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LATIN AMERICAN DEMOGRAPHIC CENTRE (CELADE)

EXCHANGE AND COOPERATION PROGRAMME CELADE/CANADA II (CCII)

TWENTY-SIXTH AND LAST REPORT OF ACTIVITIES

January-March 1989

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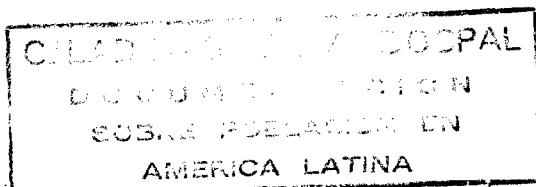


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EXCHANGE AND COOPERATION PROGRAMME CELADE-CANADA II (CCII)

TWENTY-SIXTH AND LAST REPORT OF ACTIVITIES

Introduction

The Exchange and Cooperation Programme CELADE-CANADA II (CCII) was established in 1982 by means of an agreement between the Canadian International Development Agency (CIDA) and the Latin American Demographic Centre (CELADE). The initial duration of CCII, as established in the corresponding Plan of Operation (POP), was of five years, from April 1982 to March 1987. A revision of the POP was made in December 1985, which provided for an extension of the original termination date, from March 1987 to March 1988. Subsequent amendments extended CCII to December 1988, and finally to March 1989. The twenty-sixth report (January-March 1989), submitted in this opportunity, is therefore the last report of the Exchange and Cooperation Programme CELADE-CANADA II (CCII).

The present report gives an account of the activities undertaken during the period January-March 1989, following the structure of the Programme's revised Plan of Operation (POP) ^{1/}. A detail of expenditures and utilization of funds for the different activities during this last quarter is enclosed as an Annex to this report.

I. TECHNICAL COOPERATION, TEACHING AND RESEARCH

1. NATIONAL DEMOGRAPHIC SURVEYS

a) Experimental Demographic Survey in Belize

This survey, organized by the Central Statistical Office (CSO) of Belize and CELADE, is carried out in the country with the financial support of the CELADE/CANADA Exchange Programme. The purpose is to test different methods to collect demographic information, to prepare for the 1990 census and obtain data, although limited, on the demographic situation and dynamics of the country.

The general plan was jointly developed with the CSO. It proposes a concentrated sample in three regions of the country: The city of Belize, a rural area in the North and a semi-urban sector in the West close to the capital city, Belmopan. The questionnaire and the manuals for interviewers and supervisors are similar to the ones used in the Guyana survey and were prepared in

^{1/} Since it is very difficult to separate the CCII's activities from CELADE's overall work programme in which most of the former are inserted, reference is often made to activities that although not financed by CIDA are closely related to CCII elements. When this is the case, the corresponding source of funding has been indicated.

CELADE San Jose. The main subjects dealt with in the questionnaire include mortality, fertility and specially migration, which is particularly relevant in the case of Belize. Basic characteristics like age, sex, ethnicity, education and economic activity also appear in the questionnaire.

During the quarter under report, changes were made in the database to adjust to a new list of occupation codes and new correction regulations regarding education. The analysis of the data was initiated and the methodological part of the final report was concluded.

b) Honduras National Demographic Survey (EDENH-II)

EDENH-II is at present in the final stage of the analysis of results, which includes the publication of six volumes, of which five have already been published. Volume VI, in preparation, will include three methodological studies on the economic activities developed by inactive women, estimation of emigration from Honduras on the basis of information on the residence of children and use of the information on the year of the mother's death to estimate adult mortality trends. The preparation of Volume VI is still unfinished in spite of the steps taken to accelerate the process. There were no expenses involved for CCII under this item during the quarter under report.

c) Guyana Retrospective Demographic Survey (GUYREDEM)

The national counterpart has expressed that they are unable to continue activities under this heading due to lack of personnel. As may be recalled, the national director of the survey left Guyana at the end of 1987. In view of the situation, during the quarter under report CELADE experts have continued the analysis of the data in order to prepare the corresponding final report. There were no expenses involved for CCII during the period.

2. INTERNAL MIGRATION SURVEY

a) National Socio-Demographic Survey of Nicaragua (ESDENIC)

This survey was carried out by the "Instituto Nacional de Estadística y Censos" (INEC) of Nicaragua, with UNFPA's financial support, CCII funds and the technical assistance of the U.N. Statistical Office and CELADE.

The survey's data processing stage was concluded and a set of tables with the results were included in four volumes at present in press. An analysis programme was established to be carried out during 1989 and 1990, that will include the preparation of monographs on the following subjects: Fertility, Mortality, Internal Migration, Economic Characteristics, International Migration, Population Projections, and a General Report on the Survey.

3. IMPROVEMENTS IN THE UTILIZATION AND GENERATION OF POPULATION INFORMATION

a) Data processing technology for the 1990 census round

The requirements of the countries and the possible contributions of CELADE in the area of 1990 census technology were clarified through CELADE experience

with REDATAM in the countries (see also 3.b) and through participation in various recent meetings with Directors of national statistical offices in which the 1990 censuses were discussed and in seminars to analyze the experiences of the 1980 censuses. First, while as in the past, CELADE will be requested to provide data processing cooperation to most countries, a major need is for suitable microcomputer technology in processing the 1990 censuses of the smaller and poorer countries, such as those in the Caribbean and some of the Central American countries. Second, the focus of CELADE should be on maximizing the continued utilization of the 1990 census data for development rather than primarily on published tabulations as in the past. Third, REDATAM can be an important instrument for ensuring extended use of the data, particularly for providing small-area data, and also can be interfaced with integrated data entry, editing, tabulation software used for the initial processing.

With these clarifications, rather than looking at technology in general for the 1990 censuses, CELADE sought to take advantage of Canadian expertise in the area of database system development to help in the design of the REDATAM-Plus system, which will be an extended and rewritten version of the present system (it should be noted that a key antecedent to REDATAM was the installation of the Statistics Canada statistical database system, RAPID and the programming of the RAPID-SPSS interface in CELADE under the CCI Project). To this end, initial conversations were held in Santiago with a visiting Statistics Canada expert in database design and the Head of Data Processing visited Statistics Canada for detailed discussions with him and other Canadian experts in this field. Missions were also undertaken to foster REDATAM experimentation with 1990 pilot censuses in Argentina and Brazil and similar discussions were held in Mexico (other funds).

No new activities were undertaken with CCII funds, but in preparation for CCIII, development of REDATAM+ continued, experience was obtained in the use of Geographic Information Systems relevant to 1990 census data utilization and further discussions were held with persons from the Caribbean on the placement of a resident data processing advisor for their 1990 censuses. Minor communications costs were incurred.

b) Installation of the REDATAM microcomputer system for small area census data retrieval in selected countries/mapping interface feasibility

The objectives of this element were to: (a) install the REDATAM software (Retrieval of census data for small areas by microcomputer) in selected Latin American and Caribbean countries, and (b) determine the feasibility of incorporating cartographic information in a future version of REDATAM. The former involved the provision of technical assistance to interested countries, particularly in the creation of 1980 census REDATAM databases. The latter involved a feasibility study by a Canadian consultant also brought CELADE staff abreast of relevant technology.

This element was a complement to an IDRC-financed two and a half year project begun in mid-1985, to develop and pilot-test REDATAM, since the IDRC funds do not cover either technical and related assistance costs required by the countries to create census databases or a feasibility study. As the element was carried out concurrently with the actual development and testing

of REDATAM, this element was intrinsically interwoven with, and was supportive of, the overall REDATAM development project in CELADE.

In addition to the two pilot-test countries, Chile and Saint Lucia, 1980 population and housing census databases have been created and REDATAM Version 3.1 has been installed with CELADE technical assistance in the statistical offices of Colombia, Costa Rica, Uruguay, Dominica, and Trinidad and Tobago. Experimental 1990 census data have been used with REDATAM in Argentina and Brazil. REDATAM has been used for other data sets in Cuba, the Dominican Republic, Nicaragua, Guyana and Belize. The latter three were CCIII-financed country survey projects.

With respect to a cartographic interface, after a long search for a Canadian consultant, an arrangement was made with Statistics Canada to have Mr. Casimiro Kiersnowski, a systems analyst from the Geocartographics Sub-Division, spend four weeks in CELADE in mid 1987 to write a feasibility report. While noting the complexity of the problem, it recommended an interface between REDATAM and a geographic information system (GIS). The experience also brought to the fore the much wider implications for REDATAM and CELADE of the spatial manipulation of population and related data with GIS technology. Based in part on the feasibility study, IDRC funded the development of REDATAM+ including a GIS interface and facilities for a multi-disciplinary databases for enlarging the use of the 1990 censuses (see element 3.a.). REDATAM+ and GIS systems, in general, will in turn, play an important role in the CCIII activities.

No new activities were carried out during this quarter with CCIII funds. However, a follow-up mission funded by Colombia was carried out to train persons from their regional statistical offices in the use of REDATAM as part of their decentralization efforts. Minor communications costs were covered by CCII funds.

d) Extension of the CELADE/DOCPAL procedures for organizing and retrieving population information by microcomputer in country institutions

In order to help improve the capabilities of country institutions to organize and retrieve bibliographical information, the specific objectives of this element were to gain experience in CELADE/DOCPAL in the practical use of UNESCO's MicroISIS, in cooperation with other interested units of the ECLAC system to produce a "turn-key" application of MicroISIS with the DOCPAL/ECLAC procedures, and to provide assistance and training in the use of the system to DOCPAL participating and other centres in the region.

A major aspect of the general DOCPAL strategy has been especially relevant for this element: standardization. CELADE/DOCPAL and ECLAC have collaborated since 1980 on the development and dissemination of a standard set of bibliographic procedures to facilitate its use by countries in any field and to avoid duplication of effort. To expedite the eventual exchange of information on diskettes, etc., DOCPAL also promotes indexing with the Multilingual Thesaurus of the U.N. Population Network (POPIN), which is compatible with the Macrothesaurus employed by ECLAC.

This element (and 12.b) must be viewed in terms of the recommendation of a 1987 seminar of governmental, private and university institutions that CELADE

and the Latin American Programme for Population Activities (PROLAP) should jointly undertake the creation of the IPALCA "Latin American and Caribbean Population Network" to link governmental, family planning, university, private and international institutions working in the field of population. As the DOCPAL procedures and MicroISIS were recommended to be the network standards, the work done under this element could have an impact far beyond that originally envisioned. CCII funds were used to publish and distribute the book "Información sobre población para el desarrollo en América Latina y el Caribe" based on the above seminar.

Although delays in UNESCO's delivery of an improved MicroISIS slowed the completion of the ECLAC MicroISIS turn-key system, which was not ready until the beginning of 1989, CELADE provided initial training on MicroISIS to staff from national centres from Paraguay (BASE), Chile (PAESMI), Bolivia (CONAPO and CERES), Brazil (SEADE), Peru (CNP and CIPCA), Dominican Republic (PROFAMILIA, 2 persons because of loss of staff) and Uruguay (CIEDUR and CIESU).

The existence of this element has also permitted CELADE to experiment with CD-ROM as a related technology for the long-term, an inexpensive solution to making the entire DOCPAL database available to national centres.

During the quarter under report, CCII funds were used for a mission to Ecuador to present an invited paper at a meeting in the "Secretaría Nacional para las Comunicaciones" and to carry out discussions with various Ecuadorian institutions (CONADE, INEC, CEPAR, CIUDAD, IEE, CIESPAL and the "Servicio de Información Técnica de la Facultad de Medicina de la Universidad Nacional") with respect to the creation of the IPALCA Network (this will serve as preparation for CCIII activities in the field of information).

e) Seminar: Evaluation of Caribbean Census

A two-week training course (28 April-9 May, 1986) was offered in Port-of-Spain, Trinidad and Tobago, to 16 national demographers and population policy planners from 9 English-speaking Caribbean countries and Belize. A set of population projections for 9 English-speaking Caribbean countries was prepared during 1987 as a follow-up to the Workshop (please refer to the Seventeenth Quarterly Report of Activities, April-June 1986).

f) Assistance to experimental censuses

i) Temuco, Chile (Project "Estudio sociodemográfico de la población en reducciones de la población en reducciones mapuches"). The following institutions are involved in the development of this study: "Universidad de la Frontera", "Universidad Católica de Temuco", "Instituto Indígena", "Instituto Nacional de Estadística", "Programa de Apoyo y Extensión en Salud Materno-Infantil" (PAESMI) and CELADE. During the quarter under review, the following activities were carried out: a) PAESMI published the document "Cómo viven los mapuches. Un análisis del censo de 1982"; b) Regarding the Experimental Census of the Mapuche Reservations, carried out in October-November 1988, institutional contacts were made to plan in-depth analyses and the preliminary version of the publication was prepared which will contain the basic findings of the study; and c) The institutional contacts were initiated for the project's third phase, which will include case studies using an anthropological methodology, with special emphasis on mother and child health.

ii) CELADE collaborated, jointly with ECLAC and the "Instituto Brasileiro de Geografia e Estatística" (IBGE), in the organization of the Seminar on Census Questionnaire Content and Design, held in Rio de Janeiro, on 13-16 March. CELADE submitted a document on "The demographic content of the census questionnaires for the 1990 population censuses", which presents the valuable experience gained in this field under this CCII funded programme. CCII also enabled the participation in the seminar of an official from the "Instituto Nacional de Estadística" of Chile, who also collaborated with CELADE in seminar-related activities.

iii) CELADE participated in a meeting of indigenous community leaders in Chile, interested in ascertaining the possibility provided by the population censuses regarding the quantification and characteristics of the indigenous populations. CELADE made an address at the Third Seminar on Human Rights and the Indigenous Populations", organized by the Technical Commission for the Indigenous Populations in Chile and the Chilean Human Rights Commission.

iv) Dominican Republic. CELADE continued collaborating with the "Consejo Nacional de Población y Familia" (CONAPOFA) in the preparation of an experimental census on mother and child mortality. This project is a complement to other studies underway on new procedures to collect data on this group's mortality. Although no cost for CCII is involved, this project is closely related to the CCII-funded activities.

v) Bolivia (National population and housing survey). Contacts with Bolivian authorities continued regarding the future assistance to the country in the analysis of the survey, carried out in substitution of the Population Census.

4. INTEGRATED STUDIES ON POPULATION AND DEVELOPMENT

a) Panama

Two studies have been carried out under this heading with the participation of the national institution "Centro de Estudios Latinoamericanos Justo Arosemena" (CELA), the technical assistance of CELADE and CCII financial support. The first of these studies "La posición socioeconómica de la mujer y su fecundidad" was concluded during the first quarter of 1989 with the elaboration of a report that incorporates the methodological comments made by CELADE. The preparation of the final report is underway regarding the second study on "El impacto de las migraciones internas a la región metropolitana de Panamá".

b) Dominican Republic

The study on population and development in the Dominican Republic, carried out by the "Instituto de Población y Desarrollo" (IEPD), with CELADE's assistance and CIDA's financial support, culminated with the publication of "República Dominicana: Población y Desarrollo, 1950-85". The document, published during the second semester of 1988, was widely distributed and discussed in national meetings of population and planning specialists. Since it has been considered as the most updated and complete account of the inter-relations between demographic, economic and social variables in the national

context, it has served as a basis for the design of new population programmes and activities in the Dominican Republic.

c) Size distribution and functional bases of cities

Three studies have been carried out under this heading. In addition to the elaboration of the corresponding reports, data bases for the microcomputer were generated, which contain demographic information and on labour force distribution according to the economic activity. The studies will be published in each country by the corresponding national institution and a summary of the three studies will appear in a CELADE publication. During the execution of the studies, CELADE worked in close contact with the respective national planning agencies, providing active technical co-operation, which included visiting trainees funded with CCII funds.

i) The report on the case of Uruguay, published by the "Centro de Informaciones y Estudios" of this country under the title "Las ciudades y el cambio", was extensively used in the training of population specialists and planners, such as the Urban Planning Courses of the Latin American and Caribbean Institute for Economic and Social Planning (ILPES). The computer file generated by this study, with detailed information on all populated centres over 100 inhabitants, has been used in the execution of other research studies and as reference material by national public institutions.

ii) A researcher of the "Instituto de Investigaciones Económicas y Sociales" of the "Universidad Católica Andrés Bello" in Caracas, worked in CELADE as a visiting trainee under CELADE's supervision, in order to complete subsequently the last stage of the study in Venezuela, including the preparation of the final report on the urban hierarchy in the country.

iii) Activities related to the study on Ecuador, initiated during the second semester of 1988, culminated with a visiting trainee from the "Consejo Nacional de Desarrollo (CONADE) who worked in CELADE in connection with the final stage of this research study, which included the preparation of the final report, at present in press for subsequent dissemination.

d) Factors associated with the population distribution process

In order to analyze the impact of socio-economic and political factors on the population redistribution process, three studies were programmed in the same number of countries. Initially, one of the case studies dealt with the relationship between employment and migration in the Central-Western region of Brazil. Unfortunately, due to problems derived from public administration procedures in Brazil, the national expert from the "Instituto Brasileiro de Geografia e Estatística" (IBGE) in charge of the study, was unable to continue participating. There were no costs involved for CCII, although some progress was made in the study. The Brazil study was replaced by a research project on migration and demographic dynamics in the regions of Chile. The three studies, which were partially financed with CCII funds, are reflected in three reports that will soon appear as a CELADE publication.

i) During the first quarter of 1989, a researcher of the University of Bahía Blanca in Argentina, spent some time at CELADE as a visiting trainee

to receive assistance in connection with the preparation of the final report on the populating process in Patagonia. This document is at present being edited after having been discussed with government organizations in this region.

ii) Also during the first quarter of the year, a visiting trainee from the "Instituto Nacional de Planificación" of Perú, stayed in CELADE to conclude the development of a research study on the relationships between public administration and the population redistribution in the country.

iii) The researcher in charge of the study on the Chilean case, a geographer-demographer, concluded during this quarter a report on internal migratory patterns and population change in the Chilean regions, comparing information for the periods 1965-1970 and 1977-1982. This research study has been developed with CELADE's assistance.

e) Methods for evaluating the impact of alternative demographic trends

The objectives of this element are (i) to enhance in-country capabilities for integrating population variables into development planning by facilitating the use of easy-to-use microcomputer packages; and (ii) to disseminate these methodologies so that they can serve as decision-making aids for planners.

During the quarter under report, work was completed on the model MED/PC, an adaptation of the models developed in the ESCAP region for use in long-range population-development planning. The work was undertaken in association with the Planning Ministry of Bolivia, specifically with the "Consejo Nacional de Población" (CONAPO), to produce a working paper which, besides describing the technical features of the model, presents some policy analysis using Bolivia as an example. An internal meeting to discuss the paper was held in CELADE in mid-January. As a consequence of the discussions which the paper stimulated, a revised version of the paper will be produced and published in the near future in CELADE's Working Paper series.

Some work was also done on the IRPM/PC sectoral model developed by CELADE. First, further modifications to the model were made in order to correct some minor programming errors. Secondly, continued demand for copies of the model both within and outside the region, were attended to. Finally, activities related to the publication in Spanish of the User's Manual for URPM/PC were completed. The manual was in press as of the end of this reporting period (Series number: LC/DEM/G.75), to be published in May 1989).

f) Population projections by sex and age for subnational areas

i) Activities in Colombia were continued on the preparation of a book containing the documents submitted to the Seminar on Subnational Population Projections. The seminar was held in Girardot, Colombia, from 30 October to 2 November 1988, organized jointly by CELADE, the "Departamento Administrativo Nacional de Estadística" (DANE), the "Departamento Nacional de Planeamiento (DNP) and the University of los Andes, with the financial support of COLCIENCIAS-Colombia, CIDA, IDRC, UNFPA and the Government of France. Its objective was to present recent methodologies for the preparation of population projections for major, intermediate and small geographical divisions and their applicability to the Latin American countries. Computer packages that

incorporate these tools were presented, in particular the CELADE-developed PRODEM package (see iv. below). A book that will contain the documents that were submitted to the seminar is in preparation.

ii) Assistance was provided to the "Instituto Nacional de Estadística" (INE) of Chile, regarding the preparation of the economically active population projection.

iii) Costa Rica. Assistance to the Planning Ministry under this heading was continued. Progress was made during the quarter in the preparation of population projections by sex and age groups for each of the cantons of Costa Rica. The method developed in CELADE Santiago by the Canadian consultant, Mr. Louis Duchesne, was used in this connection ("Método de proyecciones de población por sexo y edad para áreas menores, por relación de cohortes").

At the request of the "Instituto Nacional de Vivienda y Urbanismo" (INVU), assistance has been given during the last months in the preparation of national housing projections for planning purposes. These activities, carried out with the active participation of Mr. Krotki (see also 14.B.b), included the development of a projection model based on the results of the estimation of the total supply of housing units and the corresponding deficit as well as the elaboration of the first draft of the final report.

iv) The preparation of version 1.0 of the PRODEM package (Demographic Projections for the Microcomputer) was concluded during the quarter. The distribution of this package will commence next June. The consultant of the "Instituto Nacional de Estadística" (INE) of Chile has continued working on the preparation of the corresponding Manual.

g) Population aging and socio-economic demands

i) Argentina. Regarding the study on the socio-economic consequences of population aging in Argentina, new tabulations of special interest were prepared for the "Instituto Nacional de Servicios Sociales para Jubilados y Pensionados". The final report of this study was prepared in CELADE during the quarter under report, with the participation of a consultant. The report has been submitted to the national agencies involved in the execution of programmes and policies for the third age population in Argentina.

ii) Costa Rica. Experimental research of mortality and some socio-economic characteristics of the third age in Costa Rica, carried out by the "Dirección de Estadística y Censos", the "Instituto de Investigaciones en Salud" (INISA) of the University of Costa Rica and CELADE. The study consists in two rounds of interviews to persons aged 60 years and over residing in the Cantones of Puriscal and Coronado enumerated in the 1984 National Population Census of Costa Rica, having the report of the first round already been published.

During the quarter, the processing of the information, the analysis of the results and a first draft report were concluded. This draft report includes the comments made so far. The report's publication and distribution will be defined once the additional suggestions requested are received.

iii) Costa Rica. The "Instituto Costarricense de Investigación y Enseñanza en Nutrición y Salud" (INCIENSA), the "Caja Costarricense del Seguro

Social" (CCSS) and CELADE San Jose collaborate in the execution and publication of three studies on basic needs, health in the third age and socio-demographic profile of the elderly, respectively.

The project is in its final stage and the authors in charge of the respective studies made a revision of the corresponding reports which included the incorporation of comments received so far. Publication will follow, once the comments requested from CELADE Santiago are received and incorporated.

iv) Latin America. On the basis of the studies carried out under this heading with the financial support of CCII, CELADE prepared a chapter on the demographic aspects of the aging population in Latin America, which will be part of an ECLAC Regional Profile on the subject, to be submitted to an international meeting that will be held in Vienna this year, organized by the U.N. Centre for Social Development and Humanitarian Affairs.

5. NATIONAL COURSES ON THE INTEGRATION OF DEMOGRAPHIC VARIABLES IN PLANNING

a) Seminars for sensitizing national bureaucracies to the need for utilizing population information and studies in the planning process

The last seminar under this heading, i.e., "The Central American Seminar on Census Data Services with Information on Small Geographic Areas", took place in San Jose, Costa Rica, in October 1987, with the participation of national statistical directors of the Central American and Caribbean countries (see Twenty-third Quarterly Report of Activities, October-December 1987).

b) Technical seminar on methods for incorporating demographic inputs into planning and related training workshops

A Technical Seminar on "Methods for the incorporation of demographic variables into planning using the microcomputer", organized by CELADE in co-operation with ILPES, was held in Santiago, on 2-5 March, 1987. The seminar was attended by three groups of participants, namely, national participants (mainly from planning agencies, authors of the models, and experts from international development organizations).

During the quarter under report, activities related to the seminar were confined to the distribution of the corresponding book published in December 1988 under the title of "Población y planificación: Seminario sobre métodos y modelos para microcomputadores". The book is addressed to disseminating practical methods on the use of demographic inputs in planning by means of the growing microcomputer technology available. The four chapters discuss recent experiences both in planning in Latin America and in microcomputer methods, thus providing an overview of the most recent methods and models as well as a series of recommendations to serve as future guides in this important field of work.

6. PROGRAMMES ON DEMOGRAPHIC STUDIES COVERING SEVERAL COUNTRIES OF THE REGION

A. FERTILITY LEVELS, TRENDS AND DIFFERENTIALS

a) IFHIPAL studies

Within the fertility study programme aimed at providing information on high-risk sectors in order to support population and basic needs policies, the following activities were carried out:

i) Chile. The "Instituto Nacional de Estadística" (INE) published the book "La transición de la fecundidad en Chile. Un análisis por grupos socio-económicos y áreas geográficas. 1950-1985", thus concluding the research study for the case of Chile.

ii) Venezuela. The "Instituto de Investigaciones Económicas y Sociales" of the "Universidad Andrés Bello" (IIES/UCAB) concluded the preparation of the final report of this research study on fertility in Venezuela.

B. CHILD AND EARLY CHILDHOOD MORTALITY

a) Research study on infant mortality in Latin America (IMIAL)

The main objective of this programme is to identify and quantify the population sectors exposed to high-risk infant mortality, in order to provide information useful for health plans, programmes and policies.

i) Venezuela. During the quarter under review, IIES/UCAB which is also the national counterpart for 6.A.ii, has continued final revision of the report "Venezuela. Diferencias geográficas y socioeconómicas de la mortalidad infantil", including the incorporation of the comments received from CELADE.

ii) Sao Paulo, Brazil. CELADE has provided assistance to SEADE in the development of this study. The publication of the corresponding report and minor pending activities is in the hands of SEADE, which is the national counterpart. There were no costs involved for CCII during the quarter.

iii) Multivariate analysis of infant mortality trends. CELADE continued collaborating with this programme of the U.N. Population Division, which is complementary to IMIAL and includes four countries, i.e., Costa Rica, Guatemala, Honduras and Paraguay. CELADE continues working on the preparation of the Spanish version to be published jointly with the Population Division. This study, which is complementary to IMIAL, did not involve costs for CCII, although its findings have been used for the purposes of the IMIAL programme.

iv) Study of childhood mortality in Central America, Panama and Belize. This project was carried out in CELADE San Jose in 1988, by means of an agreement with PAHO, UNICEF and the Ministry of Health of Costa Rica. Separate reports were published for each country (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Panama and Nicaragua) and the results of the study were presented at the IV Meeting of the Health Sector of Central America and Panama. In view of the interest shown by different institutions and researchers in the findings of the study, PAHO, UNICEF and CELADE published the individual reports in a single volume which was issued and distributed in March 1989.

Although this investigation is not developed with CCII funds, it is closely related to the CELADE/CANADA programme both in its objectives and in the utilization of inputs from other projects carried out under CCII.

b) Applications of the analysis of the structure of the causes of death in health planning

i) Mexico. The document on the contribution of causes of death to the increase of life expectancy at birth and differences by sex, prepared by Ms. Leticia Rodriguez as part of her thesis for the 1987-88 Master's Degree Course in Population and Development, has been published, pending the design of a special cover for its distribution.

ii) Chile. The document "Compatibilización de la clasificación internacional de causas de muerte. Revisiones VII, VIII and IX. Aplicación a Chile 1960-1982" is in press at the "Instituto Nacional de Estadística" (INE). Part of this report was used in the "Demography in 1987 Yearbook".

Along the same line, a student of the 1987-88 Master's Degree Course in Population and Development concluded his thesis on "Atlas de la mortalidad por causas para Chile por provincias".

iv) Maternal mortality. The data obtained through the Experimental Census of Mapuche Reservations in the IX Region of Chile (see also I.3.f) on mortality by maternal causes for mother and sisters of the informants were processed and the analysis of these data has been initiated.

iii) Guatemala and Uruguay. The revision of the document on "Causes of death in the third age: The cases of Guatemala and Uruguay" prepared by Dr. Danuta Rajs was concluded and will eventually be published in CELADE's journal "Notas de Población".

iv) Honduras. At the request of the Coordinator of the National Survey on Epidemiology and Family Health, of the "Dirección General de Salud", the general report of the surveys was revised by CELADE and returned with comments.

c) Experimental investigation for measuring infant mortality and evaluation of effectiveness of health programmes

i) Argentina. Collaboration with the IDRC-funded project on infant mortality, which is closely related to the CCII programme, was continued during the quarter with the following activities:

- Demographic survey of the Mapuche population in Junin de los Andes (EDMAPU). The third round of interviews is in preparation in order to take into account the changes occurred after the second round. Problems related to data collection and biases were analyzed.

- The application of the previous child procedures was continued in Junin de los Andes. The continuity of this research study makes it particularly interesting, since it is underway for approximately three and a half years. Data collection in Cafayate and Santiago del Estero was concluded.

ii) Bolivia. Assistance, jointly with UNICEF, continued to be provided in the execution of the population census in the city of Oruro, regarding the study of the relationship between infant mortality and fertility and maternal mortality. Future analysis activities have been co-ordinated, including the visit to CELADE by a Bolivian professional during the following quarter.

iii) Chile. The information collected in the experimental census of Indian reservations (Mapuche population) in the IX Region of Chile was processed during the quarter, in order to apply indirect procedures to measure childhood mortality. The corresponding analyses will be initiated during the next quarter.

iv) Dominican Republic. CELADE continues collaborating with the "Consejo Nacional de Población y Familia (CONAPOFA) in a research project on infant mortality funded by IDRC Canada. The project includes three main activities: A study of infant mortality in five maternities of the country through the previous child method; a study on the proximate determinants of infant mortality in a maternity of Santo Domingo; and an experimental census in a locality near the capital city.

During the quarter under report, a mission to the Dominican Republic was carried out to co-ordinate and follow-up the project, and participate in a seminar to present the findings of the previous child study. For this purpose, the first draft of the final report on this study has been prepared. Meetings were also held to discuss progress made regarding the study on the determinants of infant mortality and the preparation of the experimental census and to establish the basic lines along which to work for the conclusion of the three studies described above.

Although no CCII funds have been involved, this activity has been included in view of its close links with other activities under this heading.

v) In connection with the "Centro Latinoamericano de Perinatología" (CLAP) in Montevideo, the document on the use of the Simplified Perinatal Clinical History to estimate childhood mortality continued to be revised during the quarter. Discussion and exchange of ideas were also continued in connection with the possibility of providing joint assistance on the subject to countries of the region. No costs for CCII were involved during the period.

C. INTERNATIONAL MIGRATION OF LATIN AMERICANS WITHIN AND OUTSIDE THE REGION

a) Investigation of international migration in Latin America (IMLIA)

i) The book entitled "Migración internacional de latinoamericanos en las Américas. Censos de 1980", prepared by Ms. Adela Pellegrino, was published jointly by CELADE and the "Instituto de Investigaciones Económicas y Sociales" of the "Universidad Andrés Bello" of Venezuela (IIES/UCAB).

ii) Mr. Edilberto Loayza continues working on his thesis dealing with Latin Americans in Canada, at the University of Western Ontario. He is expected to present his thesis in May 1988 (see also II.13.a).

iii) In the framework of the 1988 Master's Degree Course in Population and Development, Mr. Jorge Martínez of Chile, carried out a research study for his thesis on "Migración internacional de personal calificado dentro de América Latina. Las corrientes en los países del Cono Sur en los ochenta". Once his thesis approved, Mr. Martínez initiated its final revision that was concluded during the quarter under report.

iv) The "Boletín Demográfico" No. 43, with updated information on the IMILA programme, is at present in press.

v) Magnetic tapes and tabulations on the IMILA programme continued to be distributed to the countries upon request.

D. SOCIO-DEMOGRAPHIC REPORT SERIES ON LATIN AMERICA

a) Investigation of internal migration (IMIN)

i) New frontier areas of agricultural expansion (Rondonia, Brazil). Work was continued on the final revision of the technical document prepared with the Joint ECLAC/UNEP Unit (United Nations Environmental Programme) on the demographic aspects involved in the expansion of the agricultural frontier. No CCII costs were involved.

7. REGIONAL INTENSIVE COURSES ON DEMOGRAPHY FOR ENGLISH-SPEAKING CARIBBEAN COUNTRIES

a) Second Caribbean Intensive Course

This activity was carried out in May 1986, in Port-of-Spain, Trinidad and Tobago, when elements I.3(e) and I.7(a) were combined to hold a Training Workshop on Census Data Evaluation and Population Projections in the English-speaking Caribbean (see Seventeenth Report of Activities, April-June 1986).

8. COURSES TO BRING DEMOGRAPHERS UP-TO-DATE IN DEMOGRAPHIC ANALYSIS TECHNIQUES

a) "Recycling" course for demographers

An updating seminar on demographic techniques was held in San Jose, Costa Rica, from 14 to 25 March 1988 with the attendance of 18 representatives of governmental institutions of 10 Latin American countries (see Twenty-Fourth Report of Activities January-June 1988).

b) Central American Regional Intensive Course

The Eleventh Regional Intensive Course on Demography was delivered in CELADE San Jose, Costa Rica, from August to December 1988, with the participation of 22 students from Belize, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Panama, Mexico and Nicaragua, in addition to two fellows from Portuguese-speaking African countries. Preparatory activities related to the Twelfth Regional Course (August-December 1989) have been initiated during this quarter in CELADE San Jose.

of c) National intensive courses

A number of national courses were carried out in the region during the CCII programme. Although funded by UNFPA, these courses were closely related to a significant number of CCII activities.

9. WORKSHOPS ON DEMOGRAPHIC DATA PROCESSING

a) Caribbean microcomputer course

The ECLAC/CELADE Demography Unit in Port-of-Spain with CELADE-San José participation carried out a training workshop on "The application of microcomputers to analysis of population-development interrelations for planning", with UNFPA and CCII funds, from 31 October to 11 November. CELADE-San Jose staff collaborated in the preparation of teaching material and databases and gave courses on the use of Lotus and SPSS to analyze the relationships between demographic and socio-economic factors. Around 27 persons attended from Statistical Offices and Planning Ministries of 15 English-speaking Caribbean countries.

The main objective of the workshop was to assist governments of the English-speaking Caribbean in improving the capabilities of planners and policy makers for conducting socio-economic and demographic research relative to population policy implementation and the integration of population into development planning, through the use of microcomputers.

The workshop, held in Port-of-Spain, forms part of a wider ECLAC/CELADE project entitled "Integration of Population and Development Planning for the Caribbean" (RLA/88/P61) funded by UNFPA. CCII supplied additional support to purchase microcomputers for use of the participants and for subsequent donation to national sponsoring Caribbean institutions which do not have their own microcomputers. The requests received for microcomputers from the governments, indicate that they will be used for population-development planning as well as for processing of the 1990 census.

Follow-up activities were carried out during the quarter with CCII funds.

10. SEMINARS ON SPECIFIC TOPICS

E. TEACHING OF DEMOGRAPHY

a) Seminar on the teaching of population in Latin America and the Caribbean

The above Seminar was held in San Jose, Costa Rica, 17-20 November 1986, jointly with the "Programa Latinoamericano de Actividades en Población" (PROLAP), for the purpose of evaluating training activities as well as present and future needs in the population field in the countries of the region.

During the first quarter of 1989, the final report prepared on the basis of the documents resulting from the seminar was concluded and sent to press. The document is divided into three parts that deal with the following

subjects: a diagnosis of the present training situation; the contribution of the national academic centres developing teaching activities in the population field; and conclusions and recommendations. An annex to the book contains a list of all Latin American institutions providing teaching in population, and some of the main characteristics of their respective training programmes.

11. FELLOWSHIP FUND

a) Fellowships

Minimal CCII costs were involved under this heading in relation to the CELADE Santiago Postgraduate Course in Population Dynamics and Development Programmes and Policies.

12. PUBLICATIONS

a) Publications

Minor expenses related to the publication of CCII documents were included under this heading.

b) CELADE/DOCPAL services via microfiche

To facilitate the sharing of Latin American and Caribbean literature in the field of population, the specific objectives of this element were to create indices of the CELADE/DOCPAL database of Computer Output Microfiche (COM) and to microfiche recent documents in the CELADE/DOCPAL collection for distribution on request to DOCPAL Participating Centres and other institutions.

The COM sets have been provided to institutions in Bolivia, Brazil, the Dominican Republic, Mexico, Panama, Peru and Uruguay, as well as to CELADE's San Jose Office and to the Economic Commission for Africa (ECA).

The recent advent of CD-ROM technology and its coming availability in Latin America, makes it likely within 2 to 3 years that full updates of the CELADE/DOCPAL database will be available regularly on CD-ROM (see element 3.d), which will permit national centres using MicroISIS and a low-cost CD-ROM reader to carry out fully computerized searches similar to those present produced on a mainframe computer by CELADE. Hence, the COM, with indices of the form found in the semestral "DOCPAL Resúmenes", must now be technologically obsolete by 1990 or 91 (which may also affect the abstract journal for similar reasons).

On the other hand, the microfiching of documents, in addition to facilitating the delivery of document copies as national centres obtain the necessary equipment, has now taken on another important function, that of ensuring permanence (CELADE/DOCPAL is the bibliographic "memory" for the region in the field of population) within the very limited space that is available in the new CELADE Headquarters on the ECLAC campus.

As in the case of element 3d, this element should be seen as having facilitated the work of CELADE/DOCPAL and created conditions to make it better able to meet the additional future demands that are likely to arise from the creation of the IPALCA Network, in which CELADE/DOCPAL has been designated as the receptor and disseminator of information from the country member institutions.

During the last quarter, CCII funds were used for microfiching 286 documents and for assisting in the checking and reorganization of the DOCPAL documents to serve CELADE students and external users after the move to the new CELADE building.

c) Acquisitions for CELADE/DOCPAL

Books, journals and other publications were purchased with CCII funds during the quarter under report for CELADE's libraries both in Santiago, Chile, and San Jose, Costa Rica.

II. EXCHANGE

13. SUPPORT TO LATIN AMERICAN STUDENTS ATTENDING CANADIAN UNIVERSITIES

a) Ph.D. Programme: Messrs. Loaiza, Berrios, and Ms. Sosa

i) Mr. Edilberto Loaiza, Colombia. Mr. Loaiza (Ph.D. Programme in Social Demography at the University of Western Ontario) has finished his doctoral thesis, entitled "Socio-demographic characteristics and economic attainment of Latin American Immigrants in Canada: A census data assessment, 1981-1986". The examination for his Ph.D. degree will take place in mid-May 1989. CELADE covered his tuition fees corresponding to the period January-April 1989 and provided him with a thesis allowance.

ii) Mr. Rodrigo Berrios, Chile. Mr. Berrios continued his Ph.D. studies in Economics with emphasis on Demography at the University of Alberta. During this term he worked full-time on his thesis and in particular on the design of an economic-demographic model. According to information received from Mr. Berrios, he will complete his doctoral studies by March 1990.

iii) Ms. Doris Sosa, Costa Rica. Ms. Sosa, who continues her doctoral studies in Demography at the University of Montréal, devoted most of her time working in her thesis which analyzes demographic variables affecting fertility in Costa Rica. Her thesis will have eight chapters, of which she has already finished three. CELADE paid her tuition fees corresponding to the Winter session. Ms. Sosa intends to conclude her studies around June 1990.

b) Master's degree programme: Messrs. St. Bernard and Grant

i) Mr. Godfrey St. Bernard, Trinidad and Tobago. Mr. St. Bernard continues his Master's programme in Demography at the University of Western Ontario. During the quarter under report, he has worked towards the completion of his M.A. thesis, which he intends to defend in August 1989. On

the other hand, the Chairman of the Department of Sociology of the University of Western Ontario informed that Mr. St. Bernard has an average of 84% with no grade less than A.

ii) Mr. Wilford Grant, Jamaica. Mr. Grant successfully continues his Master's studies in Demography at the University of Montréal, which he intends to conclude in December 1989. During the period under report he worked intensively on his thesis "Population policies and economic-demographic transition in three Caribbean countries with prospects to the year 2000".

14. PROFESSIONAL PERSONNEL RECRUITED IN CANADA

A. CONSULTANTS

No activities were carried out under this heading during the last quarter.

B. RESEARCH ASSOCIATES

Activities under this heading are covered with CCII funds.

a) Mr. Heward Gough, CELADE Santiago. The major part of the period under review was devoted to CELADE's postgraduate teaching programme in Santiago. Some work was also done on analysis of the demographic data from the Guyana Retrospective Demographic Survey, along with miscellaneous activities.

With regard to the 1989 Postgraduate Course in Population Dynamics and Development Programmes and Policies, class notes and laboratory exercises for the first-term course in Descriptive Statistics were prepared, in conjunction with the preparation of the introductory course in computation, making use of the statistical package SPSS. The course itself began in mid-March and extended to mid-April. Discussions were also begun with another professor regarding the development of a course on analytic techniques applied to the study of the determinants of demographic change, to be held during the second term.

In collaboration with CELADE's Associate Expert Demographer, work was done on the preparation of further tabulations and revision of the text of the data analysis report for the Guyana Retrospective Demographic Survey.

In response to an invitation to attend a Seminar on the Use of Sampling in Censuses, to be held in Buenos Aires in April, work was begun on the preparation of a paper for presentation.

Miscellaneous activities during the period included the following: Translation from Spanish to English of the introductory chapter and the methodological notes of the Demographic Bulletin No. 43, devoted to international migration; attendance at several meetings and lectures in CELADE/ECLAC on various topics related to Latin America demography and economics, and one meeting in CIEPLAN; consulting on various statistical and mathematical topics, including applications of SPSS to the analysis of data from the Demographic Survey of the Mapuche population in Chile.

b) Mr. Karol Krotki, CELADE San José. During the period under report, Mr. Krotki assisted the Institute for Psychological Research of the University of Costa Rica making recommendations for the questionnaire and sample design prepared for a national survey of family structure. A large part of the corresponding data processing was carried out in CELADE San Jose in order to prepare the data base for analysis using SPSS.

Mr. Krotki made changes to the final report describing the results of applying two methods for projecting dwelling units in Costa Rica. The final version is being circulated internally to pick up any errors and to see whether the document should be published officially as a CELADE publication.

In connection with the Belize Experimental Demographic Survey, Mr. Krotki made changes to the final version of the data base, mainly due to changes in the occupation code list and the education edit rules. Minor structural and content errors were also incorporated. The final report is currently being drafted and a first version is expected to be sent to Belmopan the first week of April.

Based on comments received during the preceding quarter, Mr. Krotki made extensive changes to the document on the situation of the elderly in Costa Rica. The report will be submitted for publication as soon as the corresponding comments are received from CELADE-Santiago.

Mr. Krotki substantially revised and circulated to interested parties the paper "Data on women in Central America: availability and accessibility" that he presented at the subregional workshop for producers and users of statistics and indicators concerning women in development, organized by the International Research and Training Institute for the Advancement of Women (INSTRAW) in San Jose, Costa Rica, in December 1988.

In connection with a technical mission to Mexico last December regarding a cooperative project between CELADE and the National Institute of Statistics in Mexico last December concerning the 1990 national census, Mr. Krotki carried out follow-up investigations to provide answers to questions raised during the mission.

Other activities by Mr. Krotki during the quarter included supervision of the library, including acquisition of new materials and reorganization of the existing collection; comments on a novel sampling scheme to estimate total population; and discussion with Dutch Embassy official regarding status of CELADE project proposal.

15. VISITING PROFESSORS TO AND FROM CANADA

No activities were carried out under this heading during the quarter.

III. PROGRAMME SUPPORT

16. TECHNICAL STAFF

All activities under this heading are covered with CCII funds.

a) Expert

During this quarter, Ms. Carmen Arretx, performed the duties of Programme Demographer, under the supervision of the Director of CELADE.

b) Consultant

During the quarter under review, Mr. Carlos Olivares, with CCII funds, continued working on the Demographic Projections Package (PRODEM) completing a first version (1.0) of PRODEM by the end of March 1989.

c) Programmer

Mr. Harry Hernández, CELADE San José. During the quarter under report, Mr. Hernández carried out a mission to Cuba, to collaborate with the "Instituto de Investigaciones Estadísticas" (INSIE) of the "Comité Estatal de Estadísticas" in the processing of the 1987 National Fertility Survey, specifically in the creation of a REDATAM data base with this information and the training of staff in its use.

Mr. Hernández assisted a staff member of the "Instituto de Estudios de Población y Desarrollo" (IEDP) of the Dominican Republic who visited CELADE San Jose to receive assistance in the generation of a database with a sample of the 1981 Population and Housing Census, in order to prepare tabulations for the migration studies of the IEDP. On the other hand, he collaborated in the processing of the information of the previous child and determinants of infant mortality studies carried out by the "Consejo Nacional de Población y Familia" (CONAPOFA) of the Dominican Republic with CELADE's assistance.

At the request of the "Dirección General de Estadísticas y Censos" (DGEC) of Costa Rica, Mr. Hernández reinstalled the REDATAM data base with the 1984 population and housing census in another computer of the DGEC, by means of a communication programme interconnecting both microcomputers, since the diskettes that had been used were not compatible with the new microcomputer. He also gave a course on the generation of REDATAM data bases to the DGEC programmers, and a data base with information from the 1987 continuous survey was created. Computer assistance was also given to the DGEC in connection with the preparation of a project request for the improvement of its information system, to be submitted to the International Development Bank (IDB).

Mr. Hernández also collaborated in computer aspects of the Demographic Survey of Belize and of a Feasibility Study carried out in connection with a CELADE/ICM project on National Information Systems on Displaced Populations in Central America, to be submitted for UNFPA funding.

Other activities by Mr. Hernández during the quarter included the programming for a tape-file control system in CELADE San Jose; assisting CELADE San Jose staff, students and visiting researchers regarding computer matters; making copies of tapes and diskettes with the corresponding documentation; and taking care of hardware problems and, in general, of maintaining the CELADE San Jose computer equipment.

17. COMPUTER SERVICES

Computer services were utilized in connection with the different CCII activities requiring data processing.

18. MATERIALS AND SUPPLIES

Office supplies, communication expenses and Xerox copies for both CELADE Santiago and San Jose were included under this item, with CCII funds, during the semester under review.

19. EQUIPMENT

During this period, the following equipment and software ordered previously with CCII funds were received:

- 50 magnetic tapes 2400 feet
- 1 C-Worthy Interf. Library f/Microsoft C
- 1 80287-8 Numeric coprocess. integrated circuit, 8mhz
- 1 Control card video MG-150
- 1 Miniscribe internal hard disk for AT, 70MB, 28ms
- 1 Miniscribe internal hard disk for AT, 40MB, 28ms
- Seagate ST251 Half-Height Hard Disk, 40MS
- 1 Harvard presentation graphics, version 2.1
- 1 Upgrade SPSS/PC+TM, version 3.0
- Instant replay
- 2 IBM Mouse for PS/2 (IBM # 8770)
- 1 Upgrade the GAUSS mathem. & stat. system, vers. 2.0
- 3 CD-ROM Reader Hitachi 1503-S and controller

and the following were purchased:

- The GAUSSX (Eccnotron Software), 5.25" disk size