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Population dynamics as an axis of sustainable development:
the Montevideo Consensus as a tool for reducing inequality
in the framework of human rights

Mexico City, 6-9 October 2015

**SUPPORT PROVIDED BY ECLAC FOR HOUSING
AND POPULATION CENSUSES, 2013-2015**

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I. INTRODUCTION

The Montevideo Consensus on Population and Development was adopted at the first session of the Regional Conference on Population and Development, held in August 2013, and subsequently affirmed through resolution 681(XXXV) adopted by the Economic Commission for Latin America and the Caribbean (ECLAC) at its thirty-fifth session, held in Lima in May 2014. This document has been prepared in fulfilment of paragraph 125 of the Montevideo Consensus on Population and Development, which asked the secretariat to report to the Regional Conference on Population and Development, at its second session, on activities carried out in the substantive areas referred to in the Consensus.

Priority measure 102 of the Montevideo Consensus explicitly called for the improvement of “data sources, particularly population censuses, administrative records, vital statistics and specialized surveys, promoting the full independence of national statistical systems and ensuring, by means of legal and institutional frameworks, that users and producers apply the fundamental principles of official statistics at both the national and international levels as well as harmonized methodologies to ensure comparability between countries.” Priority measure 110, moreover, called on the secretariat to continue, within the framework of the existing links between population and development, to give priority to a series of issues including sources of sociodemographic information (population censuses and vital statistics), and human resources training in the fields of demography and population and development.

Pursuant to the aforementioned agreements and the recommendations made by the Statistical Conference of the Americas and its Executive Committee on preparing for and conducting the round of censuses for the current decade, the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, with the support of the United Nations Population Fund (UNFPA) and the Working Group on Censuses, continued to carry out activities aimed at strengthening countries’ capacities in the technical, methodological and operational definition of censuses, as well as the assessment, analysis, dissemination of information obtained and preparation for the 2020 round.

The member States have made considerable efforts to achieve high levels of coverage, quality and timeliness in the dissemination of information. Of the 13 countries that have conducted censuses this decade and have made progress in revising projections based on this decade’s census, eight show coverage of above 95%, which is a good indicator. However, certain difficulties have been encountered in the region, particularly in respect of two of the four censuses carried out in 2012 (in Chile and Paraguay) and, possibly, the census conducted in Honduras in 2013. In terms of dissemination, the preliminary results from the Latin American censuses were available less than six months after the end of collection, and in some cases definitive results were published seven months after collection. One of the main international recommendations in this area has thus been successfully implemented, that is, that users should be able to consult collected and processed data in a timely manner.

The ease with which users can access information also continues to be facilitated by technology. The Retrieval of Data for Small Areas by Microcomputer (REDATAM) program, a free tool that provides specific technical assistance for such tasks, has enabled statistical offices to make census data available to users in record time, along with a wide range of tabulation options.

The activities carried out over the past two years have been both diverse and specialized. Some countries are beginning the census-planning process while others are collecting, processing, evaluating, disseminating or analysing the results. This report will provide further details of these activities and the main outcomes and lessons learned.

II. FOLLOW-UP TO RESOLUTION 681(XXXV): ACTIVITIES

Numerous activities have been pursued in coordination with other United Nations agencies and national and international agencies with a view to monitoring preparations for the 2010 census round and strengthening countries' capacity to carry out censuses.

In particular, UNFPA provided technical and financial support via the 2008-2013 and 2014-2017 regional programmes, which aim to strengthen regional capacity to compile and systematize the information needed to produce a sociodemographic profile, taking into account specific subnational, national and subregional characteristics, and to strengthen technical analysis aimed at developing policies, and dissemination and advocacy activities. All of the above involves boosting the region's privileged position in accessing and using microdata from censuses and other sources of sociodemographic information.

More specifically, in 2013 activities carried out under project RLA6U717 entailed boosting countries' capacity to produce and analyse census data in line with international standards, encouraging their use in the design and implementation of programmes and policies, the conceptual and methodological definition of questionnaires, incorporating the ethnic and gender perspectives, coverage evaluation methodologies, using technological tools to update census maps, and developing the REDATAM program to create and process databases. In 2014, project RLAC7206 aimed to support countries in the production and dissemination of socio-demographic data, particularly in the collection, analysis and dissemination of population census data (with a view to preparing for the 2020 round) including databases, to develop the capacity of countries to detect demographic and socioeconomic inequalities, present them as geo-referenced data and use that information and evidence to design, monitor and evaluate policies and programmes on population and development. In 2015, project RLAC7412 provided national capacity-building in the production and dissemination of high-quality disaggregated data on population and development, by mapping demographic disparities and socioeconomic inequalities, and in planning in a humanitarian environment.

In this context, the UNFPA-ECLAC programmes of work for 2013-2015 focused on providing countries with technical assistance for the evaluation and analysis of the 2010 census round and population projections, using recent censuses to update databases on indigenous and Afro-descendent populations, internal and international migration, population distribution and population ageing, and organizing the annual intensive regional course on demographic analysis.

Activities have also been carried out in cooperation with the Working Group on Censuses of the Statistical Conference of the Americas of ECLAC, whose technical secretariat is CELADE-Population Division of ECLAC. The 2013-2015 programme of work has been led by the Bolivarian Republic of Venezuela and forms part of the 2005-2015 strategic plan of the Statistical Conference of the Americas of ECLAC. Its main goal is to promote and develop initiatives that support countries in the evaluation and analysis of 2010 housing and population censuses through training activities (workshops on evaluating coverage and quality, processing and analysing census information, and formulating population estimates and projections based on the 2010 census round), boosting the exchange of knowledge and experiences among countries (concerning, for example, the use of new technologies in housing and population censuses and data editing procedures), determining how countries tackled their recent censuses in terms of content, methodologies and technologies, and evaluating the experience in the light of the results obtained.

Collaboration has been forthcoming from the divisions of ECLAC in their various areas of expertise, and from different subregional offices. These include the subregional headquarters for the Caribbean in Port of Spain, the Programme Planning and Operations Division, the Division for Gender Affairs, the Statistics Division, the Social Development Division, the Publications and Web Services Division and the Conference Services Unit.

A. TRAINING COURSES, WORKSHOPS AND EXPERT MEETINGS TO DISCUSS CONCEPTUAL AND METHODOLOGICAL ASPECTS OF CENSUS EVALUATION AND ANALYSIS

CELADE-Population Division of ECLAC has continued to hold workshops and seminars, with a view to strengthening national capacities to evaluate census quality and coverage, and to discuss and share experiences while boosting various forms of cooperation on operational aspects of census-taking activities. The following census-related activities were carried out in the period under review:

- Holding the third regional meeting on using census data for demographic evaluation and estimation (Santiago 22-26 July 2013),¹ convened by CELADE-Population Division of ECLAC, the Statistical Conference of the Americas, ECLAC and UNFPA, with funding from the UNFPA and ECLAC annual work programme for 2013. The event aimed to inform participants about the types of error affecting sources of information and processes of estimating and evaluating the components of population dynamics, to identify problems of consistency, quality and coverage of censuses and to apply direct and indirect techniques to resolve or mitigate them. It also provided a forum for countries to exchange experiences and develop the capacity of professionals and technical staff from national statistical institutes in the analysis of population dynamics and in conducting census evaluation processes.
- Jointly organizing the first Latin American and Caribbean Course on population estimates and projections with ECLAC, UNFPA, the Congress of the Latin American Population Association (ALAP), the Venezuelan Association for Population Studies (AVEPO), the National Institute of Statistics of the Bolivarian Republic of Venezuela and the Central University of Venezuela,² (Caracas, 28 September-1 October 2013).
- Holding the seminar “the 2010 censuses in Latin America: overview and main lessons learned” (Santiago 22-24 October 2013),³ convened by CELADE-Population Division of ECLAC, the Statistical Conference of the Americas of ECLAC and UNFPA with funding from the UNFPA and ECLAC annual work plan for 2013. The objective was to provide information on innovations or continuities that informed the countries of the region’s choices in the methodological and conceptual definitions used in the censuses of the 2010s, and to assess the achievements in light of the quality of their findings.

¹ See [online] http://www.eclac.cl/cgi-bin/getProd.asp?xml=/celade/agenda/3/50143/P50143.xml&xsl=/celade/tpl/p3f.xsl&base=/celade/tpl/top-bottom_2010.xslt.

² See [online] http://www.ine.gov.ve/index.php?option=com_content&view=article&id=591%3Ai-curso-latinoamericano-y-del-caribe-sobre-estimaciones-y-proyecciones-de-poblacion&catid=149%3Ademograficos&Itemid=3.

³ See [online] http://www.eclac.cl/cgi-bin/getProd.asp?xml=/celade/agenda/1/51431/P51431.xml&xsl=/celade/tpl/p3f.xsl&base=/celade/tpl/top-bottom_2010.xslt.

- Jointly holding the second Latin American and Caribbean Course on population estimates and projections with ECLAC, UNFPA and the national statistics institute of the Bolivarian Republic of Venezuela,⁴ which informed participants on methods and computer programs for making population estimates and projections, and on uses for population projections (Caracas, 8-13 September 2014).
- Jointly organizing, as part of the activities of the Statistical Conference of the Americas and ECLAC Working Group on Censuses, the seminar “Sharing experiences on developing the censuses for the 2020 round”, run by the National Institute of Statistics of Chile, with support from UNFPA. The event provided a forum for exchanges of experiences and technical discussion among countries preparing to conduct censuses, and drew on lessons learned in the region from the 2010 census round. There were some 60 participants, representing 20 different government bodies, academic institutions and non-governmental organizations (Santiago, 25 May 2015).

CELADE-Population Division of ECLAC also participated in various activities concerning population and housing censuses organized as part of the sixth congress of the Latin American Population Association (ALAP), on “population dynamics and sustainable development with equity”, held in Lima from 12 to 15 August 2014.⁵

- The paper “Los censos de 2010 en América Latina: balance y principales lecciones aprendidas con miras a los censos de 2020” (The 2010 censuses in Latin America: overview and main lessons learned with a view to the 2020 census round) was presented at the preparatory event on population dynamics in Peru.
- The presentation on “Developments in the quality of population data, censuses and vital statistics in Latin America” was given at ordinary session No. 33, on “Bases de Datos na América Latina e suas Potencialidades de Pesquisa”.
- A talk on “Difficulties encountered in the 2010 census round was given at round table No. 9, on “Consensuses or predictions”.

Demand has been growing for professional training on population issues from Latin American and Caribbean governments and from universities and non-governmental organizations. This is reflected in the agreements adopted at the first Regional Conference on Population and Development, whose priority measure 106 called for the design and implementation of training strategies in the area of population and development that covered various issues, territorial levels and course formats, using the academic establishments in the region and available technological advances. The agreements adopted at the seventh meeting of the Statistical Conference of the Americas commended CELADE-Population Division of ECLAC and UNFPA on holding the intensive regional course on demographic analysis with census applications, called on them to arrange other similar courses, subject to the availability of resources, and encouraged other specialized agencies in the United Nations system and other international cooperation entities to support these activities.⁶

⁴ See [online] http://www.ine.gov.ve/documentos/NotasdePrensa/pdf/CONVOCATORIA_II_CURSO-1-2-1.pdf.

⁵ See [online] http://alapop.org/2009/index.php?option=com_content&view=article&id=1241&Itemid=619.

⁶ See [online] <http://www.cepal.org/deype/noticias/documentosdetrabajo/5/52165/LCL3771e.pdf>.

In this context, between August and December 2013,⁷ and again in the same months of 2014,⁸ CELADE-Population Division of ECLAC organized the Intensive Regional Course on Demographic Analysis, with the support of UNFPA. At the time of writing, the Division was preparing for the start of work on the 2015 edition, which was scheduled to begin on 24 August 2015. Other agencies in the United Nations system, such as the United Nations Children’s Fund (UNICEF) and the Pan-American Health Organization (PAHO), and other agencies such as the Inter-American Development Bank (IDB) and the Ford Foundation, have provided support that has enabled the participation of students from several countries. The intensive regional course is therefore helping to meet regional demand for professionals trained in population matters, from within the government sector in terms of regional, sectoral and global management, production, processing and analysis of statistics, as well as from universities and non-governmental organizations. In terms of its content and approach, the course aimed to provide training in demographic analysis methods and techniques to be used in the study and assessment of population dynamics, the production of demographic input for economic and social management, and the design, evaluation and monitoring of social projects, public policies and interventions. It focused on using census data as the basis for demographic analysis, thereby strengthening regional work carried out as part of the 2010 census round. It is intended for graduate professionals, preferably those with links to agencies that produce statistics or analyse censuses in the region’s countries.

Students gave very positive feedback on both the academic content and the organization of the course. The most highly rated aspect was the practical usefulness of the course overall and of each module, as well as the positive effect that the course content would have on their daily work. Other highly rated aspects of the course in general were the order of the subjects covered, the bibliography provided, and the coherence between theory and practice. The most problematic aspects were the complexity of some of the course content (especially at the beginning of the course, because of the mixed academic level of students), as well as the short time devoted to each module in such an intensive course. The annual assessments of the course conducted by CELADE-Population Division of ECLAC have led to improvements in the course content, its timeframe, and logistical and general aspects. A record number of registrations have been received for the 2015 edition, which is evidence that it has been successfully re-positioned in the region and has proven useful for statistical offices, other government agencies and civil society organizations representing groups such as indigenous and Afro-descendent communities.

In order to develop the training and technical assistance provided to countries conducting censuses and other data sources, with the support of UNFPA, several texts and reference documents have been published in the period under review (see annex 2), including the following manuals and articles on censuses:

- *Manuales series* No. 80 on “Principales cambios en las boletas de los censos latinoamericanos de las décadas 1990, 2000 y 2010” which conducts a comparative analysis of the length and content of census papers used in the last three decades in Latin America, with special emphasis on the differences between papers in each country over this period.
- The article, published in *Notas de Población* No. 96 “¿Es recomendable preguntar en el censo acerca de la sobrevivencia del último hijo nacido vivo?” (Is it advisable for censuses to ask about the survival of the last live-born child?), which presented experiences in Latin America

⁷ There were 13 participants (46% of whom were women) from 7 countries in the region: Chile (1), Colombia (1), Ecuador (2), Haiti (2), Panama (3), the Dominican Republic (2) and the Bolivarian Republic of Venezuela (2).

⁸ There were 16 participants (56% of whom were women) from 11 countries in the region: the Plurinational State of Bolivia (1), Brazil (1), Chile (3) Colombia (1), Cuba (1), Ecuador (1), Panama (2), Paraguay (1), the Dominican Republic (1) Uruguay (3) and the Bolivarian Republic of Venezuela (1).

with regard to the question on the survival of the last live-born child, which was covered by some of the recent censuses in Latin America, and aimed to ascertain the accuracy of their findings in order to estimate infant mortality rates in the year preceding the census.

- *Manuales series* No. 82, Los datos demográficos: alcances, limitaciones y métodos de evaluación, (Demographic data: scope, limits and evaluation methods) with the intention of identifying the main concepts related to the evaluation of demographic information and its features in the area of population analysis, paying particular attention to the nature of errors in this type of statistics. Its purpose is to provide a guide to inform the work of professionals and technicians from the national statistical offices responsible for collecting and analysing demographic information.
- The article published in *Notas de Población* No. 97, “Estimar la mortalidad materna con base en información censal: experiencias y perspectivas” (Estimating maternal mortality on the basis of census information: experiences and perspectives) the aim of which is to present the possible alternative method of estimating maternal mortality using census data, study the most recent experience in Latin America and other regions and review recommendations for the inclusion of the topic in coming censuses.

Work continues on a guide to quality control, census evaluation and demographic estimations, which will compile and review evaluation methodologies for censuses and other demographic information sources. The guide will include documentation based on the experiences of various countries in the region, as well as a proposed table of contents for a census evaluation report.

B. DEVELOPMENT OF REDATAM AND TRAINING WORKSHOPS ON ITS USE

1. Support for the Latin America and Caribbean region and dissemination in other regions

In order to continue supporting national institutions in their use of census information, CELADE-Population Division of ECLAC organized several training workshops on using the sociodemographic information generated by each country, which were held in the context of technical cooperation with countries and at their request.

During the period 2013-2015, a major pillar of the Division’s work in the area of sociodemographic information systems and processing tools was the organization of 30 national, subregional and regional (2 in 2013, 14 in 2014 and 14 in 2015) workshops in Argentina, Bangladesh, the Bolivarian Republic of Venezuela, Chile, Colombia, Costa Rica, Cuba, Ecuador, Ethiopia, Grenada, Mozambique, Peru, the Plurinational State of Bolivia, South Africa, Trinidad and Tobago and Uruguay. These training activities, which received financial support from the country offices of UNFPA, the Ford Foundation and the Spanish Agency for International Development Cooperation (AECID), aimed to build new professional capacities and strengthen existing ones, chiefly among staff at national statistical offices, for the use, analysis and dissemination of census data, which entailed making use of information and communications technology (ICT) tools such as REDATAM to review and create databases, process and tabulate sociodemographic indicators and develop applications for online information dissemination using REDATAM Webserver. Around 422 ICT technicians, statisticians and demographers from Latin America and the Caribbean and other regions (Africa and Asia) were trained in the use of REDATAM, in particular with regard to management, processing, analysis and online information dissemination from the 2010 round of housing and population censuses.

As a result of these efforts, the Bolivarian Republic of Venezuela, Ecuador, Costa Rica, Argentina and Uruguay updated their websites with the latest version of REDATAM Webserver. Furthermore, in Africa, Ethiopia made the REDATAM Integrated Management Information System (IMIS) publicly available online for the processing of censuses and surveys.⁹ In 2015, Mozambique will release the REDATAM application to process the 2011 round of housing and population censuses.

Technical assistance was also provided to various national statistical offices in the region and public officials, with a particular focus on two areas: improving knowledge on the creation of REDATAM databases via the provision of technical consultancy services, and updating web applications for online processing of the 2010 round of the housing and population census and other databases, such as agricultural censuses, which entailed advising Chile, Costa Rica, Cuba, Panama, the Plurinational State of Bolivia, Saint Lucia, Saint Vincent and the Grenadines and Uruguay on technical matters.

Similarly, representatives of the National Office of Statistics and Information (ONEI) of Cuba received training at CELADE-Population Division of ECLAC to create the REDATAM database on the 2012 housing and population census and develop a web application for its dissemination.

In addition to the aforementioned workshops, every six months CELADE-Population Division of ECLAC holds capacity-building sessions in the use of REDATAM at its headquarters in Santiago that all the region's countries are invited to attend. The workshop held in the first half of the year focused on statistical processing and analysis of information from housing and population censuses, and on the production of sociodemographic indicators in various thematic areas: estimating the education and housing shortfall; sociodemographic profiling of specific population groups (older persons, young people and adolescents, the indigenous population); migration; and estimation of unmet basic needs. The other workshop, held in the second half of the year, covered the creation of REDATAM databases, and the development of applications to disseminate sociodemographic information online using the REDATAM Webserver platform. It will be held once more in the second half of 2015.

Furthermore, the annual publication of *Redatam Informa* continued, with volume 19 being compiled in 2013, volume 20 in 2014 and volume 21 due for release in 2015.¹⁰

In conclusion, the Division continued to provide technical cooperation services to member States from ECLAC headquarters, both within the countries themselves and in Africa and Asia. CELADE-Population Division of ECLAC also cooperated with the UNFPA headquarters in South Africa in the organization of one subregional and two national REDATAM workshops—one for Ethiopia and one for Mozambique—and with the headquarters of UNFPA in Bangladesh for a national workshop, all aimed at strengthening national capacities in to the management and dissemination of census data.

2. Development of REDATAM

Among other improvements to REDATAM, a new edition, REDATAM 7, was officially released. This program is still being developed and improved in order to completely update all of its components. This new version is a major technological step forward and involves adaptation to new ICT developments, operating systems and other software (Xml, CsPro, DevInfo). So far, the Red7 Create, Red7 Admin and a large part of the Red7 modules have been completed and have already been

⁹ See [online] <http://imis.csa.gov.et/imiseth/>.

¹⁰ See [online] www.cepal.org/es/publications/list?search_fulltext=redatam+informa.

used with satisfactory results in several countries' training workshops in 2015. Development is expected to continue on the mapping module and automatic creation of indicators in the Red7 Process module in the second half of 2015.

At the same time, owing to numerous requests for improvements and corrections to REDATAM+SP Webserver, this module is being updated alongside REDATAM 7, to test its functionality.

C. PARTICIPATION IN CENSUS WORKSHOPS AND MEETINGS

During the reference period, CELADE-Population Division of ECLAC representatives attended several meetings organized by other institutions, including the United Nations Commission on Population and Development, the United Nations Statistical Commission, the sixth meeting of the Statistical Conference of the Americas of ECLAC and meetings of its Executive Committee. Meetings on censuses were also attended when these were scheduled during meetings or conferences of demographics and population associations in the countries in the region.

As part of the eighteenth meeting of the Executive Committee of the Statistical Conference of the Americas of ECLAC, held in Santiago from 12 to 14 August 2014, CELADE-Population Division of ECLAC also provided support for the drafting and presentation of the activity reports of the Working Group on Censuses,¹¹ as well as the formulation of the programme of work for the next biennium.

CELADE-Population Division of ECLAC also participated in a workshop on experiences from the 2010 round of population and housing censuses, organized by the National Administrative Department of Statistics (DANE) of Colombia and the UNFPA office in Colombia,¹² to share the experiences of different countries that have conducted censuses in the 2010 round with a view to deepening the understanding of the challenges in census processing, such as data collection, information technologies and coverage and quality assurance (Bogota, 26-31 October 2014).

D. TECHNICAL ASSISTANCE

The CELADE-Population Division of ECLAC technical team, with UNFPA support, has carried out intensive technical assistance activities in order to strengthen the capacity of the region's countries with regard to population issues. A fifth of all days and expert technical assistance provided by CELADE-Population Division of ECLAC, whether on missions or from headquarters (by means of e-mail, teleconferencing or training visits by experts), were dedicated to addressing censuses and population projections. Some of the technical assistance activities carried out in the two years covered by this report are detailed below.

¹¹ See [online] http://www.eclac.org/deype/ceacepal/2012_CE_XIreunion.htmLC/L.3490(CE.11/3); <http://www.cepal.org/deype/noticias/noticias/4/49614/CE12-GT-Censos-abril2013.pdf> and <http://www.cepal.org/deype/ceacepal/2015-CE14/PPT/CE14-GT-Censos.pdf>.

¹² See [online] <http://lac.unfpa.org/sites/lac.unfpa.org/files/pub-pdf/Memorias%20Taller%20Censos%20Poblacion%20Bogot%C3%A1%202014.pdf>.

- The Plurinational State of Bolivia was provided with technical assistance for the analysis of census coverage, the updating of population projections and to ensure internal census consistency for its national population and housing census in 2012. The pre-census assessment report submitted by the National Institute of Statistics (INE) to CELADE-Population Division of ECLAC was also revised.
- Technical assistance was also provided to INE for the post-census study of maternal mortality. Questions were included in the Plurinational State of Bolivia's 2012 census to collect data on deaths in 2011; deaths of women aged 15 and over were investigated to ascertain whether they occurred during pregnancy or childbirth. In order to estimate maternal mortality, every case had to be verified by interviewing family members or checking hospital records to document the true number of deaths in that period. INE requested assistance from CELADE-Population Division of ECLAC on preparing its investigation, questionnaires and manuals as well as its pilot test report. These documents were reviewed by CELADE-Population Division of ECLAC and comments and suggestions were provided, which were then incorporated in the instruments and procedures. Three technical assistance missions have been carried out (November 2014, March 2015 and May 2015) for the final review of collection instruments and recommendations for field work, codification of causes of death, creation of the database and estimations of indicators. At the time of writing, the definitive database was yet to be finalized.
- Technical assistance was provided to the National Institute of Statistics and Informatics (INEI) of Peru on three occasions, in preparation for the 2017 population and housing census: at the meeting of experts held by INEI at the Latin American Population Association Congress in August 2014, and during the technical assistance missions carried out in October 2014 and April 2015. The document "Censo de hecho versus censo de derecho" (De facto census vs. de jure census), prepared by the INEI Department of Censuses and Surveys, was reviewed and guidance was given concerning the need to test the questions on habitual residence in the event that a de jure census was chosen. Support was also provided in the evaluation of the pilot test of updating census maps and in proposed changes in preparation for its nationwide roll-out.
- Technical assistance was provided to INE in (i) drafting the report and biennial work plan and in the activities proposed for the Statistical Conference of the Americas, and (ii) preparing for and conducting two meetings concerning the Latin American and Caribbean course on population estimates and projections (October 2013 and September 2014, Caracas).
- Technical assistance was provided to the National Office of Statistics and Information (ONEI) of Cuba to support the implementation of socioeconomic policy. Two simultaneous missions were organized, at the request of ONEI, from 27 to 31 October 2014. One mission concerned internal migration and spatial population distribution and aimed to provide practical and conceptual tools to improve understanding of and analyse the fundamental elements of these areas, with a particular focus on adapting the use of microdata for the purposes of the Cuban census. The other involved holding a workshop on the use of REDATAM, designed to complement the course on internal migration and spatial distribution.
- The Department of Statistics, Surveys and Censuses (DGEEC) of Paraguay requested that CELADE-Population Division of ECLAC join the commission of international experts, made up of professionals from DANE of Colombia, the Brazilian Geographical and Statistical Institute (IBGE), the National Institute of Statistics and Geography (INEGI) of Mexico and UNFPA, with a view to proposing technical recommendations help close the 2012 census process, in view of the coverage issues that had been detected. DGEEC then submitted the

document “Propuesta de ajuste al censo 2012” (Proposed adjustment to the 2012 census) to CELADE for review. This document aimed to assess the census in terms of quality of information, especially with regard to demographic variables such as fertility, mortality and migration, with a view to determining whether questions on these aspects should be included in the shortened form of the census. To that end, CELADE conducted its own estimates of mortality, fertility and international migration. This entailed making a preliminary estimation of the total population by age and gender in 2012 and updating the coverage evaluation methodologies that it had begun in September 2013 during the mission of the international advisory committee.

- Technical assistance was provided to INE of Chile on four occasions (i) in its capacity as a member of the External Review Commission of the 2012 census; (ii) in the review of estimates and population projections; (iii) in the review of the document “Technical audit of the 2012 census database”, and (iv) in its capacity as a member of the Advisory Commission for the preparation of the 2017 census.
- Technical assistance was provided to Colombia and Haiti in the review of census questionnaires for the 2016 Population and Housing censuses.
- Technical assistance was provided to Nicaragua in the review of the census process that will form the basis of the 2017 Population and Housing censuses.

Another important aspect of technical support is delivered through various seminars, workshops and meetings organized by CELADE-Population Division of ECLAC, mainly at headquarters, which are attended by representatives from national statistical offices. In the period covered by this report, a total of 160 participants from the region attended five workshops or courses related to the emerging aspects of the 2010 round of censuses. These events concerned: (i) demographic evaluation and estimates based on census data (2013); (ii) the 2010 censuses in Latin America: overview and main lessons learned (2013); (iii) the regional intensive course on demographic analysis (2013 and 2014), and (iv) sharing experiences with a view to developing censuses of the 2020 round (2015). All of the region’s countries have benefited from these activities, either through direct participation or the recommendations that emerge from the workshops.

III. RESULTS AND IMPACT

Cooperation between countries in preparing and conducting the 2010 round of censuses has been considerable, as has the support CELADE-Population Division of ECLAC has received from other ECLAC Divisions and subregional, regional and international agencies, including UNFPA and the United Nations Department of Economic and Social Affairs. The region’s countries have also played a key role in this coordination through the Statistical Conference of the Americas of ECLAC.

As previous reports have stated, between 2008 and 2010 the activities of CELADE-Population Division of ECLAC focused on preparing censuses and defining the content of questionnaires. Work in 2011-2013 focused on the use of information and data and the evaluation and dissemination of results. With this in mind, workshops were organized on methodologies for estimating and evaluating the coverage and quality of census data (see annex 1). Since 2012, when the regional intensive course was resumed, the content of workshops on census evaluation and the potential of censuses have been incorporated into the course curriculum. Since 2014, a major focus of activities in the area of censuses has

been providing technical assistance for censuses in 2016 and 2017 (Chile, Colombia, El Salvador, Guatemala, Haiti and Nicaragua) and possible censuses in Paraguay and the Plurinational State of Bolivia.

Each country's experiences regarding these issues and the conclusions of the workshops conducted by CELADE-Population Division of ECLAC, with the support of UNFPA and the Working Group on Censuses of the Statistical Conference of the Americas of ECLAC, were used to produce manuals and technical documents that have proven very useful in the standardization of concepts in the region, horizontal cooperation and education. Another two manuals have been added to the five published in 2011: *Manuales Series No. 80* on "Principales cambios en las boletas de los censos latinoamericanos de las décadas 1990, 2000 y 2010" (Main changes in Latin American census papers in the 1990s, 2000s and 2010s) and *Manuales Series No. 82*, Los datos demográficos: Alcances, limitaciones y métodos de evaluación (Demographic data: scope, limits and evaluation methods). These manuals, and the documentation produced regarding the 2010 round of the censuses in general, have been recognized as useful in the preparation of censuses, in different analyses and in evaluations of census processes. Moreover, since the relevant methodologies and concepts have now been adopted by most countries in the region, census data are now comparable, and regional studies can thus be made using standardized techniques.

A. OVERVIEW AND LESSONS LEARNED FROM THE 2010 ROUND OF CENSUSES

In the 2010s, most censuses, whether already conducted or planned in the future, have been de jure in nature. Four censuses were conducted over one day and the remainder collected data over periods lasting between a week and four months. Three countries have used basic questionnaires to collect all housing and population-related data, with an extended version used to take samples. Most countries continued to digitize the data they collected: four used personal digital assistants (PDAs), two used scanners and one country used optical character recognition.

No significant changes have been seen in the profile of housing and dwellings. As per the recommendations received, questions concerning ethnicity, disability, social protection and access to information and communications technologies have been widely incorporated into sections on population, and the recommended set of questions on fertility, mortality and migration have been maintained.

Most of the countries have streamlined the process of submitting results. Some countries have decided to make the data base gradually available as specific variables overcome consistency analysis or coding.

Two methods have been used to process population data from censuses taken over periods longer than one day: one based on the population included in the census, that is people who were actually interviewed and provided information, and the other based on an estimate of the number of people in households with members not present when the census was taken. Transparency of data dissemination is important in order to know which method a country is using, with a view to classifying the types of omissions and to enable comparisons with previous censuses or those of other countries on a like-for-like basis.

The contents of censuses and the technological methodologies used are now widely disseminated. Several countries have made census microdatabases available to its users, as well as publishing tabulated data and allowing online consultation.

Although the methodologies for evaluating census coverage have not changed much, data from surveys of housing and dwellings made prior to censuses was more widely used, thus helping to create more disaggregated indicators. As noted above, census data on unoccupied housing have become more important in identifying omissions. The cause of omissions can be identified by means of analyses of countries' population dynamics conducted using previous censuses, other sources and the results of the census coverage assessment (if applicable).

Although progress has been made, there remain two worrying aspects, concerning omissions and census evaluation. Work needs to be undertaken to identify their causes and find solutions. In some countries census omission increased considerably, despite efforts and methodological changes that were expected to yield higher quality results. Census evaluation has taken longer than hoped and, as a result, the creation and dissemination of new population projections has been delayed for too long, and the data generated will thus be less relevant.

The low level of coverage in the 2012 censuses in Chile and Paraguay, and possibly also in Honduras in 2013 (the results of which are not currently available), and quality issues in some other countries, meant that painstaking preparatory work was necessary. Quality controls had to be conducted of all processes and documentation concerning the type of the problem, its frequency and the solutions introduced. The difficulties faced by some countries in defining habitual residency suggest that a specific pilot test should be carried out if a *de jure* census has been chosen. The strengths of the chosen census are rarely taken advantage of, in other words, just knowing that a methodology has theoretical advantages is not enough; all the mechanisms must be designed to exploit them, resulting in a high-quality census with wide coverage. In fact, the absence of quality controls during data collection has led to a loss of census information on housing, meaning that in the homes where the census taker conducted interviews, the data on number of inhabitants and their profiles are incomplete, leading to a situation that could have been avoided if timely and adequate field supervision had been ensured.

Experience has also shown the growing need to view censuses as nationwide projects and to seek support from all sections of society in order to insulate censuses from the effects of political and administrative changes. The fact that the census process lasts for several years means that it tends to overlap with the national and local electoral timetable, and thus coincides with changes in administrations, so many decisions are influenced, delayed or altered by the country's politics. There is thus a need for high-level committees with management capacities in administrative, technical and political areas that support census decisions and ensure the success of the project.

The wide range of research carried out by national statistical offices, and its technical recognition, means that censuses are perceived as just one of many such studies. Competition for resources within such institutions can delay the formation of a comprehensive, specialized team dedicated to the census. This makes it difficult to ensure the harmonization and standardization of the conceptual and methodological definitions and control can be lost of the timetable and the critical path of various processes.

As the handbooks guiding census project preparation and census quality control¹³ prepared by CELADE-Population Division of ECLAC with UNFPA financial support have stated, census-takers must pay particular attention to quality control and coverage during the preparatory phase, and establish processes to carry out and document checks, as mistakes can always happen, despite efforts to improve

¹³ "Guía para la elaboración de un proyecto censal", *Manuales series*, No. 70 [online] <http://www.cepal.org/es/publicaciones/5508-guia-para-la-elaboracion-de-un-proyecto-censal> and "Guía para asegurar la calidad de los datos censales", *Manuales series*, No. 74 [online] <http://www.cepal.org/es/publicaciones/5515-guia-para-asegurar-la-calidad-de-los-datos-censales>.

data collection. For the same reason, once data have been collected, evaluating the scope and quality of data to identify potential limitations facing users is another key task.

B. REDATAM IN LATIN AMERICA AND THE CARIBBEAN AND OTHER REGIONS

The constant development of REDATAM and the ongoing technical assistance and training provided via the various workshops have significantly improved processes for the dissemination of countries' sociodemographic and statistical information, both by ensuring that census data are more widely utilized, and used in public policy-making, and by making them available on the websites of the national statistical institutes. All the countries of the region now have their most recent censuses, older censuses and statistical data available for processing online (in most cases via the REDATAM platform). The following countries in Latin America and the Caribbean have already used the REDATAM Webserver to develop an application for online dissemination of data from their most recent censuses: Argentina, Aruba, Belize, Bolivarian Republic of Venezuela, Costa Rica, Ecuador, Panama, Plurinational State of Bolivia, Saint Lucia and Uruguay. Grenada, Barbados and Trinidad and Tobago will shortly go live with their applications.

Other government agencies have also developed applications to disseminate their data online, which will enable users to carry out their own processing and tabulations. In Chile, the National Institute for Youth (INJUV) has released an online data-processing application for its national youth survey (ENJ 2006, 2009 and 2012)¹⁴ and updated its geo-referenced set of indicators on youth (INJUMAP IV). In Costa Rica, the country's Department of Social Security (CCSS) continues to update its online database processing procedures using the REDATAM Webserver. The National Statistical Office of the Dominican Republic uses REDATAM as the platform for its database of census, survey and administrative records microdata (BADECER), which is available on its website. In the Bolivarian Republic of Venezuela, the database for cities (bdpCiudades) is being distributed to pilot cities. Based on REDATAM, this system combines sociodemographic information with economic and environmental statistics. This has increased the number of people with no background in statistics or data-processing using or requesting social and statistical information, which is more easily accessible via REDATAM.

Other regions are also opening up access to sociodemographic information, with a view to bringing it to users who are not experts in statistical processing and analysis. In Africa, technical assistance is being provided to Ethiopia and Mozambique to set up the population and housing censuses in their statistical portals using the REDATAM Webserver platform.¹⁵ Bangladesh is also running this platform, and the country's population of 159 million people poses a challenge that requires REDATAM to deal with a vast database, further proof of its ability to process millions of records at high speeds. This technical assistance, which has been under way for several years, has made a significant impact on this part of the world, leading to further requests for technical assistance and training from the region.

REDATAM has thus consolidated its position as the ideal tool for accessing large sociodemographic databases and has promoted cooperation among specialists on several continents, many of whom have built a practice community that uses Facebook¹⁶ and Twitter to facilitate collaboration. The support of UNFPA, IDB, the International Development Research Centre (IDRC) and various other organizations has been essential in ensuring progress made regarding this tool and its continued success.

¹⁴ See [online] www.redatam.org/redchl/injuv/encjuv.

¹⁵ See [online] <http://imis.csa.gov.et/bineth/RpWebEngine.exe/Portal?BASE=MYAPP2>.

¹⁶ See the REDATAM Facebook page.

Annex 1

**LIST OF SEMINARS, WORKSHOPS AND MEETINGS
ON CENSUSES SINCE JUNE 2013**

No.	Title	Description	Place and date
1.	Third regional meeting on using census data for demographic evaluation and estimation	CELADE-Population Division of ECLAC, Working Group on Censuses of the Statistical Conference of the Americas of ECLAC, UNFPA	Santiago, July 2013
2.	Intensive Regional Course on Demographic Analysis (CRIAD)	CELADE-Population Division of ECLAC, UNFPA	Santiago, August-December 2013
3.	Intensive Regional Course on Demographic Analysis (CRIAD)	CELADE-Population Division of ECLAC, UNFPA	Santiago, August-December 2014
4.	First Latin American and Caribbean Course on Population Estimates and Projections	ECLAC, UNFPA, Latin American Population Association (ALAP), Venezuelan Association for Population Studies (AVEPO), INE of the Bolivarian Republic of Venezuela, Central University of Venezuela	Caracas, September 2013
5.	Seminar "The 2010 census round in Latin America: overview and main lessons learned"	CELADE-Population Division of ECLAC, UNFPA, Working Group on Censuses of the Statistical Conference of the Americas of ECLAC	Santiago, October 2013
6.	Second Latin American and Caribbean Course on Population Estimates and Projections	CELADE-Population Division of ECLAC, UNFPA and INE of the Bolivarian Republic of Venezuela	Caracas, September 2014
7.	"Sharing experiences on developing the censuses for the 2020 round"	CELADE-Population Division of ECLAC, UNFPA, INE of Chile, Working Group on Censuses of the Statistical Conference of the Americas of ECLAC	Santiago, May 2015

Annex 2

LIST OF PRESENTATIONS AND PUBLICATIONS SINCE JUNE 2013

No.	Title	Description	Date
1.	¿Es recomendable preguntar en el censo acerca de la sobrevivencia del último hijo nacido vivo? Magda Ruiz, Andreina Duarte and Sebastián Carrasco	<i>Notas de Población</i> magazine No. 95, (forthcoming)	2013
2.	Demographic Observatory 2012. Population Projections	LC/G.2569-P	August, 2013
3.	Principales cambios en las boletas de los censos latinoamericanos de las décadas de 1990, 2000 y 2010	Manuales Series, No. 80, LC/L.3734	December, 2013
4.	Demographic Observatory 2013. Population Projections	LC/G.2615-P	July, 2014
5.	Tercera reunión regional sobre Evaluación y estimaciones demográficas con base en información censal. Informe de reunión	No document symbol	January, 2014
6.	Tercera reunión regional sobre Evaluación y estimaciones demográficas con base en información censal. Informe de encuesta a participantes	No document symbol	January, 2014
7.	Seminario Los censos de 2010 en América Latina: balance y principales lecciones aprendidas. Informe de reunión	No document symbol	January, 2014
8.	Seminario Los censos de 2010 en América Latina: balance y principales lecciones aprendidas. Informe de encuesta a participantes	No document symbol	January, 2014
9.	Los datos demográficos: alcances, limitaciones y métodos de evaluación	Manuales Series, No. 82, LC/L.3906	October, 2014

Note: All of the documents listed are available on the website of the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, [online], www.eclac.org/celade/censos2010.