500 fertile age women, stratified in three social, economic and cultural groups. For the purpose of carrying out these surveys, CELADE requested the collaboration of national institutions with which it signed technical assistance and financial aid agreements.^{5/}

Technical assistance includes mainly the design of the sample and the elaboration of research instruments (questionnaires, handbooks for interviewers and supervisors and coding handbooks among other things), a course for the executive directors of the surveys and constant supervision of the progress of investigations.

Field work in the Bogotá survey began in July 1967, the following year in Buenos Aires and Panama and at the end of 1969 in Lima. At present, CELADE has tapes with survey data from the first three cities; in Lima coding is well underway.

A preliminary review of the data now in CELADE will allow the preparation of a uniform plan of tabulations and the publication of reports and studies on the different aspects covered by the investigation.

In addition, CELADE has received requests from several countries for technical assistance to carry out research studies similar to the ones described above. To this effect, technical assistance agreements were signed between CELADE and the National Family Centre (CENEFA) of Bolivia, to carry out surveys in La Paz, Cochabamba and Santa Cruz, and with the Faculty of Medicine of the National University of Asunción (Paraguay) under the sponsorship of the Ministry of Public Health. The latter 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, the Centre considered that a comparison of the relative merits of both procedures would prove useful. For this purpose, a longitudinal survey was started in September 1969, in the North Health Area of Santiago, Chile, covering a sample of

^{5/} The national institutions participating are: in Bogotá, 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 Department of Gynecology and Obstetrics of the Faculty of Medicine of the University of Panama.

800 women 20-44 years of age. Once concluded, a retrospective study of a second sample of women with similar characteristics was made. Coding and tabulation will be ready in early 1971.

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. were used in 1968 for the evaluation of the programme. 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.

A study in charge of Department B of Hygiene and Preventive Medicine of the University of Chile and CELADE was carried out in a representative sample of 1 200 women of the area, 18-37 years.

Field work was concluded in January 1969, after which a set of basic tabulations was prepared as well as a report covering the main aspects investigated.

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 CELADE. While, as a rule, the purpose of field work carried out by the Centre is to deepen the knowledge 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 to 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. CELADE has been of the opinion that to carry 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, 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, with one exception, 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 unknown)- nothing can be done to obtain basic demographic information. Honduras, as the only example, organized a national survey following guidelines proposed by CELADE and is now in its first year of operation.

Results from the two above-mentioned investigations have been published. The first, Encuesta Demográfica Experimental de Guanabara (Serie A, No. 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. The methodology used in these studies is presented in CELADE's Basic Course as part of the course on Nature, Sources and Data in Demography.

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 demographic 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 direct purpose of the survey was to obtain adequate statistical information for the study of the following subjects: 1) 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, since 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 arrived over 14 years of age, was gathered by means of direct interviews using a more detailed questionnaire, which includes, 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.^{6/} 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

^{6/} A general report with results from the Great Santiago Survey was included in publication No. 15 of CELADE, Series A. A more extensive and complete analysis of this investigation was published in book form under the title "Migraciones a las Areas Metropolitanas de América Latina".

above all make this part of the questionnaire more objective, taking into account 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. 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.^{7/}

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.

During 1969 advances were 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.

A researcher from Brown University (Rhode Island), who visited CELADE for six weeks and an Advanced Course fellow were given facilities and documentation during 1970, to prepare studies related to this programme. Other outstanding activities in this connection were those aimed at the constitution of an interinstitutional working group for the exchange of knowledge, orientation and research promotion in this field; the preparation of a selection of technical articles not available in Spanish which will be published by CELADE, and a specialized bibliography on theoretical, methodological and sociological

^{7/} "Encuesta de Inmigración: Lima Metropolitana". Reports Nos. 1, 2 and 3. Dirección Nacional de Estadística y Censos, 1966-1968.

aspects of internal migrations.

5. The Programme Operation Census Samples (OMUECE)

The "Seminar on Evaluation and Utilization of Latin American Census Results", organized by the United Nations, was held in Santiago, Chile, in 1959, "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".^{8/}

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:

i) prepare advanced tabulations, for the purpose of publishing certain results before the basic tabulation programme is concluded; ii) prepare tabulations which, by their very nature, do not require the utilization of information corresponding to the total population; iii) 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; and iv) ensure the future availability of basic and detailed information about aspects of demographic interest.

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 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.

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.

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.

^{8/} Final Report of the Seminar, United Nations, New York, 1961.

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.

Samples from the majority of the countries were received at CELADE in IBM punch cards. In order to be utilized, all the information gathered (approximately 3 500 000 persons) had to be previously converted into a single processing system. Today the data from all samples are stored in tapes, the sole exception being the original sample of Argentina, country for which tapes with data from an amplified sample of 500.000 persons are expected to be received.

The tabulations anticipated for the OMUECE programme cover five main demographic subjects: a) nuptiality; b) fertility; c) education; 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, underemployment and family characteristics.

At present, the tabulations corresponding to nuptiality, education and economically active population for twelve of the countries for which samples are available have already been made; as well as those on migration for five countries and on fertility for Chile.

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 agencies such as ECLA have been met. In general, samples are at the disposal of all institutions or individuals interested in 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.

Some of the tabulations prepared as part of the OMUECE programme have been used for studies such as the one on migrations in Colombia, carried out by a researcher from ECLA's Social Affairs Division.

Both the analyses to be made of the data and tabulations will be published in the regular series of CELADE publications.

The OMUECE programme is planned to be continued with the population censuses to be held during the seventies. To this effect, countries which have taken 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. Samples from Argentina, Brazil, Chile, Mexico and Panama are expected to be obtained during 1971.

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 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 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 measuring 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, 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.

The 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 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, Perú, Canada and other non Spanish speaking countries and territories in the Caribbean, and Central and South America;
- b) Fertility surveys carried out in 10 Latin American cities from 1963 to 1967 (Bogotá, Buenos Aires, Caracas, Guatemala, Mexico City, Guayaquil, Panama City, Quito, Rio de Janeiro and San José, 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;
- g) Experimental censuses of Canton Grecia, Costa Rica, and Belén, Argentina;
- h) Survey on induced abortion in three cities (Bogotá, Panamá, Buenos Aires). Lima will be included in the future.
- i) Two national surveys on fertility in small urban and rural areas (Colombia and Costa Rica). México and Perú will join later on; and
- j) Fertility survey in La Calera, Chile, 1965.

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 of 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.

CELADE's contribution is mainly related to the preparation and application of a demographic submodel to be included in the broader economic model. A version of this demographic model appears in a preliminary publication entitled "Relations of the Demographic Submodel". The model was programmed for use in the computer and the programme supplied with data of Latin America as a whole, on the basis of which an exploratory projection until the year 2 000 was prepared.

In the process of measurement and analysis of occupation, some relations between these variables and others frequently used in demography were studied, such as, for instance, occupational level and fertility; fertility and women's participation in economic activities. Possible nexus between occupation, consumption, integration to internal market and demographic characteristics were also investigated, analyzing as well some implications of demographic changes on the occupation in order to measure the order of magnitude of the problem.

The project covers investigations in countries, subregions and in Latin America as a whole. Several interested national institutions are taking part in the project.^{9/}

^{9/} "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).

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 seminar.^{10/} 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.

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 Córdoba, 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 example, the "laboratorios" on health and population, in relation to the introduction of the teaching of demography in the schools of 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

^{10/} CELADE's participation is shown in two documents entitled "Ocupación y población" and "El modelo a emplear", which correspond to the II and III chapters, 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".

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 Inter American Statistical Institute (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 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 and the following 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, etc.) which demanded frequent visits from CELADE officials to Argentina and from INDEC officials to Santiago, Chile. Prospects that the agreement will continue in the future look promising.

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. The interest shown by these agencies in incorporating demographic variables to their studies, is an indication that CELADE will have to intensify in the future its technical assistance services to national planning institutions.

A Seminar on the Use of Demographic Studies and Data in Planning is programmed to be held in Santiago in August 1971, under the sponsorship of ECLA, the Latin American Institute of Economic and Social Planning (ILPES), the OAS/PREALC Working Group, the Inter American Development Bank (IDB), the United Nations Fund for Population Activities (UNFPA) and CELADE. This initiative will be very important in the establishment and development of a regular demographic assistance programme for planners. Similar seminars were held under the sponsorship of the United Nations in Kiev and Addis Abeba (1969).

The Santiago Seminar aims are to provide planners with an exact view of the possibilities of the use of demographic studies in development planning, to discuss the corresponding methodology and the substantive aspects of the different planning fields, and to define the general lines of a training programme in demographic aspects of planning. An Organizing Committee composed of representatives of the sponsoring institutions has been established, with a coordinator in charge of work and an executive secretariat, under the responsibility of a CELADE staff member. Approximately 40 representatives of countries of the region are expected to attend the Seminar.

b) Demographic research. An example of another type of technical assistance rendered by CELADE, which is considered highly significant and which would be desirable to extend to several countries, is advisory services to research institutions, as is the case of 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 a university of the 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. Thus, CELADE rendered assistance during 1970 in the preparation of the project for the organization of the Population Studies Institute which is planned to be established in the Faculty of Economic Sciences of the University of Córdoba, Argentina, and in formulating the corresponding financial assistance request submitted to UNFPA.

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).

d) Collection of basic demographic data. CELADE has paid special attention to promoting the improvement, broadening and availability of primary data, in view of the importance of reliable basic information for an adequate and accurate evaluation of the demographic situation and prospects of a country. Part of this effort was described when referring to the activities related to experimental population censuses under Section III.

Other examples in this connection are, on the one hand, the technical assistance being rendered to the National Statistics Institute of Chile, for the elaboration of two samples in order to obtain advanced results from the Census taken in April 1970. On the other hand, the support CELADE-Sub-Centre is giving to the Honduras Office of Statistics and Census in the technical aspects of the taking of a National Demographic Survey whose purposes have already been described in another section of this report.

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. More recently, however, it was decided to include again a demography expert in these missions.

This agreement materialized for the first time in 1970, in a mission sent by ILPES to the State of Minas Gerais, Brazil. On that opportunity, the demographer prepared several population projections required by the mission and participated in re-formulating the demographic statistics system of the State.

Likewise, CELADE participated in a working group in charge of the preparation of basic statistical information, such as past population trends and its future projections, in connection with the Andean Group of countries.

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.

c) Cooperation with the IASI. The programme of population censuses 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 analyzing 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 ECLA-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 social work was signed with the OAS for the purposes of the Conference held on this subject in Santiago, Chile, in September, 1970.

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.

f) Cooperation with subregional groups. The establishment of a Sub-Centre in Costa Rica has facilitated the exchange and collaboration with sub-regional institutions. Thus, in June 1970, an "Interagency Meeting on the Assistance in the Field of Population in Central America" was held in Guatemala with the participation of members of CELADE Headquarters' and Sub-Centre's staff. A working group was appointed during this meeting with representatives from the Sub-Centre, in order to set up a programme of studies and priorities in population matters for the region. During the period covered by this report the group met twice, in July (Guatemala) and in September (San José). Continued periodical meetings are planned to be held in order to reach agreements for the distribution of responsibilities in population studies matters.

V. PUBLICATIONS, INFORMATION AND DOCUMENTATION

1. Publications

In 1964, a Section specially in charge of these activities was organized, although 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.

CELADE issues nine series of publications, covering several fields of activities such as, studies and reports carried out by the professional staff, class notes and teaching manuals, monographs prepared by the students, translations into Spanish of articles published in technical journals and other documents of interest to the Centre, books and a semi-annual bulletin (Demographic Bulletin).

Since the Centre's establishment until December 31st, 1970, 374 titles have been published, distributed as follows: Series A - Reports on research carried out by CELADE: 107 publications; Series B - Text-books and other teaching material prepared by the teaching staff of the Centre: 32; Series C - Reports on research carried out by the students of the Centre: 126; Series D - Translations, papers, conferences and others, prepared by visiting professors and experts: 64; Series E - Publication of books: 7; Series F - Demographic Bulletin: 6 volumes; Series G - Administrative documents: 29; Series H -

Extension Text-books: 1 volume, and Series I: 2.

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.^{11/} In relation to this Series E, we must mention that during 1970, preliminary work for the edition of five other volumes, to be published during 1971, has been carried out.^{12/}

During 1970 appeared the first two volumes of Series I, which is addressed at issuing selections of demographic studies on countries of the region. The first volumes correspond to Chile and Argentina.

The preliminary edition of a Demographers' Directory, containing the names of persons connected with demography in the region has been distributed. Its final version will be published once more information on the subject is received at CELADE.

All this editorial work was possible, to a large extent, due to the expansion and improvement of printing facilities of the Section, which will necessarily have to be increased in the future if the growing requirements created by the expansion of CELADE's activities are to be met.

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 recommendation of CELADE's Governing Board.

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- ^{11/} Until December 31st, 1970, 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".
 - J. C. Elizaga: "Migraciones a las Áreas Metropolitanas de América Latina".
 - R. O. Carleton: "Aspectos Metodológicos y Sociológicos de la Fecundidad Humana".
- ^{12/} Alvaro Vieira Pinto: "El pensamiento crítico en demografía". (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". (Directly translated from the Russian. The Spanish version is in revision).

2. Information

At the end of 1967 the post of Information Officer attached to the Publications 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. 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.

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, often present no interest for the general public.

In 1968 an Exhibition on demographic aspects of Latin America was held in the following cities: Caracas, Bogotá, Quito, Lima, Santiago, (on the occasion of the VIII World Congress of the IPPF), Viña del Mar and Concepción, 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 Bogotá and distributes them through all Latin America, to the amount of some 5 000 copies. A total of 20 articles have been sent in the course of two years.

CELADE's Information Bulletin is published periodically 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.

3. Library and documentation

As a support to its training and research programmes, as well as to offer consultative services to organizations and individuals interested in

population matters and allied subjects, CELADE has been gathering in Santiago through the years a vast bibliography and documentation, which today constitutes the "Giorgio Mortara" Library, which includes almost 6 000 books, in addition to more than 2 500 reprints and booklets, series of demographic journals and allied subjects, yearbooks and national journals specially related to population matters.

This material is undoubtedly the most complete bibliography on demographic subjects in the region. Therefore, CELADE is studying a way of expanding the consultative and documentation services which the "Giorgio Mortara" Library could render to the Latin American countries, especially to training and research centres.

APPENDIX I

Table 1

REGULAR TRAINING PROGRAMME

1. Participants by courses and countries. 1958-1970 period.

Countries	Courses			
	Basic	Advanced a/	Specialization b/	Research fellows
<u>Total</u>	<u>221</u>	<u>68</u>	<u>15</u>	<u>14</u>
Argentina	24	16	6	1
Bolivia	5	2	-	2
Brazil	14	2	1	1
Colombia	22	3	-	1
Costa Rica	6	2	1	1
Cuba	5	3	-	-
Dominican Republic	7	2	-	-
Chile	32	9	4	-
Ecuador	11	2	-	1
El Salvador	8	1	-	-
Guatemala	3	1	-	3
Haití	4	2	-	-
Honduras	8	1	-	-
México	15	4	1	4
Nicaragua	3	-	-	-
Panamá	10	3	1	-
Paraguay	10	2	-	-
Perú	17	6	1	-
Puerto Rico	3	-	-	-
Uruguay	5	3	-	-
Venezuela	9	4	-	-

a/ These students are included among Basic Course participants, with the exception of one who came directly from an Intensive Course in Demography.

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>236^{a/}</u>	<u>221</u>	<u>68</u>	<u>15</u>	<u>14</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
1970	35	25	6	1	3

a/ This total is obtained by adding the second column (221) to the last (14), plus an Advanced Course student who did not attend the Basic Course, and represents the number of different persons who participated in the courses.

3. Financing of fellowships

	Totals	Periods		
		1958-1961	1962-1965	1966-1970
United Nations	246	66	80	100
AID	31	-	2	29
BID	10	-	1	9
OAS	9	-	3	6
Population Council	7	3	4	-
Others (WHO and CEPD)	7	-	-	7
Total fellowships granted	310	69	90	151

Table 1 (continued)

4. Former fellows, by main field of activities, at the end of 1969.

Main field of activity	Number of former fellows ^{a/} (by level of course attained)			
	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 available	30	28	2	-
	207	145	48	14

^{a/} Includes 11 research fellows.

Table 2

NATIONAL COURSES IN DEMOGRAPHY
Organized by CELADE^{a/}
1967-1970

Country	Year	Participating National Institution	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 (Córdoba)	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
Argentina (Córdoba)	1970	Universidad Nacional de Córdoba	13	19	380

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

Table 3

REGIONAL COURSES IN DEMOGRAPHY (In San José)
Organized by the Sub-Centre, 1970

Course	Year	Participating countries	Students	Duration in weeks	Hours of Teaching
Central American Course on Basic Training in Demo- graphy and Sex Education ^{a/}	1970	5	20	5	105
Intensive Course on Demo- graphy for the Central American countries and the Caribbean	1970	8	25	16	400

^{a/} This course was organized with the collaboration of the "Centro de Estudios Sociales y de Población" of the University of Costa Rica.

Table 4

INTERNATIONAL COURSES (IN SANTIAGO)

1. Courses and hours of teaching in demography in charge of CELADE personnel
1966-1970

Courses and organizing institutions	Hours of teaching					
	Total	1966	1967	1968	1969	1970
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	36
c. Latin American Training Programme in Family Planning (Chilean Association for the Protection of the Family)	380	63	85	112	120	117
d. Demography and Health (CELADE)	75	75	-	-	-	-
e. Training courses in housing (1966) education (1967) and human resources (1968 and 1970), (Latin American Institute of Economic and Social Planning-ILPES)	43	16	5	22	-	30
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	-
i. Course on "The demographic situation in Latin America" at the Department of Economic Development of FLACSO's Course in Sociology	-	-	-	-	-	10
Total	1 177	287	287	330	273	193

a/ National post-graduate course

Table 4 (continued)

2. Participants by country of origin: 1966-1970

Country	Total	In courses of 20 hours or more in demography					In courses of less than 20 hours in demography 1966-1970
		1966	1967	1968	1969	1970	
Argentina	57	6	21	16	9	8	9
Bolivia	24	-	4	13	5	3	2
Brazil	60	11	21	15	4	5	10
Colombia	53	9	13	11	16	9	5
Costa Rica	16	2	4	7	3	3	-
Cuba	14	3	2	-	3	2	7
Chile	204	13	38	43	85	114	31
Dominican Republic	13	2	3	6	-	3	2
Ecuador	32	3	4	7	16	55	2
El Salvador	12	2	6	1	3	2	1
Guatemala	15	-	5	4	4	2	2
Haiti	3	-	1	-	1	-	2
Honduras	16	-	4	6	5	-	1
Mexico	15	1	1	4	4	1	9
Nicaragua	18	1	2	9	5	-	1
Panamá	7	3	1	1	1	1	1
Paraguay	29	5	-	8	12	11	4
Peru	77	35	12	14	11	6	6
Uruguay	23	2	6	6	4	4	6
Venezuela	24	2	7	4	6	2	6
Puerto Rico	1	-	1	-	-	-	-
Other non-Latin American countries	5	-	1	1	2	-	2
Total	718	100	157	176	199	231	109

Table 4 (continued)

3. Professional field of participants: 1966-1970

Professional field	Total	In courses of 20 hours or more in demography					In courses of less than 20 hours in demography 1966-1970
		1966	1967	1968	1969	1970	
Medicine and Public Health	513	86	118	150	158	175	2
Sociology and other social sciences	83	1	35	14	29	33	16
Other fields ^{a/}	122	13	4	12	12	23 ^{b/}	91 ^{c/}
Total	718	100	157	176	199	231	109

^{a/} Education, city-planning, etc.

^{b/} Economics (20), Agronomics (1), Accounting (1), Law (1).

^{c/} Housing (30), Education (51), Philosophy (6), Economics (3), Law (1).

Table 5

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) Course for social workers and family education workers, on the University of Chile (Valparaiso)	1969
f) Career of Statistical Technicians of the University of Chile	1970
g) Teachers at Schools of Obstetrics, depending from the University of Chile and the National Health Service	1970
h) Third year in the Schools of Obstetrics	1970
i) Course on Educational Planning of the "Centro de Perfeccionamiento , Experimentación e Investigación Pedagógicas" of the Ministry of Education of Chile	1970
j) Lectures on Economically Active Population at the School of Sociology of the Catholic University of Chile	1970

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.

Table 5 (continued)

2. At the National University of Costa Rica (San José)

	<u>Year</u>
a) Training Programme in Population Dynamics and Family Planning, in the Faculty of Medicine (monthly courses). 1968-1969-1970	
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)	1968-1969-1970

APPENDIX II

Table 1

SOME STUDIES PREPARED BY CELADE PERSONNEL^{a/}

<u>Author</u>	<u>Title</u>
<u>1. Contemporary population problems</u>	
Jorge A. Arévalo	El crecimiento de la población en la América Latina y su implicación en el sector educativo. CELADE, Serie A. No. 50.
Robert O. Carleton	Aspectos demográficos de la infancia y de la juventud en la América Latina. CELADE, Serie A, No. 52
Tomas Frejka	Análisis demográfico de la situación educacional en Latinoamérica (in press)
Carmen A. Miró	La población del mundo: Dos "bloques" claramente diferenciados. CELADE, Serie A, No. 51
	La población de América Central y Panamá; un ejemplo de multiplicación acelerada. CELADE, Serie A, No. 58
	Los cambios demográficos en América Latina y su influencia. CELADE, Serie A, No. 68.
	La población de América Latina en el siglo XX. (Spanish edition of <u>Population Dilemma in Latin America</u>)
Jorge L. Somoza	República Argentina: Algunos efectos sociales y económicos derivados de la baja de la mortalidad entre 1900 y 1960. CELADE, Serie A, No. 105
<u>2. Mortality</u>	
Carmen Arretx and José Pujol	La mortalidad en América Latina en el período 1965-1970. Conferencia Regional Latinoamericana de Población, México, 1970.
Guillermo Macció	El estado actual de las investigaciones sobre mortalidad en América Latina. Conferencia Regional Latinoamericana de Población, México, 1970.
Antonio Ortega	Estimación de la mortalidad a través de las preguntas sobre hijos nacidos vivos e hijos sobrevivientes. Conferencia Regional Latinoamericana de Población, México, 1970.
Jorge L. Somoza	Document of the Organizer of the Session on Mortality. Conferencia Regional Latinoamericana de Población, México, 1970.

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

<u>Author</u>	<u>Title</u>
Jorge L. Somoza	La mortalidad en la Argentina, entre 1869 y 1960. CELADE, Centro de Investigaciones Sociales, Instituto Torcuato Di Tella. (in press).
<u>3. Fertility, birth control and related topics</u>	
Zulma Camisa	La nupcialidad femenina en los países de América Central en el último período intercensal. Conferencia Regional Latinoamericana de Población, México, 1970.
Robert O. Carleton	Crecimiento de la población y fecundidad diferencial en América Latina. CELADE, Series A, No. 60. El efecto del mejoramiento educacional sobre las tendencias de fecundidad en Latinoamérica. CELADE, Series A, No. 34. Labour force participation: A stimulus to fertility in Puerto Rico. CELADE, Series A, No. 55
María Luisa García	Informe sobre el estado de los programas de planificación familiar en América Latina. CELADE, Series A, No. 97.
Carmen A. Miró and Walter Mertens	Influencia de algunas variables intermedias en el nivel y en las diferenciales de fecundidad urbana y rural de América Latina. CELADE, Series A, No. 92.
Julio Morales	Análisis demográfico de la ilegitimidad en Chile. World Population Conference, Belgrade, 1965.
Jorge L. Somoza	Nivel y diferenciales de la fecundidad en la Argentina en el siglo XIX. Instituto Torcuato Di Tella, Series Population and Society, No. 45.
<u>4. Spatial distribution and migrations</u>	
Zulma Camisa	Effects of migration on the growth and structure of population in the cities of Latin America. World Population Conference, Belgrade, 1965.
Juan C. Elizaga	Document of the Organizer of the Session on Migration, Urbanization and Regional Distribution. Conferencia Regional Latinoamericana de Población, México, 1970. Internal migration in Latin America, International Social Science Journal (UNESCO), Vol. VII.2. A study of migration to Greater Santiago (Chile) <u>Demography</u> , Vol. 3, No. 2.

<u>Author</u>	<u>Title</u>
Juan C. Elizaga	Population and migration: Latin America and the Caribbean. CELADE, Series A, No. 66
	Urban-rural pattern of population distribution in Latin America. CELADE, Series A, No. 14
	Migraciones interiores en América Latina (<u>Componentes de los cambios demográficos</u> , Milbank Memorial Fund, 1965).
Julio Morales	Evaluation of the magnitude and structure of international migration movements in Latin America (1958-67). General Conference of the IUSSP, London, 1969.
5. <u>Miscellaneous</u>	
Hildebrando Araica	Some factors limiting the study and calculation of households in Latin America. World Population Conference, Belgrade, 1965.
Carmen Arretx	Métodos para estimar tasas demográficas en regiones donde no se dispone de estadísticas vitales y censales. World Population Conference, Belgrade, 1965.
Carmen Arretx and Jorge L. Somoza	Survey methods based on periodically repeated interviews, aimed at determining demographic rates. CELADE, Series A, No. 65
Carmen Arretx and Eduardo Miranda	Análisis de los cambios demográficos en el sistema de Seguridad Social. CELADE, Series A, No. 90.
Juan C. Elizaga	Demographic aspects of employment and under-employment. World Population Conference, Belgrade, 1965.
	Investigaciones sobre recursos humanos en América Latina. CELADE, Series A, No. 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.
Angel Fucaraccio	El control de la natalidad y el argumento del ahorro y la inversión. Conferencia Regional Latinoamericana de Población, México, 1970.
Valdecir F. Lopes	Problemas que afectan la producción de datos demográficos en América Latina. CELADE, Series A, No. 98.

<u>Author</u>	<u>Title</u>
Julio Morales	Situación actual de la enseñanza de la demografía en las escuelas de Economía y Sociología de América Latina. Bogotá, 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, Series A, No. 53.
	The Latin American Demographic Centre (CELADE). A Summary Evaluation of Accomplishments and Shortcomings. CELADE, Series A, No. 79.
	Principios y prácticas de enseñanza y adiestramiento en el Centro Latinoamericano de Demografía (CELADE). CELADE, Series A, No. 21
CELADE	Enseñanza de la demografía en las Escuelas (Facultades) de Medicina. CELADE, Series A, No. 87.

Table 2

PROGRAMME OF COMPARATIVE URBAN FERTILITY SURVEYS

List of Studies prepared at CELADE

<u>Author</u>	<u>Title</u>
Adalberto Arrias, Alfonso Farnos	Buenos Aires, Bogotá y San José: Análisis del método de Brass para la medición de la fecundidad y la mortalidad.
Enrique Brito	Argentina, México: Fecundidad diferencial por status socio-económico.
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