

# Population, territory and sustainable development

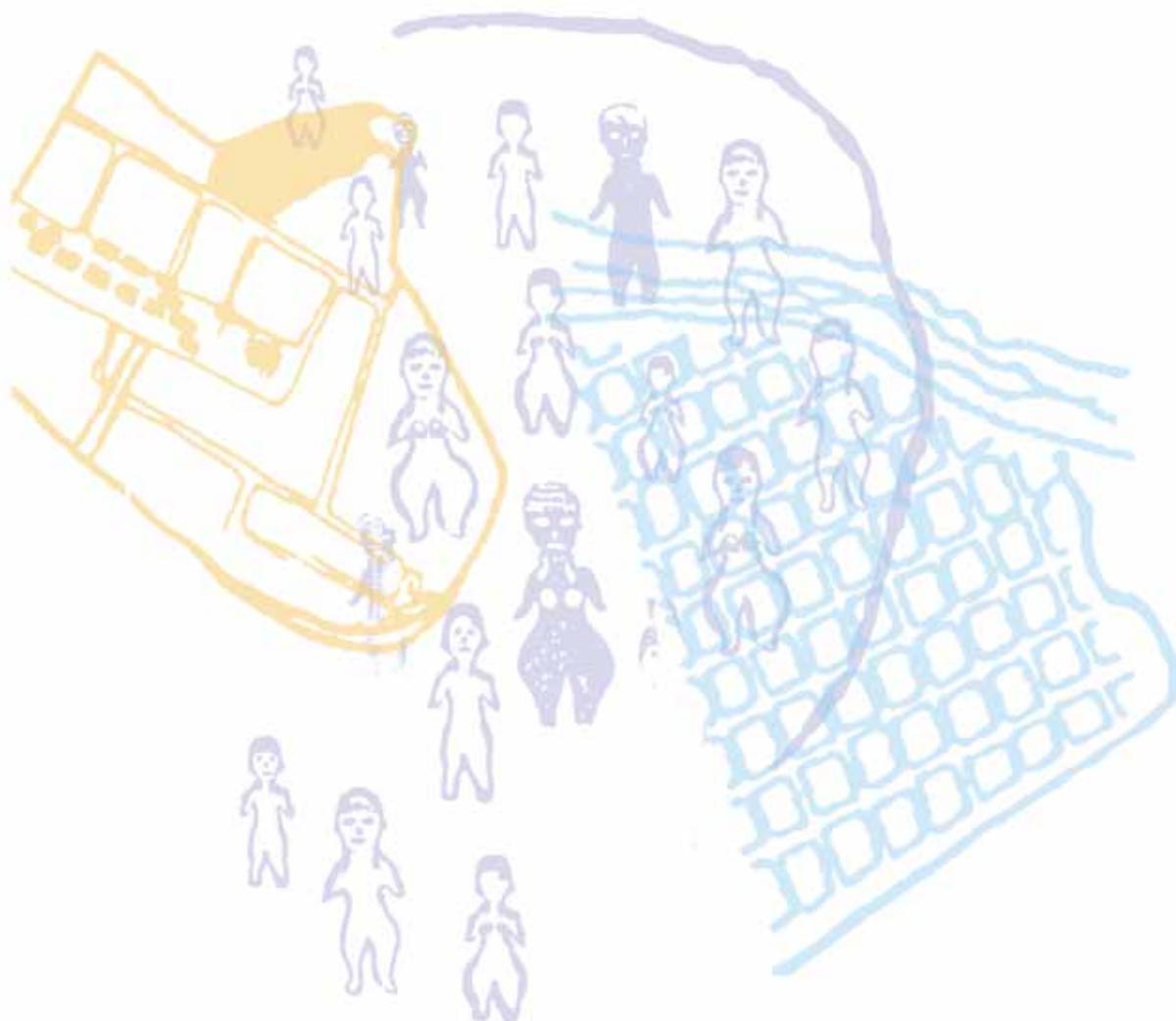


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ECLAC Ad Hoc Committee on  
Population and Development  
**ECUADOR 2012**



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ECLAC Ad Hoc Committee on  
Population and Development  
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## CONTENTS

	<i>Page</i>
<b>Chapter I</b>	
<b>Introduction</b> .....	11
<b>Chapter II</b>	
<b>Concepts, definitions and interlinkages</b> .....	15
<b>Chapter III</b>	
<b>Migration and spatial redistribution of the population: general trends and specific interrelationships</b> .....	23
<b>Chapter IV</b>	
<b>The rural environment: sweeping changes, persistent inequality and emigration</b> .....	27
A. Rural population trends at the international and regional levels .....	27
1. Natural population growth in rural areas .....	34
2. Rural-urban transfers .....	35
B. Rural settlement patterns.....	41
1. An analytical approach based on density gradients .....	41
2. Numerous settlements, disjointedness and the socioeconomic implications .....	46
3. Peri-urban rural areas: rural-urban interrelationships and how they may shape new types of spatial contexts .....	48
C. Production patterns and the rural economy .....	52
D. Poverty and intrarural inequality .....	57
E. Rural-urban differences in access to services, information technologies and education .....	65
1. Access to drinking water and sanitation .....	65
2. Access to and use of information and communications technologies.....	67
3. Education .....	68
<b>Chapter V</b>	
<b>The settlement of sparsely populated areas in Latin America</b> .....	73
A. Introduction and background .....	73
B. Demographic trends and context up to 2000.....	76
C. The recent situation and the outlook for the future .....	82
<b>Chapter VI</b>	
<b>Borderlands: territories at stake</b> .....	87
A. Introduction.....	87
B. Typology of selected border areas in the region by migration patterns .....	88
C. The political context and mobility in borderlands.....	90
D. Outlook for research and policy for border areas: the case of sexual and reproductive health .....	90

**Chapter VII****Regional inequalities within countries: the role of internal migration** ..... 93

- A. Introduction ..... 93
- B. Background to regional inequality in Latin America ..... 96
- C. Economic stagnation and demographic stagnation at the regional level:  
two sides of the same coin? ..... 97
- D. Territorial equity, regional development and internal migration: current trends ..... 99
- E. The qualitative effect of migration: an under-explored but crucial facet ..... 106

**Chapter VIII****Sustained urbanization: between functionality and urban deficiencies** ..... 115

- A. Introduction: urbanization, territory and sustainable development ..... 115
- B. Urbanization, migration and development ..... 117
- C. Basic trends in and current status of urbanization ..... 119
- D. Urbanization, sustainable development and rural-urban migration ..... 122
- E. Urbanization, rural-urban migration and urban population composition ..... 125
- F. Urbanization, poverty and urban deficiencies ..... 130
  - 1. Living conditions, urban poverty and slums ..... 131
  - 2. Basic services deficit ..... 133
  - 3. Urban mobility and transport ..... 135
  - 4. Social and community facilities and public space ..... 136
  - 5. Conclusions on urban deficits ..... 139

**Chapter IX****The system of cities: an expanding universe** ..... 141

- A. Introduction ..... 141
- B. Latin America's mushrooming system of cities ..... 141
- C. Population size trends in the system of cities ..... 145
- D. Socioeconomic differentials by city size as proxies for  
Millennium Development Goals indicators ..... 154
- E. Migration patterns by city and class of city ..... 158
- F. Migration draw, sociodemographic characteristics and standard of living ..... 163

**Chapter X****Trends, mutations and challenges in large cities** ..... 169

- A. Metropolitanization, a hallmark of Latin America ..... 169
- B. Situation of major administrative divisions with large cities ..... 170
  - 1. Demographic evolution of large cities ..... 173
  - 2. Figures and debate on the primacy and development of large cities ..... 175
  - 3. Informality and peri-urban growth ..... 179
  - 4. Structural mutations in metropolises: restructuring and the public agenda ..... 186
  - 5. Concluding remarks: the great importance of major cities in Latin America ..... 191

<b>Chapter XI</b>		
<b>Findings, messages and policy discussion .....</b>		<b>193</b>
<b>Bibliography .....</b>		<b>215</b>
<b>Tables</b>		
Table III.1	Latin America and the Caribbean: internal migrants by migration type, 1990 and 2000 .....	24
Table III.2	Ecuador, Panama and Mexico: observed and age-standardized gross mobility rate.....	24
Table III.3	Latin America (19 countries): overall migration effectiveness index and aggregate net migration rate between major administrative divisions by country .....	26
Table IV.1	Latin America and the Caribbean: relative size and growth rate of the rural population, 1950-2000.....	31
Table IV.2	Latin America (selected countries): overall birth and general fertility rates for urban and rural areas, around 1990 and 2000 .....	36
Table IV.3	Latin America (selected countries): general urban and rural fertility rates, censuses of the 1990s and 2000s .....	37
Table IV.4	Latin America (selected countries): infant mortality rates in urban and rural areas, censuses of the 1990s and 2000s .....	37
Table IV.5	Latin America (selected countries): infant mortality rates in urban and rural areas based on demographic and health surveys conducted in the 1990s and 2000s .....	38
Table IV.6	Latin America: net migration from rural to urban areas and relative scale of rural-urban migration, 1980-2010.....	39
Table IV.7	Latin America: size of the urban and rural populations as calculated using alternative quantification criteria, around 2000.....	42
Table IV.8	Population density/economic activity gradient .....	43
Table IV.9	Costa Rica: distribution of the rural and urban population as measured on the basis of official definitions and rurality gradients .....	45
Table IV.10	Mexico: number of rural settlements and their population, by size of rural settlement, 2010 census.....	47
Table IV.11	Latin America: poor population by geographical area, around 2000 and 2010.....	58
Table IV.12	Latin America (selected countries): population with access to drinking water and sanitation, urban and rural areas, 2010 census round .....	66
Table IV.13	Latin America (selected countries): proportion of the population with access to a fixed telephone line and Internet in the household, urban and rural areas, 2010 census round .....	68
Table IV.14	Latin America: average schooling of rural population by age group, 1990 and 2000 census rounds .....	69
Table V.1	Latin America (9 countries): share of total population and growth rates of selected low-population-density major administrative divisions, 1950 and 2000 .....	77
Table V.2	Latin America (9 countries): net migration and net migration rates, selected low-population-density major administrative divisions, 1980-2000.....	78

Table V.3	Latin America (9 countries): population living in urban areas and population growth rates in major administrative divisions, 1950-2000.....	79
Table V.4	Ecuador: net internal migration rate of the Amazon provinces and the Galapagos islands, 1977-2010.....	84
Table VII.1	Latin America and the Caribbean (selected countries): simple linear correlation between the Human Development Index (HDI) and the net internal migration rate at the major administrative division level censuses from the 2000 round.....	99
Table VII.2	Ecuador: migration balance and net internal migration by province, 1977-2010.....	100
Table VII.3	Panama: migration balance and net internal migration rate by province and region ( <i>comarca</i> ), 1995-2010.....	106
Table VII.4	Latin America (selected countries and years): impact of migration on the age and educational structure, disadvantaged major administrative divisions (MADs).....	108
Table VII.5	Latin America (selected countries and years): impact of migration, in-migration and out-migration on the average years of schooling of heads of household, disadvantaged MADs.....	109
Table VII.6	Peru (Sierra departments): net migration indicators, 2002-2007.....	110
Table VII.7	Peru (Sierra departments): impact of migration on the demographic dependency ratio, major administrative divisions with chronic poverty, 2007.....	111
Table VII.8	Panama: impact of migration, in-migration and out-migration on the average number of years of schooling of the population aged 25 to 39, 2010.....	112
Table VII.9	Ecuador: impact of in-migration and out-migration on average years of schooling of heads of household at the level of major administrative divisions (provinces), 2010 census.....	114
Table VIII.1	Latin America and the Caribbean (selected countries): degree of urbanization in 1950 and 2010.....	121
Table VIII.2	Latin America and the Caribbean (20 countries): relative contribution of net rural-urban transfer to urban population growth, 1980-2010.....	126
Table VIII.3	Panama: estimated impact of rural-urban migration on the sex ratio in rural and urban areas, 2005-2010.....	128
Table VIII.4	Panama: estimated impact of rural-urban migration on child population percentage in rural and urban areas, 2005-2010.....	128
Table VIII.5	Panama: estimated impact of rural-urban migration on the proportion of older persons in rural and urban areas, 2005-2010.....	128
Table VIII.6	Panama: estimated impact of rural-urban migration on the average education level of the population aged 30 to 49 in rural and urban areas, 2005-2010.....	129
Table VIII.7	Panama: estimated impact of rural-urban migration on the average education level of heads of household in rural and urban areas, 2005-2010.....	130
Table VIII.8	World (major regions): urban population living in slums.....	133
Table VIII.9	Latin America and the Caribbean (selected countries): indicators for access to basic services in urban areas, census data from the 2000s.....	134
Table IX.1	Latin America: number of cities by population size, 1950-2000.....	144
Table IX.2	Latin America: prospective longitudinal analysis of population trends in the system of cities, by population size.....	150
Table IX.3	Latin America: retrospective longitudinal analysis of population trends in the system of cities, by population size.....	151

Table IX.4	Panama: number of cities by population category, 1950-2010 .....	152
Table IX.5	Ecuador: number of cities by population category, 1950-2010 .....	153
Table IX.6	Latin America (14 countries) (1,439 cities with more than 20,000 inhabitants, by population size): total net migration (absolute and relative) with the rest of the urban system and the rest of the system of cities .....	154
Table IX.7	Latin America (9 countries) (917 cities with more than 20,000 inhabitants, by population size): total net migration and with the rest of the urban system (total and percentage positive net migration), censuses from the 1990s.....	159
Table IX.8	Latin America (14 countries) (1,439 cities with more than 20,000 inhabitants, by population size): net total migration and with the rest of the urban system (total and percentage positive net migration), censuses from the 2000s.....	160
Table IX.9	Latin America (3 countries): metropolitan cities by total net migration, close and distant (absolute balances), censuses from the 2000 onwards .....	161
Table IX.10	Latin America and the Caribbean (14 countries): simple correlation matrix between total net internal migration, with other cities and with the rest of the system of human settlements, and socioeconomic indicators (employment, education, and living conditions).....	166
Table IX.11	Latin America and the Caribbean (14 countries): linear regressions by country for socioeconomic variables and total net and intra-urban system migration intensity, significant coefficients .....	167
Table X.1	Latin America and the Caribbean: percentages of global total, rural and urban population .....	169
Table X.2	Latin America: evolution of the relative weight of the population of the metropolitan MADs or capital cities in the national population, 1950-2000 .....	171
Table X.3	Latin America: evolution of the relative weight of the population of the metropolitan MADs or capital cities in the total urban population of the country, 1950-2000 .....	172
Table X.4	Latin America and the Caribbean: concentration of the population in large cities .....	173
Table X.5	Latin America: population and growth rate of cities with 1 million to 4 million inhabitants, by number of cities, 1950-2000 .....	174
 <b>Figures</b>		
Figure IV.1	Rural population, by major world regions, 1950-2050 .....	27
Figure IV.2	Latin America and the Caribbean: total rural population, 1950-2015 .....	28
Figure IV.3	Latin America: growth rate of the rural population during the intercensal period 1990-2000 and percentage of the population living in urban areas, 2000 census.....	32
Figure IV.4	Density/economic-activity gradient, 2000 census round .....	44
Figure IV.5	Latin America and the Caribbean (15 countries): distribution of rural employment among the primary, secondary and tertiary sectors.....	50
Figure IV.6	Latin America: poor and indigent rural population, around 2000 and 2010.....	59
Figure IV.7	Poverty in rural households, by typology.....	60
Figure IV.8	Typology of rural economies, on the basis of percentages of employment in agriculture and poverty rate by household .....	60
Figure IV.9	Poverty in rural households by ethnic status .....	63

Figure IV.10	Latin America (selected countries): population with access to drinking water and sanitation, urban and rural areas, 2000 census round .....	66
Figure IV.11	Latin America: proportion of the population with access to a fixed telephone line and Internet in the household, urban and rural areas, 2000 census round.....	67
Figure IV.12	Latin America: average years of schooling of the population aged 30-59 years, urban and rural areas, 2000 census round .....	70
Figure IV.13	Latin America: rural–urban gaps in education, by age group, around 2008 .....	71
Figure V.1	Mexico: net internal migration rates by State, 1985-2010 .....	85
Figure VII.1	Mexico: net internal migration rates by federal entity, 1985-2010 .....	104
Figure VII.2	Mexico: net internal migration rate, 2005-2010, and Human Development Index by federal entity, 2006 .....	104
Figure VII.3	Ecuador: poverty rates, 2005-2006, and net internal migration rates by province, 2005-2010 .....	105
Figure VII.4	Panama: net internal migration rate, 2005-2010, and Human Development Index (HDI), by province, 2006.....	105
Figure VII.5	Mexico: impact of migration on years of schooling of the population aged 25 to 39, by federal entity, 2010 census .....	112
Figure VII.6	Ecuador: impact of migration on schooling (population aged 25 to 39), 2010 census .....	113
Figure VIII.1	World and major regions: urban population, 1950-2010 .....	120
Figure VIII.2	Latin America and the Caribbean: urban population and human development index, 1990, 2000 and 2010.....	123
Figure VIII.3	Latin America and the Caribbean: urban population and per capita gross domestic product, 1990, 2000, and 2010 .....	124
Figure VIII.4	Latin America and the Caribbean (16 countries): net enrolment ratio in primary education and primary education completion rate in urban areas, census data for the 2000s .....	137
Figure VIII.5	Latin America and the Caribbean (18 countries): level of satisfaction with the availability of green areas and public spaces, 2009 .....	138
Figure IX.1	Latin America: percentage of the population living in localities with 2,000 or more inhabitants, by size, 1950-2000 .....	146
Figure IX.2	Latin America: breakdown of the population living in localities with 2,000 or more inhabitants, 1950-2000 .....	147
Figure IX.3	Latin America: cities that had 20,000 or more inhabitants in some census during the second half of the twentieth century, population in 1950 (axis and logarithm) and rate of growth, 1950 and 2000 .....	149
Figure IX.4	Latin America (1,735 cities): education indicators by city population size, censuses from the 2000s.....	155
Figure IX.5	Latin America (1,735 cities): unemployment rate by city population size, censuses from the 2000s.....	156
Figure IX.6	Latin America (1,735 cities): indicators of access to basic services and household items by city population size, censuses from the 2000s.....	156
Figure IX.7	Latin America (1,735 cities): indicators of access to basic services and household items by city population size, censuses from the 2000s.....	157
Figure X.1	Latin America: primacy index, 1950-2000 .....	176

**Boxes**

Box IV.1	Gradient-based definitions and estimates of the rural population.....	29
Box IV.2	Underdevelopment of rural areas and rural-to-urban migration .....	34
Box IV.3	The ageing of the rural population .....	40
Box IV.4	Agriculture in the world economy: recent trends.....	52
Box IV.5	Impacts of soybean production in five countries of the region .....	54
Box IV.6	Labour market and rural poverty.....	61
Box IV.7	Conditional cash transfer programmes and rural poverty .....	64
Box IV.8	Adolescent fertility in Latin America: an example of social and territorial inequalities .....	72
Box V.1	The developmentalist and geopolitical fixation with the Amazon and current paradoxes .....	75
Box V.2	Latin America: population growth in low-population-density major administrative divisions, 1950-2000.....	81
Box VII.1	Measuring the impact of migration on the composition of the population of the places of origin and destination .....	107
Box IX.1	Mexico: a functional view of the system of cities.....	142
Box X.1	Metropolitan concentration: a phenomenon that is not limited to population ....	170
Box X.2	Views on urban informality in Latin America .....	181
Box XI.1	Ecuador: articles of the 2008 Constitution concerning development and territorial rights, including the concept of “good living” .....	195
Box XI.2	Recent experiences with territory-based rural development policies.....	199
Box XI.3	Protecting the ecosystem and ethnicity in Amazonia: the example of Ecuador’s basic zoning, autonomy and decentralization code .....	202
Box XI.4	Action Plan for Prevention and Control of Deforestation in the Legal Amazon region of Brazil.....	202
Box XI.5	Focusing on the family of territorial policies .....	205
Box XI.6	Brazil’s city statute: contributions, limitations and challenges .....	207
Box XI.7	Initiatives for improving public transportation systems in the region.....	209
Box XI.8	Metropolitan governments: needs, challenges and options.....	211

**Maps**

Map IV.1	Latin America and the Caribbean: intercensal rural population growth rates, 1990-2000.....	33
Map IV.2	Costa Rica: rurality gradient .....	45
Map V.1	South America: population density by major administrative division, 1950 and 2000 .....	74
Map V.2	Mesoamerica: population density by major administrative division, 1950 and 2000 .....	74
Map V.3	Brazil: population growth rate at the municipal level, 2000-2010.....	83
Map VII.1	Latin America and the Caribbean: infant mortality rate by major administrative division (MAD), around 2010.....	94
Map VII.2	Latin America and the Caribbean: per capita gross domestic product by major administrative division, around 2006.....	95
Map VII.3	Chile: classification of major administrative divisions (MADs) by migration status, censuses of the 1990 and 2000 rounds .....	101
Map VII.4	Brazil: classification of major administrative divisions (MADs) by migration status censuses of the 1990 and 2000 rounds .....	102

Map VII.5	Plurinational State of Bolivia: classification of major administrative divisions by migration status censuses of the 1990 and 2000 rounds .....	102
Map IX.1	South America: number and population size of cities, 1950 and 2000 .....	144
Map IX.2	Central America and the Caribbean: number and population size of cities, 1950 and 2000 .....	145
Map X.1	Latin America (selected countries): intercensal growth rates of metropolitan areas in minor administrative divisions, 1990-2000 .....	180
Map X.2	Mexico: intercensal growth rates in minor administrative divisions, 2000-2010 .....	181
Map X.3	Greater Buenos Aires and Greater Santiago: selected socioeconomic disparities between central and peripheral municipios, 2000 round of censuses .....	183
Map X.4	Mexico City: extended metropolitan area, 2000 and 2010 censuses .....	187
Map X.5	Peruvian migrant population residing in Greater Santiago, 2002 census.....	190
Map X.6	Foreign population residing in Panama City, 2010 census .....	190

## Chapter I

**INTRODUCTION**

The ECLAC Ad Hoc Committee on Population and Development was established during the twenty-fifth session of ECLAC and met for the first time during the following session, held in San José in April 1996. Its objective is to ensure adequate implementation, follow-up and review of the Latin American and Caribbean Regional Plan of Action on Population and Development, and to examine the region's situation with respect to population and aspects related to the execution and institutionalization of population policies and programmes (ECLAC, 1996, paragraphs 78 and 99).

In fulfilling this responsibility, the Committee has periodically evaluated the execution of the Regional Action Programme and the ICPD Programme of Action, examining key aspects of the relationship between population and development. Among these are population, reproductive health and poverty (1998); population, youth and development (2000); sociodemographic vulnerability: old and new risks for communities, households and individuals (2002); population, ageing and development (2004); international migration, human rights and development (2006); demographic transformations and their influence on development in Latin America and the Caribbean (2008); and, more recently, population, development and health, including sexual and reproductive health (2010).

The thirty-third session of ECLAC, held in Brasilia from 30 May to 1 June 2010, approved resolution 657(XXXIII) entitled "Ad Hoc Committee on Population and Development of the Economic Commission for Latin America and the Caribbean", which takes note of the "Agreements on population and development: priority issues for 2010-2012" adopted at the meeting of the ECLAC Ad Hoc Committee on Population and Development held in Santiago from May 12 to 14 2010.

Point 24 of the agreements reads "Decides that, at its next ordinary meeting, to be held in 2012, the Ad Hoc Committee will analyse the issue of population, territorial dimensions and development" and "also requests the secretariat to prepare the corresponding substantive documents in collaboration with the United Nations Population Fund".

As requested by the countries, the Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC has drafted this document as a summary, with its own emphasis and approach, of a more extensive and detailed report to be presented and discussed at the 2012 meeting of the ECLAC Ad Hoc Committee on Population and Development.

The purpose hereof is to provide an overview of current trends, contexts and issues in the spheres of population, territory and sustainable development and examine their public policy implications. Three themes run through the report. The first two are laid out in the empirical chapters (III through X); the third is taken up in the closing chapter. Using the most recent data available (including censuses conducted in the 2010s), the first theme describes and tracks location and spatial mobility patterns for the population of Latin America, focusing on certain kinds of territory. The second explores the linkages between these patterns and sustainable development in different kinds of territory in Latin America and the Caribbean. The third offers considerations and policy proposals for fostering a consistent, synergistic relationship between population location and spatial mobility, on the one hand, and sustainable development, on the other, in the kinds of territory studied.

This document is therefore divided into 11 chapters, the first being this introduction.

Chapter II provides a frame of reference for the empirical analysis. The core concepts of population, territory and sustainable development are explained and discussed in the light of *Time for equality: closing gaps, opening trails* (ECLAC, 2010) and other prior studies on the matter by CELADE-Population Division of ECLAC and other ECLAC divisions. The general linkages between demographic dynamics and sustainable development which will be looked at in detail later in the report are identified. An operationalization rationale is provided for the types of territory under study: minor and major administrative divisions, rural areas, low population density areas, border and cross-border areas, regions (such as major administrative divisions), urban areas and cities (localities with 20,000 or more inhabitants) as a system, plus big cities (1 million or more inhabitants). Reference is made to relevant territories that are not listed, including watersheds, environmentally threatened areas (especially those that are most vulnerable to climate change) and protected areas. And the proxies and scales used in the analysis are defined.

The empirical chapters (III through X) describe and analyse the trends and linkages between population, territory and sustainable development, with particular reference to the selected territories.

Chapter III uses an empirical proxy to provide a regional overview of changes in migration intensity and the population redistribution impact of migration, especially internal migration. The goal is an up-to-date understanding of what could be regarded as the most classical and, at the same time, most basic relationship between population and territory. Such an understanding will be useful for more extensive examinations of this relationship and for comprehensive studies of the linkages between population, territory and sustainable development.

Chapter IV looks at the demographic dynamics of rural Latin America and how they are linked to rural territory and rural development. Starting the thematic chapters with this subject does not mean that it is regarded as more important; indeed, one of the central messages of the report is the need to prepare for an increasingly urban future. But it is not by chance that the starting point is rural territory (after all, it accounts for most of the region's land mass). The idea is to raise awareness, because rural areas are usually overlooked or put on hold because of the growing population, socioeconomic, political, cultural and mass media influence of urban areas in Latin America.

Chapter V examines territories that have a unique relationship with population and population dynamics: these low population density territories are very sensitive to settlement by migration. They appear to be rural but really are not, because, among other things, most of their growing, albeit still sparse, population is classed as urban. In any case, the common thread running through the study has to do with the complex relationships between inhabitants of these areas (for example, indigenous peoples, long-established residents, recent settlers and migrant workers), settlement intensity and modality, predominant types of economic activity and investment, and ecosystem balances. These are territories that have come into the political spotlight in recent years because of substantial shifts in international and national perceptions as growing value is attributed to their role in ecosystemic balances at the global, national and local levels. Nevertheless, they are still a setting for interests and practices that tend to clash with these new perceptions.

Chapter VI concerns border areas, where peoples, traditions, laws, ways of doing business and even languages and slang from two or more countries interact and mix. These are areas where movement, exchange and opportunities coexist, sometimes uneasily, with control, asymmetry and risks. Noteworthy among the risks are abuse, discrimination, exploitation and exposure to communicable

diseases, including sexually transmitted infections. Migrants tend to be the most affected by these adversities. Dedicating a chapter to border areas is something of a wake-up call: these areas tend to be low in priority because of a double misunderstanding. For one, after a period of relatively heavy public investment driven by geopolitical considerations, it is now widely assumed that positive border externalities operate naturally, on the sheer thrust of market forces. However, evidence suggests that this is not a sturdy assumption. And then, fluid borders often constrain national State governance capabilities; weak public institutions are ill-prepared for coping with the specific risks of these areas. The upshot is that many border areas, far from being privileged and thriving as is sometimes thought, are actually neglected, unprotected and disorderly. This calls for rethinking how they are treated by States, both individually and in partnership as neighbours.

Chapter VII picks up the core theme of the landmark ECLAC (2010a) study *Time for equality: closing gaps, opening trails*, which is inequalities among regions within the countries of Latin America and the Caribbean. These inequalities are acute and enduring, and in certain areas they entail risks in the form of poverty traps and infringement of rights. Chapter VII also probes the relationships between the regional demographic dynamic (especially migration between regions) and unequal development. It takes a fresh look at concepts and estimates from *Time for equality*, going more deeply into its demographic factors —especially dissimilar population growth among regions and the impacts of migration on their sociodemographic makeup.

Chapters VIII, IX and X examine the population dynamics of urban areas and how it is related to economic and social development at the country level as well as in urban settings and for different kinds of cities. Chapter VIII focuses on urbanization. While primarily defining urbanization in strictly demographic terms (an increase in urban population percentage), it brings other dimensions (productive, sociocultural and political) into the picture because they are essential for understanding the relationship between urbanization and development. Chapter IX turns the spotlight on systems of cities, examining them in as much detail as the main source of information for the document (population censuses) allows. Because of its new approach, and since much of the data in it is so recent, this chapter homes in on population dynamics and migrant exchanges in systems of cities. To this end it takes a regional and national view and avoids studying specific cities. Any reference to a particular city is to illustrate a point, an interesting case, or an exception. Focusing on demographic and migration dynamics does not mean ignoring the other dimensions of city system development, which are examined above all in terms of living standards and how these relate to city size. Chapter X goes further into a special group of cities: large ones with more than 1 million inhabitants. There are specific studies of metropolises and megalopolises, operatively defined herein as cities with 5 million to 10 million inhabitants and cities with more than 10 million inhabitants, respectively. These studies centre on issues that are making their way onto the public and academic agenda. Among these are peripheral expansion, diffuse configuration, metropolitan sprawl and residential segregation. They are more pressing in metropolises and megalopolises, are closely tied to spatial mobility and are associated with the reproduction of inequalities, inefficiencies, eroding social cohesion and the breakdown of community life in metropolitan areas. These matters are emerging public policy challenges, especially for metropolitan areas.

Chapter XI summarizes the main findings of the report, sets out the most significant messages and policy considerations associated with them and puts forth options, suggestions and challenges for future action and research in the framework of the ECLAC approach to sustainable development and equality.



## Chapter II

**CONCEPTS, DEFINITIONS AND INTERLINKAGES**

This document focuses on the three concepts mentioned in the title: population, territory and sustainable development. These concepts are complex and have multiple meanings. Defining them first thus serves two purposes: theoretical delimitation and semantic accuracy.

The concept of population used in this report easily goes beyond the five meanings<sup>1</sup> given in the *Concise Oxford English Dictionary*, which generally refer to the collective inhabitants of a particular place. For demographers and experts on the links between population and development, the term “population” refers to the number, growth, structure and spatial distribution of persons and the demographic variables determining those factors (fertility, mortality and migration). For the purposes hereof, however, the concept needs to be restricted. The definition of population used in this report refers to the spatial distribution and territorial mobility<sup>2</sup> of people. It also takes into account population size, growth and structure, but essentially in order to describe and compare subnational areas. Mortality and fertility may also be discussed, but as variables determining demographic trends in subnational areas, rather than as detailed analytical variables per se.

The concept of territory used in this report depends on the concept of population as defined above. As already indicated, the concept of population refers to spatial distribution and mobility within countries. As a result, the basic notion of territory used here refers mainly to subnational areas in which populations live and move around. In some cases, multinational areas are used, either because the discussion concerns border areas (between two or even three countries) or because the type of link being analysed goes beyond the national scale (for example, the effects of climate change), or because the relevant population variable is international migration.

The concept of territory used in this text still needs to be specified further. The dictionary definitions<sup>3</sup> are useful but insufficient.<sup>4</sup> Although they cover the physical (geographical) and administrative components, which are essential in any analysis, they do not include the social dimensions,

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<sup>1</sup> The tenth edition of the *Concise Oxford English Dictionary* defines population as follows: (i) all the inhabitants of a particular place; (ii) a particular group within this; (iii) the action of populating an area; (iv) a community of interbreeding organisms; and (v) a finite or infinite collection of items under consideration.

<sup>2</sup> In this document, the term “mobility” always refers —unless explicitly indicated otherwise— to the physical movement of the population in a territory, regardless of the means used. Given that there are many different types of movement, this report refers systematically only to movements that are regarded as components of demographic dynamics, specifically internal migration and international migration. Two other types of movement are also examined, albeit less systematically, given the nature of this document and their importance for population, territory and sustainable development research and policy purposes. These are seasonal migration by individuals who move to take up temporary work without changing their place of residence and commuters, who travel between their place of residence and place of work (or study) on a daily or regular basis.

<sup>3</sup> The tenth edition of the *Concise Oxford English Dictionary* defines territory as: (i) an area under the jurisdiction of a ruler or state; (ii) an area of knowledge or experience; (iii) an area in which one has certain rights or responsibilities; (iv) an area defended by an animal against others of the same sex or species and (v) land with a specified characteristic.

<sup>4</sup> See the detailed review and discussion of the concept of territory in Cuervo (2011), Haesbaert (2011), Ramírez, Silva and Cuervo (2009) and Cuervo and González (1997).

which are important when analysing the interlinkages between population, territory and sustainable development. Some of the social dimensions have a geographical basis, such as location, but others are determined by investment and economic patterns, such as connectivity, or by cultural and political structures, such as regional or local identity.

The geographical characteristics that define territory include climate, mountain ranges, bodies of water, topography, soil quality, wind patterns and the natural resources base. These attributes constitute the natural productive vocation of the territory and define the general conditions for population settlement and human activity. In the past, these characteristics largely determined the productive and demographic future of territories. Today, the wealth of human activity in the form of production facilities, infrastructure, technology, institutions, communities and social ties is more relevant in this regard. As a result, as explained below, the concept of territory used herein includes all its human components.<sup>5</sup> This concept clearly differs from essentialist views that value only natural landscape and resources and the original ecosystem of territories. There is no doubt that territories not exposed to human intervention exist. However, this report focuses on territories that have been transformed by human activity and thus turned into a social space. Untouched territories and those with limited artificiality are not excluded from the analysis but will be included according to their potential as a habitat or source of wealth and well-being for the population. It is recognized that the preservation and intangibility of these territories could be useful, for example in order to maintain global ecosystem balances and ensure the survival of ancestral communities.

Administrative delimitation is essential for two reasons. First, because the possibilities on the geographical scale are virtually infinite—a territory can cover anything from the entire Earth to a remote locality to a block in a big city. As a result, shared public criteria have to be used to identify the specific areas covered by an analysis. Second, because administrative areas tend to be spaces covered by formal jurisdictions, public policies and programmes and major institutions, both national and subnational, and official information on those spaces is collected on a relatively regular basis. Consequently, technical analyses are more likely to support decision-making when they refer to administrative areas. In practice, this report systematically uses major administrative divisions (MADs) (states, regions, departments or provinces, depending on the country) and minor administrative divisions (MIADs) (municipalities, communes, counties, cantons or districts) for calculating indicators, mapping and analysis, where possible. In some cases, two or more MADs (or MIADs) are grouped together.

Even with the use of administrative delimitations, the scales and scope of the areas analysed still need to be defined. This is because some very relevant territorial distinctions do not have administrative status. An emblematic example is the dichotomy between rural areas and urban areas or, more correctly, the gradient between areas with a scattered population and unspoilt countryside (which are not necessarily untouched by human intervention, however) and densely populated areas with artificial landscapes and structures. In this case, instead of a given territory with a precise geographical scale and clear limits, there is a territory settlement and use pattern which creates specificities and distinctions relating to production, distribution, consumption, administration, symbolism and way of life. An initial distinction can be made on the basis of national definitions of urban and rural. But given that definitions differ between countries—at times considerably—the analysis should be complemented, in so far as possible, by other definitions

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<sup>5</sup> This multidimensional view is in line with the multidimensional approach adopted by ECLAC and the increasing interaction between scientific disciplines in the treatment of cross-cutting issues such as territory: “Thanks to the recent incursions made in disciplines such as anthropology, sociology, cultural geography and even local economic development theory, the concept of territory has lost its monolithic, indisputable reference to physical space” (Cuervo, 2011, p. 13).

which guarantee comparability. Complementary analyses based on previous research available will be used to obtain the urban-rural gradient, as well as the spheres and patterns of interaction which blur the boundaries.

Another area that goes beyond administrative delimitation is cities and metropolitan areas that tend to span one or more MIADs. In this case, considering only the urbanized area—which is technically the correct approach—proves to be very complicated, especially when dealing with hundreds or thousands of cities, as is the case in this report. For that reason, almost without exception, the boundaries of cities coincide with the MIAD or MIADs in which they are located.

Several other territories of interest do not correspond to administrative divisions. These include most of the natural scales inherent to the size and functioning of ecosystems, including the relationship between the population and the ecosystem. For example, geographical basins are crucial to analyse the links between population and water resources or natural hazards. Similarly, it is well documented that local environmental changes can have a regional or even global impact, which makes even national administrative limits insufficient. In addition, residential segregation analysis often requires disaggregated scales, such as census areas, districts or blocks, which do not have administrative status. In such cases, the analysis is carried out according to the technically relevant scale, but the policy conclusions relate to the closest local governments in each case.

In its publication entitled *World Development Report 2009: Reshaping Economic Geography*, the World Bank uses international, national and subnational (regional or metropolitan) scales. The same three scales are used in this report, but other territorial levels and scales are also used in the analysis in order to widen the scope of the assessment and diversify the policy conclusions.

The other components of the concept of territory used in this report relate to location, connectivity, artificiality and identity. Location concerns the geographical situation of each area and its physical proximity to other areas and to certain geographical landmarks (such as the coast, major rivers and fertile valleys). Location can create opportunities or pose risks (such as being situated in or close to areas vulnerable to natural disasters); these attributes are part of the comprehensive definition of a territory. Connectivity has historically been linked to location. However, the link has been weakened as technological advances have been made, since connectivity is dependent on human activity and channels of communication (which are now also virtual) linking a specific territory to other territories. Artificiality refers to any infrastructure of human origin which accommodates people and is key to their productive capacity. Last, territorial identity refers to a sense of belonging which is shared by the population inhabiting it.

There is a widespread belief that territory is becoming less important in the new social and production climate marked by globalization, remote coordination, information flows and the rise of virtual communication and interaction. Although these developments are very real, they do not make territory and geographical location irrelevant. They merely give rise to what could be referred to as “multiterritorialization”, increasing the potential (which has always existed but never before to such an extent) for being part of different territories at the same time and meaning that our territory is constantly being reconstructed (Haesbaert, 2011).

In short, the definition of territory<sup>6</sup> used in this report establishes tangible spatial areas which in some cases coincide with political, administrative boundaries, such as MADs, but in other cases are not bound by such limits, such as sparsely populated areas. The different spatial areas defined are covered in separate chapters. In addition, the definition includes a series of attributes defining territory as a complex system, which go beyond the traditional restricted view based on its physical components and focus more on its economic, social and cultural characteristics.

With regard to sustainable development, the definition put forward by ECLAC will be used in this report given the Commission's long tradition in this field. This definition is much broader than the paradigms focused mainly or exclusively on growth (although growth is key) and highlights international asymmetries and vulnerabilities, structural heterogeneity and internal social inequality as barriers to a buoyant labour market and increasing productivity. Moreover, the concept of sustainable development presented by ECLAC includes overcoming the deficit in citizens' rights in areas such as universal access to basic services, social protection and the exercise of rights, especially economic, social and cultural ones. Although the concept of sustainable development has been widely validated since it was formally introduced in the Brundtland Report (1987), its use has been extended and diversified; this has given rise to confusion and challenges from different angles.<sup>7</sup>

The concept of sustainable development used in this report comprises three dimensions. First, the heritage of nature, which consists of a base of ecosystems capable of reproducing themselves over time, satisfying the space and natural resources requirements of new generations and ensuring global and local natural equilibriums which, if disrupted, could have disastrous consequences for all or part of the planet and its inhabitants. Second, the capital legacy, which includes not only its traditional economic forms (productive, technological and financial) but also human, social and cultural capital. The latter have been defined in various ways, but for the purposes hereof they are defined as follows, respectively: (i) individual capacities for social performance (nutrition, health and education are fundamental goals); (ii) trust in others; and (iii) the codes of conduct that facilitate peaceful, creative and fruitful interaction between people. Third, civic heritage, which is grounded in institutional mechanisms for achieving formal and substantive social equality designed to ensure respect for human rights, including economic, social and cultural rights, for all people, regardless of natural differences relating to biology, family and social background, upbringing or individual decisions.

Sustainable development requires progress in all three dimensions in order to be regarded as such. Otherwise, it turns into stagnation, development that is spurious because it is exclusive, or fragile development which does not provide the material foundations for survival. This approach to sustainability, which is expanded to the point that it can be referred to as social sustainability (not only environmental or economic sustainability, although it includes these two aspects) is not new. For example, a comparative study on the social sustainability of cities defined sustainability as "development that is compatible with the harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging

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<sup>6</sup> There are many other possible definitions; for some studies it may even be unnecessary or inappropriate to define the term. For example, in the study by Cuervo (2011) it was concluded that the theoretical debate on the concept of territory showed that territory is versatile, multidimensional and subject to multiple scales, which means that it has to be malleable and flexible. It was therefore decided that a precise definition of the concept of territory was unnecessary and not appropriate. This is not the case in this report, however, which requires a precise, concrete definition of territory.

<sup>7</sup> See the revision of this critique in Giddens (2009).

social inclusion, with improvements in the quality of life for all segments of the population” (Polèse and Stren, 2000, p. 16).

The comprehensive definition of development entails theoretical complexities and practical difficulties beyond the purpose of this report, which is not to examine the concept in depth or measure development. The aim of this report is to identify where the relations between population and territory overlap with sustainable development. The message behind this definition is that the report does not look just at the links between the spatial redistribution of populations and economic growth or improved living conditions. It also analyses the links with ecosystem development, fulfilment of rights, the accumulation or disaccumulation of social capital and social governance, on different geographical scales.

These definitions should be complemented by the space for interaction between the three fundamental concepts. This includes the economic activities carried out by the population in a given area, the institutions (in the sociological sense), rules, standards and habits created by the population which govern it in a given territory and the reinforcing or conflicting relations between population, territory and sustainable development. Moreover, these concepts —which constitute the pillars of analysis— materialize in the form of tangible processes such as urbanization, spatial redistribution of the population, urban sprawl and the expansion of the demographic frontier. All these processes will be examined in this report, not only from the demographic point of view but also from other perspectives. This distinction is important in the case of urbanization, since its economic and sociocultural dimensions tend to stand out more than its demographic aspects. That said, the initial analysis of urbanization will look at the growth in the urban share of the population, before considering the increase in urban production, distribution, consumption and way of life as secondary issues.

With regard to the interlinkages between population, territory and sustainable development, numerous recent publications by various United Nations bodies have emphasized the links between the spatial distribution and mobility of populations and sustainable development (UNDP, 2009; World Bank, 2008; UNFPA, 2007; UN-HABITAT, 2008). Population settlement and movement have a direct impact on ecosystems, which means that the spatial distribution and mobility of populations is a driving force behind ecosystem alteration and transformation. International migration and mobility have become increasingly important and visible in recent years and have additional implications by linking States. However, the effects are not linear, nor are they automatically positive or negative. This is because they depend on a range of factors including the size and characteristics of the population, how the ecosystem is occupied and used, production and consumption patterns, technology and the absorption and replacement capacity of the ecosystem.

Moreover, the spatial distribution and mobility of a population, including international migration, is linked interactively with sustainable development. Historically, a scattered population was linked to rurality, primary production and limited access to services, technology and knowledge. By contrast, population concentration has favoured production and technological advances and boosted the knowledge economy and an expansion of services. In addition, it brought down the cost of basic and social services by means of coordinated networks, promoted access to public goods and spaces and facilitated the extension and exercise of citizenship.

These stylized facts highlight the positive impact of urbanization on sustainable development but omit the following effects:

- (i) Sustainable development in turn triggers deconcentration, partly as a result of technological progress —which facilitates coordinated remote production; instant, virtual interaction and

exchanges; and physical movement by land and air (enabling people to live and work in different places, for example)— and partly because areas become so concentrated that ecosystems, infrastructure and governance reach their maximum capacities. This weakens the historical link between development and population concentration (especially concentration in large cities) but does not mark a return to the isolated scattering of the past. Instead, it indicates a more diversified link between sustainable development and the scale and complexity of cities and urban networks.

- (ii) Population concentration also entails adversity, since it puts excessive strain on the ecosystem occupied, overloads productive chains beyond operational limits, saturates infrastructure networks and exhausts or collapses social institutions and markets created for smaller populations. In many cases these are not inevitable problems but rather challenges that can be overcome, albeit temporarily, if concentration is gradual, the economy is sound and there is sufficient technical capacity, governance and public policy planning.
- (iii) Concentration has ambiguous, complex links with several key issues currently on the sustainable development agenda, such as global warming and climate change. Concerning these issues, the dark side of urbanization is usually stressed<sup>8</sup> because urban activities are greenhouse gas-emission intensive (although this depends on the income, conduct, technology and even the age structure of each city) and population grouping in coastal cities exposes people to greater risks as sea levels rise. But studies have shown that, by concentrating the population, cities leave land available to capture these gases and have the capacity to substantially reduce their emissions by using appropriate technologies and standards.<sup>9</sup>

In principle, internal migration contributes to sustainable development by enabling people to move to areas that are more prosperous, dynamic and productive with better employment and income prospects. In addition, relocation within countries is a basic human right that should be guaranteed and protected. In fact, internal migration is a strategy used by communities, households and individuals to tackle adversity, build up resources, achieve social mobility and seek out more comfortable, pleasant surroundings. International migration is based on the same logic, since flows tend to originate in less developed countries and head in the direction of more developed countries. International migration normally meets labour needs in developed economies, creates or increases the income of migrants, generates a source of revenue for the countries of origin (remittances to families in particular) and eases the pressure on resources and the labour market in those countries. Seasonal mobility fulfils the production needs of certain sectors that require a large workforce during specific periods of the year (such as agricultural harvests). As a result, it contributes directly to the production of countries and enables numerous workers to gain employment. Commuting also fulfils the function of connecting workers to jobs but its rationale, determinants and consequences differ considerably from those applicable to migration and seasonal migration, to the extent that it is not relevant to sustainable development.

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<sup>8</sup> Urbanization can lead to an increase in projected emissions by more than 25%, particularly in developing regions, mainly through effects on labour supply (O’Neill and others, 2010).

<sup>9</sup> See, for example, Martine and others (2008). Even the study by O’Neill and others (2010) indicates that the higher productivity of urban labour evident in household surveys implies that urbanization tends to increase economic growth. However, other studies find that, controlling for income, urban living can be more energy efficient. See also Romero-Lankao and Dodman (2011).

The above description is clearly biased towards the potential of population mobility to promote sustainable development and improve living conditions. As a result, it masks the adverse effects that mobility could have on sustainable development and the life-paths of migrants and their families. The potential damage includes: (i) movement from poor regions to rich regions can increase territorial inequalities and erode the human resources base in poor regions (poverty trap), thereby compromising their sustainable development options; (ii) migration may not be absorbed in the destination places in a sustainable manner and could result in economic, social or environmental imbalances; (iii) migrants may not succeed in actually improving their living conditions because conditions are not better in the destination place or because they encounter barriers; (iv) international migrants in particular can be subjected to abuse, humiliation, discrimination, segregation, xenophobia or resentment from natives, who are afraid that they will be displaced or replaced by newcomers; and (v) migrants can face difficulties and barriers in trying to integrate and settle in a different sociocultural context, and this stress can take a toll on their physical and mental health or general social performance.

It is not unintentional that this second chapter (which constitutes a conceptual frame of reference for the report) closes by contrasting the potential and risks of population mobility and spatial distribution for sustainable development of different territories. The report is primarily descriptive, and it therefore systematizes, presents and analyses the most recent evidence to give an up-to-date assessment of the issue based on that evidence. But it also makes proposals, which is a central dimension of this work. The proposals made are in line with the public policy proposals and reflections of ECLAC and refer to key issues for the Commission, such as achieving greater equality, the protection and exercise of rights, strengthening production, environmental protection and improved governance. Both the potential and the risks of each proposal are taken into account, as are the conditions required to implement the proposals effectively. Proposing a set of policies and measures that create benefits for an entire population is not an easy task, and interventions often have adverse effects on certain groups and entail risks of collateral damage, negative externalities or dangerous consequences. The subject covered in this work is a complex one. For that reason, the aim is to anticipate both the positive outcomes and the potential risks of the proposals made.



## Chapter III

**MIGRATION AND SPATIAL REDISTRIBUTION OF THE POPULATION: GENERAL TRENDS AND SPECIFIC INTERRELATIONSHIPS**

Several factors interact in a complex manner to determine the pattern of population distribution within a territory. Foremost among them are the ecological and topographical base, which makes the territory suitable for human settlement, and economic, social and political forces, which enhance the value of those spaces for people. This interaction of factors has cumulative effects and, as a result, the current situation and future outlook are at times decisively influenced by the past. Thus, the existing pattern of population distribution over the territory does not arise from the potential and “natural” advantages of each area, but rather from a complex series of decisions that have contributed to a territory’s material, social and cultural endowment.

Without delving deeply into the complexities of this process, this document offers a detailed and novel description of the spatial distribution of the population, which, from the demographic viewpoint, is determined by three factors. The first is internal and international migration. Whenever migration movements occur and generate migratory balances other than zero, the resulting population redistribution, other things being equal, produces a gain in the demographic weight of the areas with net immigration and a loss in those with net emigration. The second factor is the natural growth differential which, again, other things being equal, raises the representation of the areas with above-average growth and reduces that of areas with below-average growth. The third factor relates to the processes of annexation, reclassification, redefinition and modification of borders, which, irrespective of the action of the two previous forces, alter the relative demographic weight of the different territories within a country.

Microdata from population censuses, the main source of information for this study, have been used to arrive at new findings relating to overall migration trends and their aggregate impact on the spatial distribution of the population.

First, an overall reduction in migration intensity has been observed in the region (see table III.1). This trend is corroborated by data from the 2010 round of censuses, although these data also reveal exceptions as in the case of Panama, which recorded a higher gross mobility rate in 2010 than in 1990, albeit a lower one than in 2000 (see table III.2).<sup>1</sup> These data are used in table 3.2 to show age-standardized findings for this rate, in order to determine to what extent this downtrend is attributable to a change in the age structure.<sup>2</sup> The findings speak for themselves, insofar as the standardized rates maintain the trend of the observed rates.

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<sup>1</sup> The gross mobility rate refers to the total number of internal migrants during the reference period (which depends on the reference entity used, that is major administrative divisions (MADs) or minor administrative divisions (MIADs), divided by the number of persons registered in the census who were exposed to the risk of having been an internal migrant during the reference period. As this is an annual rate, the numerator is divided by the number of years in the reference period. It is normally expressed per thousand. For further details, see Rodríguez and Busso (2009).

<sup>2</sup> Migration shows a high degree of age-selectivity (a fact documented by Rodríguez and Busso (2009)), given that it occurs more frequently among youth. Thus, the migration rate is directly affected by changes in the age structure that lead to a change in the proportion of the young population (“composition effect”). Demographic transition implies changes in the age structure that can exogenously influence the trend in the gross mobility rate. This effect is checked through standardization by applying internal migration rates by five-year age groups to a given population (the initial population); the result (the standardized rate) is no longer affected by the change in the age structure.

Table III.1  
**LATIN AMERICA AND THE CARIBBEAN: INTERNAL MIGRANTS BY MIGRATION TYPE,  
 1990 AND 2000**  
*(Percentages)*

Census round	Absolute or lifelong migration		Recent migration (within the last five years)	
	MAD <sup>a</sup>	MIAD <sup>b</sup>	MAD	MIAD
1990	17.5	34.2	5.1	12.6
2000	17.7	35.2	4.0	8.7

**Source:** J. Rodríguez, “Spatial distribution, internal migration and development in Latin America and the Caribbean”, *CEPAL Review*, No. 96 (LC/G.2396-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2008, p. 141.

<sup>a</sup> Major administrative regions.

<sup>b</sup> Minor administrative regions.

Table III.2  
**ECUADOR, PANAMA AND MEXICO: OBSERVED AND AGE-STANDARDIZED  
 GROSS MOBILITY RATE**  
*(Per thousand)*

**A. 1980 and 1990**

Country	1980				1990			
	Reference population	Internal migrants between MADs <sup>a</sup>	Observed rate	Standardized rate	Reference population	Internal migrants between MADs	Observed rate	Standardized rate
Ecuador	6 710 228	568 556	<b>84.7</b>	<b>84.7</b>	8 312 119	482 335	<b>58.0</b>	<b>57.7</b>
Panama					2 021 564	88 529	<b>43.8</b>	<b>43.8</b>
Mexico					66 501 519	3 468 508	<b>49.6</b>	<b>49.6</b>

**B. 2000 and 2010**

Country	2000				2010			
	Reference population	Internal migrants between MADs <sup>a</sup>	Observed rate	Standardized rate	Reference population	Internal migrants between MADs	Observed rate	Standardized rate
Ecuador	10 743 574	562 717	<b>52.4</b>	<b>53.1</b>	12 853 717	608 582	<b>47.3</b>	<b>48.9</b>
Panama	2 421 143	153 658	<b>63.5</b>	<b>64.1</b>	2 937 455	165 047	<b>56.2</b>	<b>55.1</b>
Mexico	85 275 006	3 784 323	<b>44.4</b>	<b>44.8</b>	99 794 866	3 502 007	<b>35.1</b>	<b>36.3</b>

**Source:** Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC), and special processing of 2010 censuses.

<sup>a</sup> Major administrative regions.

The potential causes of this fall range from a gradual reduction in the relative magnitude of rural-urban migration (see chapter IV) to the replacement of migration by commuting<sup>3</sup> and new forms of virtual interaction. Overall, this trend and its determinants are the subject of discussion in the different existing theoretical frameworks for understanding internal migration (Rodríguez, 2007). A recent global study (Bell and Muhidin, 2009) confirms this trend not only in the case of Latin America but also in several other world regions. This is therefore a global phenomenon and its causes, including the three mentioned above, are also undoubtedly of global origin.

Two additional determinants should be underscored in the case of Latin America (Rodríguez and Busso, 2009). One of them is the steady increase in international emigration, which may, in some cases, act as a substitute for internal migration in selected regions of the countries. The second concerns the end or the suspension of the three major public programmes of spatial redistribution of the population, which played a very important role in the Latin America from the 1950s to the 1980s, as will be discussed in chapters V and VI. Several Latin American countries had programmes which encouraged—and at times even forced—mass population shifts to sparsely populated areas; the elimination of these schemes in the 1990s did away with one of the drivers of internal migration in the region.

This fall in the intensity of internal migration can lead Governments and opinion pollers alike to underestimate the extent of migration trends. In this document, however, it is noted that internal migration is still occurring on a large scale, its profile is changing and imposing new challenges, and its qualitative impacts, which will be measured using new procedures, are highly significant for sending and receiving areas.

Consistent with the above-mentioned trend is a new finding: the lessening of the redistributive effect that internal migration has on the population of the territory. At the aggregate (i.e. national) level, this effect can be measured using two indices: the migration effectiveness index and the aggregate net migration rate.

The migration effectiveness index compares the sum of migration balances of all entities (in absolute values so that they do not cancel each other out) with the sum of gross migration of all entities. This ratio provides an estimate of migration effectiveness as a force for population redistribution in the territory, which is maximized when flows are not counteracted by counterflows, i.e. when a given entity or entities receive only immigrants and another or others record only emigrants.

But this effectiveness is measured in relation to actual migration figures and thus does not take into account the amount of migration that is essential for its redistributive effect. In other words, migration may be very effective as a mechanism for population redistribution in a particular country yet ultimately still have a small redistributive effect because migrants account for only a very small proportion of the total population. Thus, the second index, the aggregate net migration rate, is used to capture this total redistribution effect. This is done by dividing the sum of gross migrations of each entity (major administrative division (MAD) or minor administrative division (MIAD)) by the total population at risk of migrating.<sup>4</sup>

The calculation of both indices reveals the absence of a clear pattern in the case of migration effectiveness, but suggests a definite reduction in the population redistribution effect between MADs. This reduction is linked to the decline in migration intensity (see table III.3). In fact, the census results from the 2010 round, which are available for three countries (Ecuador, Mexico and Panama), point to a continuing downtrend in the migration redistribution effect.

<sup>3</sup> Refers to regular movements whether for work or study purposes.

<sup>4</sup> For further details on the calculation and interpretation, see Bell and Muhidin (2009).

Table III.3  
**LATIN AMERICA (19 COUNTRIES): OVERALL MIGRATION EFFECTIVENESS INDEX  
 AND AGGREGATE NET MIGRATION RATE BETWEEN MAJOR ADMINISTRATIVE  
 DIVISIONS BY COUNTRY**

Country	Overall migration effectiveness index				Aggregate net migration rate			
	1980	1990	2000	2010	1980	1990	2000	2010
Argentina			11.0				0.7	
Bolivia (Plurinational State of)		23.8	28.8			2.7	3.4	
Brazil		25.4	17.6			2.0	1.2	
Chile	27.0	10.5	5.8		3.2	1.3	0.7	
Colombia		19.5	17.1			3.1	1.5	
Costa Rica	15.0		13.2		2.0		1.5	
Cuba			39.3				1.7	
Dominican Republic			25.2				2.1	
Ecuador	51.6	28.1	30.9	14.2	8.7	3.3	3.2	1.4
El Salvador		48.1	15.7			4.6	1.0	
Guatemala		35.3	27.9			1.8	1.6	
Honduras	34.6		31.9		3.4		2.7	
Mexico		33.5	27.5	19.2		3.3	2.4	1.3
Nicaragua		33.6	21.1			2.4	1.0	
Panama		20.2	51.3	46.0		1.8	6.5	4.9
Paraguay	33.4	36.5	25.0		7.2	6.7	3.8	
Peru		28.7	29.7			4.9	3.2	
Uruguay	21.2	22.9			3.2	3.0		
Venezuela (Bolivarian Republic of)			25.9				2.6	

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC), and special processing of 2010 census databases relating to Ecuador, Mexico and Panama.

These results confirm the validity of examining the links between population, territory and sustainable development without limiting this endeavour, as in the past, to the extent of migration flows. Indeed, the reduction in internal migration should not be construed as a loss of relevance because, as shown here, these trends have implications that go far beyond the impact on the spatial redistribution of the national population.

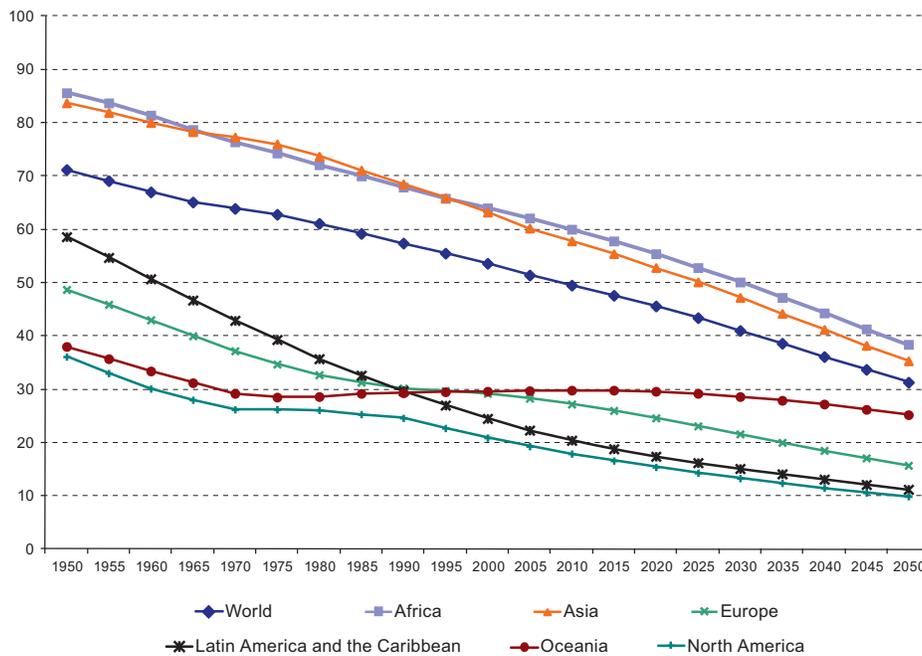
## Chapter IV

## THE RURAL ENVIRONMENT: SWEEPING CHANGES, PERSISTENT INEQUALITY AND EMIGRATION

### A. RURAL POPULATION TRENDS AT THE INTERNATIONAL AND REGIONAL LEVELS

In the mid-twentieth century, slightly over 70% of the world population lived in rural areas. Africa and Asia had the highest percentages, at over 80%, whereas around 59% of the population of Latin America and the Caribbean lived in rural areas. At under 49%, Europe, Oceania and North America had the lowest percentages. In the following decades, the percentage of the population in rural areas fell off sharply, especially in the Latin American and Caribbean region, which now has one of the lowest levels of rurality (20.4% in 2010), although North America still has the lowest of all (18%). Whereas Europe and Oceania had the lowest percentages in the 1950s, their rural populations now represent nearly 30% of the total (see figure IV.1). In the decades to come, the relative size of the rural population will continue to decline throughout the world, and North America and Latin America and the Caribbean will continue to have the lowest percentages, with the rural population representing around 10% of the total.

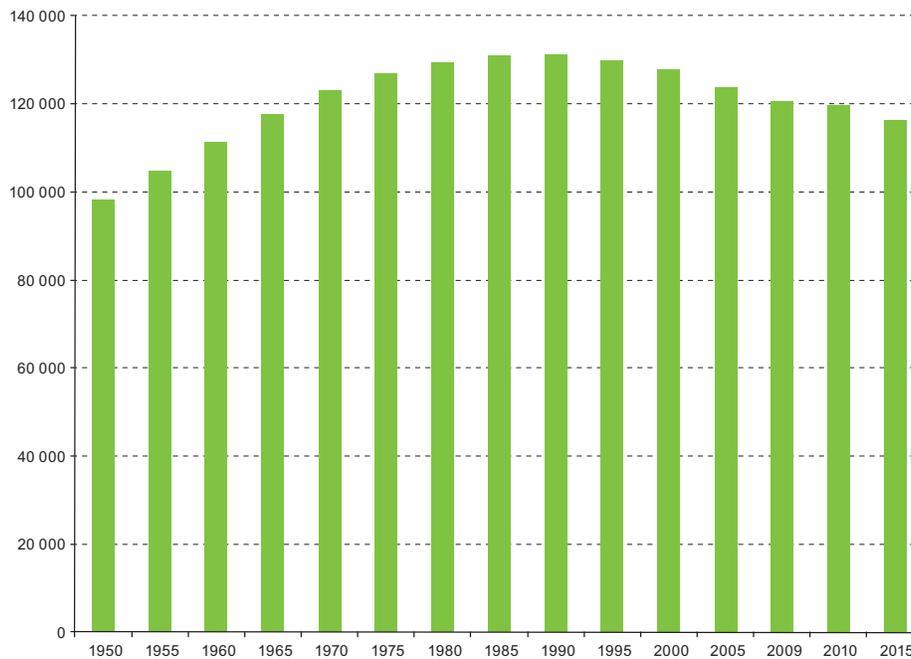
Figure IV.1  
RURAL POPULATION, BY MAJOR WORLD REGIONS, 1950-2050  
(Percentages)



Source: United Nations, World Population Prospects: The 2010 Revision [online] <http://esa.un.org/unpd/wpp/index.htm>.

While the rural population of Latin America and the Caribbean has indeed decreased in relative terms, in absolute terms it has more or less levelled out at between 110 million and 130 million (see figure IV.2). The most striking aspect of this trend is that, in the space of roughly 50 years, Latin America and the Caribbean have gone from being a predominantly rural region to an urban one. The range of different factors underlying this outcome will be analysed in this chapter.

Figure IV.2  
**LATIN AMERICA AND THE CARIBBEAN: TOTAL RURAL POPULATION, 1950-2015**  
 (Thousands)



Source: United Nations, *World Population Prospects: The 2010 Revision* [online] <http://esa.un.org/unpd/wpp/index.htm>.

Defining what is urban and what is rural is methodologically challenging because it is difficult to align the different types of numeric, political/administrative, locational, functional and other criteria that are involved. Researchers have heatedly debated the ways in which these terms should be defined for quite some time. The various criteria used to define the rural population are examined in box IV.1, where the main sources of information for population studies are also discussed. For the purposes of the analysis presented here, the rural population will be defined as it is in population censuses, although other measurements will also be covered.

Since 1950, the Latin American countries have transitioned, to a greater or lesser degree, from predominantly rural societies to ones in which the great majority of the population resides in urban areas. In 1950, more than 60% of the population lived in rural areas in 13 out of 20 Latin American countries; in Haiti, Guatemala and the Dominican Republic, the figure was over 75%. By the 2000s, that had all changed: the rural population accounted for less than 60% of the total in all the countries of the region. The countries with the highest percentages were Haiti (59%), Honduras (54.5%) and Guatemala (54%), while Brazil (19%), Chile (13%), Argentina (9.5%), the Bolivarian Republic of Venezuela (9.5%) and Uruguay (8.2%) were below the regional average (table IV.1).

## Box IV.1

**GRADIENT-BASED DEFINITIONS AND ESTIMATES OF THE RURAL POPULATION**

Population censuses are one of the chief sources of information used in demographic studies and, as here, in the study of the rural population. The definitions of “urban” and “rural” used in censuses vary a great deal, however, at times even from one census to another in the same country. As a result, the question of the international comparability of census figures used in cross-country analyses and in population estimates and projections is sometimes a controversial one.

The criteria used in censuses to classify population groups as urban or rural include numerical parameters according to which a settlement is defined as urban if it has a given number of inhabitants (e.g. 1,000, 1,500, 2,000, 2,500), a specified number of contiguous dwellings or a given population density within a defined area, with the zones that do not meet those requirements being defined as rural on a residual basis. There are also administrative parameters, whereby the capital or seat of government of a local administrative district (e.g. parish, municipality, canton) is defined as urban and everything else as rural. In some cases, a combination of criteria is used. For example, some countries use a mixture of administrative and locational parameters and determine which areas are to be categorized as urban based on a combination of political/administrative factors (capital or seat of the municipal government, for example) and the presence of certain types of basic infrastructure, blocks and some public utilities, with everything else being defined as rural. Others combine numeric and functional criteria, with urban areas being defined on the basis of a minimum number of inhabitants and the availability of basic infrastructure for the delivery of public services; here again, rural areas are defined residually. Still others combine numeric criteria with parameters relating to the sectoral composition of the economically active population (see table 1). As can be seen from the following table, over the past 50 years many of the countries have changed the criteria they use for this purpose, while others have maintained the same criterion. For example, Argentina, the Bolivarian Republic of Venezuela, Mexico and the Plurinational State of Bolivia have all used a numeric criterion, although the numeric threshold that they use differs and, in some cases, has also differed from one census to the next within the same country. Brazil, the Dominican Republic, Ecuador, Haiti and Uruguay, on the other hand, define their urban populations on the basis of a political/administrative criterion. Others have used a mixture of criteria, as in the cases of Costa Rica, which combines a political/administrative criterion with an infrastructure-based standard, and Chile, which has used numeric and functional (production activity) criteria in its last two censuses.

Table 1  
**LATIN AMERICA: CENSUS DEFINITIONS OF URBAN AND RURAL POPULATION GROUPS,  
BY PRIMARY AND SECONDARY CRITERIA, 1950-2000**

Secondary/primary criteria	Size of population	Infrastructure/services	Production activity	Political/administrative status
<b>Size of population</b>	Argentina Bolivia (Plurinational State of) Mexico Puerto Rico Venezuela (Bolivarian Republic of)	Chile (1970) Cuba (1970, 1981, 2002) Guatemala (1950) Honduras (1961, 1974, 1988, 2001) Nicaragua (1963, 1971, 1995, 2005) Panama	Chile (1992, 2002) Nicaragua (1963, 1971)	Colombia (1964, 1973) Nicaragua (1995 y 2005) Peru (1972, 1981, 1993, 2007) Guatemala (2002)
<b>Infrastructure/services</b>	Cuba (1953)			El Salvador (2007)
<b>Locational criteria</b>	Chile (1982)	Chile (1960)		
<b>Political/administrative status</b>	Peru (1940)	Costa Rica Paraguay (1962) Peru (1961)	Chile (1952)	Brazil Colombia (1951, 1985, 1993) Dominican Republic Ecuador El Salvador (1950, 1961, 1971, 1992) Guatemala (1964, 1973, 1981, 1994) Haiti Honduras (1950) Jamaica Nicaragua (1950) Paraguay (1950, 1972, 1982, 1992, 2002) Uruguay

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of Jorge Rodríguez, “Distribución espacial de la población de Latin America and the Caribbean: tendencias, interpretaciones y desafíos para las políticas públicas”, *Población y desarrollo series*, No. 32 (LC/L.1831-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2002. United Nations publication, Sales No. S.02.II.G.137.

The countries of the region thus use differing criteria for estimating the size of the rural population, and membership in that population is a residual demographic category, since the countries start by determining which areas are urban and estimating the size of the urban population on that basis, with everyone that is left over being classified as rural.

## Box IV.1 (concluded)

In addition, since the cut-off levels are low and since density or remoteness are not used as criteria, many population groups that live in what are essentially rural areas (with a scattered population) are classified as residing in urban areas. None of the countries uses population density or the distance from towns as explicit criteria either, even though they are often associated with the economic and geographical dividing lines between urban and rural areas (Rodríguez and Meneses, 2011). This classification of the ways in which urban and rural areas are defined therefore fails to settle the controversy, since, once a country has chosen one or more parameters, it must then make other decisions about the specification of its indicators and cut-off points which will have very important operational implications (Rodríguez, 2002). When numerical or political/administrative criteria are used, the corresponding indicators are obvious, but in other cases, such as when, for example, criteria based on locational factors and production activity are used, then the selection may become a subject of heated debate. Thus, no matter what definition is used, difficult decisions have to be made about where to set the cut-off points (Rodríguez, 2002).

Reservations about the accuracy of measurements of rural areas have led to the proposal of some alternative methods. More recent approaches focus on setting aside this kind of demographic definition of rurality and replacing it with one in which rural areas are viewed as territories, as a spatial category that is chiefly defined on the basis of population density, remoteness and economic activity (Dirven, 2011). Rural territories are then seen as being characterized by low population density, remoteness and a predominance of primary economic activities. This territorial approach also focuses on discerning the heterogeneity of rural areas, of the interactions among them and between them and urban areas, and the way that these relationships evolve. In order to achieve this, it becomes necessary to make the shift from dichotomic measurements to gradient-based measurements or rurality indices, such as the following:

- (i) *A combined density/economic-activity gradient*: A different approach to estimating “rurality” is to use a combination of population density and the share of agricultural employment. Density is determined by measuring the population in the next-smallest administrative division after municipal districts (minor administrative divisions) --referred to as “areas of analysis”-- using census microdata and digital census maps. Economic activity is incorporated at the lower level, which is generally the level of the units used to collect census data. This is the level at which small areas in which at least 35% of the economically active population (EAP) is employed in agriculture are identified. These areas are then aggregated at the level of areas of analysis. This makes it possible to determine, for each area of analysis, what percentage of all small areas have at least 35% of their EAP employed in the agricultural sector. Candia (2011) takes a somewhat different approach by combining information on population density and agricultural employment with the level of unmet basic needs (UBN) in the different categories of areas of analysis. This yields two important findings: (a) the extent of unmet basic needs increases as population density decreases; and (b) the extent of unmet basic needs increases as the percentage of the EAP employed in agriculture rises.
- (ii) *A multi-variable rural-urban gradient*: Saborío and Rodríguez (2008) use geographic information systems (GIS) and satellite imagery restitution tools developed by Arce and Samudio (2008) to construct a rurality gradient that merges environmental information, information on land use, geographical data (distance to roads and towns) and economic information (the share of employment accounted for by agriculture). They first develop a rurality index that combines information on land use and remoteness. This information is then synthesized into a rural-urban gradient which is then supplemented with information on the employment status of the economically active population. This gradient-based approach marks a departure from the idea that rurality is something that transitions linearly into urbanity. Furthermore, since poverty is not a variable that is included in any of the original indices, it also leaves behind the idea that “rural” can be equated with “poverty” or “backwardness”.

Nonetheless, as will become evident in the discussions presented in this chapter, the persistence of social inequalities associated with the urban-rural dichotomy used in censuses and surveys is a powerful argument for its validity, and it will therefore be used in this study as well.

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of Jorge Rodríguez, “Distribución espacial de la población de Latin America and the Caribbean: Tendencias, interpretaciones y desafíos para las políticas públicas”, *Población y desarrollo series*, No. 32 (LC/L.1831-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2002. United Nations publication, Sales No. S.02.II.G.137; Economic Commission for Latin America and the Caribbean (ECLAC), “Urbanization prospects”, *Demographic Observatory*, No. 8 (LC/G.2422-P), Santiago, Chile, 2009. United Nations publication, Sales No. E/S.10.II.G.57; A. Rodríguez and J. Meneses, “Transformaciones rurales en Latin America y sus relaciones con la rural population”, paper presented at the Expert Meeting on Population, Territory and Sustainable Development, Santiago, Chile, 16-17 August 2011; M. Dirven, “El empleo rural no agrícola: tendencias, interpretaciones y políticas”, paper presented at the Expert Meeting on Population, Territory and Sustainable Development, Santiago, Chile, 16-17 August 2011.

Of course, the speed with which the relative (and, in some cases, absolute) decline in the rural population has occurred has varied across countries and over time. Five countries— Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile and Uruguay— had negative growth rates for their rural populations for 1950-2000. Argentina, Chile and particularly Uruguay are the countries whose urbanization processes are the most long-standing, as they have been predominantly urban for much longer and the rates of decline in their rural population growth figures have been sharper from much earlier on. In contrast, the Plurinational State of Bolivia, Colombia, Cuba and Peru have registered positive growth rates for their rural populations in 1950-2000. Even so, their mean annual growth rates have been quite low, at less than 1%, and this is underscored when those rates are compared to the growth rates for these countries' urban populations, which have been fairly high. Another group of countries —the Dominican Republic, Ecuador, El Salvador, Haiti, Mexico, Panama and Paraguay— exhibit slightly higher rural population growth rates (between 1% and 1.8%). The trends in the relative decline of the rural population observed in these countries have differed, however. For example, Ecuador, El Salvador and Mexico began to see low growth rates as early as the 1970s, and those rates have continued to slow even further. In the Dominican Republic, Panama and Paraguay, on the other hand, the rural population's growth rates dropped off steeply in 1990-2000. Finally, in Costa Rica, Guatemala, Honduras and Nicaragua, the growth rates of the rural population are fairly high —above 2% as an annual average— and the percentage of the population living in rural areas during the 2000s in those countries was over 40% (see table IV.1).

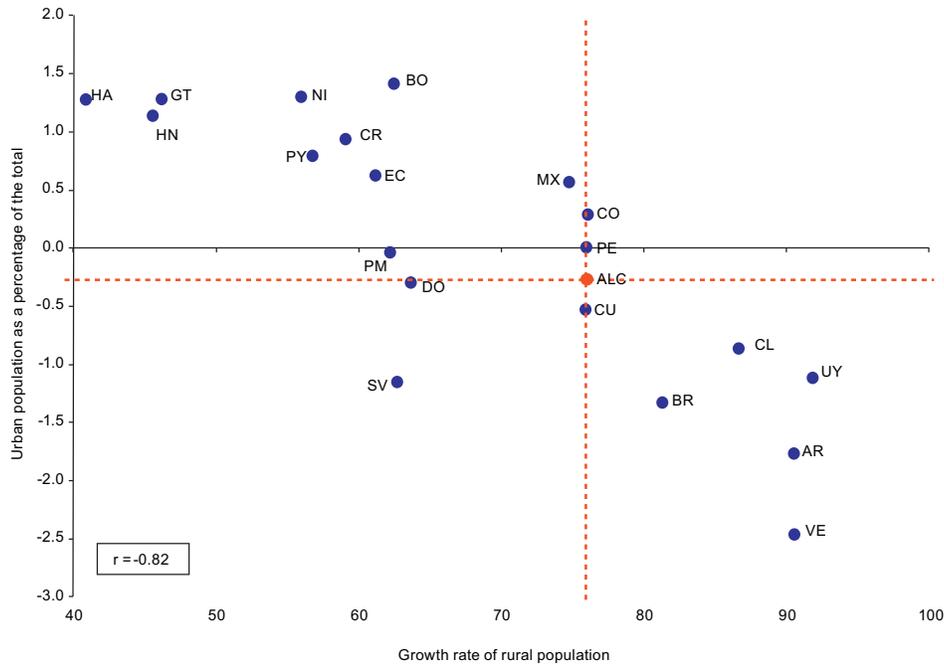
Table IV.1  
**LATIN AMERICA AND THE CARIBBEAN: RELATIVE SIZE AND GROWTH RATE  
 OF THE RURAL POPULATION, 1950-2000**  
*(Percentages and per 100 inhabitants)*

	Rural population						Annual growth rate					
	1950	1960	1970	1980	1990	2000	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	1950-2000
Argentina	37.5	26.2	21.0	17.0	12.8	9.5	-0.9	-0.7	-0.3	-1.3	-1.8	-1.0
Bolivia (Plurinational State of)	66.1	...	58.3	...	42.5	37.6	1.1	...	...	0.1	1.4	0.9
Brazil	63.5	57.0	44.1	32.4	24.7	18.8	1.7	0.6	-0.6	-0.7	-1.3	-0.1
Chile	39.3	31.8	24.9	17.8	16.5	13.4	0.1	-0.6	-0.8	0.9	-0.9	-0.3
Colombia	57.3	47.9	40.9	32.8	29.0	24.0	1.5	1.2	-0.2	0.4	0.3	0.7
Costa Rica	66.5	65.5	59.4	55.5	...	41.0	3.9	2.4	1.7	0.9	...	2.1
Cuba	44.9	...	39.3	31.0	...	24.1	1.4	...	-1.0	-0.5	...	0.2
Dominican Republic	76.1	69.5	60.3	48.0	43.9	36.4	2.6	1.4	0.9	1.5	-0.3	1.2
Ecuador	71.5	64.7	58.6	51.0	44.9	38.9	2.1	2.2	0.9	0.6	0.6	1.4
El Salvador	63.5	61.5	60.5	...	49.6	37.3	2.5	3.3	...	0.8	-1.1	1.1
Guatemala	75.0	66.4	63.6	67.3	65.0	53.9	2.2	1.6	2.7	2.2	1.3	2.0
Haiti	87.8	...	79.8	75.5	...	59.2	1.1	...	0.9	1.3	...	1.1
Honduras	69.0	69.6	62.8	61.3	...	54.5	3.0	1.9	3.1	2.4	...	2.6
Mexico	57.4	49.3	41.3	33.7	28.7	25.3	1.5	1.4	1.2	0.3	0.6	1.0
Nicaragua	65.1	59.1	52.3	...	45.6	44.1	2.1	1.0	2.9	...	1.3	2.2
Panama	64.0	58.5	52.4	49.6	46.3	37.8	2.0	1.8	1.8	1.9	0.0	1.5
Paraguay	65.4	64.2	62.9	57.2	49.7	43.3	2.5	2.6	1.4	1.7	0.8	1.8
Peru	64.7	52.6	40.5	34.8	29.9	24.1	1.2	0.5	0.8	0.9	0.0	0.7
Uruguay	...	19.0	16.7	12.7	9.2	8.2	...	-0.5	-2.1	-2.4	-1.1	-1.5
Venezuela (Bolivarian Republic of)	52.1	37.5	26.9	20.0	15.6	9.5	0.5	0.0	-0.5	2.2	-2.5	-0.1

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from the Spatial Distribution and Urbanization in Latin America and the Caribbean (DEPUALC) database, 2010.

As a result of the absolute and relative decreases in the rural population during the period under study, given the slowing (and, in some cases, negative) growth rates of the rural population, the differential between the urban and rural rates has been widening (see figure IV.3).

Figure IV.3  
**LATIN AMERICA: GROWTH RATE OF THE RURAL POPULATION DURING THE INTERCENSAL PERIOD 1990-2000 AND PERCENTAGE OF THE POPULATION LIVING IN URBAN AREAS, 2000 CENSUS**  
*(Per 100 inhabitants, percentages)*



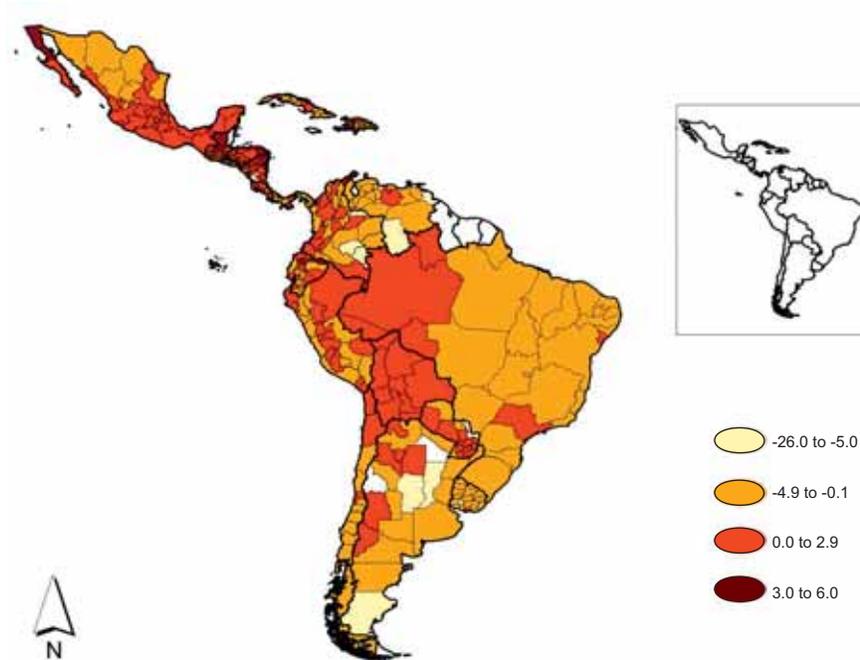
**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from the Spatial Distribution and Urbanization in Latin America and the Caribbean (DEPUALC) database, 2010.

As can be seen from figure IV.3, there is a clear-cut negative correlation between the percentage of the population living in urban areas and the growth rate of the rural population. The countries in the upper left-hand corner of the figure are undergoing a full-fledged urbanization process, as their urban populations are still smaller than the regional mean and the growth rates of their rural populations are high. These countries should really be divided into two groups, however. The first group, which includes Guatemala, Haiti and Honduras, still have quite small urban populations and still exhibit high rural population growth rates; the second group, made up of the Plurinational State of Bolivia, Costa Rica, Ecuador, Nicaragua and Paraguay, are further along in the urbanization process, although they still have a long way to go, since their rural population growth rates are still considerably higher than the regional average. The countries in the lower right-hand quadrant (Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile and Uruguay) have the largest urban populations in relative terms, as their urbanization processes are at a quite advanced stage, and their rural population growth rates are therefore negative. Four countries —Colombia, Cuba, Mexico and Peru— are quite close to the regional mean and have relatively small rural populations (less than 25% of the total population). Colombia, Mexico and Peru have a positive rural population growth rate, however, whereas Cuba has a negative one. Finally, the

Dominican Republic, El Salvador and Panama have negative rural population growth rates, but the percentage of the total population represented by the urban population is below the regional mean.<sup>1</sup>

The absolute and relative declines in the rural population are also evident at the subnational level. The DEPUALC database indicates that growth rates for the rural population in major administrative divisions have also been low. In fact, in 1950-2000, one out of every four major administrative divisions had a negative growth rate for its rural population, and 28% of all such divisions had average annual growth rates of below 1%. These low rates are primarily attributable to net rural-to-urban population transfers (chiefly through migration), although they are also partially due to reclassifications and the annexation of some areas. While there are also some major administrative divisions in which the rural population grew by an annual rate of 5% or more in 1950-2000, they are the exception to the rule. Map IV.1 depicts the more recent situation in terms of intercensal growth rates for 1990-2000. Here, it can be seen that a large number of major administrative divisions had negative rural population growth rates, while the only divisions to have positive growth rates for that period were in some Meso-American and Andean countries and Brazil.

Map IV.1  
**LATIN AMERICA AND THE CARIBBEAN: INTERCENSAL RURAL POPULATION  
 GROWTH RATES, 1990-2000<sup>a</sup>**  
*(Per 100 inhabitants)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial Distribution and Urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

<sup>a</sup> The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

<sup>1</sup> The regional mean shown in figure 4.3 is based on census information provided by the countries that conducted censuses in the 2000s, whereas the regional mean shown in figure 4.1 is based on United Nations estimates and projections (2009).

The sustained decline in the rural population at both the national and subnational levels is in part a reflection of the disadvantageous position within society occupied by much of the rural population and of the backwardness of a still significant portion of peasant agricultural activities. This subject is explored in greater depth in box IV.2.

#### Box IV.2

#### UNDERDEVELOPMENT OF RURAL AREAS AND RURAL-TO-URBAN MIGRATION

The steady decrease in the rural population in relative terms is the result of a range of historical, economic, social and other factors that have prompted members of that population to migrate to urban areas.

First of all, there is a historical legacy of inequality in land distribution and access in rural areas. This situation stems from the fact that, for centuries, there have been two different types of agricultural production activities in these areas: one based on large landholdings, which is now associated with development models designed to take advantage of the production and export potential of vast tracts of farmland; and another linked to small-scale rural plots of land held, for the most part, by campesinos. The latter are often both productively and technologically backward, since they have not consistently enjoyed the institutional support needed to compete with big business. The expansion of large-scale producers of soybeans, sugar cane and maize for use in biofuels, non-native forests, cereals and other crops has helped to push small-scale farmers and landholders out of rural areas and into nearby cities.

The distribution of the widely scattered rural population makes for a poor level of connectivity between rural areas and urban centres, with the resulting problems in rural areas of gaining access to basic services, educational and health-care institutions and, more recently, information and communications technologies (ICTs). All of these types of services are difficult to deliver in rural areas and, with some exceptions, government programmes tend to focus on urban areas. The rural population therefore has much less access to these services than the urban population does. This is another factor that has prompted rural inhabitants to migrate to cities and towns.

Poverty is one of the most intractable features of rural areas and, although it has subsided somewhat in recent years, poverty rates in rural areas are generally higher than in the urban areas of the countries of the region and are even more so among indigenous groups, where the majority of the population is poor. Rural areas where much of the population lives in extreme poverty have long been excluded from mainstream society and have lagged far behind in terms of development. As a result, and despite the policies implemented by some countries to try to help the inhabitants stay in their home regions, these areas have seen a considerable reduction in their population.

Indigenous groups are one of the especially vulnerable sectors of the population that have been displaced by the establishment of mining, energy and forestry projects on their ancestral lands. More recently, internal conflicts in some countries (e.g. Colombia and Peru in the 1980s and 1990s) and environmental and ecological disasters (droughts, floods, earthquakes, hurricanes) have obliged large numbers of campesinos and other rural inhabitants to move to the cities in search of shelter and safety.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), *Social Panorama of Latin America, 2007* (LC/G.2351-P), Santiago, Chile, May, 2007. United Nations publication, Sales No. S.07.II.G.124; José Graziano da Silva, Sergio Gómez and Rodrigo Castañeda (eds.), *Boom agrícola y persistencia de la pobreza rural. Estudio de 8 casos*, Rome, Food and Agriculture Organization of the United Nations (FAO), 2009; Jorge Rodríguez, “Distribución espacial de la población de Latin America and the Caribbean: Tendencias, interpretaciones and desafíos para las políticas públicas”, *Población and desarrollo series*, No. 32 (LC/L.1831-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2002. United Nations publication, Sales No. S.02.II.G.137.

### 1. Natural population growth in rural areas

Thus far, this discussion has focused on the slow and even negative overall growth of the rural population as compared to the increase in the urban population. The next step is to determine whether this decline in the rate of rural population growth is due to a steady reduction in the natural growth rate for the rural population (i.e. the difference between the fertility and death rates) or to net out-migration from rural areas. This can be tested quite simply, since the areas where the natural growth rate is highest should be, on average, those that have tended to account for an increasingly larger proportion of the population during the reference period (Rodríguez, 2002).

However, answering this question, which should be possible to do simply by comparing natural population growth rates with the total growth of the rural population, is not as easy as it might seem at first glance because the lack, discontinuity or unreliability of data on natural growth rates at subnational levels makes it quite difficult to develop a regional profile. Nonetheless, the information that can be obtained from censuses (which can be used to calculate indirect estimates of fertility rates and child mortality rates at the subnational level for urban and rural areas), population and health surveys (which provide general fertility and overall child mortality rates for urban and rural areas) and vital statistics can be used to provide a rough estimate of the natural population growth rate in rural areas.

The available information (see tables IV.2, IV.3, IV.4, and IV.5) indicates that rural areas systematically have higher general fertility rates than urban areas do and therefore have high enough birth rates to more than offset their higher mortality rates. Consequently, their natural growth rates are higher than the national and urban averages. An additional factor is that the demographic transition has advanced more rapidly in urban areas than in rural ones, since the latter generally have a lower level of socioeconomic development and poorer living conditions.

The relative shrinkage of the rural population and its slow growth rate over a number of decades are thus accounted for by net rural-to-urban transfers. As will be seen in the following section, out-migration from rural zones directly accounts for the continued urbanization of the region. In fact, in the absence of rural-urban migration, the region would have become more ruralized, since its rural areas have a higher natural population growth rate.

## 2. Rural-urban transfers

For decades now, the subject of migration from rural to urban areas, including major cities, has figured prominently in the debate and research on migration as well as acting as a central consideration in public policy measures taken in this connection (ECLAC, 2007 and 2009; Rodríguez, 2004). The issue receives renewed attention each time further findings are reported regarding the major role played by the ongoing net transfer of population from the countryside to the cities in the decrease in the rural population in both absolute and relative terms and in the region's continuing urbanization. Earlier studies (Lattes, Rodríguez and Villa, 2002; Rodríguez, 2002; Villa, 1992) have shown, however, that the influence exerted by these two types of flows has changed significantly in the last two decades.

These net rural-urban transfers can be measured directly and indirectly via population censuses. Direct measurements do not provide us with a regionwide picture of the situation, however, since only some countries include a specific question about migration between urban and rural areas in their battery of migration-related queries. The other option is to use an indirect technique known as the "survival ratio" method.<sup>2</sup> The results obtained using this method are shown in table IV.6.

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<sup>2</sup> Indirect estimates arrived at using survival ratios and census data are based on a compensatory equation so that net migration can be estimated residually. This method requires data on the total and urban populations, disaggregated by age and sex, and mortality estimates which are derived from comparisons of survival ratios. These estimates provide no more than an indication of the scale of net migration taking place during a given time period (usually the period between one census and the next) (Villa, 1992).

Table IV.2  
**LATIN AMERICA (SELECTED COUNTRIES): OVERALL BIRTH AND GENERAL FERTILITY  
 RATES FOR URBAN AND RURAL AREAS, AROUND 1990 AND 2000**

Country	Survey year	Overall birth rate <sup>a</sup>				Total fertility rate <sup>b</sup>			
		Total	Urban	Rural	Rural/ urban ratio	Urban	Rural	Total	Rural/ urban ratio
Bolivia (Plurinational State of)	2008	25.5	23.5	28.4	1.2	2.8	4.9	3.5	1.8
	2003	28.1	26.0	31.5	1.2	3.1	5.5	3.8	1.8
	1998	30.7	27.6	35.8	1.3	3.3	6.4	4.2	1.9
	1994	34.3	31.7	37.4	1.2	...	...	...	...
Brazil	1996	21.6	20.7	25.1	1.2	...	...	...	...
	1991	26.9	24.0	31.0	1.3	...	...	...	...
Colombia	2010	18.0	17.4	20.0	1.1	2.0	2.8	2.1	1.4
	2005	20.4	19.0	24.3	1.3	2.1	3.4	2.4	1.6
	2000	22.7	21.6	25.7	1.2	2.3	3.8	2.6	1.7
	1995	26.5	24.9	29.8	1.2	2.5	4.3	3.0	1.7
	1990	25.8	25.8	25.9	1.0	2.5	3.6	2.8	1.4
Dominican Republic	2007	20.4	20.0	21.4	1.1	2.3	2.8	2.4	1.2
	2002	25.2	25.3	24.9	1.0	2.8	3.3	3.0	1.2
	1999	23.5	24.1	23.0	1.0	2.7	3.4	2.9	1.3
	1996	27.7	26.4	29.8	1.1	...	...	...	...
	1991	30.3	29.7	30.8	1.0	...	...	...	...
Ecuador	2004	...	...	...	...	2.8	3.8	3.2	1.4
	1987	...	...	...	...	3.5	5.3	4.2	1.5
Guatemala	2008	...	...	...	...	2.9	4.2	3.6	1.4
	2002	...	...	...	...	3.3	5.2	4.4	1.6
	1998-1999	38.1	34.9	40.3	1.2	4.1	5.8	5.0	1.4
	1995	37.3	31.7	40.6	1.3	3.8	6.1	5.1	1.6
	1987	...	...	...	...	4.0	6.4	5.5	1.6
Guyana	2009	22.5	17.3	24.4	1.4	...	...	...	...
El Salvador	2008	...	...	...	...	2.0	3.0	2.5	1.5
	2002	...	...	...	...	2.3	3.5	2.8	1.5
	1985	...	...	...	...	3.3	5.4	4.2	1.6
Haiti	2005-2006	28.4	25.1	30.3	1.2	2.8	5.0	4.0	1.8
	2000	32.7	30.2	33.8	1.1	3.3	5.8	4.7	1.8
	1994-1995	34.1	30.9	35.7	1.2	3.3	5.9	4.8	1.8
Honduras	2005-2006	26.7	24.3	28.9	1.2	2.6	4.1	3.3	1.6
	2001	...	...	...	...	3.3	5.6	4.4	1.7
Nicaragua	2006	...	...	...	...	2.2	3.5	2.7	1.6
	2001	26.9	23.8	31.0	1.3	2.6	4.4	3.2	1.7
	1998	29.4	26.1	34.2	1.3	2.9	5.0	3.6	1.7
Paraguay	2008	...	...	...	...	2.2	3.0	2.5	1.4
	2004	...	...	...	...	2.5	3.7	2.9	1.5
	1990	32.8	29.9	35.7	1.2	3.6	6.1	4.7	1.7
Peru	2000	21.6	18.6	27.0	1.5	2.2	4.3	2.8	2.0
	1996	27.5	24.3	33.8	1.4	2.8	5.6	3.5	2.0
	1991-1992	28.0	23.5	39.1	1.7	2.8	6.2	3.5	2.2

**Source:** Macro International Inc., “Demographic and Health Surveys, Measure DHS Statcompiler” [online] <http://www.measuredhs.com>.

<sup>a</sup> Number of births per 1,000 inhabitants.

<sup>b</sup> Number of children per woman.

Table IV.3  
**LATIN AMERICA (SELECTED COUNTRIES): GENERAL URBAN AND RURAL  
 FERTILITY RATES, CENSUSES OF THE 1990s AND 2000s**  
*(Number of children per woman)*

Country	Census	Urban	Rural	Total	Rural/urban ratio
Bolivia (Plurinational State of)	1992	4.0	6.4	4.9	1.6
	2001	3.3	5.8	4.0	1.8
Brazil	1991	2.4	4.3	2.8	1.8
	2000	2.2	3.5	2.4	1.6
Chile	1992	2.5	3.0	2.6	1.2
	2002	2.0	2.3	2.1	1.2
Ecuador	1990	3.0	4.9	3.7	1.6
	2001	2.5	3.6	2.9	1.4
Guatemala	1994	3.7	6.5	5.4	1.8
	2002	3.4	6.1	4.6	1.8
Honduras	1988	3.7	6.8	5.3	1.8
	2001	2.9	5.1	3.9	1.8
Panama	1990	2.4	4.1	3.0	1.7
	2000	2.3	3.9	2.8	1.7
Paraguay	1992	3.7	6.0	4.6	1.6
	2002	3.3	5.3	3.9	1.6
Venezuela (Bolivarian Republic of)	1990	3.2	5.1	3.4	1.6
	2001	2.7	4.3	2.8	1.6

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of indirect estimates of fertility rates calculated using census microdata.

Table IV.4  
**LATIN AMERICA (SELECTED COUNTRIES): INFANT MORTALITY RATES IN URBAN  
 AND RURAL AREAS, CENSUSES OF THE 1990s AND 2000s**  
*(Per 1,000 live births)*

Country	Censuses	Urban	Rural	Total	Rural/urban ratio
Brazil	2000	37.7	50.5	41.3	1.3
	1991	53.3	69.1	58.2	1.3
Chile	2002	12.4	13.6	12.6	1.1
	1992	19.7	26.2	20.8	1.3
Costa Rica	2000	13.4	15.9	14.6	1.2
	1984	18.5	27.2	23.7	1.5
Ecuador	2001	30.3	54.2	40.6	1.8
	1990	47.3	86.1	65.3	1.8
Guatemala	2002	41.7	53.9	49.0	1.3
	1994	56.6	74.0	68.6	1.3
Honduras	2001	28.7	49.4	40.8	1.7
	1988	55.0	76.9	69.0	1.4
Mexico	2000	27.4	39.5	32.7	1.4
	1990	37.1	63.7	45.8	1.7
Panama	2000	16.9	38.7	27.0	2.3
	1990	18.4	42.4	31.4	2.3
Paraguay	2002	40.2	40.6	40.5	1.0
	1992	46.8	48.8	47.9	1.0

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of indirect estimates of mortality rates calculated using census microdata.

Table IV.5  
**LATIN AMERICA (SELECTED COUNTRIES): INFANT MORTALITY RATES IN URBAN  
 AND RURAL AREAS BASED ON DEMOGRAPHIC AND HEALTH SURVEYS  
 CONDUCTED IN THE 1990s AND 2000s**  
*(Per 1,000 live births)*

Country	Year of survey	Infant mortality rate			Rural- urban differential
		Total	Urban	Rural	
Bolivia (Plurinational State of)	DHS 2008	57.9	42.8	74.6	1.7
	DHS 2003	67.8	57.4	81.4	1.4
	DHS 1998	73.5	53.0	99.9	1.9
	DHS 1994	86.6	68.8	105.8	1.5
	DHS 1989	90.6	73.9	106.6	1.4
Brazil	DHS 1996	48.1	42.4	65.3	1.5
	DHS 1991	93.3	81.0	106.9	1.3
	DHS 1986	84.0	72.9	106.0	1.5
Colombia	DHS 2010	18.1	18.2	17.6	1.0
	DHS 2005	22.1	20.3	25.9	1.3
	DHS 2000	24.4	21.3	31.1	1.5
	DHS 1995	30.8	28.3	35.2	1.2
	DHS 1990	27.0	28.9	23.4	0.8
	DHS 1986	38.7	37.5	40.7	1.1
Ecuador	RHS 2004	31.6	30.3	33.2	1.1
	DHS 1987	65.2	51.6	77.7	1.5
El Salvador	RHS 2008	21.1	15.6	26.1	1.7
	RHS 2002	29.0	29.6	28.6	1.0
	DHS 1985	70.9	57.6	82.4	1.4
Guatemala	RHS 2008	34.4	27.2	38.5	1.4
	RHS 2002	43.7	34.6	48.3	1.4
	Interim DHS 1998-1999	49.1	49.0	49.1	1.0
	DHS 1995	57.2	45.4	62.9	1.4
	DHS 1987	79.2	66.6	84.2	1.3
Guyana	DHS 2009	34.8	45.1	31.7	0.7
Haiti	DHS 2005-2006	69.9	57.6	76.0	1.3
	DHS 2000	89.4	87.0	90.5	1.0
	DHS 1994-1995	87.1	83.2	88.9	1.1
Honduras	DHS 2005-2006	28.9	24.1	32.5	1.3
	RHS 2001	35.2	30.5	38.2	1.3
Jamaica	RHS 2008	19.4	18.5	20.3	1.1
Mexico	DHS 1987	56.4	41.6	79.2	1.9
Nicaragua	RHS 2006	33.2	29.1	36.9	1.3
	DHS 2001	35.3	27.7	42.8	1.5
	DHS 1998	45.2	40.0	51.1	1.3
Paraguay	RHS 2008	24.7	26.4	22.4	0.8
	RHS 2004	26.0	24.7	27.5	1.1
	DHS 1990	35.9	32.6	38.7	1.2
Peru	DHS 2000	43.2	28.4	60.3	2.1
	DHS 1996	49.9	34.9	71.0	2.0
	DHS 1991-1992	63.7	47.5	89.9	1.9
	DHS 1986	79.1	55.8	106.1	1.9
Dominican Republic	DHS 2007	32.5	33.1	31.4	0.9
	DHS 2002	34.6	33.1	37.5	1.1
	DHS 1999	36.8	35.3	39.1	1.1
	DHS 1996	48.6	45.8	52.6	1.1
	DHS 1991	44.4	37.2	54.4	1.5
	DHS 1986	70.1	71.9	67.9	0.9
Trinidad and Tobago	DHS 1987	30.5	34.2	27.9	0.8

Source: Macro International Inc., "Demographic and Health Surveys, Measure DHS Statcompiler" [online] <http://www.measuredhs.com>.

Table IV.6  
**LATIN AMERICA: NET MIGRATION FROM RURAL TO URBAN AREAS AND RELATIVE  
 SCALE OF RURAL-URBAN MIGRATION, 1980-2010**

Country	Net migration rate (per 1,000)				Relative scale of rural-urban migration (percentages)							
	1980-1990		1990-2000		2000-2010		1980-1990		1990-2000		2000-2010	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Argentina	5.1	5.3	3.0	2.9			29.0	29.0	25.2	24.6		
Bolivia (Plurinational State of)	21.2	23.9	8.0	8.4			55.5	57.0	24.9	30.4		
Brazil	10.6	11.4	7.6	8.6			40.3	41.9	37.5	38.1		
Chile	1.5	1.7	3.5	3.2			8.0	11.2	22.6	23.1		
Colombia	7.3	8.5	7.6	6.8			30.6	34.0	31.2	32.8		
Costa Rica	15.5	15.8	18.9	18.5			42.7	45.1	45.7	46.3		
Cuba	13.2	13.6	4.9	5.2			61.4	59.4	44.8	45.2		
Dominican Republic	6.9	6.7	13.1	13.7			27.9	27.9	42.6	52.3		
Ecuador	15.1	16.0	10.5	10.2	5.3	5.4	45.5	47.8	38.0	38.6	24.2	24.6
El Salvador	15.4	15.1	16.6	16.5			56.0	55.1	81.5	76.1		
Guatemala	10.6	11.9	25.8	26.3			39.9	42.1	55.3	54.9		
Haiti	29.0	12.1	32.6	12.8			48.3	50.9	58.2	118.5		
Honduras	17.5	20.7	14.2	15.6			42.2	49.0	41.5	45.6		
Mexico	8.6	8.4	7.0	7.1	3.1	5.1	40.1	34.3	32.4	32.9	20.5	30.6
Nicaragua	8.4	9.5	4.7	6.2			23.8	27.7	28.9	37.8		
Panama	10.5	11.6	16.7	15.9	6.4	6.8	36.3	40.6	51.5	51.9	30.7	32.7
Paraguay	18.6	21.0	13.0	14.4			45.6	50.6	42.4	48.0		
Peru	8.1	9.0	7.1	7.7			32.3	35.0	38.3	41.1		
Uruguay	3.7	3.2	1.2	1.5			37.5	35.5	30.9	35.9		
Venezuela (Bolivarian Republic of)	5.4	6.3	4.9	4.9			20.6	23.3	19.2	20.4		

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), using the intercensal survival ratio method.

The figures on net rural-urban transfers given in table IV.6 show how much net rural-urban migration rates vary across countries. Some countries (Costa Rica, the Dominican Republic, El Salvador, Guatemala, and Honduras) have high net migration rates, and their rural-urban migration flows are still significant. Other countries (Argentina, the Bolivarian Republic of Venezuela, Chile and Uruguay) have seen their net migration rates decline or remain low, and the relative scale of rural-urban migration has tended to diminish. Thus, the movement of people from rural to urban areas continues to make a significant contribution to the growth of the urban population in the first group of countries. In the second group of countries, on the other hand, migration from the countryside to the cities accounts for a small and declining portion of the expansion of the urban population, although it must be remembered that, if the natural growth rate for the urban population falls to zero, then the influence of rural-urban transfers will increase again, since it would then be virtually the only factor spurring the growth of the urban population.

There are, of course, some exceptions. The rural population in Panama, for example, represents a smaller and smaller percentage of the total, but rural-to-urban transfers continue to account for a significant proportion (over 30% in 2010) of the growth of the urban population. There are also some puzzlingly sharp changes from one decade to the next (in El Salvador, Haiti and the Plurinational State of Bolivia, for example). These findings may warrant further study or may reflect abnormalities attributable to short-run situations or flaws in the methodology.

The net transfer of population from the countryside to the cities is a significant factor in the decline of the rural population, and it has continued to occur even when countries have reached a high degree of urbanization. Rural-to-urban migration continues to have a considerable impact on rural zones not only in terms of declining population growth rates (and the depopulation of many areas) but also on the ageing of the population, since the scale of out-migration is closely correlated to age, with younger members of the population being the most likely to emigrate (see box IV.3).

Box IV.3  
**THE AGEING OF THE RURAL POPULATION**

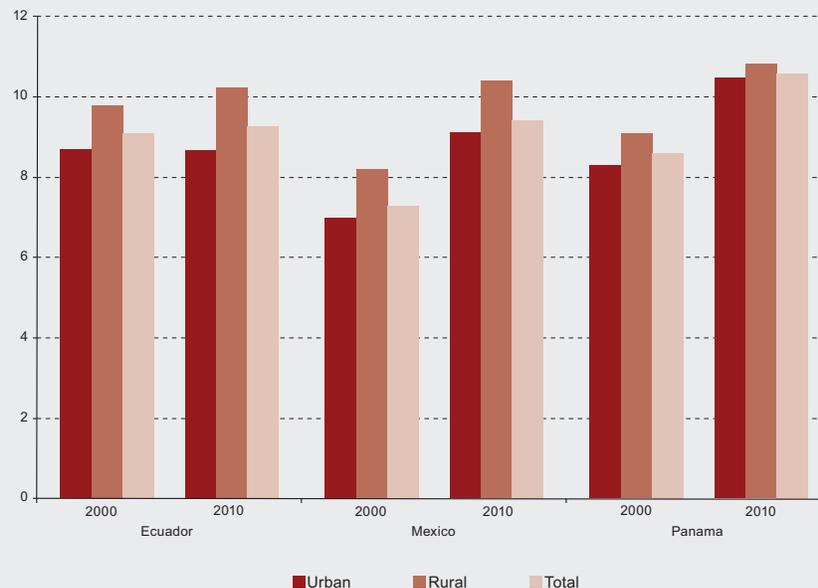
The ageing of the population in the region has been an uneven process due to the heterogeneity of the demographic transition. Population ageing has proceeded more rapidly in some countries, as shown by the short amount of time that elapsed before the older population came to represent over 10% of the total, and more slowly in others, where the ageing process is still in its early stages.

Of course, national figures on the percentage of the population made up of older persons do not tell analysts anything about the differences that may exist from one area to the next within a given country, such as those found between urban and rural zones. This is largely because the demographic transition has been quite different in urban areas than it has been in rural ones, as population ageing has occurred much more rapidly in the former. This divergence is not as evident as it would otherwise be because of the effect of internal migration and particularly migration from the countryside to the cities. Although this is not the largest migration flow in most of the countries of the region (flows between urban areas are larger at this point), it remains larger than the flow in the other direction and therefore entails a net transfer of population from the countryside to the cities.

Since most of the people who migrate from rural to urban areas are of working age, the population in the countryside is ageing more quickly than it otherwise would (strictly speaking, there is a much higher dependency ratio than there would be in the absence of rural-to-urban migration), and there has been a marked increase in the middle-aged population in the cities, together with a disproportionate number of women (ECLAC, 2003b). This does not mean, however, that the urban population is younger than the rural population. In fact, the available data indicate that the rate of population ageing in urban areas is virtually the same as the nationwide rate (see figure 1). Because the demographic transition is at a much more advanced stage in urban areas, the percentage of older persons in those areas should be greater; but this is not the case because so many young people migrate from rural to urban areas. The male/female selectivity of internal migration flows in the countries of Latin America and the Caribbean—with more women than men migrating (Rodríguez, 2004)—is reflected in the differentials between the ageing of the male and female populations in urban and rural areas.

Figure 1 bears out what has been said. The percentage of the population aged 60 or over rose in the three countries for which census information is available for both decades, and the percentage of the population represented by older persons is higher in rural areas than in urban ones in all of them as well.

Figure 1  
**LATIN AMERICA: PERCENTAGE OF THE POPULATION COMPOSED OF PERSONS AGED 60 OR OVER,  
BY AREAS OF RESIDENCE, 2000 AND 2010 CENSUS ROUNDS**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from the Regional System of Indicators on Ageing.

There has also been a change in the male/female composition of rural-to-urban migration flows. Women used to make up a majority of these migrants, and this was reflected in the female selectivity seen in regional migration up until the 1980s (Rodríguez, 2004). In almost all of the countries, however, the preponderance of women migrants began to lessen in the years stretching between the 1980s and the 2000s. The figures from the 2010 census round do not confirm the continuation of this pattern, however.

## **B. RURAL SETTLEMENT PATTERNS**

It is no easy task to describe and analyse rural settlement patterns in any depth because it is virtually impossible to identify and list each and every one of the rural settlements in the countries of the region. There are, however various approaches that can be used to take a close look at rural settlement patterns and to gather evidence that will enable us to put together a clear picture of the situation.

### **1. An analytical approach based on density gradients**

One of the ways to get around this urban/rural dichotomy is to understand rurality on the basis of a gradient that runs from densely populated areas to more distant ones in which the population is more widely scattered. With this approach, it is not the actual number of inhabitants that matters but rather an area's population density at a territorially disaggregated level (Candia, 2011; Rodríguez and Meneses, 2011; Chomitz, Buys and Thomas, 2004). The two main factors taken into account with this method of measurement are population density and distance, which are of pivotal importance in the implementation of action-oriented policies in rural areas (Candia, 2011). Population density influences the cost of implementing public investment and social policy, while areas with low population densities may not be attractive to private investment because of problems of economies of scale, distance costs and low demand; in addition, remoteness has a bearing on the types of economic activities that will be developed in a given area, since transport costs influence decisions about where to site a given type of production activity (von Thünen, 1826; Candia, 2011; Dirven, 2007). Furthermore, the population density of areas of a certain size, municipalities or even census districts does not necessarily equate with the level of dispersion of the population, since there may be areas with the same number of inhabitants and the same population density but whose population is distributed in a completely different way within that area.

The ways in which the different sections of the gradient are classified reflect the existence of differing types of territories, ranging all the way from those that are definitely rural (e.g. dispersed rural) to intermediate categories (concentrated rural, urban periphery) to those that are definitely urban (metropolitan areas and, in general, urban areas with high population densities) (Rodríguez and Meneses, 2011). The criteria to be used need to be defined in such a way as to reflect the existence of various different types of rurality that are constantly changing and interacting and to provide a picture of integrated environments that share and interchange population groups, production complexes, services, natural resources and institutions, some of which are entirely agricultural but that are nonetheless closely linked to nearby cities and population centres. The purpose of developing these types of criteria is to devise the most suitable analytical tools possible for guiding public and private policymaking as it relates to investments, programmes and projects.

Rodríguez and Meneses (2011) compare the sizes of urban and rural populations using alternative definitions. Table IV.7, which provides an overview of this study, shows the percentages of the rural and urban populations in the first two columns based on the official definitions used by the countries of the region. In the next three columns, the table shows the urban and rural populations as defined on the basis of the size of the human settlements concerned. In this section of the table, human settlements having 20,000 or more inhabitants are defined as urban, while an intermediate category corresponds to settlements with between 19,999 and 2,000 inhabitants. The last columns in the table show the estimates calculated by Chomitz, Buys and Thomas (2004), who looked at population density and the distance between the area in question and the closest human settlement with a population of over 100,000. These authors also used an intermediate category for areas that are neither dispersed rural zones (defined as having a density of 150 inhabitants/km<sup>2</sup> or less) nor concentrated urban zones (over 500 inhabitants/km<sup>2</sup> and areas with lower population densities that are less than four hours away from a city with a population of over 100,000). While the criterion of remoteness is an essential consideration in understanding how rural areas function, it is dauntingly difficult to compile data on travel times; if these data cannot be obtained directly, then a range of criteria need to be used (type of road and road surface, most frequent mode of transport, elevation gradients, difficulty or ease of the terrain, etc.) in order to arrive at a more or less accurate estimate of travel times.

Table IV.7  
**LATIN AMERICA: SIZE OF THE URBAN AND RURAL POPULATIONS AS CALCULATED USING  
 ALTERNATIVE QUANTIFICATION CRITERIA, AROUND 2000**  
*(Percentages of the total population)*

Countries	Government criteria		Modified government criteria			Chomitz, Buitz and Thomas (2004)		
	Rural	Urban	Rural <sup>a</sup>	Intermediate <sup>b</sup>	Urban <sup>c</sup>	Dispersed rural <sup>d</sup>	Intermediate <sup>e</sup>	Concentrated urban <sup>f</sup>
Argentina	10	90	11	13	77	21	27	52
Bolivia (Plurinational State of)	38	62	37	8	54	31	49	20
Brazil	19	81	21	15	65	18	38	44
Chile	13	87	12	11	77	8	33	59
Colombia	24	76	25	10	65	11	36	53
Costa Rica	41	59	41	10	49	21	29	50
Cuba	24	76	24	21	55	1	49	50
Dominican Republic	36	64	36	11	53	...	100	...
Ecuador	39	61	39	7	54	7	35	58
El Salvador	37	63	39	17	44	...	...	...
Guatemala	54	46	52	17	31	6	55	39
Haiti	59	41	60	6	34	...	100	...
Honduras	55	46	56	11	33	5	52	43
Mexico	25	75	22	17	61	10	39	51
Nicaragua	44	56	45	14	41	17	43	40
Panama	38	62	38	5	57	42	31	27
Paraguay	43	57	46	10	45	32	21	47
Peru	24	76	27	11	62	30	22	48
Uruguay	8	92	13	15	72	40	18	42
Venezuela (Bolivarian Republic of)	10	91	10	15	74	8	37	55
Total regional	...	...	...	...	...	15	37	48

**Source:** A. Rodríguez and J. Meneses, “Transformaciones rurales en Latin America and sus relaciones con la rural population”, paper presented at the Expert Meeting on Population, Territory and Sustainable Development, Santiago, Chile, 16-17 August 2011, and Kenneth Chomitz, Piet Buys and Timothy Thomas, “Quantifying the rural – urban gradient in Latin America and the Caribbean”, *World Bank Policy Research Working Paper*, No. 3634, Washington, D.C., World Bank, 2004.

<sup>a</sup> Human settlements with fewer than 2,000 inhabitants.

<sup>b</sup> Human settlements of between 2,000 and 19,999 persons.

<sup>c</sup> Human settlements with 20,000 inhabitants or more.

<sup>d</sup> Areas with fewer than 150 inhabitants per km<sup>2</sup>.

<sup>e</sup> Differential between dispersed rural and concentrated rural areas

<sup>f</sup> Areas with over 500 inhabitants /km<sup>2</sup> and nearby (not remote) human settlements.

Rodríguez and Meneses (2011) note that there are a number of factors that stand out when countries' official data are compared with measurements based on alternative approaches. Firstly, all of the countries' official figures overestimate the urban population, although the use of the cut-off point of 2,000 inhabitants to define rural areas leads to very similar results to official estimates in terms of the figure for the rural population as a percentage of the total national population. Secondly, the size of the population in human settlements and territories classified as being between rural and urban areas is substantial, especially when using the approach defined by Chomitz, Buys and Thomas. Finally, the percentage of the urban population is also smaller when the approach used by Chomitz, Buys and Thomas is used.

Other authors (Candia, 2011; Rodríguez and Murillo, 2008) have developed slightly different versions of this methodology. The gradient that they use combines population density and the level of employment in agriculture, with the figures for population density being applied directly to digital population maps derived from population censuses.

Density is therefore calculated on the basis of the next-smallest division after minor administrative divisions, with these "areas of analysis"; these areas are identified with the help of microdata and digital census maps. The economic activity variable is incorporated at a lower level, which is generally the unit used for the collection of census data. At that level, all the small areas in which at least 35% of the economically active population (EAP) is employed in agriculture are identified. Then, the units identified on the basis of this criterion are aggregated into areas of analysis. This makes it possible to determine the percentage of all small areas making up the area of analysis in which at least 35% of the EAP is employed in agriculture.

In the classification obtained using the proposed criterion, population groups residing in high-density areas of analysis in which a significant proportion of the population is employed in agricultural activities are categorized as rural (see table IV.8).

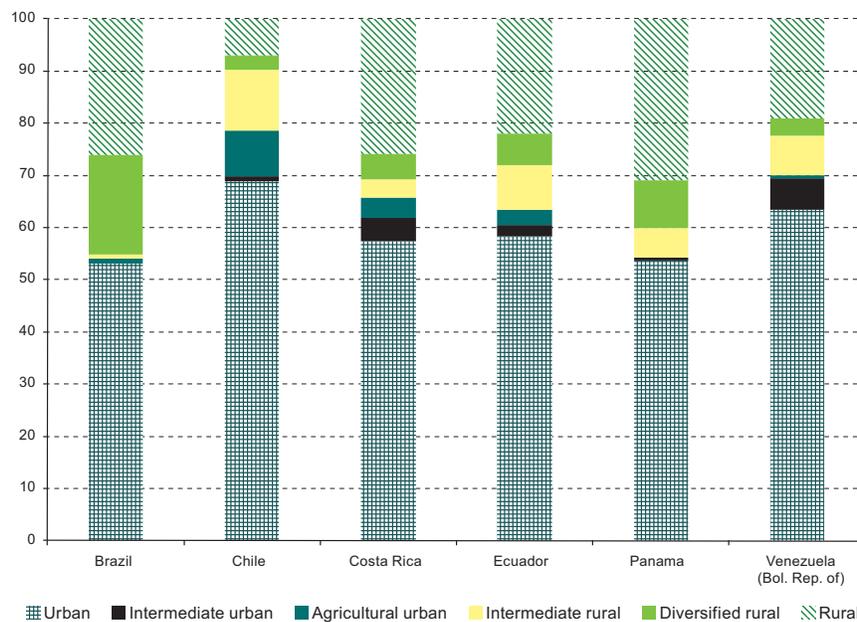
Table IV.8  
**POPULATION DENSITY/ECONOMIC ACTIVITY GRADIENT**

Average density per area of analysis (inhab./km <sup>2</sup> )	Percentage of small areas within the area of analysis in which at least 35% of the EAP is employed in agriculture		
	0% - 20%	20% - 40%	40% - 100%
Less than 50	Low level of agricultural employment and low density (rural plus low level of agricultural employment = diversified rural)	Intermediate level of agricultural employment and low density (transitional rural)	High level of agricultural employment and low density (rural)
50 – 100			
100 – 150			
150 – 500	Low level of agricultural employment and high density (urban)	Intermediate level of agricultural employment and high density (transitional urban)	High level of agricultural employment and high density (urban plus high level of agricultural employment = agricultural urban)
500 – 1 000			
1 000 – 2 500			
2 500 or more			

**Source:** A. Rodríguez and J. Meneses, "Transformaciones rurales en Latin America and sus relaciones con la rural population", paper presented at the Expert Meeting on Population, Territory and Sustainable Development, Santiago, Chile, 16-17 August 2011.

The classification outlined in table IV.8 demonstrates that there is no single, explicit definition of what is urban and what is rural. Instead, there are combinations of areas with high and low population densities that have high, intermediate or low levels of agricultural employment. The different possible urban/rural combinations can be divided into six categories: (i) rural, (ii) transitional rural, (iii) diversified rural, (iv) agricultural urban, (v) transitional urban and (vi) urban. Some of the results of using a classification based on these six categories, which are derived from the combination of two density gradients (population density and agricultural employment as a percentage of the EAP), as shown in table IV.9, are depicted in figure IV.4. That figure indicates that a significant percentage of the population resides in what are defined as diversified rural areas in Brazil (19.1%), while a sizeable proportion of the population lives in intermediate or transitional rural areas in Chile (11.8%), Ecuador (8.5%) and the Bolivarian Republic of Venezuela (7.5%). Chile is the only country in which a fairly large percentage of the population resides in agricultural urban areas (8.8%), and it also has the smallest percentage of its population living in rural areas (7.0%), while the rest of the countries in the sample register figures of around 20% for that category.

Figure IV.4  
DENSITY/ECONOMIC-ACTIVITY GRADIENT, 2000 CENSUS ROUND  
(Percentages)



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC on the basis of A. Rodríguez and J. Meneses, “Transformaciones rurales en Latin America and sus relaciones con la rural population”, paper presented at the Expert Meeting on Population, Territory and Sustainable Development, Santiago, Chile, 16-17 August 2011.

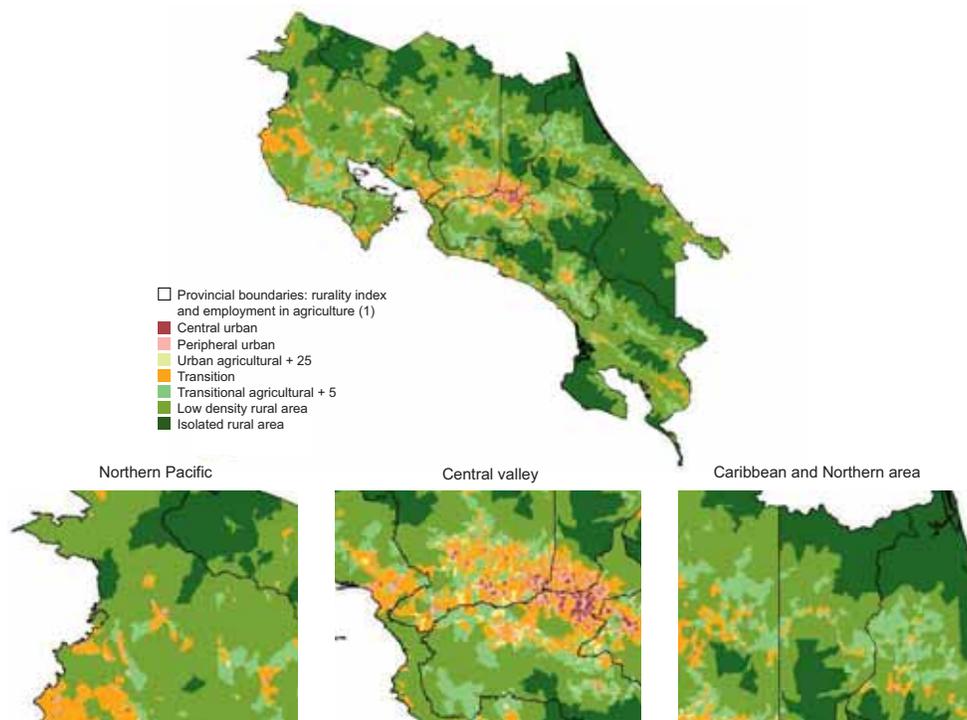
Rodríguez and Saborío (2008) take a more sophisticated approach based on geographic information systems (GIS) and satellite imagery tools developed by Arce and Samudio (2008) to construct a rurality gradient that combines environmental information (land use), geographical information (the distance from roads and towns) and economic data (percentage of agricultural employment). This gradient is then used to develop a rurality index that combines information on land use and remoteness. This information is then synthesized in a rural-urban gradient that is supplemented with information on EAP employment categories (see table IV.9 and map IV.2).

Table IV.9  
**COSTA RICA: DISTRIBUTION OF THE RURAL AND URBAN POPULATION AS MEASURED  
 ON THE BASIS OF OFFICIAL DEFINITIONS AND RURALITY GRADIENTS**  
*(Percentages of the total population)*

Rural-urban categories	Combined gradient	Rural-urban categories	Official definitions	Combined gradient
Urban-central	18.9			
Urban-peripheral	34.0	Total urban	59.0	52.9
Urban-agricultural	4.4			
Transitional	21.0	Total rural	41.0	21.7
Transitional-agricultural	9.6			
Rural-non-remote	10.1	Intermediate		25.4
Rural-remote	1.9			
Total	100.0		100.0	100.0

**Source:** A. Rodríguez and M. Saborío (eds.), *Lo rural es diverso: evidencia para el caso de Costa Rica*, San José, Inter-American Institute for Cooperation on Agriculture (IICA), 2008.

Map IV.2  
**COSTA RICA: RURALITY GRADIENT**  
*(Combination of information on distance to towns and to roads,  
 land use and employment in agriculture)*



**Source:** A. Rodríguez and M. Saborío (eds.), *Lo rural es diverso: evidencia para el caso de Costa Rica*, San José, Inter-American Institute for Cooperation on Agriculture (IICA), 2008.

**Note:** The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

An analysis of the results obtained using this kind of gradient highlights the significant degree of heterogeneity exhibited by rural territories. While, in some areas, the agricultural sector is the major employer, in others, the services sector is also an important source of employment. A spatial continuity pattern similar to the one derived from the land-use model developed by von Thünen (1826) also emerges: the “urban–central” category is almost always adjacent to the “urban–peripheral” category, which is, in turn, adjacent to the “urban–agricultural” category. Among the rural categories, the “rural - remote” category is at one end of the spectrum and is consistently surrounded by the “transitional” rural category. The urban and transitional agricultural rural categories are separated by a transitional category whose hallmark is a high degree of population density.

This indicates that there are strong linkages between the different categories on the gradient. However, given their different characteristics in terms of population density and economic activity, the transition from one category to the next is not necessarily linear. Two non-linear transitions, in particular, appear to be possible: from the “rural–transitional” to the “urban–agricultural” categories, and from the “transitional” category to the “urban–peripheral” category. These gradients also make it possible to identify middle-sized cities outside the central valley, along with their spheres of influence, more clearly.

The conclusions that can be drawn from the application of this approach are that rural territories typically have a low population density, that they are remote and that most of their economic activities are in the primary sector. This approach also makes it clear how important it is to capture the heterogeneity of rural areas, the interaction among different types of rural areas and between them and urban areas, and the way in which these relationships change over time. And in order to do this, dichotomous measurements need to give way to gradient-based measurements or rurality indices (Rodríguez and Meneses, 2011).

## **2. Numerous settlements, disjointedness and the socioeconomic implications**

A majority of the region’s rural population is scattered among a vast number of small settlements. These settlements generally have a low population density and are separated from one another by considerable distances. In addition, the access routes between them are poor.

The remoteness of rural settlements has to do with the travel times and distances separating them not only from large urban centres, but also from one another, since their geographical locations and the size of rural land holdings make it difficult to travel between or to them.

The results of the 2010 census in Mexico illustrate the number and diversity of rural settlements that exist there. Slightly more than 10 million people live in 173,409 settlements with fewer than 500 inhabitants each (see table IV.10). These figures are not very different from those gathered in the 1995 population census, which indicates that somewhat more than 10 million people were living in nearly 185,000 towns of fewer than 500 inhabitants each (CONAPO, 1999, pp. 91 and 93; Ruvalcaba, 2001, p. 8).

Table IV.10  
**MEXICO: NUMBER OF RURAL SETTLEMENTS AND THEIR POPULATION,  
 BY SIZE OF RURAL SETTLEMENT, 2010 CENSUS**

Size of settlement	Number of settlements	Population
Countrywide total	192 245	112 336 538
1- 249 inhabitants	159 820	5 743 745
250 - 499 inhabitants	13 589	4 821 711
500 - 999 inhabitants	9 264	6 506 784
1 000 - 2 499 inhabitants	5 921	8 976 888

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC on the basis of results of the population and housing census of Mexico, 2010 [online] <http://www3.inegi.org.mx/sistemas/TabuladosBasicos/Default.aspx?c=27302&s=est>.

Although these data are incomplete (since they do not cover settlements with fewer than 500 inhabitants for all the countries of the region), they nonetheless provide us with some idea of just how many small towns and villages are scattered over the rural areas of the region. This disperse settlement pattern in rural areas has a negative impact when it is coupled with insufficient transportation routes, modes of transport and communications networks (Rodríguez, 2002). The implications of this situation for these settlements' prospects for sustainable development are quite serious, given the distances separating them from the cities and their infrastructure shortages, particularly in the more remote zones. Rural settlements are separated from the urban centres of gravity by an "economic distance", since the greater the geographic distance between them, the smaller the scale of production. This economic distance is a function not only of the physical distances that exist but also of the transaction costs involved in labour, capital, product and input markets, which have an impact on the development prospects of local activities. Yet another factor to consider is cultural distance (Primi, 2002), or, in other words, differences in concepts, logic, ideas, beliefs, values and language that can contribute to rural communities' social isolation from the closest urban centre and to the isolation of one local settlement or even household from another, given the widely scattered distribution of the rural population in various areas of Latin America.

Towns closer to urban areas may therefore be part of a more diversified sphere of economic activity, whereas more remote towns which interact less in territorial, economic and social terms, may be linked to more extensive activities, if any, and exhibit a lower degree of local economic development, since distance and low population densities are at times insurmountable obstacles for rural areas that are seeking to attract factors of production and promote capacity-building (ECLAC, 2005a).

The scattered distribution and unconnectedness of the rural population also are factors in the failure to meet the population's basic needs since, from a cost-benefit perspective, the delivery and administration of essential services (health care, education, drinking water, sewerage and electricity) are very complex and financially unattractive for supplier firms (Rodríguez, 2002). As we will see later on, the gap between urban and rural areas' access to basic services remains a reality. That gap has narrowed, but urban centres continue to enjoy much greater service coverage. A similar situation exists in terms of education: a large percentage of the school-age population has to go to a city or to a larger town in order to attend secondary school, since most small towns have primary schools only. There is also a differential in terms of access to health care. For example, prenatal and postnatal care in rural areas falls far short of the services provided in urban areas because primary care units are often far away or difficult to access.

Although the inhabitants of some rural areas of the region, especially those that border on large cities or that fall within the sphere of influence of large metropolitan areas, are more likely to have access to modern services and to jobs that are in some way related to urban activity and to live in more accessible locations, many members of the rural population are divorced from that reality, and their daily lives are marked by the time-lag or “backwardness” that is often seen as being typical of rural areas. As shown in box 4.2, however, the roots of this gap between rural and urban areas go far deeper than the scattered pattern of settlement or difficulties of access.

### **3. Peri-urban rural areas: rural-urban interrelationships and how they may shape new types of spatial contexts**

From a regional economic standpoint, rural settlements located in the vicinity of cities may be assumed to have a higher degree of agricultural development owing to the functional integration of these two areas of activity. This functional integration facilitates the creation of service-delivery and infrastructure linkages between urban centres and the surrounding rural areas. Schejtman (1999) contends that the spatially polarized development problems experienced in a majority of developing countries have been brought about by the skewed distribution of national investment and that the solution therefore lies in skewing the distribution of investment in favour of secondary urban centres. By strengthening the positive linkages between smaller urban centres and their rural surroundings (and given the heterogeneity of the agricultural production structure), this approach would place the benefits of investment within the reach of small-scale rural producers. The virtues of this type of functional integration stem from a number of factors: the fact that cities have played an important role in generating and disseminating agricultural technology (Jacobs, 1970); that capital, input, labour and product markets tend to be less imperfect in the vicinity of urban-industrial hubs; and that, as a spillover effect, nearby agricultural enterprises have access to more sophisticated machinery and technologies, have less surplus labour, command better prices for their products and receive greater remuneration for their work (Schejtman, 1999).

Schejtman (1999) also, however, calls for a critical appraisal of whether or not present urban settlement patterns actually help to promote this type of rural development and of what types of measures should be promoted in order to generate its potential benefits. This also means that the analysis of rural development issues needs to be approached from the standpoint of the development status of local economies, that is to say, by focusing on the economic linkages between urban communities and their surrounding agricultural areas and by analysing how the different markets existing at that scale fit in with one another. Schejtman (1999) asserts that this is the only way to tackle the issues posed by changing production patterns, poverty and the environment at a sufficient level of specificity to ensure effectiveness and participation within a given institutional context.

A specific example is provided by Vázquez (2011) in his analysis of how land use has been modified in a number of smaller cities in eastern Paraguay in ways that are reshaping the urban landscape in that country. The linkages that these emerging cities, which are more modern and offer a more diversified range of services, have with rural areas, on the one hand, and with other regional urban centres, on the other, are very close and becoming more so all the time. These cities are a reflection of the strong growth profiles of regional production activities and, above and beyond their identity as urban areas with a defined urban structure, are economic hubs that provide an ideal platform for the expansion of service industries. One of the mainstays for these emerging cities is the communications infrastructure that links the various regions of the country. This reconfiguration is giving rise to a more complex urban model in Paraguay that encompasses Asunción and its metropolitan areas, the older established cities located in border areas and the new agriculturally based cities, which are bringing together a range of

production sectors (i.e. intensive agriculture, family farms and livestock enterprises). This entire process is expedited by the fact that these cities are located in the central portion of the eastern region, where these “agro-cities” serve as a gateway to modern forms of economic activity and opportunities, not only for the urban population, as is to be expected, but especially for the rural population, which is undergoing a period of rapid change that is changing its profile altogether.

Another rural urbanization process, as described by Arias (2005), is bringing about changes in rural labour markets as maquila industries set up operations in the countryside and as low-skilled sectors of the rural population find employment in the services sector. Alongside rural inhabitants, new types of business enterprises are taking part in these processes, which involve new production, marketing and consumption patterns that, while regional in nature, extend beyond the bounds of the traditional rural-urban construct.

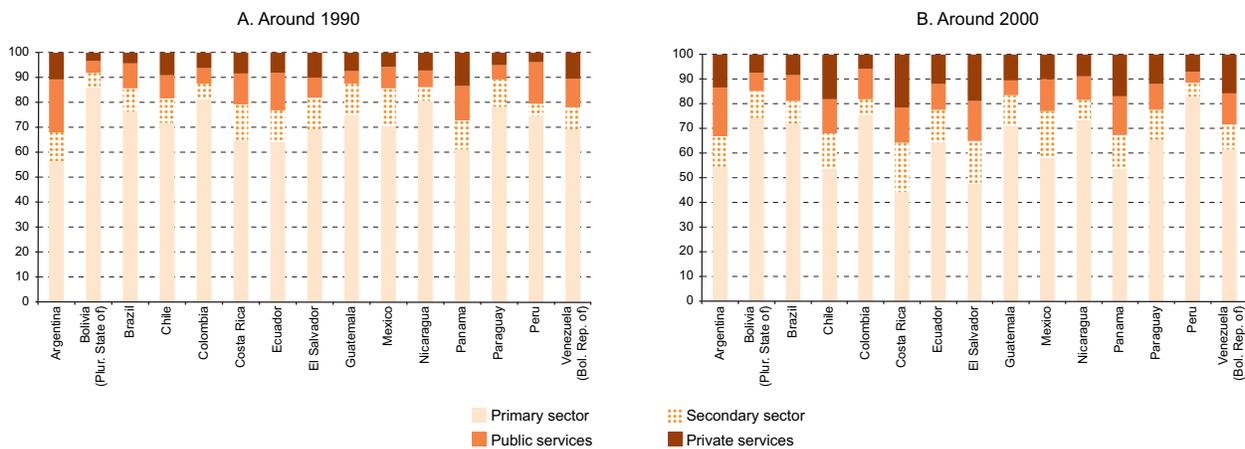
This shift in land use and economic activity in rural areas is bringing about a gradual transition away from agrarian pursuits and towards emerging urban industrial activities or residential patterns; these areas have reached an intermediate stage in this transition involving the establishment of facilities and activities that are no longer tied to the rural economy but instead are more closely associated with urban systems (Prost, 1991). Traditionally rural locations are thus ceasing to be homogenous areas in which everything revolves around agriculture activity and are transitioning towards a more diverse structure involving links of varying degrees with urban economic activities. This brings two different economic systems into contact with one another: on the one hand, the classic production functions identified with farming and ranching, and, on the other, new types of economic activity, whether in the tertiary sector, the leisure industry or rural industrial activities (Ávila, 2009).

These hybrid urban/rural areas are gaining a great deal of ground in the sprawling capital cities of Latin America, but they differ from their counterparts in industrialized countries in that these differentiated forms of land appropriation and use are to be found mainly in peri-urban residential areas (Ávila, 2009). One of the factors that has helped to shape these emerging centres is the urbanization process, which is especially evident along city exit routes; another is the disperse nature of population distribution (Ávila, 2009). One clear example of this type of spatial configuration is provided by the Mexico City Metropolitan Area, where there has been a great deal of development along the main routes to surrounding cities (Puebla, Toluca, Cuernavaca and other burgeoning urban hubs such as Pachuca and Texcoco). Another is the Greater Santiago Metropolitan Area in Chile, which is becoming increasingly closely linked to surrounding rural areas located along the main transportation routes to Rancagua to the south, to San Felipe and Los Andes to the north, and especially to the Greater Valparaíso Metropolitan Area on the coast. The growth of these urban-rural linkages has, however, not only had an impact on fairly poor farming areas, but also on more productive ones. For example, some rural areas in Colombia, Mexico and Ecuador that used to grow maize, beans or vegetables and raise cattle have abandoned those activities in order to grow flowers for the urban and international markets.

Rodríguez and Meneses (2011) say that one of the more significant transformations seen in rural Latin America in the last two decades has been the diversification of the production structure and the effect that this has had on the labour market in terms of the growth of non-agricultural sources of employment for rural residents (i.e. economic activities other than primary-sector agriculture, a category that includes livestock, forestry, hunting and, in most cases, fishing) (Dirven, 2011). These new types of rural employment are extremely varied in terms of the branch of activity concerned (at least some rural residents are working in virtually all sectors of the economy), company size (ranging from one-person microenterprises to transnational corporations that employ hundreds of residents in a given locale) and occupational status (ranging from unpaid family workers to employers).

Non-agricultural employment has been on the rise since at least the early 1990s (see Rodríguez and Meneses, 2011; Dirven, 2011; Schejtman, 1999). In fact, Klein (1992) sifted through 1980 population census data to show that the main source of employment for 24% of the rural population in Latin America was not in the agricultural sector and that this diversification of rural employment into non-agricultural activities was gathering momentum. Both Dirven (2011) and Rodríguez and Meneses (2011) indicate that this trend continued to be reflected in the population census rounds of the 1990s and 2000s, and this is corroborated by the results of household surveys conducted during the past decade.

Figure IV.5  
**LATIN AMERICA AND THE CARIBBEAN (15 COUNTRIES): DISTRIBUTION OF RURAL EMPLOYMENT AMONG THE PRIMARY, SECONDARY AND TERTIARY SECTORS**  
*(Percentages of the employed population around 1990 and 2000 according to census data)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC on the basis of A. Rodríguez and J. Meneses, “Transformaciones rurales en Latin America and sus relaciones con la rural population”, paper presented at the Expert meeting on population, territory and sustainable development, Santiago, Chile, 16-17 August 2011.

The data shown in figure IV.5 demonstrate that the percentage of rural employment accounted for by agriculture rose only in Peru, held steady only in Ecuador and Argentina, and declined in the other 12 countries covered in the study. The sharpest decreases were seen in El Salvador (21.8%), Costa Rica (20.5%), Chile (16.7%), Paraguay (12.8%), Mexico (12.6%) and the Plurinational State of Bolivia (11.1 %). The largest changes of all were in Costa Rica and El Salvador, where employment in agriculture fell to less than 50% according to data for the year 2000; these two countries have also seen the sharpest rise in secondary activities (with increases of 5.7% in Costa Rica and 5% in El Salvador) and in services (up 14.9% in Costa Rica and 16.7% in El Salvador). In Costa Rica, virtually all of the upswing in employment in services is accounted for by the private sector, however, whereas, in El Salvador, the increase is fairly evenly split between public and private services. Chile and Mexico have also witnessed an expansion of employment in the secondary sector (around 4.3%), while employment in services also represents a significant share of the total in Chile (13.6%) and Paraguay (11.4%); in both of these cases, growth in this sector has been concentrated in the private sector.

These figures illustrate the shifts occurring in the production structure in rural areas, which entail the shrinkage of the agricultural sector—and, along with it, employment in agriculture—as countries become more developed. Dirven (2011) points out, however, that there are major stumbling blocks that have to be overcome when transitioning from agricultural employment to employment in non-agricultural activities in rural areas and vice versa. These stumbling blocks are primarily related to the types of assets that are reflected in average educational levels, age, income, sex, geographic location, etc. She also maintains that the highly seasonal nature of the agricultural labour market influences non-agricultural employment in rural areas, since it has an impact both on household consumption and on production inputs and services. The high and low seasons in tourism are just one example. There are, however, other types of non-agricultural employment that are fairly stable throughout the year. Consequently, taken as a whole, non-agricultural employment in rural areas tends to help to smooth out seasonal swings in rural employment and incomes. Another factor to take into account is that the type and distribution of growth in non-agricultural employment will be quite different in areas where agricultural productivity is rising sharply than it will be in more depressed rural areas.

Information and communications technologies (ICTs) have begun to have an impact on various aspects of rural life and economic activity and are opening up countless non-agricultural rural employment opportunities that had not even been thought of before. As will be seen later on, mobile telephony has quickly come into widespread use in rural areas of the countries of the region, and although Internet coverage is still quite limited, a number of the countries are making the expansion of Internet coverage and use an explicit policy objective (Dirven, 2011).

Dirven (2011) draws attention to the increase in the number of people employed in agriculture who reside in what are classified as urban areas, as well as to the increase in rural residents engaged in non-agricultural work. She notes that this latter trend can be attributed in part to the existence of second homes, weekend tourism and the location of primary residences in peri-urban areas, along with the associated linkages. These “reurbanization” processes are continuing to take place in the vicinity of middle-sized or small cities as well. The impacts that these urban enclaves are having include the creation of new jobs for the rural population in the vicinity, although this has resulted in “long-time” inhabitants of these areas leaving their old jobs behind in order to work as gardeners, housekeepers and the like; for the most part, however, the people residing in these closed communities tend to obtain goods and services from nearby cities. Be that as it may, there are opportunities for creating a stronger interrelationship between the two population groups, and this would be likely to create more non-agricultural jobs in those areas as well. Meanwhile, the increase in the number of wage earners in the agricultural sector who live in urban areas can be accounted for by a number of different factors, including inheritance (i.e. people may, for example, not yet have inherited their parents’ land or house or another family member may have done so); strategies for lowering transaction costs and car-pooling as a means of transport to temporary jobs; increased access to services, including transport infrastructure; urban housing subsidies; or simply personal preferences (Dirven, 2002 and 2011). The reasons why there are a significant and apparently growing number of own-account agricultural producers who live in urban areas are less evident, although some of the above-mentioned factors may certainly be part of the explanation. It has also been seen that young and middle-aged people (and especially women) tend to live near transport routes to the more economically dynamic towns or cities in the vicinity, whereas the distribution of the older population in rural areas tends to be more dispersed (Dirven, 2011).

### C. PRODUCTION PATTERNS AND THE RURAL ECONOMY

Latin America and the Caribbean is “the region that has shown the greatest growth in agricultural, livestock, forestry and fishery production, and in its exports, over the past 15 years (ECLAC/FAO/IICA, 2009). Much of this growth reflects developments in the South American countries, since the Central American and Caribbean subregions are net importers, especially of staple products such as cereals, oilseeds, meat and dairy. The broader agricultural sector —primary agriculture together with agro-industry, transport, inputs and services— is still one of the largest sectors in the regional economy, whether measured by employment or by share in GDP and exports. Box IV.4 summarizes the main trends in agriculture in the past few years and looks at the challenges of developing the sector. The Latin American and Caribbean region has much to contribute to global food security and the upward trend of agricultural commodity prices in real terms offers a great opportunity for the region’s agriculture given the great potential for crop production afforded by land availability in several countries (Argentina, the Bolivarian Republic of Venezuela, Brazil and Colombia and, to a lesser extent, Belize, Ecuador, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay), its relative abundance of water and its human resources (ECLAC/IICA/FAO, 2011). Thus far, however, agricultural production has been concentrated in a few regions and centres on particular products and producers with access to external markets. Accordingly it has generated social disadvantages and income inequalities, particularly in rural areas (ECLAC/IICA/FAO, 2009; Graciano, Gómez and Castañeda, 2009).

#### Box IV.4

#### AGRICULTURE IN THE WORLD ECONOMY: RECENT TRENDS

*The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2011-2012* notes that the growth of agricultural activities in Latin America and the Caribbean took place in an international environment characterized by rising, cyclical and volatile prices. Data on adjusted Agricultural Value Added (AVA) show that there were cycles during the last decade in which real income grew much more strongly than production volumes. Real agricultural income in the region grew by 13.3% in 2002 and 10.2% in 2003, and remained virtually constant until 2008 (10.1%), while growth in the volume of production never topped 5% in those years (ECLAC/FAO/IICA, 2011). It was also found that growth in adjusted AVA has been uneven across the region: 4.5% as an annual average in the Southern Cone, but no more than 2.5% in the other subregions.

The study found that agricultural production in Latin America and the Caribbean was up in 2010 compared with the previous year and performed fairly well in general; cereal production was the strongest segment, up by 7% between 2009 and 2010. Variations in agricultural production have been due mainly to changes in weather conditions, in the area sown and in prices, although crop production is expected to rise in 2011, especially in cereals. The study put forward a number of considerations for the long term, with a view to boosting agricultural performance. In particular: (i) energy and food prices will rise in real terms over the long run; (ii) China will continue to be one of the region’s largest partners and will need larger quantities of food products, which will help revive agricultural trade flows; (iii) the need to achieve food security will make it necessary to produce more good-quality food and to do so competitively; and (iv) research will continue to be pursued and strengthened in the countries of the region.

Livestock production, the study found, represented 46.6% of the region’s gross agricultural output. Prices for livestock products were highly volatile in 2008-2011, owing to low income-price elasticity in the developed countries and shocks on both supply and demand sides. In 2010 total meat production climbed 2.8%, with a drop in beef production and a rise in that of pork, chicken and turkey. Brazil is the world’s largest exporter of beef, followed by Uruguay, Paraguay and Argentina. The region’s production of milk rose 10% between 2005 and 2008, and Brazil and Argentina are among the world’s largest milk producers. The study cited good expectations for 2011, owing to the strong horizontal integration which has developed in the meat and dairy industries and the next few years are expected to bring major opportunities for the livestock sector, given the need to meet growing demand for meat and dairy products.

## Box IV.4 (concluded)

Commercial fishing, the report notes, has reached its maximum sustainable production level in Latin America and the Caribbean, with falls in the catches of some species suggesting that overfishing is occurring. Although the rate of aquaculture growth in Latin America and the Caribbean has fallen, it remains the fastest-growing activity in the food production sector. South America continues to be the regional leader in commercial fishing and aquaculture. The latter activity is still developing at a moderate rate in many countries of the region and diseases remain a threat, especially in Chile and Mexico, where epizootics have affected production and employment.

According to data produced by FAO, 23.6% of the world's forests are to be found in Latin America and the Caribbean, and the countries that have planted the most forests in the region are Brazil, Mexico, Chile, Peru and Uruguay. The loss of forest cover between 2005 and 2010 was slightly less than during the period 2000-2005, when up to 4.8 million hectares were lost each year. Forestry's contribution to the region's GDP has increased steadily, rising from US\$ 30 billion to US\$ 40 billion, and accounting for 6% of the world total. Conversely, the total carbon stored in the forest biomass fell during the period 1990-2010 and official information about non-timber forest products (NTFPs) continues to be in short supply. The problems faced by countries in the region include soil degradation and changes in land use, while the limited amount of water available is a serious problem in the Andes and on some Caribbean islands.

The report acknowledged that enormous challenges exist in each of these areas. One is to reduce the technology gap in agriculture, which would help to raise yields and therefore the production of food, and encourage innovation, free competition and training, which is essential for the livestock sector. Environment-related challenges exist too, including climate change and natural-resource management. The fisheries sector needs a fresh approach to small producers and new schemes to improve sector governance. As well, more needs to be known about fish populations and their patterns. Lastly, in the forestry sector, public policy alternatives are needed to promote private investment plantations in the framework of strategies for developing forestry in the region. Progress must be made on further developing mechanisms for payment of environmental services that bring benefits to rural communities, and on engaging rural communities in the management of forestry resources.

**Source:** Economic Commission for Latin America and the Caribbean/Food and Agriculture Organization of the United Nations/Inter-American Institute for Cooperation on Agriculture (ECLAC/FAO/IICA), *The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2011-2012*, San José, 2011.

Although agricultural production has expanded in the region, under the prevailing development model this growth has been concentrated in areas which have natural advantages for production or have managed to build up a competitive edge, but always for the export market. This was explored in recent research on the agricultural boom and rural poverty, which took eight case studies to illustrate the situation in the region. This study found that in Argentina, for example, agricultural development has centred on the Pampas region and, to a lesser extent, the northern region. Production has focused on soybean, most of which is cultivated by middle-sized and especially large growers, who have used seed pooling methods<sup>3</sup> to make large investments in new technologies and most of their production is exported (see box IV.5). A similar situation obtains in Brazil, where agriculture has expanded heavily in the centre-west region and, to a smaller extent, in the south of the country. Here, the main products are cotton, soybean and poultry. Again, business owners use state-of-the-art technology and their products are destined for the export market. The study also looked at Chile, in whose central zone agricultural production—mainly fruit, vegetables (fresh or processed) and seeds—has burgeoned, all grown by medium-sized and large enterprises that form part of production chains and broader services, and like in Argentina and Brazil, export the bulk of their production. The same production model is seen in Peru: agricultural growth has centred on the coastal region, where medium and large growers produce vegetables, especially asparagus and fruit for export.

<sup>3</sup> A method of agriculture in which financial capital plays a major role in the organization of a temporary business system set up to control agricultural output. In this system large tracts of land are rented and equipment is hired for sowing, pest-spraying, harvesting and transport, thus generating economies of scale and high yields. A seed pool is a fund formed by several investors, which is used to hire the goods and services needed to bring a harvest to completion. The profits are then distributed among the members of the pool. This system plays a large role in the production of soybean, in which crop Argentina has become the world's third largest supplier in its raw form (seeds and beans), and the largest in soybean oils.

## Box IV.5

**IMPACTS OF SOYBEAN PRODUCTION IN FIVE COUNTRIES OF THE REGION**

Five South American countries —Brazil, Argentina, Paraguay, the Plurinational State of Bolivia and Uruguay— are among the world's 10 largest soybean producers. Driving the expansion of soybean production in these countries was the “green revolution”, with intensive use of machinery and chemical products; however, the availability of land that lent itself to these techniques, suitable climatic and environmental conditions and relatively low production costs were also important factors.

In Brazil, soybean has been cultivated since the early twentieth century, when seeds were introduced from Asia, mainly into the state of Rio Grande do Sul, and investments were made in adapting the crop to the local climate. Production later expanded to lower latitudes and more acidic soils, such as the Brazilian Cerrado, particularly the state of Mato Grosso which, within 20 years, became the country's largest soybean-producing state.

Argentina began to grow soybean more recently, but the crop has expanded very rapidly there. Until the 1970s Argentina was not among the 20 largest soybean producers, but became the fourth largest producer within 10 years and the third largest by the first decade of the twenty-first century. Expansion of soybean production in Argentina has been dubbed “agriculturization” because it has led to changes in the way agricultural land is used in order to boost export crops yields (by using input technologies and concentrating production resources), which has worsened environmental degradation and heightened the social exclusion of smaller farmers.

The situation is quite similar in Paraguay, where recent estimates suggest that 2.6 million hectares are currently under cultivation and that production will continue to rise. And, like in the past, much of Paraguay's soybean harvest goes to Argentina for processing. Uruguay too has increased both production and the area under cultivation, with soybean fields lying adjacent to the Uruguay River and new growing areas in other parts of the country. In the Plurinational State of Bolivia production is expected to hold steady or rise slightly, although there are a number of issues affecting production, including fuel distribution problems.

The context for soybean production in South America has become more complex in the past few years since, as well as traditional uses for the grain, there is now interest in using it as raw material in the production of biodiesel, and this has broadened and sharpened social and environmental controversies. In Argentina, for example, the expansion of agriculture driven by technological change and the combination of production activities has caused or at least facilitated sociodemographic shifts. Three main changes have arisen from the use of process technology: (i) less labour is needed for agricultural work, (ii) local rural exodus, caused by technological changes and indebtedness of small farms, has increased the massed rural population and decreased the dispersed rural population, and (iii) pampas towns have spread at the expense of high-quality agricultural land. This carries a some risk for the population, given the total surface area sown and the areas used by settlements, since once soybean production has taken up almost all the available space competition arises over land use, and chemicals are used in close proximity to residential areas.

In the past few years civil society has begun to react more strongly or more frequently to the social, economic and environmental impacts of soybean production in all the countries in the region that grow it. Rural disturbances over soybean production have escalated in Paraguay, with protests and conflicts over access to land and the impacts of agro-chemicals. Tensions are rising in Argentina and Brazil and beginning to appear in Uruguay over the displacement of small farmers. Soybean is thus increasingly associated with rural conflict. The effects of intensive use of chemicals in soybean production can be harmful for the workers who handle the crop and leads to the build-up of pollutants in the environment (mainly water and soil) and in human tissue. These impacts are observable only in the medium and long terms, although studies indicate that various types of cancer and lung conditions are on the rise. From a land-use perspective, soybean may continue to encroach into livestock-rearing areas. Argentina has large reserves in land in the northern part, but expansion of the crop could cause or worsen social conflicts with groups of small farmers and long-time residents who lack legal title over the land. It could also cause environmental conflict over deforestation, even though there are no land regulations relating specifically to the conditions under which forest areas may be cleared for agriculture, or to the extent of clearing allowed.

**Source:** R. Do Carmo and M. Franci Alvarez, “Expansión del cultivo de soja, salud y medio ambiente. Situación en Córdoba (Argentina) y Mato Grosso (Brasil)”, *Población y medio ambiente en Latinoamérica y el Caribe: Cuestiones recientes y desafíos para el futuro*, Roberto Luiz do Carmo and Gilberto Javier Cabrera Trimiño (orgs.), serie *Investigaciones*, No. 6, Rio de Janeiro, ALAP Editor, 2009, E. Gudynas, *La soja en el 2008. Perspectivas bajo nuevos contextos productivos, sociales y ambientales*, Observatorio en agropecuaria y sustentabilidad (OAS), 2007, and Carlos Reboratti, “Un mar de soja: La nueva agricultura en Argentina y sus consecuencias”, *Revista de geografía, Norte Grande*, No. 45, Santiago, Chile, Pontificia Universidad Católica de Chile, May 2010, pp. 63-76.

The Central American countries are no exception to this pattern. Guatemala has seen considerable growth in agriculture in some central areas of the country, particularly in vegetable and sugarcane production for export. High altitude coffees are also produced for export in the country's Altiplano or highlands, although this is "gourmet" production, i.e. produced by small farmers. Nicaragua too has an emerging agricultural sector located in the South Atlantic and Central regions, which have specialized in exporting dairy products closely associated with foreign investment, although there is also a growing niche ("fair trade") market for organically grown sesame seeds produced by small farmers on the Pacific plains and the dry tropical regions in the west of the country. In Mexico, although agricultural activity has been growing strongly, it has been limited to certain areas estimated at some 500,000 hectares. In the north-west region, for example, fruit and vegetables are grown for export by a constantly shrinking number of successful producers.

So, although agricultural production has expanded in the region, this growth has centred on certain products and, especially, on certain countries. It is also occurring in an uncertain context, since the impacts of various still-unfolding crises are still not fully known. One crisis is that arising from the surge in agricultural commodity prices, but there is also the environmental crisis of global warming and the ongoing global financial crisis (Graciano, Gómez and Castañeda, 2009).

Agricultural activity is highly uneven, concentrated in certain areas of the country, with large monocropping farms owned by agricultural enterprises producing mainly for export, alongside small independent farms. Dirven (2007) notes that there is academic and political debate on the viability of small farms, since they face specific, complex challenges in this new and constantly changing rural environment. Most of the region's small farms have seen their income drop, in some countries drastically (Dirven, 2007). Their productivity is slow to improve and they have little engagement with value chains into expanding markets, whether for processed products or for local supermarkets or export markets.

One of the ways to help small scale farming improve in the future would be to subsidize some of its transaction costs and take measures to level the playing field, including in the areas of education, infrastructure, and research and development. One notable initiative in this direction is the Government of Brazil's schemes for buying from family farms (for supplying the school meals programme, among others) and the award of a social responsibility seal to firms which buy a portion of their agricultural inputs for the manufacture of biodiesel from family farms, which qualifies them for tax reductions (Dirven, 2007).

Socioeconomic, production and cultural differences among small farmers make it difficult for them to set up associations and form links in value chains and networks. And farmers with limited resources tend to be at a greater disadvantage in the vicinity of larger farms than when everyone has limited resources, since buyers of raw materials for processing and marketing may prefer larger suppliers. So most small farms are facing increasingly difficult situations and, unless attention is paid to them, they could be wiped out prematurely (Dirven, 2007)

There is a consensus that some recent agricultural policies and trends have been damaging for small farms. Dirven (2007) points to the transition from agricultural commodities to specialized goods, including staple foods; increasing concentration of agents in transforming and marketing agricultural products (especially agro-industries and supermarkets) and the effect of this concentration on raw material suppliers. Small farmers are therefore poorly prepared and lack the means to rise to the new challenges of competing in markets that are more stringent in terms of safety and quality, because they have to offer standardized products and guarantee timely delivery, but must also be able to deal with agents' payment terms.

A recent study entitled *Inserción de la agricultura familiar en los modelos de gobernanza de las cadenas agroindustriales: Casos en Uruguay y Paraguay* (FAO, 2011) found that the development of agricultural value chains offers opportunities for small farmers, although there are also major challenges in terms of the marketing mechanisms by which their involvement is facilitated.

The agricultural trends in the region are also set within a historical context, since two types of farming have traditionally been present in rural Latin America: latifundios, or large estates, and minifundios or small farms, which date back to the colonial system of land concession. Latifundios were associated with the farming of large tracts of land, while minifundios were smallholdings farmed usually by peasants. This duality has, to some extent, continued with Latin American agricultural modernization in which technology favours large farms and thereby creates a social phenomenon: a rise in the rural population of landless agricultural workers. Both types of farming are becoming a structural feature in rural Latin America (Graciano, Gómez and Castañeda, 2009).

Both recent studies (ECLAC/FAO/IICA, 2009; Graciano, Gómez and Castañeda, 2009) and the preceding paragraphs have pointed to the existence of a fast-changing agriculture structured around modern technologies and driven by increasing financial efficiency and productivity. Yet this modern sector of agriculture is surrounded by rural areas—quite significant in most of the region’s countries—in which family farming continues and a landless rural population grows. As will be seen later, these are the rural areas with the highest levels of poverty and social inequality.

Both agriculture as a sector of the economy and rural areas in a broader sense have undergone deep-reaching changes in recent times. It therefore comes as no surprise that a number of researchers are proposing to reinterpret rural issues in the light of the social, political and economic processes which are transforming them. One of these changes is that the term “rural” is gradually moving away from meaning something exclusively agricultural, and this is leading to forays into economic and social processes in rural areas which often bear no direct relation to farming per se. Mostly, such activities involve rural tourism and non-farming activities linked to the service sector, whether public or private.

The agrarian question has taken on a new identity in the past few decades in the region, in the framework of globalization and structural adjustments. Many of the phenomena seen in rural Latin America today may be traced to these processes and their consequences. Teubal (2001) argues that many of the aspects that have worsened in these few decades reflect farming’s increasing domination by capital in what is part of a globalized trend. Some of the phenomena that have worsened, states Teubal, are the growing dispersal of wage work, increasingly precarious conditions in rural employment and people working in multiple jobs; the crowding out of small and middle-sized farmers; continuous rural-urban and cross-border migration; the growing market orientation of agricultural production; the absorption of small farmers into agro-industrial complexes in which decisions are made mainly at power centres associated with large transnational or transnationalized corporations; and the formation of seed pools in some countries. In parallel with these processes, agro-industrial complexes run by transnational or transnationalized corporations are becoming increasingly significant. They are associated with global trade in agricultural products, the supply of agricultural inputs and technology, industrial processing and final distribution of food stuffs. They are involved, too, in the spread of seed pools and other financial mechanisms which affect the agricultural sector. Processes of globalization are thus associated with the increase in land concentration, the consolidation of a new sort of latifundio in the rural milieu associated with financial and agro-industrial capital, and greater concentration of capital in the sectors making up agrifood systems in Latin America (Teubal, 2001).

The consolidation of an agrifood system around large transnational corporations, alongside free-market policies and structural adjustment in rural areas, have had much to do with the configuration of the “new rurality” signalled by a number of researchers (Teubal, 2001). This new rurality perspective not only emphasizes productive activity but recognizes the great importance of the management, use and conservation of natural resources. It also recognizes environmental services as a means of invigorating the economy in rural areas and building a more sustainable development model (Pérez, 2004). Pérez argues that conservation and management are among the new functions allocated to the agrarian milieu as economic activities that the rural population may pursue. But this new thinking on rurality and rural development also means that such areas are not being conceived as only for agricultural activity but also as being germane to the attainment of a better standard of living and as a place for leisure activities.

At the same time, agricultural technologies need to be developed to enable farmers to restore and maintain soils and to make better use of water resources. Such technologies encourage the development of clean agriculture by reducing the use of pollutants and pesticides, not only leading to better management of natural resources but also improving people’s quality of life. Naturally, this new rurality also means changes in institutions, stakeholder participation and the formation of rural development plans and projects, since it is associated with local democratization and the attribution of value to local resources, human and natural alike (Pérez, 2004).

The new rurality affords the rural milieu renewed value, leaving behind the notion that rural means backwardness and is not part of a vision of progress and development. What is more, Rojas (2008) notes that the new rurality broadens both the concept of agriculture and rurality’s own dimensions, since it strengthens urban-rural linkages, non-agricultural rural employment, the provision of environmental services, agro-environmental certifications or green seals, towns as services hubs, the active role of communities and social organizations and ecological and cultural diversity as a form of capital.

As the following section discusses, ingrained poverty and land and income concentration are not, in fact, preventing the changes the new rurality brings, but represent challenges that must be tackled from a new rural development perspective. Rural development policies must accordingly adopt a new vision from a territorial perspective.

#### **D. POVERTY AND INTRARURAL INEQUALITY**

Poverty is one of Latin America’s most entrenched characteristics. Although poverty has decreased in the region, the rate has not fallen evenly among or within the countries. Around 53% of the rural population lives in poverty today and, although that proportion has fallen in the past few decades (see table IV.11), urban-rural poverty gaps remain in most of the countries.

A large proportion of rural-dwellers lack sufficient income to meet their basic needs and many cannot afford even a basic food basket. Income insufficiency is moreover, accompanied by lacks in terms of education, health, housing and basic services. Rural poverty occurs in a context of continual out-migration to cities and to countries outside the region, rising social and infrastructure spending in almost all the countries and, apparently, falling rural unemployment (ECLAC/FAO/RIMISP, 2003).

Table IV.11  
**LATIN AMERICA: POOR POPULATION BY GEOGRAPHICAL AREA, AROUND 2000 AND 2010**  
*(Percentage of total population in each geographical area)*

Country	Total		Urban		Rural	
	2000	2010	2000	2010	2000	2010
Bolivia (Plurinational State of)	62.4	54.0	52.0	42.4	79.2	75.8
Brazil	37.5	24.9	34.1	22.1	55.2	39.3
Chile	20.2	11.5	19.7	11.7	23.7	10.4
Colombia	54.2	44.3	48.7	38.5	69.6	62.7
Costa Rica	20.3	18.5	17.5	17.0	24.3	20.8
Ecuador	48.3	39.2	45.2	37.1	54.5	43.2
El Salvador	48.9	46.6	39.4	41.1	62.4	55.8
Guatemala	60.2	54.8	45.3	42.0	68.0	66.5
Honduras	77.3	67.4	66.7	56.3	86.1	76.5
Mexico	41.1	36.3	32.3	32.3	54.7	42.9
Nicaragua	69.4	61.9	63.9	54.4	77.1	71.5
Panama	36.9	25.8	26.2	15.1	54.6	44.8
Paraguay	59.7	54.8	50.1	46.5	70.9	66.6
Peru	54.7	31.3	42.0	19.1	78.4	54.2
Dominican Republic	47.1	41.4	42.4	39.6	55.9	45.2
Uruguay	17.7	8.4	18.1	8.6	12.6	4.2
Latin America	43.9	31.4	38.3	26.0	62.4	52.6

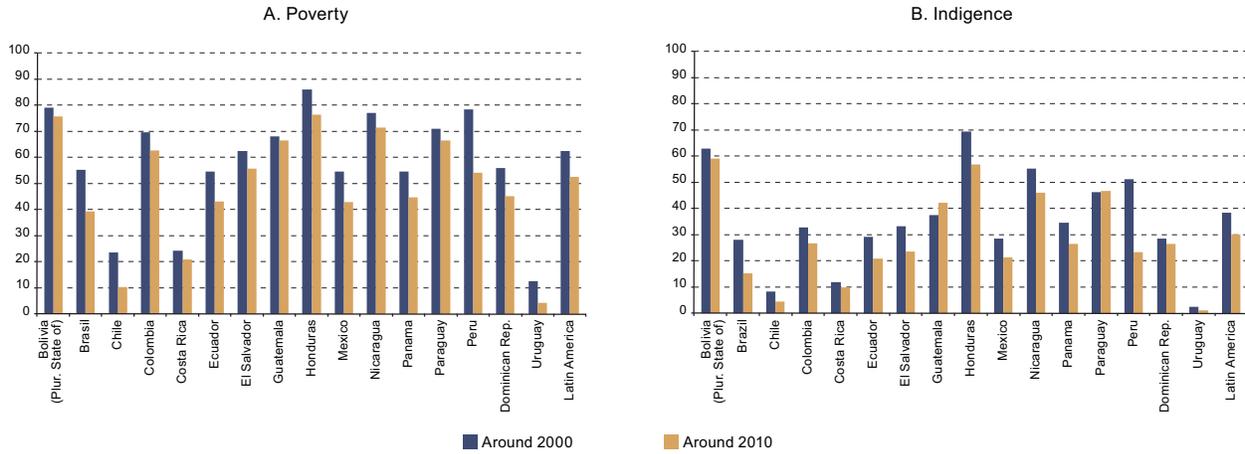
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys conducted in the relevant countries.

Between the early years of the 2000s and around 2010 rural poverty fell in all the countries which report these data, and rural indigence rose in only two countries (see figure IV.6), tracking the national averages fairly closely. In this period, rural poverty decreased by over 50% in Chile and Uruguay and significantly —by around 30%— in Brazil and Peru. Nicaragua, Paraguay, the Plurinational State of Bolivia and Guatemala, by contrast, show the smallest reductions in rural poverty—by less than 5% in the case of the last two countries. Most countries have made great strides in reducing extreme poverty, especially Peru (by 54.6%), Uruguay (by 54.2%), Chile (by 47.6%) and Brazil (by 45.7%), with the smallest reductions seen in the Dominican Republic (7.3%) and the Plurinational State of Bolivia (6.2%). Most worrisome, however, is the fact that Paraguay and Guatemala saw the proportion of the indigent population rise in rural areas (by 1.1% and 12.2%, respectively) (see figure IV.6).

Yet, in all, poverty and indigence remain substantially higher among the rural than among the urban population. The sole exceptions are Chile and Uruguay, where rural poverty is less than urban poverty; and Costa Rica, where there is no significant difference (see figure IV.6).

In their study of rural poverty at the household level, Rodríguez and Meneses (2011) classify rural households in four categories: (i) agricultural households, whose employed members obtain 100% of their labour income from agriculture; (ii) non-agricultural households, whose employed members obtain 100% of their labour income from non-agricultural activities; (iii) multi-activity households, whose employed members obtain labour income from both agricultural and non-agricultural activities; and (iv) transfer-dependent households, all of whose income comes from transfers, i.e. they receive no labour income.

Figure IV.6  
**LATIN AMERICA: POOR AND INDIGENT RURAL POPULATION, AROUND 2000 AND 2010**  
*(Percentage of total population)*

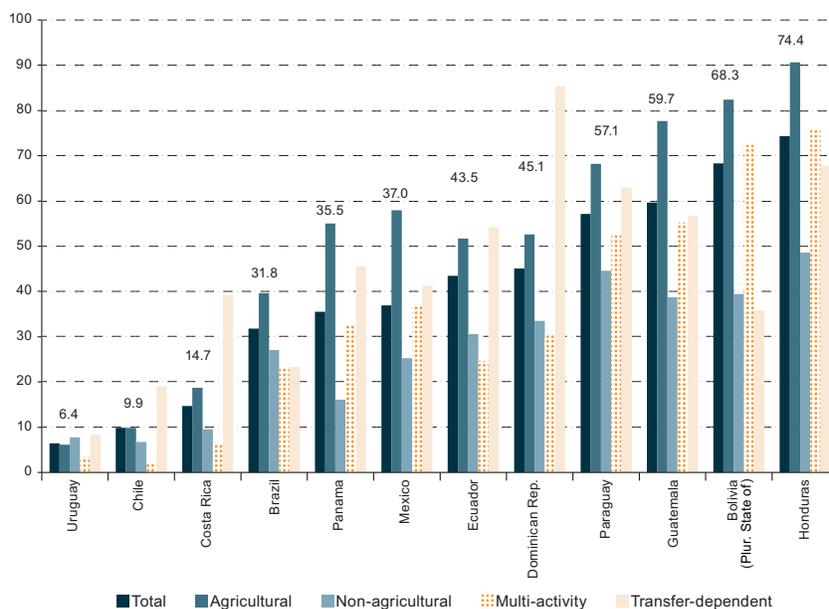


**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys conducted in the relevant countries.

Rodríguez and Meneses group the countries studied in three major categories by percentage of poverty in all rural households (see figure IV.7). The first category corresponds to those countries in which less than 20% of households are poor: Uruguay (6.4%), Chile (9.9%) and Costa Rica (14.7%). In the second, between 20% and 50% are poor: Brazil (31.8%), Panama (35.5%), Mexico (37.0%), the Dominican Republic (45.1%) and Ecuador (45.3%). In the third, over 50% of households are poor: Paraguay (57.1%), Guatemala (59.7%), Plurinational State of Bolivia (68.3%) and Honduras (74.4%).

Rodríguez and Meneses (2011) thus identify four subgroups of rural economies based on the percentage of rural employment in agriculture and poverty rates among all rural households (see figure IV.8). The first subgroup comprises countries in which over 50% of the rural population is employed in agriculture and over 50% of rural households are poor. The countries in this subgroup are characterized as having traditional agrarian rural economies: Honduras, Guatemala, Paraguay and the Plurinational State of Bolivia. The second subgroup is composed of countries in which over 50% of the rural workforce is employed in agriculture and less than 20% of rural households are poor. In these rural economies agriculture predominates and poverty is low, and they are characterized by non-traditional agriculture. This is the case of Chile and Uruguay. In the third subgroup less than 30% of rural employment is in agriculture and the poverty rate among rural households is around 20%. This category has only one country, Costa Rica, which has a diversified rural economy. Lastly, the fourth subgroup includes countries with intermediate levels of rural poverty, between 20% and 50%, and a highly varying percentage of rural employment in agriculture. These are countries whose rural economies are in transition: Brazil, the Dominican Republic, Ecuador, Mexico and Panama.

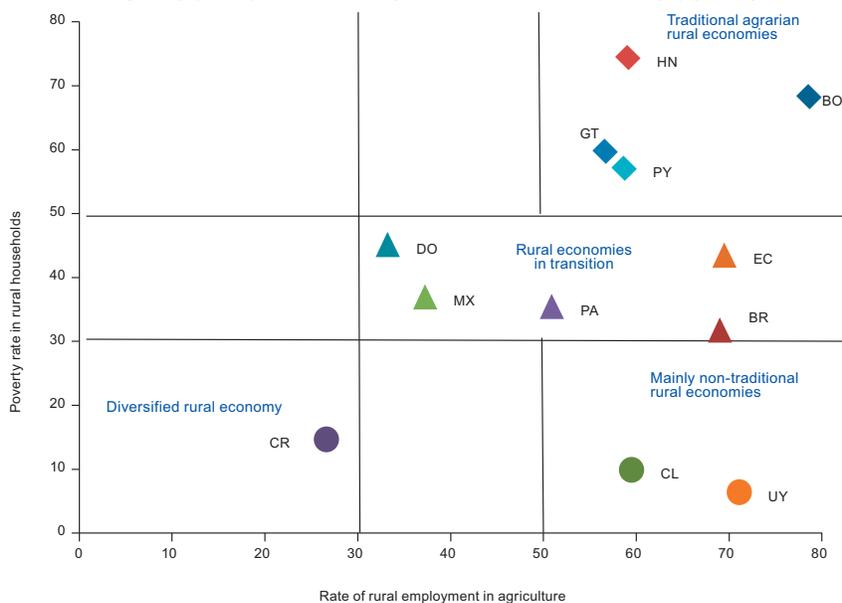
Figure IV.7  
**POVERTY IN RURAL HOUSEHOLDS, BY TYPOLOGY**  
*(Percentages of all households in each group)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from national household surveys conducted in the relevant countries.

<sup>a</sup> The numbers above the bars denote the poverty in all rural households.

Figure IV.8  
**TYPOLGY OF RURAL ECONOMIES, ON THE BASIS OF PERCENTAGES OF EMPLOYMENT IN AGRICULTURE AND POVERTY RATE BY HOUSEHOLD**



Source: A. Rodríguez and J. Meneses, “Condiciones socioeconómicas y laborales de los hogares rurales en doce países de América Latina”, paper presented at the forty-eighth Congress of the Brazilian Society of Rural Economics, Management and Sociology (SOBER), Campo Grande, 25- 28 July 2010.

The results of the analysis show some major differences among countries which have low poverty rates among rural households. For example, what small differences there are in the poverty rate between groups of households in Uruguay still show poverty being highest among agricultural households, whereas in Chile and Costa Rica transfer-dependent households have the highest poverty rates (19% and 39.3%, respectively). And in all three cases the lowest rates of poverty are seen in multi-activity households. The authors report that the group of countries with rural economies in transition is the most uneven: the highest poverty rates are found in agricultural households in Brazil (39.6%), Panama (55.1%) and Mexico (58.0%) and among transfer-dependent households in Ecuador (54.2%) and the Dominican Republic (85.4%), while the lowest poverty rates occur in multi-activity households in Brazil (22.9%), Ecuador (24.7%) and the Dominican Republic (30.3%) and among non-agricultural households in Panama (16.1%) and Mexico (25.2%). The four countries with traditional agrarian rural economies share a high proportion of agricultural households (over 40%) and high rates of poverty in this group of households (close to or over 70%); and in three of those countries (Guatemala, Honduras and Paraguay) the lowest poverty rates occur in non-agricultural households (with rates of around or above 40%).

In countries with the highest rates of rural poverty, these tend to occur among households whose labour income comes wholly from agriculture, with poverty rates lower among non-agricultural households. Conversely, in countries with lower rural poverty rates, poverty tends to be greater among households which depend entirely on transfer income and lower in households which combine agricultural and non-agricultural labour income. A recent study on labour market policies and rural poverty (FAO/ECLAC/ILO, 2010) offers a number of innovative observations in this regard. These are summarized in box IV.6.

Rodríguez and Meneses (2011) found that household survey data from four of the region's countries confirm higher poverty rates in indigenous than in non-indigenous rural populations. Figure IV.9 shows that these differences are larger in Ecuador and Guatemala, and in both countries the gap widened in the reporting period. In Guatemala the wider gap between indigenous and non-indigenous rural populations (from 22.7 to 28.7 percentage points between 2000 and 2006) occurred because poverty fell among the non-indigenous rural population, but remained high (around 83%) among the indigenous population. In Ecuador poverty rates fell in both groups between 2004 and 2009 but the gap widened (from 16.9% to 22.5%), mainly because non-indigenous rural poverty eased more rapidly. In the Plurinational State of Bolivia, the poverty gap between the indigenous and non-indigenous populations narrowed considerably between 2001 and 2007 (from 17.4 to 4.3 percentage points), partly owing to falling poverty rates among the indigenous population (4.9 percentage points) and rising poverty among non-indigenous populations (8.2 percentage points). The lowest poverty rate among indigenous rural populations occurs in Chile, where the gap between indigenous and non-indigenous rural populations decreased between 2000 and 2009 (from 15% to 10.3%). Lastly, Chile is the only country in which indigenous poverty was below 20% towards 2010, whereas it was considerably higher in Ecuador (60%), the Plurinational State of Bolivia (70%) and Guatemala (80%).

#### Box IV.6

#### LABOUR MARKET AND RURAL POVERTY

A research work entitled *Políticas de mercado de trabajo y pobreza rural en América Latina* (FAO/ECLAC/ILO, 2010) draws upon five case studies conducted for Brazil, Chile, Costa Rica, El Salvador and Peru, and contributes significant findings on the linkages between rural employment and poverty in rural areas. In the background to the study is the premise that the idea that poverty can be eliminated only through economic growth has ceased to be valid, since generations have gone by and yet poverty persists. The agricultural boom of the past few years boosted agricultural production and prices but produced no great impact on rural poverty rates (Graciano, Gómez and Castañeda, 2009). Between 1990 and 2006, with the exceptions of Brazil and Chile, in all countries labour income for employed indigents stood still or fell. Where poverty among indigents fell in that period, it was not because their labour income increased, but because the number of employed persons in the household rose or because non-labour income —mainly transfers— increased (ECLAC, 2009).

## Box IV.6 (concluded)

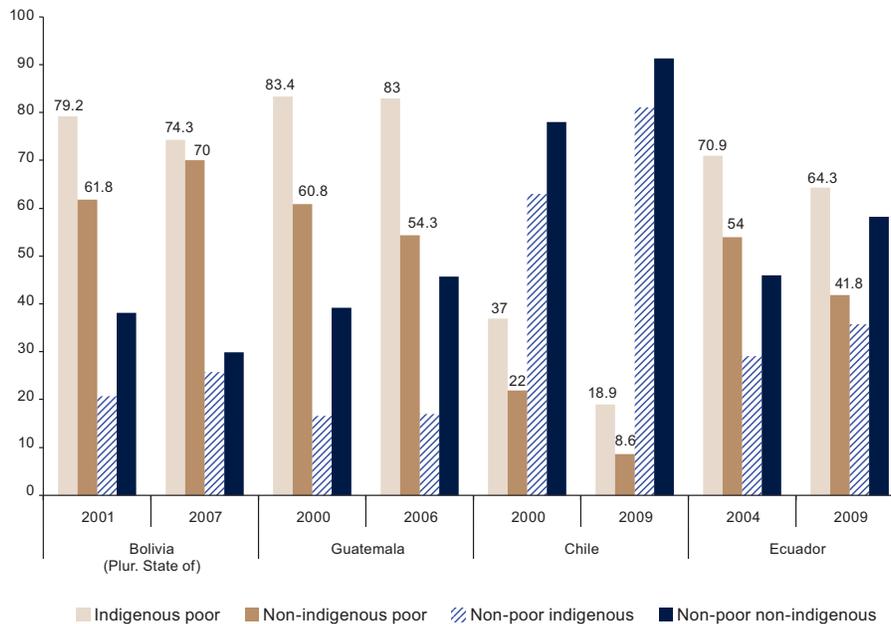
These and other observations lay behind this project, whose aim was to discover what was happening in the rural labour market, on the hypothesis that the market's workings were partly to blame for its poor performance in relation to poverty reduction, inasmuch as the rural labour market was clearly not distributing the benefits of growth, particularly among the rural poor. The five case studies showed that in some of the countries, over half of rural-dwellers are poor and, in all five countries except Chile, poverty is higher in rural than in urban areas. The authors note that there are multiple causes for this, but focus on determining those origins of poverty that lie in the labour market, specifically in wage work which is where the labour market operates. The study's main findings are summarized below.

Most of the rural employed work mainly in agriculture —except for in Costa Rica and El Salvador— but non-agricultural rural employment, especially in commerce and services, is nonetheless significant. This is important when it comes to analysing poverty, since non-agricultural rural activities generate higher income than agricultural activities. Occupational structure shows that most of the rural employed are wage workers in Costa Rica and Chile and, to a lesser extent, in El Salvador. In Peru few rural employed work for wages, but those that do are mainly on the coast. Brazil has a slightly higher proportion of rural wage workers than Peru, but they are concentrated in certain activities such as the growing of sugar cane and export fruit and a few other activities. In addition, the percentage of urban-dwelling wage workers employed in agriculture has risen: almost half of workers employed in agriculture in Chile and around a third in Brazil. Taken together with the tendency for rural employment to be increasingly seasonal, it becomes clear why poverty is more widespread among seasonal workers living in urban areas. Seasonal workers make up two thirds of those employed in agriculture in El Salvador and three fifths in Chile, and in all five countries seasonal workers, when employed, earn between 65% and 75% of the income of permanent workers. So any attempt to understand rural poverty must focus on primary activities.

From analysis of the operation of the main labour market institutions, it is clear that their poor performance and coverage explain much of rural poverty. First of all, with the exception of Chile, avoidance of legal minimum wages is widespread, especially when it comes to poor workers: poor workers are poor because they do not earn what the law says they should and this is the responsibility of the firms which hire labour and the State which ought to ensure compliance with the law. Many wage workers earning below the legal minimum actually work longer hours than the normal working day; this occurs in Brazil. This is simply exploitation. Second, employment informality —i.e. where workers have no contract or social security provision— is also very common, especially among rural women. In all the countries studied, job informality rates are between 54% and 98% among the poor, and between 23% and 85% among the non-poor. In other words, there is a clear, direct link between employment informality —an avoidance issue for which employers and the State are responsible— and rural poverty. Trends in labour intermediation and subcontracting, which have been observed in some countries, are also influencing the increasingly precarious conditions of employment and the consequent increase in poverty rates. Naturally, comprehension of rural poverty dynamics also requires analysis of other labour-related processes occurring in the labour market, and the case of child labour is perhaps the clearest: it takes children out of education, their work contributes little to the family income and it passes poverty on from one generation to the next since the link between poverty and low level of schooling has been highlighted in many case studies. Also, in poor households few members work, and this is crucial because among the poor labour income forms the bulk of total household income. A related point is that poor households have a much larger number of people who are economically dependent on each employed household member than non-poor households, which explains their low per capita income. One of the reasons for this is women's rate of participation in paid employment, which is generally lower than that of men; and rural women have a lower economic participation rate than urban women. Lastly, the authors note that, since the study examined the operation of the labour market, the reasons for the poverty of the rural poor not participating in that market must be sought in other variables, such as production resources, technology, spatial integration and other factors.

**Source:** Food and Agriculture Organization of the United Nations Economic Commission for Latin America and the Caribbean/International Labour Organization (FAO/ECLAC/ILO), *Políticas de mercado de trabajo y pobreza rural en América Latina*, Santiago, Chile, 2010.

Figure IV.9  
**POVERTY IN RURAL HOUSEHOLDS BY ETHNIC STATUS**  
*(Percentages of all households in each group)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from national household surveys conducted in the relevant countries.

Escobal and Ponce (2003) note that certain regularly occurring features enable a profile to be drawn of the region's rural poor. With regard to family size, poor families tend to be more numerous than non-poor rural and even than urban poor families. Poor rural households also show a higher economic dependency rate, i.e. they have more non-working members for each working member. In terms of sociodemographic structure, the rural poor tend to be older than the rural non-poor; they have fewer years of schooling which was, at the time, linked to a lower rate of school attendance and a higher school dropout rate. The rural non-poor tend to reside in more readily accessible areas and therefore to have greater access to public services. Conversely, tending to live in more isolated and more dispersed areas, the poor rural population has less access to public infrastructure (roads) and public services (especially electricity and basic sanitation). With regard to land access, the rural poor generally lack proper titles for their land or other assets or have had to pay high transaction costs to secure them and, generally speaking, their land does not benefit from large public irrigation schemes. The rural poor show worse health indicators than the non-poor, in particular higher child mortality and lower life expectancy. The income of the rural poor population comes in general from both agricultural and non-agricultural activities—the mix of activities depending on the quantity and quality of public and private assets available to them—and, the poorer they are, the more important are subsidies as part of their income.

In short, then, countries which have managed to successfully reduce rural poverty usually have dynamic economies which have a coherent macroeconomy linked in with a sectoral policy (and, in some cases, multisectoral and territorial policies), which operates in a relatively orderly manner and is constantly being improved (Echeverri and Sotomayor, 2010). Examples are the “green” agricultural development and agro-export strategy pursued by Costa Rica; export agriculture combined with specific programmes for family farms in Mexico and Brazil; and the small-farm, export-oriented strategies adopted in Chile by means of multiple public support instruments combined with substantial targeted transfer schemes (Rodríguez and Meneses, 2011). Echeverri and Sotomayor (2010) note that these set-ups

combine a number of factors of which agriculture is one, but operating as an element that brings effective traction to poverty reduction efforts. This operates alongside the development of other economic and social activities that support self-employment (tourism, crafts, and so forth), as well as migration, remittances, rural employment (agricultural and non-agricultural) and social transfers which also generate a poverty-reduction impact. Box IV.7 looks at a number of conditional cash transfer (CCT) programmes, which countries have implemented as part of their efforts to reduce rural poverty.

#### Box IV.7

### CONDITIONAL CASH TRANSFER PROGRAMMES AND RURAL POVERTY

Conditional (or co-responsibility) cash transfers (CCTs) have become established in the region as a particularly effective policy instrument for combatting poverty. According to the database on non-contributory social protection programmes in Latin America and the Caribbean maintained by ECLAC, 18 of the region's countries now operate CCTs, benefiting over 25 million families (around 113 million people), which represents 19% of the population of Latin America and the Caribbean. Some of the better known among these schemes are Ecuador's Human Development Grant, the CCT with the largest percentage of population covered (44%), while Brazil's *Bolsa Família*, Mexico's *Oportunidades* and Colombia's Families in Action have the largest numbers of beneficiaries in absolute terms. CCTs consist of monetary and non-monetary resources which are provided to poor or extremely poor families with minor children, upon certain conditions which families must meet. These conditions have to do with human-capacity-building and are an important step in bringing poor and indigent families with children into contact with broader and more integrated social protection systems.

CCTs are aimed at the poor and so by definition should cover both the urban and the rural poor, although certain programmes target particular vulnerable groups: indigenous peoples (Argentina, Colombia), displaced populations (Colombia) and the rural population (in its early years *Oportunidades* in Mexico targeted the rural population, as does Peru's *Juntos* scheme now). There is very little information on CCTs in the rural population and it is not easy to isolate their impacts on rural poverty as compared to total poverty. Very few studies envisage analysis of CCT impacts on rural populations.

Nevertheless, there are data on some CCTs. One of these in the Human Development Grant in Ecuador, which provides immediate benefits for the low-income population and is aimed at vulnerable groups (mothers, disabled persons and older persons). When it started, targeting errors occurred with this programme and it developed a markedly urban bias, since the first targeting system and means of entry and exit hindered access by the rural population, particularly the inhabitants of Amazonia. In Colombia, the Families in Action programme offers conditional transfers to poor families in municipalities with under 100,000 inhabitants, treating the population of these districts as essentially rural even though they have municipal seats. An assessment of the programme's impact conducted between 2002 and 2006 showed differentiated impacts by area of residence and found that in rural areas the scheme was meeting most of its objectives. In view of this evaluation and of the fact that in 2010 Families in Action covered over 2 million families in a country whose rural population stands at 21%, over half of it poor, it may be supposed that the programme is well targeted and largely reaches the rural poor. In Mexico, meanwhile, *Oportunidades* (formerly *Progresa*) targeted rural areas until 2002, covering 60% of the extremely poor according to the household survey conducted that year. The scheme later changed name and its targeting shifted to both urban and rural areas.

There is no full picture with respect to the impact of CCTs in rural areas, specifically in relation to rural poverty, since programme assessments do not always distinguish area of residence. As noted earlier, some schemes are directed exclusively at the rural poor or specific groups which tend to inhabit rural areas, such as *Progresa* in its early years. In this light, the findings of studies on CCTs show a tendency towards better results in rural than in urban areas, as regards income, poverty and demand for education services. This has much to do with the rural population's much lower participation in education systems before entering programmes, which makes a relatively better performance more easily achieved. In terms of health no evidence is available to differentiate the urban from the rural population; all that may be concluded is that in both areas the results are less striking than in education. This may be because the education-related conditionalities are met day to day, whereas changes in relation to user health are more difficult to ascertain, since users come to health centres sporadically, rather than establishing routines of compliance.

In sum, information on CCT coverage in the rural population is short, it is difficult to isolate their effects on rural poverty as opposed to total poverty, and few studies analyse the impacts of CCTs in rural populations except in cases where the target population is exclusively rural. Nonetheless, results tend to be better in rural than in urban areas, both in terms of income and poverty, and in terms of demand for education. This is probably because the starting level for school attendance is much lower in rural than in urban areas, giving greater scope for better performance.

**Source:** S. Cecchini and A. Madariaga, "Conditional cash transfer programmes. The recent experience in Latin America and the Caribbean", *Cuadernos de la CEPAL*, No. 95 (LC/G.2497-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2011. United Nations publication, Sales No. E.11.II.G.55 and M. Rangel, "Pobreza rural y los programas de transferencias condicionadas en América Latina y el Caribe", *Documento de trabajo*, No. 3, Proyecto conocimiento y cambio en pobreza rural y desarrollo, Santiago, Chile, Latin American Center for Rural Development (RIMISP), 2011.

## **E. RURAL-URBAN DIFFERENCES IN ACCESS TO SERVICES, INFORMATION TECHNOLOGIES AND EDUCATION**

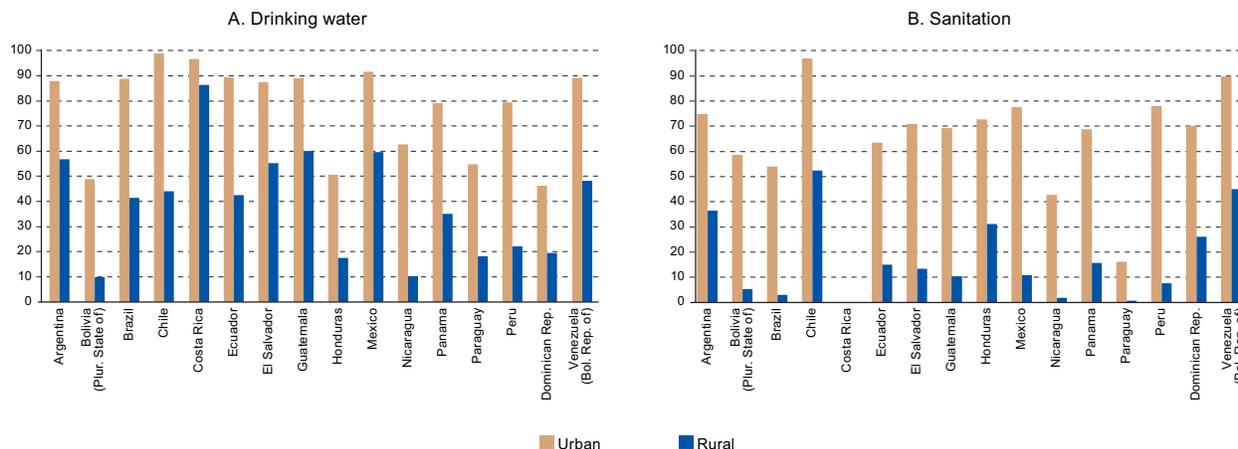
Although there are differences within rural areas as regards access to basic services, the averages show a notable gap between rural and urban areas in the countries of the region (ECLAC, 2010b). With respect to information and communications technologies (ICTs), coverage of some, especially mobile telephony, has increased, yet the rural-urban gaps remain very sharp. In education the situation is not much different: although education policies in all the countries aim for complete coverage in primary schooling, lags remain in rural areas owing to accessibility issues or early dropout. In addition, follow-up of progress towards the Millennium Development Goals shows that in all aspects advances have been slower in rural areas (ECLAC, 2010b).

### **1. Access to drinking water and sanitation**

The past decade has seen improvements in access to basic services, yet large disparities remain between countries and between rural and urban areas. According to data from the 2000 census round, nationwide over 80% of the population of six (Argentina, Bolivarian Republic of Venezuela, Brazil, Chile, Costa Rica and Mexico) of the 16 countries has access to drinking water within the home (see figure IV.10), although these figures mask access lags in these countries' rural populations. The largest urban-rural gaps in these countries occur in Chile, Brazil, the Bolivarian Republic of Venezuela and, to a lesser extent, in Argentina and Mexico. The smallest gap in this regard occurs in Costa Rica, which has the highest percentage of rural population with access to drinking water within the home. Rural-urban gaps are also considerable among the countries which have lower rates of access to drinking water within the household at the national level (Nicaragua, Paraguay, the Dominican Republic, the Plurinational State of Bolivia and Honduras) (see figure IV.10). The situation is similar with regard to sanitation: although the percentage of the population with access to improved sanitation at the national level is highest in Argentina, the Bolivarian Republic of Venezuela and Chile, rural-urban gaps —of around 50%— remain. Gaps also remain where access is more limited, i.e. where less than 40% of the total population has access to this facility: for example in the Plurinational State of Bolivia around 5% of the rural population has access to improved sanitation, compared with 60% of the urban population. Nicaragua shows a similar trend: 2% of the rural population has access to sanitation, compared with 43% of the urban population. So, regardless of the level of access to these services, the gaps between urban and rural areas persist (see figure IV.10).

On the basis of information from household surveys conducted around 2009, Rodríguez and Meneses (2011) arrive at similar findings. They note that several countries have made considerable gains both in improved supply of drinking water and in sanitation and rural electrification, but gaps remain with respect to urban areas, especially in access to piped water. The authors find that the widest gaps are found in the Plurinational State of Bolivia, Nicaragua and Peru, where the differences are over 50 percentage points in the case of piped drinking water and over 40 percentage points in electrification, although there are also large gaps in access to piped water in Brazil, Colombia and Ecuador; and in access to electric lighting in Honduras. They also confirm that Costa Rica is the only country with no significant differences in urban and rural access to these services.

Figure IV.10  
**LATIN AMERICA (SELECTED COUNTRIES): POPULATION WITH ACCESS TO DRINKING WATER AND SANITATION, URBAN AND RURAL AREAS, 2000 CENSUS ROUND**  
*(Percentages)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

The following census results for Ecuador, Panama and Mexico in 2010 show that access to drinking water and sanitation has widened, but with persistent gaps between rural and urban areas (see table IV.12), bearing out the findings of differences in service access for the population in those two types of areas.

Table IV.12  
**LATIN AMERICA (SELECTED COUNTRIES): POPULATION WITH ACCESS TO DRINKING WATER AND SANITATION, URBAN AND RURAL AREAS, 2010 CENSUS ROUND**  
*(Percentages)*

Country	Drinking water		Sanitation	
	Urban	Rural	Urban	Rural
Ecuador	91.7	68.4	91.1	52.6
Mexico	94.4	72.9	94.6	63.6
Panama	86.3	42.7	78.6	24.1

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of processing of census microdatabases using Retrieval of data for small areas by microcomputer (REDATAM).

Reducing the rural-urban gap in access to basic services is very important for improving living standards among the population that has more limited access. In some cases, solutions for rural areas have taken the form of delivering water in tankers, which is a very costly method and, ultimately, the water costs more as a proportion of income than it does for better-off people. Such solutions also carry a high health risk since there is no guarantee of water quality (Jouravlev, 2004). In the case of access to sanitation, technologically speaking, the solutions adopted in rural areas (such as septic tanks and latrines) do not guarantee a level of service quality or functionality comparable to that in cities, especially in terms of household connections (Jouravlev, 2004). So the rural population without basic services is extremely vulnerable to the various related risks, because the lack of sufficient, safe and physically accessible water

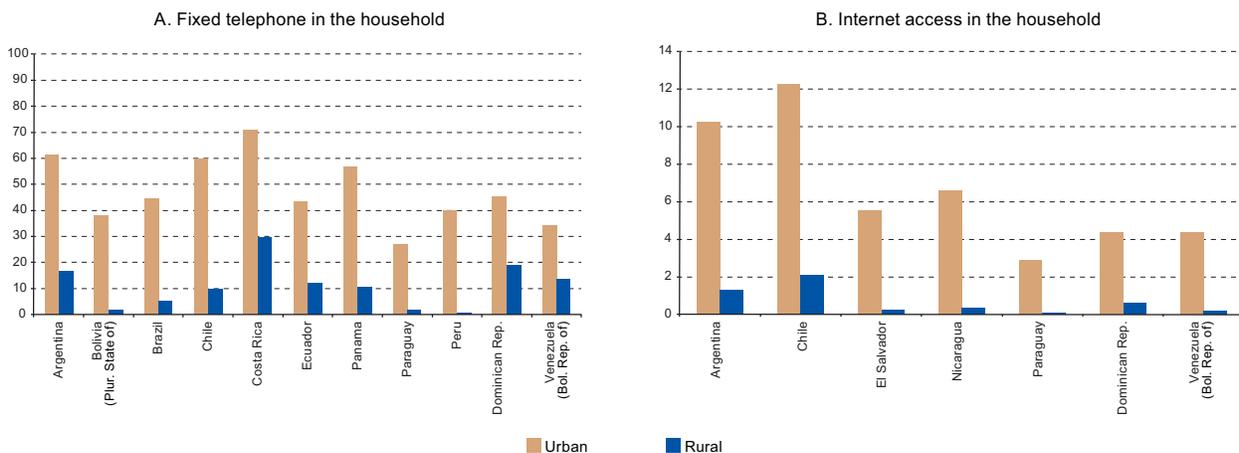
and proper sanitation impedes access to a range of other rights —such as the right to a healthy environment, health and proper food— which are directly or indirectly related to water and sanitation (Hopenhayn and Espíndola, 2007). Lack of access to quality basic services and a safe environment that protects health and stimulates the full development of capacities translates into social disadvantages for the whole family group. If there are children in the household, for example, they are at higher risk of infectious and diarrhoeic diseases and early mortality.

## 2. Access to and use of information and communications technologies

A recent study (ECLAC/FAO/IICA, 2011) argues that “information and communication technologies (ICTs) are fundamental for achieving the goals of productivity, sustainability and transparency. Moreover, they have proven effective in securing the social inclusion of rural people. When access to these technologies is either lacking or unreliable, entire regions or generations can be excluded and cut off from opportunities for more rapid and inclusive development.” It is therefore germane to enquire into developments regarding ICTs in rural areas. Figure IV.11 shows the proportion of the population with a fixed telephone line in the household and with access to Internet in rural and urban areas, and rural-urban asymmetries do in fact occur to differing extents in the countries. The largest differences in relation to fixed telephone lines are seen in Paraguay, where access in urban households is almost 13.8 times higher than in rural households. The next largest gap is in Brazil (7.8 times), Mexico (7.7 times), Ecuador (6.4 times), Chile (6.4 times) and the Bolivarian Republic of Venezuela (6.1 times). A study by González and Ortiz (2011) on access to ICTs in the region also found that rural-urban gaps in mobile telephony are smaller than in fixed telephony. The largest difference in this respect occurs in Panama, where possession of mobile telephones by urban households is only 4.8 times higher than by rural households, far less than the differences seen in access to fixed lines. The differences in the other countries are smaller and these data clearly show a high rate of penetration of mobile telephony in rural households.

Figure IV.11

### LATIN AMERICA: PROPORTION OF THE POPULATION WITH ACCESS TO A FIXED TELEPHONE LINE AND INTERNET IN THE HOUSEHOLD, URBAN AND RURAL AREAS, 2000 CENSUS ROUND (Percentages)



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

The data in figure IV.11 also show asymmetries in Internet access between urban and rural areas. These gaps are larger than for telephony, clearly showing urban predominance in this respect. González and Ortiz (2011) indicate that ownership of a computer is at least four times more frequent in urban than in rural households: the smallest difference is found in Costa Rica, where the frequency of urban households with computers is 3.9 times than of rural households. The largest gaps occur in Honduras, Mexico, the Bolivarian Republic of Venezuela and Paraguay, where the urban-rural ratio is as high as 14. The data shown in figure IV.11 corroborate the existence of asymmetries both within and between countries with regard to Internet connection: Paraguay and the Bolivarian Republic of Venezuela have the largest internal asymmetries. Recent figures from the 2010 census round show new findings, for example a high percentage of Internet access among the Panamanian rural population as compared with that of Mexico and Ecuador, although rural-urban ICT access gaps remain (see table IV.13).

Table IV.13  
**LATIN AMERICA (SELECTED COUNTRIES): PROPORTION OF THE POPULATION WITH ACCESS TO A FIXED TELEPHONE LINE AND INTERNET IN THE HOUSEHOLD, URBAN AND RURAL AREAS, 2010 CENSUS ROUND**

Country	Fixed telephone		Internet access	
	Urban	Rural	Urban	Rural
Ecuador	42.6	17.1	18.2	5.1
Mexico	52.0	16.4	27.9	2.7
Panama	...	...	75.8	35.1

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of processing of census microdatabases using Retrieval of data for small areas by microcomputer (REDATAM).

The countries of the region must reduce the rural-urban gaps in ICT access, since the incorporation of ICTs in economies and societies has produced great challenges and opportunities for agricultural and rural development in Latin America and the Caribbean. ICTs have a positive impact on the production and consumption chain which, directly or indirectly, affects relations between producers, consumers, suppliers and agro institutions, among other factors because innovations in forms of communication have helped to invigorate rural areas, not only economically, but also socially and culturally, with a generally positive impact on the well-being of the population. ICTs have also shown great potential for improving opportunities for employment in non-agricultural rural activities, such as agro-tourism and other services (ECLAC/FAO/IICA, 2011).

### 3. Education

Most of the region's countries have made progress in the past two decades in terms of increasing the average schooling of the rural population. The largest gains in average years of schooling are seen in the population aged 15 to 24, although the 25-to-39 age group also show large advances in this regard. The largest average gains in both groups have occurred in Brazil and Chile, and the smallest in Colombia and Panama (see table IV.14).

Table IV.14  
**LATIN AMERICA: AVERAGE SCHOOLING OF RURAL POPULATION BY AGE GROUP,  
 1990 AND 2000 CENSUS ROUNDS**  
*(Years of schooling)*

Country	Ages 15 to 24		Ages 25 to 39	
	1990	2000	1990	2000
Argentina	7.2	7.8	6.7	6.6
Bolivia (Plurinational State of)	5.8	6.6	5.3	5.4
Brazil	3.3	4.3	3.0	3.4
Chile	8.2	9.1	7.4	8.1
Costa Rica	4.6	6.3	3.8	4.5
Ecuador	5.5	6.7	4.4	6.4
Guatemala	3.1	3.8	2.4	2.8
Mexico	3.1	6.6	2.4	5.5
Nicaragua	2.6	4.6	2.2	3.5
Panama	6.8	7.1	6.5	7.0
Paraguay	5.3	6.8	4.7	5.7
Peru	5.2	7.9	4.1	4.8
Dominican Republic	5.0	5.8	4.0	4.1
Venezuela (Bolivarian Republic of)	4.6	6.0	3.3	4.7

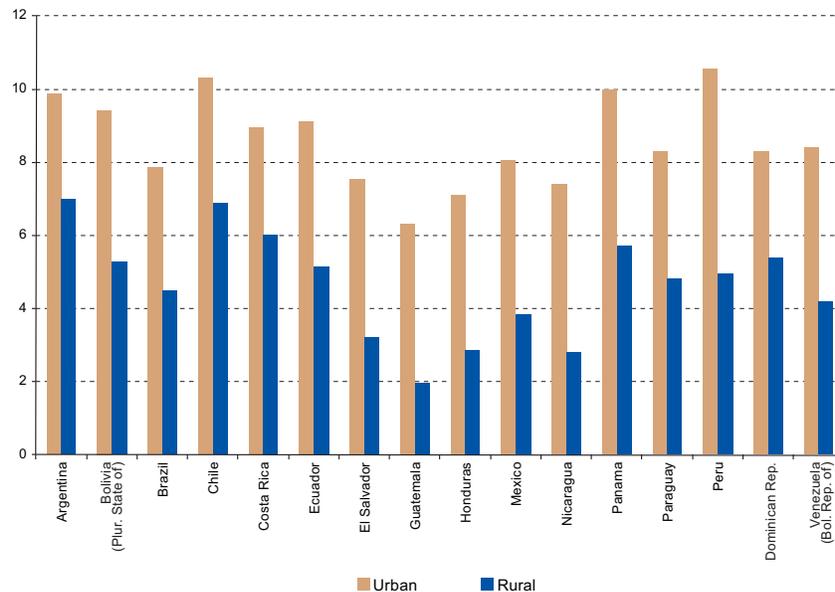
**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of processing of census microdatabases using Retrieval of data for small areas by microcomputer (REDATAM).

Despite the gains made in the past decade in the rural population's average years of schooling, most of the countries still show substantial lags when the figures are compared with the urban population. The data in figure IV.12 illustrate this situation, which occurs to a greater or lesser extent in all the countries examined. In general, the rural population aged 30 to 59 has on average three or four years fewer of schooling than the urban population of the same age. The largest rural-urban gaps occur in Peru—whose rural population has on average 5.6 years of schooling fewer than its urban population—in Nicaragua, with a difference of 4.6 years, and in Guatemala, with a difference of 4.4 years. The smallest gaps are found in the Dominican Republic, Costa Rica and Argentina, where the rural population has on average 2.9 fewer years of schooling than the urban population.

When they conducted a more specific study by age group, Rodríguez and Meneses (2011) found smaller gaps in the younger population (over three years only in Honduras and Nicaragua) and—as may be expected—these increase with age. Nonetheless, regardless of age group, the largest gaps occur in Colombia, Guatemala, Honduras and Nicaragua. Certainly, the size of the gaps by age group reflects the countries' efforts to increase the coverage of primary and secondary education. Costa Rica and Uruguay show the smallest gaps across all age groups and they are joined by Chile for the 25-to-39 age group, and additionally by Mexico and the Dominican Republic for the group aged under 25 (see figure IV.13).

Gaps are also evident in school repetition and dropout rates, which are higher in rural than in urban areas. The reasons for this geographical inequality include lack of education services accessible at a reasonable distance, larger numbers of schools with an incomplete grade structure, greater family pressure for young people to work, and less skilled teachers since, generally speaking, there are no significant incentives for teachers to work in rural areas or in difficult settings (Blanco and Cusato, 2004).

Figure IV.12  
**LATIN AMERICA: AVERAGE YEARS OF SCHOOLING OF THE POPULATION AGED 30-59 YEARS,  
 URBAN AND RURAL AREAS, 2000 CENSUS ROUND**



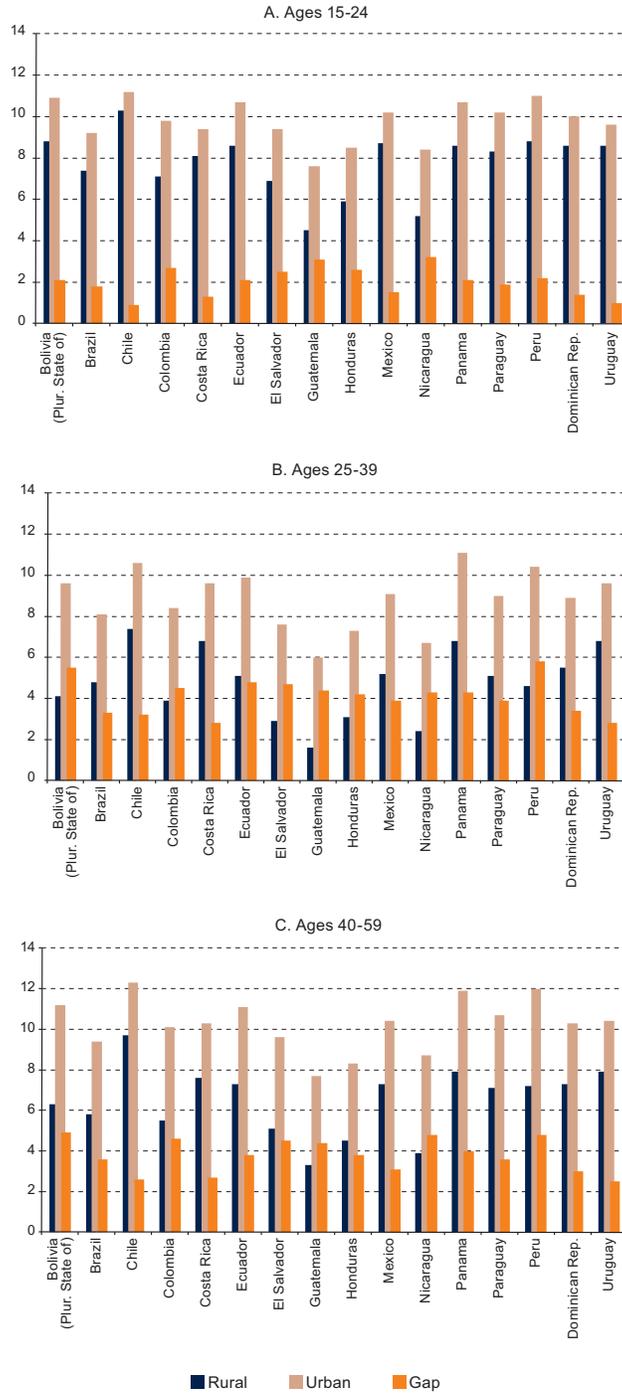
**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

It is important that rural-urban inequalities in education are tending to decrease, since the prospects for poverty eradication are closely associated with the years of schooling of the adult population. Accordingly, a longer schooling period is essential for increasing a person's chances of entering the labour market and obtaining the basic skills needed to secure a productive job with better pay.

Those primarily employed in non-agricultural rural activities usually have, on average, two to three years more years of schooling than those employed in agriculture. All the analyses also agree that the returns on education are much higher in non-agricultural rural employment than in agriculture. But, as noted earlier, in more isolated areas there are fewer possibilities of obtaining a non-agricultural job. So as well as the reasons already given for higher school dropout in rural areas, there are fewer incentives to continue in school in isolated areas (Dirven, 2011). What is more, the impacts on the labour market of conditional cash transfers associated with better schooling have yet to be studied. As noted, by their very design they target young people in poor areas and households, including many young rural-dwellers who, without these schemes, would have had on average one or two fewer years of schooling. Among the questions that remain to be answered on the impacts are those relating to: the labour-market integration of these young people; their decisions in relation to migration; the displacement of other less skilled workers; the emergence of new local opportunities and growth engines; and the devaluation of education in the area or country (Dirven, 2011).

As noted earlier, progress towards achievement of the Millennium Development Goals has been slow in rural areas. An example is the situation with respect to adolescent fertility rates. Box IV.8 offers an analysis of this variable in rural and urban areas using recent data.

Figure IV.13  
**LATIN AMERICA: RURAL-URBAN GAPS IN EDUCATION, BY AGE GROUP, AROUND 2008**  
*(Average years of schooling)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from national household surveys conducted in the relevant countries.

Box IV.8  
**ADOLESCENT FERTILITY IN LATIN AMERICA: AN EXAMPLE OF SOCIAL  
 AND TERRITORIAL INEQUALITIES**

A recent study conducted by ECLAC (2011) notes that most of the region's countries have much higher adolescent fertility rates than would be expected in relation to their total fertility rates. What is more, since total fertility rates are consistently higher in rural than in urban areas, it comes as no surprise that adolescent fertility shows large urban-rural gaps. The table below shows adolescent maternity trends in Ecuador, Mexico and Panama.

**ECUADOR, MEXICO AND PANAMA: MOTHERS AGED 15-19 BY AREA OF RESIDENCE,  
 2000 AND 2010<sup>a</sup>**  
 (Percentages)

Country	Year of census	Urban areas	Rural areas	Total	Rural-urban ratio
Ecuador	2001	15.0	18.4	16.3	1.2
	2010	18.4	22.7	20.0	1.2
	Absolute variation	3.4	4.3	3.8	...
	Relative variation	22.9	23.4	23.0	...
Mexico	2000	11.0	15.4	12.1	1.4
	2010	11.8	14.3	12.4	1.2
	Absolute variation	0.8	-1.1	0.3	...
	Relative variation	7.4	-7.1	2.6	...
Panama	2000	13.0	25.0	17.3	1.9
	2010	12.2	21.1	15.4	1.7
	Absolute variation	-0.9	-3.9	-1.9	...
	Relative variation	-6.6	-15.5	-11.1	...

**Source:** Prepared by the authors on the basis of census microdata from Ecuador, Mexico and Panama, 2010.

<sup>a</sup> Percentage of women aged 15-19 who report having one or more live-born children at the time of the census.

The findings for 2010 show uneven trends in the three countries: an increase between 2001 and 2010 in Ecuador, a slight increase between 2000 and 2010 in Mexico and a drop in the reporting period in Paraguay. Yet, in all three countries, adolescent maternity is consistently higher in rural areas, even though the rural-urban ratio of adolescent fertility shows no common pattern. In Ecuador the gap has persisted notwithstanding the fact that adolescent fertility has fallen in both urban and rural areas. In Mexico the adolescent fertility gap has narrowed reflecting a slight rise in urban areas and a slight drop in rural areas. The gap has narrowed in Panama, too: here both urban and rural adolescent fertility rates have dropped, but the latter slightly more steeply.

The narrowing of the rural-urban gap in adolescent fertility reflects varying patterns in the intricate relations between sexual activity, union and pregnancy in adolescence. Urban adolescents, for example, show an increase in pre-union sexual activity, which in principle reduces the relevance of union in explaining their fertility rates. However, some poor urban adolescents see union and the formation of a family (i.e. having children) as a means to obtain their own place in the world and a purpose in life, against a backdrop of limited alternatives. The available evidence suggests that the trend is in the opposite direction, however, given the rising proportion of adolescent mothers who are single or living with one or both parents instead of forming their own household. By contrast, rural adolescents tend to form unions earlier, many of them with the explicit intention of early maternity, in which case early union continues to precede early reproduction. This is particularly evident in the case of early unions that follow cultural patterns, as occurs in many indigenous populations.

In addition, even among adolescents who wish to avoid pregnancy, use of contraceptive methods is limited. Clearly, there are failings in prevention and barriers to access to modern contraception. Access inequalities are found to be much sharper among rural adolescents and those who have a lower level of schooling or belong to lower-income families. As noted in the ECLAC publication *Social Panorama of Latin America 2011*, this situation has helped to form a hard core of intergenerational reproduction of exclusion and inequality, in which poor education is combined with lack of child-care support, vulnerable family trajectories, greater difficulties in pursuing income-generating activities and precarious access to social protection networks.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), *Social Panorama of Latin America 2011*, (LC/G.2514-P), Santiago, Chile, March, 2012. United Nations publication, Sales No. E.12.II.G.6.

## Chapter V

**THE SETTLEMENT OF SPARSELY POPULATED AREAS IN LATIN AMERICA****A. INTRODUCTION AND BACKGROUND**

A glance at the map of Latin America shows a very uneven settlement pattern, with densely populated areas mostly on or near the coasts and huge swathes of sparsely populated areas, both at the heart of South America (the Amazon rainforest, which spans several national borders, and the Chaco region in Paraguay) and in the far south (Patagonia). Throughout the region there are other low-population-density areas that share one defining characteristic: extreme environmental conditions. These include deserts, for example, in the north of Mexico and the Atacama Desert in Chile, rainforest and marshland, such as the Darien Gap which lies across southern Panama and the northern tip of Colombia, and ice fields in the Aysén and Magallanes regions of Chile.

Disparities in terms of population density started to even out in the second half of the twentieth century, as shown in maps V.1 and V.2. This did not happen by chance, but was rather the result of economic incentives and deliberate action taken to attract settlers to areas of low population density, which were also misnamed “empty spaces”. This chapter presents a brief account of the process of deliberate settlement of sparsely populated areas.

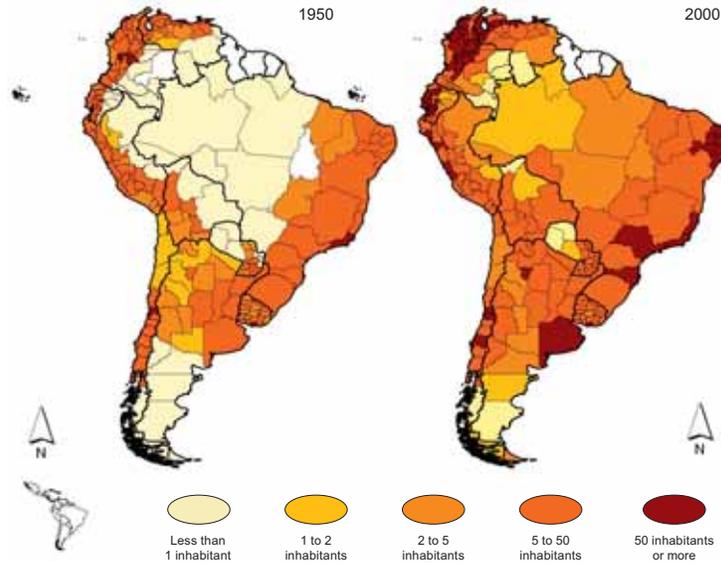
Between 1950 and 1970, public policy in the region typically promoted productive development, territorial, economic and social integration, and demographic consolidation (that is, settlement) of sparsely populated regions. These objectives and policies actually predated those two decades, with “to govern is to populate”<sup>1</sup> and similar philosophies being long established. However, it was Brazil’s decision in the 1950s to change its capital from Rio de Janeiro to an entirely new location, to be built from scratch and named Brasilia, chosen precisely because it was unpopulated, close to the demographic frontier and far from the historical centres of economic, political and social power, that led countries to embark upon initiatives promoting the development and settlement of sparsely populated areas that were considered of strategic value.

The idea of settling low-population-density areas, particularly in the Amazon, was already familiar in Brazil, but now it became a pillar of the national construct, first through developmentalist projects, then through nationalist agendas. This objective lost favour both as a subject of political discourse and as a focus of policies and programmes, however, with the return of democracy in the 1980s, as will be discussed later in this chapter. Nevertheless, recent studies show that people, organizations, companies and even the State continue to gravitate towards the Amazon region (see box V.1).

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<sup>1</sup> The dictum of Juan Bautista Alberdi in the mid-nineteenth century in Argentina was, precisely, “En América, gobernar es poblar” (In America, to govern is to populate), specifically by encouraging immigration from Europe. See Alberdi (n/d).

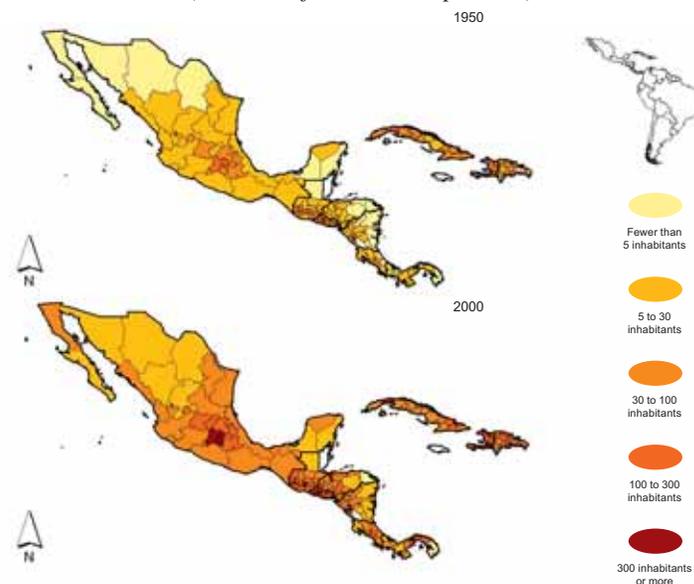
Map V.1  
**SOUTH AMERICA: POPULATION DENSITY BY MAJOR ADMINISTRATIVE DIVISION, 1950 AND 2000**  
*(Number of inhabitants per km<sup>2</sup>)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

**Note:** The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

Map V.2  
**MESOAMERICA: POPULATION DENSITY BY MAJOR ADMINISTRATIVE DIVISION, 1950 AND 2000**  
*(Number of inhabitants per km<sup>2</sup>)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

**Note:** The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

## Box V.1

**THE DEVELOPMENTALIST AND GEOPOLITICAL FIXATION  
WITH THE AMAZON AND CURRENT PARADOXES**

The Amazon has been an important focus of attention since the early governments of Brazil. The rubber boom, which lasted from around 1870 to the beginning of the First World War, showcased the economic potential of the region and its ability to attract workers from other parts of the country, while also revealing its social and environmental fragility. It also highlighted the hardships involved in advancing into the rainforest and the high probability that the settlement process would be reversed (Balán, 1974). The rubber crisis brought to an end Brazil's economic cycle as a producer of only one product, until the Second World War.

Even at the initial phase of the import substitution strategy, the preoccupation with extending the agricultural frontier and producing enough food for the growing urban population, as well as the decision to decentralize the population, resulted in the march west and its milestones: the creation of Brasilia, the colonization projects and the national integration programme (Sawyer, 1984).

The Amazon region became an emblem of the incipient agrarian reform process introduced by the government of João Goulart. This was more of a symbolic transformation, however, as the process was cut short by a military coup that was openly opposed to agrarian reform (Le Tourneau and Bursztyn, 2011).

For the various military governments, the occupation of the Amazon region became both the highest geopolitical priority and the key to development, resulting in colonization processes that led to the redistribution of land: during the military dictatorship, the colonization projects of the National Institute for Colonization and Agrarian Reform (INCRA) were intended to foster the Amazon's economic integration with the rest of Brazil and the creation of new productive areas, in addition to promoting the settlement of a region in which it was feared there would be a demographic void (Le Tourneau and Bursztyn, 2011).

Under the democratic governments in Brazil since the 1980s, the Amazon region's position on the public agenda has lost the geopolitical connotation of the past. Nevertheless, the region remains a vast source of land, and is now being used to meet growing demands for redistribution and for living space by landless farmers and homeless city dwellers. The population in the area thus continues to grow and it remains an attractive destination for migrants.

Some authors have highlighted the tensions between existing programmes to redistribute land and newer policies focusing on environmental protection and conservation in the Amazon region: in short, the social protection policy, which in rural areas takes the form of agrarian reform, and the environmental protection policy are two contradictory creations stemming from the return to democracy in 1985 (Le Tourneau and Bursztyn, 2011).

**Source:** J. Rodríguez and G. Busso, "Migración interna y desarrollo en América Latina entre 1980 y 2005, Un estudio comparativo con perspectiva regional basado en siete países", *Libros de la CEPAL*, No. 102 (LC/G.2397-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009, p. 60; François-Michel Le Tourneau and Marcel Bursztyn, "La réforme agraire en amazonie est-elle écologiquement correcte?", *Revue Tiers Monde*, 2011/2, No. 206, 2011.

These first settlement initiatives consisted of measures to promote the occupation and exploitation of the land. As these huge expanses of land were in forest areas, the first step towards appropriation involved various interrelated actions, including the granting of land rights and the transportation of settlers, which together formed the basis of the colonization programmes implemented in those years. Other elements included the construction of basic infrastructure and roads, technical support and various incentives to promote farming. It was often naively supposed that merely opening up these lands to productive activities (mainly agriculture) would guarantee the success of the undertaking, forgetting the limitations inherent to the location and to trade. Not only did these programmes promote agriculture, they also encouraged industry, the creation of new cities and the consolidation of existing ones, and the provision of public services.

In most countries, these policies were effective from the outset and yielded notable results, at least in terms of the territorial distribution of the population. In fact, the sustained increase in population density and the settlement of inland areas in Latin America (especially South America) are clear indicators of the lasting impact of these policies.

Prime examples of this include the Plurinational State of Bolivia and Paraguay, which changed the structure of their settlement patterns by encouraging mass migration from the historically populated areas (in the west for both countries) towards the extensive eastern areas, which were much more sparsely populated and had significant productive potential. Other countries did not drive such large shifts in the spatial distribution of their populations, but they nevertheless took steps to settle political, demographic and productive frontiers. Some such policies failed, simply because too few migrants were persuaded to move to the low density areas that were targeted for settlement and more intensive exploitation.

Recognizing the changes brought about by these policies and programmes in no way constitutes an endorsement or promotion of them. Many of them led to well-documented harm to the environment, the unpleasant or harsh treatment of colonizers, aggressive and violent behaviour towards the indigenous populations who traditionally occupied the land, and below-par, not to mention unsustainable, progress towards economic and social development (Rodríguez and Busso, 2009; Rodríguez and da Cunha, 2009; ECLAC/CELADE, 1995; CELADE, 1984). Precisely because of these lessons learned from experience and other emerging factors,<sup>2</sup> colonization programmes are no longer included in international recommendations<sup>3</sup> or the public policy agendas of the countries in the region.<sup>4</sup> Some vestiges of these policies remain, for example, in the ad hoc granting of land rights in low-population-density areas, but these programmes are no longer of the scale, scope or priority seen in the past.

## B. DEMOGRAPHIC TRENDS AND CONTEXT UP TO 2000

Many of the major administrative divisions that have seen the most robust population growth since 1950 were the most sparsely populated. To name only those with annual average growth rates of over 5% (at which point the population doubles approximately every 14 years), the list includes: Sucumbíos (8.2%), Zamora Chinchipe (5.4%) and Galapagos (5.1%) in Ecuador; Alto Paraná (7.9%) in Paraguay; Rondônia (7.2%), Roraima (5.8%) and Amapá (5.1%) in Brazil; Quintana Roo (7.0%) in Mexico; Petén (6%) in Guatemala; Vaupés (5.8%) in Colombia, and Tierra del Fuego (5.5%) in Argentina. In some cases, this pace of growth has not been sustained over time and has slackened considerably, as will be shown below with reference to selected areas.

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<sup>2</sup> These include a new environmental awareness at the global and regional levels (reflected in some countries of the region in specific legislation, institutions, policies and programmes), the possibility of generating revenues and other economic benefits through conservation and the increasing recognition of the territorial rights of local populations, especially indigenous people.

<sup>3</sup> Colonization projects are not even mentioned in the Programme of Action of the International Conference on Population and Development. Indeed, in paragraph 9.9, "Countries are urged to recognize that the lands of indigenous people and their communities should be protected from activities that are environmentally unsound or that the indigenous people concerned consider to be socially and culturally inappropriate. The term "lands" is understood to include the environment of the areas which the people concerned traditionally occupy."

<sup>4</sup> The most recent report on world population policies (United Nations, 2010) contains no mention of active or planned colonization programmes as public policy. In addition, only 4 of the 19 countries of Latin America that responded, stated they wished to see greater migration from the cities to the country (in the region city dwellers would be the main source of settlers for any possible colonization programme). Finally, the number of countries that reported wishing to see significant changes in the spatial distribution of their populations fell from 22 in 1976 to 12 in 2009.

The rapid growth seen in these major administrative divisions can, in part, be attributed to a statistical factor: their sparse population at the beginning of the reference period. Yet this factor is important because, despite their rapid growth, most of these areas still account for a small proportion of the total population of their respective countries. Only Santa Cruz in the Plurinational State of Bolivia, Petén in Guatemala and Alto Paraná in Paraguay have substantially increased their demographic weight as a proportion of the national total to 24.5%, 3.3% and 10.8%, respectively (see table V.1).

Table V.1  
**LATIN AMERICA (9 COUNTRIES): SHARE OF TOTAL POPULATION AND GROWTH RATES  
 OF SELECTED LOW-POPULATION-DENSITY MAJOR ADMINISTRATIVE DIVISIONS,  
 1950 AND 2000**

(Per 100 inhabitants, percentages)

Country	Major administrative division	Share of the total population						Total population growth rate					
		1950	1960	1970	1980	1990	2000	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	1950-2000
Argentina	Tierra del Fuego	0.0	0.1	0.1	0.1	0.2	0.3	6.0	3.3	6.3	8.1	3.6	5.5
Bolivia (Plurinational State of)	Santa Cruz	9.5		15.4		21.2	24.5		3.5		4.2	4.3	3.8
Brazil	Rondônia	0.1	0.1	0.1	0.4	0.8	0.8	6.3	4.6	14.9	7.6	2.2	7.2
Brazil	Roraima	0.0	0.0	0.0	0.1	0.1	0.2	4.4	3.7	6.6	9.2	4.5	5.8
Brazil	Amapá	0.1	0.1	0.1	0.1	0.2	0.3	5.8	5.2	4.3	4.6	5.6	5.1
Chile	Aysén	0.4	0.5	0.5	0.6	0.6	0.6	4.2	2.7	2.6	1.9	1.3	2.5
Ecuador	Sucumbíos	0.1	0.1	0.2	0.5	0.8	1.1	3.6	12.4	14.1	7.7	4.7	8.2
Ecuador	Zamora Chinchipe	0.1	0.3	0.5	0.6	0.7	0.6	7.3	9.5	3.6	4.4	1.3	5.4
Ecuador	Galapagos	0.0	0.1	0.1	0.1	0.1	0.2	4.8	4.5	4.9	5.9	5.9	5.2
Guatemala	Petén	0.6	0.6	1.2	2.2	2.7	3.3	3.7	9.9	9.0	4.1	5.7	6.0
Mexico	Quintana Roo	0.1	0.1	0.2	0.3	0.6	0.9	6.2	5.6	9.5	8.0	5.8	7.0
Paraguay	Alto Paraná	0.7	1.3	3.7	6.6	9.8	10.8	7.7	13.4	8.1	7.0	3.2	7.8
Peru	Loreto	2.1	2.4	2.5	2.6	3.1	3.3	2.8	3.2	3.0	3.6	1.8	2.8
Peru	Madre de Dios	0.1	0.2	0.2	0.2	0.3	0.4	5.2	3.3	4.8	5.9	3.4	4.6

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database [online] [http://www.cepal.org/celade/depualc/default\\_2011.asp](http://www.cepal.org/celade/depualc/default_2011.asp).

This rapid growth is most likely attributable to significant net immigration, since there is no history of natural population growth rates exceeding 4%. The evidence gathered systematically for this study provides quantitative support for and confirmation of this statement. In almost all of the selected major administrative divisions shown in table V.2, both the cumulative net migration stocks (life time) and the recent migration rates (specific reference date) are very high compared with those for other major administrative divisions in the country.

Table V.2  
**LATIN AMERICA (9 COUNTRIES): NET MIGRATION AND NET MIGRATION RATES, SELECTED  
 LOW-POPULATION-DENSITY MAJOR ADMINISTRATIVE DIVISIONS, 1980-2000**

Country	Major administrative division	Total migration			Recent migration			
		Cumulative net migration (Number of inhabitants)	Net migration in the five years preceding the census (Number of inhabitants)		Migration rate in the five years preceding the census (Per 1,000)			
		2000	1980	1990	2000	1980	1990	2000
Argentina	Tierra del Fuego	42 111	...	...	3 122	...	...	7.1
Bolivia (Plurinational State of)	Santa Cruz	422 607		41 878	91 271	...	7.6	10.9
Brazil	Rondônia	626 453	...	32 599	10 590	...	6.8	1.7
Brazil	Roraima	135 327	...	28 653	33 373	...	33.1	25.5
Brazil	Amapá	130 236	...	16 494	29 469	...	14.0	15.0
Chile	Aysén	9 278	699	-68	-235	2.5	-0.2	-0.6
Ecuador	Sucumbíos	55 319	...	7 311	4 032	...	25.4	7.6
Ecuador	Zamora Chinchipe	13 008	3 222	4 123	-391	18.1	15.994	-1.2
Ecuador	Galapagos	9 369	606	1 114	1 545	27.7	31.057	20.7
Guatemala	Petén	91 029	...	10 871	8 220	...	13.2	5.8
Mexico	Quintana Roo	443 282	...	73 841	85 978	...	39.9	24.1
Paraguay	Alto Paraná	162 551	14 389	27 789	1 544	21.5	18.151	0.7
Peru	Loreto	-77 194		-9 040	-16 255		-3.3	-4.2

**Source:** Latin American and Caribbean Demographic Centre – Population Division of the Economic Commission for Latin America and the Caribbean, on the basis of data from the Database on Internal Migration in Latin America and the Caribbean (MIALC).

It has been widely documented (Rodríguez and Busso, 2009) that migratory flows leading to the settlement of large proportions of the low-population-density areas in inhospitable territory (deserts, ice fields, high mountain ranges, rainforests) originated in colonization programmes and the introduction of relatively autarkic productive activities (primarily extractive industries). Neither of these two settlement modalities (colonization and the setting up of enclaves) showed particular consideration for the local indigenous population, where there was one, or for the environment. Given the often fragile ecosystems in those areas, settlement frequently caused extensive damage. In fact, these programmes were ultimately discontinued owing to their collateral damage.

With the interruption of these programmes, growth in some low-population-density areas is now stagnating and their appeal to migrants is waning. Table V.1 contains several examples of such cases, including Rondônia in Brazil, Aysén in Chile, Alto Paraná in Paraguay and Zamora Chinchipe in Ecuador. There are many reasons, apart from the end of colonization schemes, why these areas have suddenly stopped drawing migrants: the depletion of natural resources or other sources of economic growth (cross-border trade, for example), the reduction of incentives, subsidies and special investments in sparsely populated areas and the advance of the agricultural and settlement frontier to other areas (this is the case for Rondônia, whose population is dwindling, while that of the neighbouring state of Roraima is burgeoning).<sup>5</sup> The situations are too diverse to seek monocausal explanations for the sociodemographic and economic changes in low-population-density areas.

<sup>5</sup> The nature of certain industries also plays a part. For example, petroleum extraction and some mining sectors are generally labour-intensive in the initial phases, but their need for migrant labour falls over time and firms can recruit more selectively.

It is tempting to think of migratory flows towards these sparsely populated areas as being into unoccupied land; this impression is highly influenced by historical images of colonizers migrating to lands granted by the government or migrants seeking their fortune in mining (or activities connected with extractive industries), whether private or public. But even under the colonization programmes based on the granting of land rights, people tended to settle in towns and cities. This has been seen to an even greater extent since the decline and disappearance of colonization schemes. Although land continues to be the most abundant resource in these areas, their cities seem to have more appeal. The numbers of migrants flocking to these areas are resulting in rapid urbanization, as shown in table V.3, with the only exception being the low-population-density major administrative divisions in Guatemala (although they are expanding in line with the country's overall rate of urbanization) and, to a lesser extent, those in Ecuador. The term "protourbanization" has been applied, even to this last case. Indeed, the settlement process in the northern Amazon region, where a large part of the oil industry is located highlights the increasingly intense interrelationship between the urban and rural environments (Barbieri, Monte-Mór and Bilsborrow, 2007).

Table V.3  
**LATIN AMERICA (9 COUNTRIES): POPULATION LIVING IN URBAN AREAS AND POPULATION GROWTH RATES IN MAJOR ADMINISTRATIVE DIVISIONS, 1950-2000**  
*(Per 100 inhabitants, percentages)*

Country	Major administrative division	Percentage of the population living in urban areas						Urban population growth rate					
		1950	1960	1970	1980	1990	2000	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	1950-2000
Argentina	Tierra del Fuego	0.0	63.0	73.8	82.5	97.2	97.1	...	4.9	7.4	9.7	3.6	...
Bolivia (Plurinational State of)	Santa Cruz	36.9	...	52.7	...	72.0	76.2	...	4.9	...	6.1	4.9	5.3
Brazil	Rondônia	37.4	43.3	53.6	46.5	58.2	64.1	7.7	6.8	13.4	9.6	3.3	8.3
Brazil	Roraima	28.3	42.9	42.8	61.6	64.7	76.1	8.5	3.6	10.2	9.6	6.3	7.7
Brazil	Amapá	37.1	51.4	54.6	59.2	80.9	89.0	9.0	5.8	5.1	7.4	6.7	6.8
Chile	Aysén	44.5	52.9	64.0	77.0	71.8	80.5	6.2	4.8	4.1	1.2	2.4	3.7
Ecuador	Sucumbíos	11.1	4.4	3.9	19.8	26.6	38.9	-4.1	11.4	33.2	11.4	8.1	10.7
Ecuador	Zamora Chinchipe	15.1	16.4	11.1	22.7	24.6	35.6	8.0	6.2	12.0	5.4	4.7	7.1
Ecuador	Galapagos	0.0	0.0	58.4	73.4	81.9	85.4	...	...	7.6	7.2	6.2	...
Guatemala	Petén	10.1	46.4	33.1	24.1	26.7	30.1	14.6	6.1	5.0	4.9	7.1	8.0
Mexico	Quintana Roo	26.9	31.4	36.5	59.1	73.9	82.5	7.8	7.1	14.3	10.3	6.9	9.3
Paraguay	Alto Paraná	20.3	8.1	18.3	41.6	56.7	66.3	0.0	21.8	16.3	10.1	4.8	10.1
Peru	Loreto	33.9	38.4	49.5	54.9	58.0	65.4	3.4	5.5	4.1	4.1	2.7	3.8
Peru	Madre de Dios	26.4	25.4	39.9	48.4	57.4	73.3	5.0	7.4	6.9	7.3	5.2	6.1

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database [online] [http://www.cepal.org/celade/depualc/default\\_2011.asp](http://www.cepal.org/celade/depualc/default_2011.asp).

A prime example of this urbanization process in low-population-density major administrative divisions —as well as the difficulty experienced by politicians, the general public and even analysts in assimilating it— is the case of the Brazilian Amazon, where the urban network has expanded and the cities are gaining ground in demographic, economic and political terms (Saint-Clair Cordeiro da Trindade, 2011).

In other areas, the territory, though wild, was hospitable, and migrants quickly formed rapidly expanding urban centres which developed along relatively typical lines for urban and even metropolitan growth. Of course, the original expansion of these cities was instigated by public policy —including the

creation of tax-free zones, the construction of infrastructure and large productive facilities (such as power plants, foundries and refineries), and trade and enterprise facilitation (the promotion of industry)— but the process subsequently gained impetus and the cities ceased to rely on special programmes to attract new migrants. That is, they became attractive in their own right and in some cases (such as Santa Cruz in the Plurinational State of Bolivia and Ciudad del Este in Paraguay) they began to vie for economic and demographic prominence with the areas that have historically been the most populated.

One special case is the rapidly growing sparsely populated major administrative divisions whose appeal is tourism, especially international tourism. As this industry relies upon the environment, the scenery and natural and historical attractions, there is, in theory, a symbiotic relationship between environmental preservation and thriving economic activity. Although this should, in theory, promote a more favourable relationship between the population and the host ecosystem, experience shows that often the impact has been more negative than expected. This situation is attributable, above all, to the international reach and mass scale of some enterprises, which have a huge impact on the ecosystem and lead to a demographic explosion, owing both to the tourists and to the workers in the industry, which is highly labour-intensive. Furthermore, many of the sites where mass tourism complexes have been set up are relatively fragile.

The different types of tourism companies and entrepreneurs are widely documented in recent studies (Helmsling and Ellinger Fonseca, 2011). There is a clear distinction between megaprojects with a global scope, such as the complexes built on many beaches in the Caribbean, Central America and Mexico, and local businesses that, while still involved in international tourism, operate on a much smaller scale and with infrastructure that seeks explicitly to maintain the characteristics, charm and natural areas of the region in which they are situated. These smaller-scale enterprises can be elitist and exclusive, in which case environmental preservation and the privacy of their clients tend to be intrinsic concerns; however, they can also target a broader public without the need for radical changes to the landscape or environment that existed prior to the tourism boom. The revenues of such businesses usually go to the entrepreneurs and local workers, closing an imperfect virtuous circle, but one that offers great opportunities to whole communities. Tourism megaprojects operate in a very different manner. For a start, they involve a hefty investment and tend to lead to a dramatic and profound transformation of the area in which they are built. Such megaprojects are almost irresistible to central authorities who associate them with foreign currency, economic growth and job creation. For these very reasons, they are normally welcomed by the population; however, that perception can change rapidly as the host community is usually the first to feel the adverse effects of the new industry and its associated infrastructure. These adverse effects go far beyond environmental damage, and include issues associated with health, security, violence, vulnerability, congestion and exclusion, and can even lead to the displacement of the population.<sup>6</sup> While this does not detract from the economic contribution of these large-scale enterprises, it does draw attention to the complex processes that they unleash, which call for greater regulation and prevention measures precisely to avoid any irreversible damage that would make tourist activities unsustainable in the long term. In short, these settlements springing up as a result essentially of global

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<sup>6</sup> The environmental damage has probably been the most studied. For example, in the Dominican Republic, it has been recently recognized that tourism development is taking place in ecologically fragile zones. As a result, large areas of the coast have been damaged by activities such as the reconditioning of beaches, which causes sediment damage. Hotel infrastructures have systematically been built in violation of the limits established by law, which prohibits construction within 60 metres of the shore, or in filled wetlands. Coral removal for hotel construction has been observed in Puerto Plata and Samana. The World Bank also warns that the announced construction of new container ports will lead to the destruction of even more coral reefs (UNDP, 2005).

market forces have future consequences which should be taken into account, not in order to prevent such development, but to manage it and attenuate any negative impact.

Box V.2 contains a summary of the population growth in the low-population-density major administrative divisions in specific countries and outlines some of the factors contributing to that growth.

Box V.2

**LATIN AMERICA: POPULATION GROWTH IN LOW-POPULATION-DENSITY  
MAJOR ADMINISTRATIVE DIVISIONS, 1950-2000**

In Ecuador, the provinces of Sucumbíos, Zamora Chinchipe and Galapagos experienced high population growth on average between 1950 and 2010, but with significant differences between them. For example, Sucumbíos, an oil-rich border province in the far north-east of the country which is also associated with coffee-growing and tourism, has attracted many workers independently of any official colonization programmes. Up to the 1970s, gold mining attracted many workers to Zamora Chinchipe, located in the country's far south-east on the border with Peru. But the area's appeal waned with the decline of gold mining and was not restored by the expansion of forestry, livestock-raising and tourism, among other reasons, because these activities can also displace the population. The Galapagos province has seen robust and relatively sustained population growth over the last 50 years, owing to the strength of the tourism industry and the assignment of significant contingents of civil servants and researchers to the islands, which are one of the world's largest and most important nature reserves. Precisely because it is a nature reserve, the province's population growth has been controlled, which has been made easier by the province's island nature.

The department of Alto Paraná is in the east of Paraguay. The high rate of population growth in this area is attributable to activities related to forest harvesting and palm heart production, as well as to the Itaipú hydroelectric plant, administered by a joint Brazilian- and Paraguayan-owned company and located on the border on the Paraná River. Ciudad del Este, one of the largest free trade zones in the region, is also located in this department.

The department of Santa Cruz in the Plurinational State of Bolivia has seen high population growth, which has increased its share in the total population. The reasons for this significant expansion include the Bolivian Government's hefty investment in the region during the 1970s and 1980s, mainly in agro-industry (sugar, oil and cotton, and later, soybean and its derivatives); that industry is now one of the driving forces of the region's economy and, together with the hydrocarbon sector, is a mainspring of productive activities. As a result, Santa Cruz is one of the most industrialized regions in the country, with some of the highest regional competitiveness indicators, which has encouraged foreign investors to set up in this department.

The states of Rondônia, Roraima and Amapá are all located on Brazil's borders: Rondônia is in the north-west, bordering with the Plurinational State of Bolivia to the south-west; Roraima and Amapá are in the north, the former is contiguous with the Bolivarian Republic of Venezuela to the north and north-west and with Guyana to the east, while the latter is on the northern border with French Guiana and Suriname. Rondônia experienced high population growth during the study period, although tailing off in recent years, which was linked to the advance of the agricultural frontier and was a determining factor in agricultural development. Since Rondônia became a state of Brazil in the 1980s, the agricultural sector and coffee production have gone from strength to strength. In Roraima, economic activities have been associated with the services sector, mining, industry and agroindustry. The state government offers fiscal incentives to companies setting up in the area in order to attract investment that will contribute to development. The population growth in Amapá (which has been a state since 1988) is attributable mainly to the farmers' settlements projects under the programmes of the National Institute for Colonization and Agrarian Reform (INCRA).

The population of the state of Quintana Roo in Mexico has swelled for several reasons, but the most striking is the development of tourism in the area, particularly in the cities of Cancun and Playa del Carmen, both major tourist centres receiving many visitors every year, as well as on the Mayan Riviera where several archaeological sites are located.

## Box V.2 (concluded)

State policies promoting migration from other areas of the country were the main cause of the population growth in the department of Petén in Guatemala. The central government created an autonomous body, the National Enterprise for the Promotion and Development of Petén (FYDEP) to manage the new settlements and the economic development of the department; the land tenure process was administered by FYDEP from 1959 to 1989, then by the National Institute for Agrarian Reform (INTA) from 1990 to 1999, and has been overseen by the Ministry of Agriculture, Livestock and Food since 1999.

Various factors underlie the substantial expansion of the population in the province of Tierra del Fuego in Argentina. First, Tierra del Fuego benefits from a law establishing a special fiscal and customs regime to promote industry in the province, thus giving a structural boost to economic development and incentivizing migration to the province, especially to Río Grande, its economic capital. Furthermore, the landscape of Tierra del Fuego has supported the development of an internationally renowned tourism hub, centred principally on the city of Ushuaia, the administrative capital of the province, and the surrounding areas.

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC.

### C. THE RECENT SITUATION AND THE OUTLOOK FOR THE FUTURE

Owing in part to the agreements reached and the awareness raised at the Earth Summit (Rio de Janeiro, 1992) and the International Conference on Population and Development (Cairo, 1994), as well as the preparatory processes leading up to these meetings and their follow-up, ever greater restrictions and increasingly demanding environmental and social impact studies now apply to the occupation and exploitation of sparsely settled areas. In addition, threats to security or national sovereignty have ceased to be a major political or social motivation for settlement processes. It is not that these areas have been declared sanctuaries owing to their intangible value: on the contrary, they contain copious natural resources, lend themselves to the capture and transmission of renewable energy (wind, solar, geothermal, among others) and offer examples that shine a favourable light on the possibility of human settlements and sustainable productive activity. However, there is greater awareness of the care that must be taken in relation to settlement and use of such areas, and of the value of preserving their ecosystems, heritage and potential for economic gains (for example, for the tourism sector).

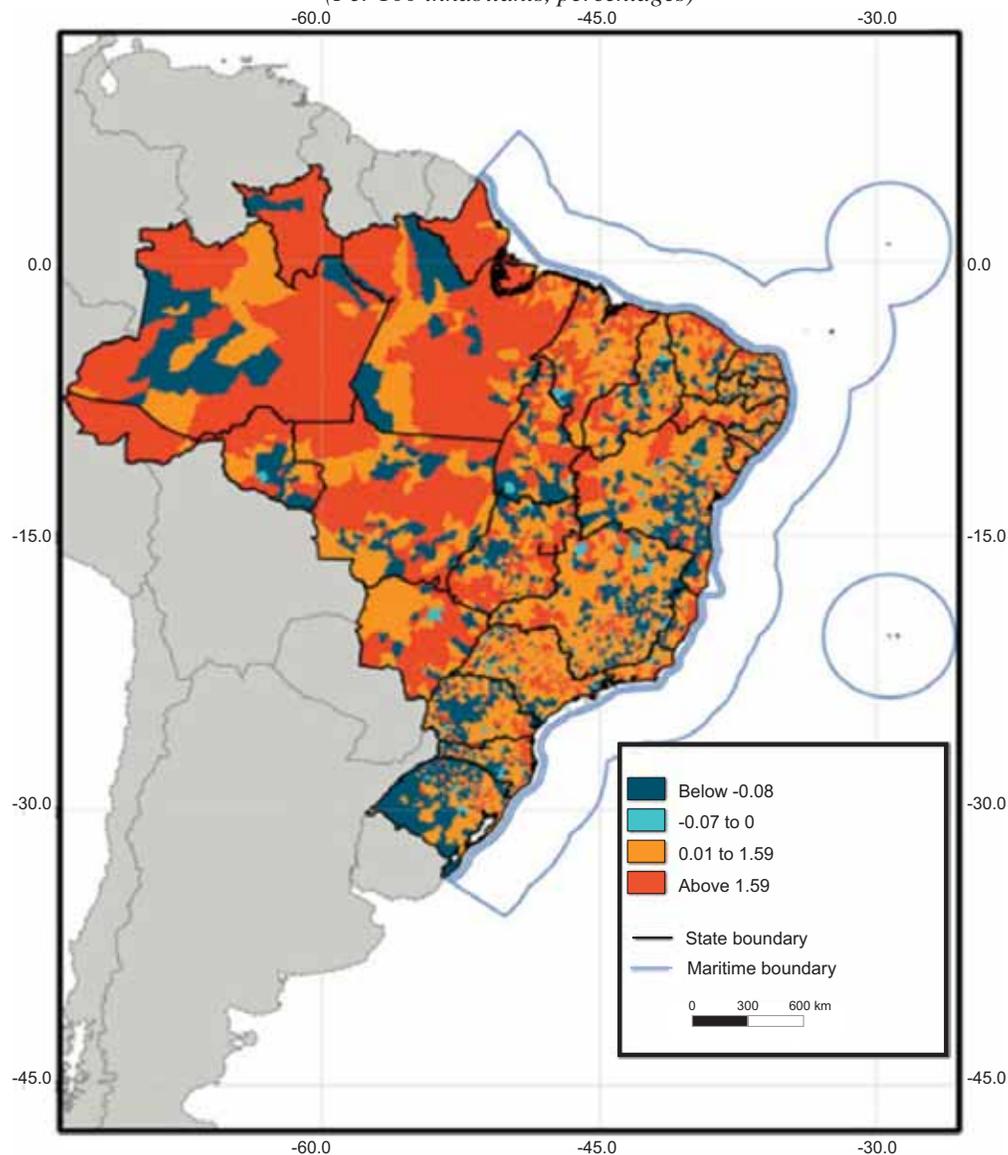
The world economy is hungry for the resources available in these low-population-density areas of the region and so strong economic and political pressures remain to take control of these areas, use them and settle them. The countries of the region have vested economic hopes in such areas, given their potential, which is no longer limited to the extraction or exploitation of natural resources, but also includes farming for export, energy generation, tourism and the “green economy” (including economic compensation for the preservation of certain areas under international environmental agreements).

The growing awareness of the importance of the environmental and social sustainability of these areas and the existence of more robust institutions and a normative framework in support of environmental and social protection could help to prevent and mitigate the adverse effects of new projects. Nevertheless, the only way to study the impact is through comprehensive and constant monitoring of these ecosystems, as is being done in the case of Brazil’s Amazon forest.

The censuses carried out since 2010 are already providing very useful information for evaluating the settlement process in these areas and the changes in the living conditions there. In early 2012, the first results from the 2010 census round showed sharp population growth in these low density areas, including some of the most emblematic. In particular, the municipal data on intercensal population growth from the

2010 census in Brazil show a rapid expansion in the Amazon. The study from which map V.3 is taken suggests that burgeoning population growth in the north of the country (where a large part of the Brazilian Amazon is located) can be explained by a variety of factors attracting migrants (de Oliveira, Ervatti and O'Neill, 2011).

Map V.3  
**BRAZIL: POPULATION GROWTH RATE AT THE MUNICIPAL LEVEL, 2000-2010**  
 (Per 100 inhabitants, percentages)



**Source:** Antônio Tadeu Ribeiro de Oliveira, Leila Regina Ervatti and Maria Monica Vieira Caetano O'Neill, *O panorama dos deslocamentos populacionais no Brasil: PNADs e Censos Demográficos*, Rio de Janeiro, Brazilian Geographical and Statistical Institute (IBGE), 2011; Luiz Antonio Pinto de Oliveira and Antônio Tadeu Ribeiro de Oliveira (orgs.), "Reflexões sobre os Deslocamentos Populacionais no Brasil", *Estudos e Análises Informação Demográfica e Socioeconômica*, No. 1, 2011, map 1, p. 42.

**Note:** The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

In any case, only once the information on migration has been released will it be possible to conclude whether this boom can be attributed to persistent waves of migrants—who move essentially because of market forces, migrant networks and the opportunities that these places offer, rather than because of public policies or programmes—or other factors (such as greater natural growth).

In Ecuador, the Amazon covers the entire part of the country east of the Andes mountain range. It is made up of the following provinces, from north to south: Sucumbíos, Napo, Orellana, Pastaza, Morona Santiago and Zamora Chinchipe. As mentioned in the previous section (see tables V.1 and V.2 and box V.2), some of these provinces (in particular, Morona, Santiago and Zamora Chinchipe) have lost some of their appeal over the last two decades as the current political and institutional context does not favour the rapid, mass occupation of the Amazon (see table V.4). By contrast, the provinces of Orellana and Pastaza remain attractive to migrants and are therefore seeing rapid population growth. Their continuing draw can be put down to the diversity of productive sectors in these areas, including petroleum extraction, mining and tourism, and the good conditions for agriculture. The situation of Napo is different because it became a province of net emigration when it was divided in two (Orellana, formerly called Coca, used to be the eastern part of Napo before becoming a separate province). The current province of Napo, which corresponds to the western part of the former province, has been settled the longest and offers fewest attractions to new residents. Surprisingly, Sucumbíos (which was also separated from Napo, but earlier than Orellana) recorded net emigration for the first time. Although the causes for this have yet to be clarified, it is striking that there has been a mass flux of migrants from Sucumbíos to Orellana, which could suggest a redistribution of productive activities (especially mining) in the north-east of Ecuador.

Table V.4  
**ECUADOR: NET INTERNAL MIGRATION RATE OF THE AMAZON PROVINCES  
 AND THE GALAPAGOS ISLANDS, 1977-2010**  
*(Number of persons and average annual rate per 1,000)*

Province	1977-1982		1985-1990		1996-2001		2005-2010	
	Total migration	Annual average net migration rate (per 1,000)	Total migration	Annual average net migration rate (per 1,000)	Total migration	Annual average net migration rate (per 1,000)	Total migration	Annual average net migration rate (per 1,000)
Sucumbíos			7 311	25.4	4 032	7.6	-557	-0.8
Napo	18 666	46.5	6 131	15.1	-446	-1.3	-5	0.0
Orellana					6 227	18.3	7 538	13.6
Pastaza	2 149	17.4	2 862	17.0	3 277	12.8	3 175	9.0
Morona Santiago	2 656	9.8	1 564	4.6	-614	-1.3	285	0.5
Zamora Chinchipe	3 222	18.1	4 123	16.0	-391	-1.2	270	0.7
Galapagos	606	27.7	1 114	31.1	1 545	20.7	1 125	10.9

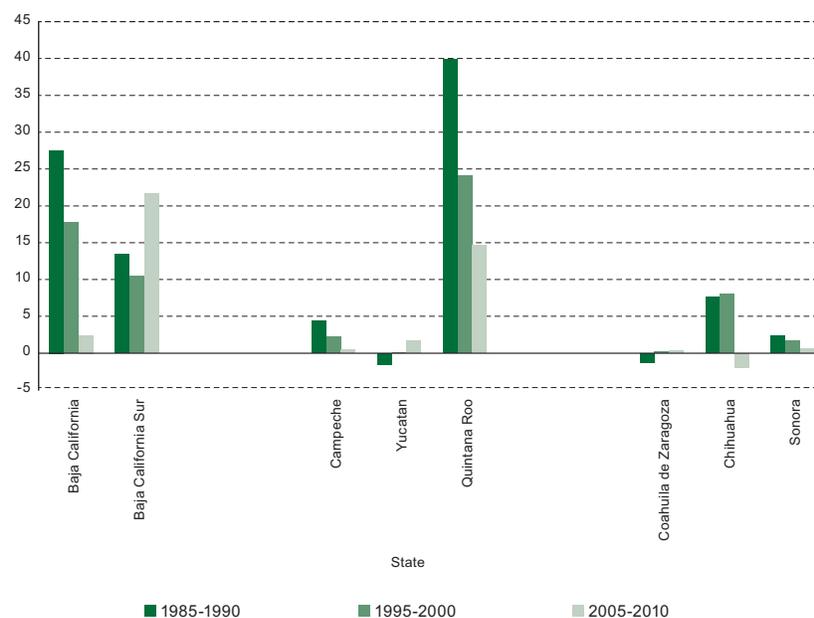
**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of the 2010 census database.

While migration patterns in the Amazon are more diverse than in the past, the Galapagos Islands continue to draw migrants. As the area is so sparsely populated, even a small net volume of migrants can represent very high migration rates. Although this could place a worrying burden on the islands' fragile ecosystem, these movements are governed by regulations that make it easier for migrants to settle in and integrate, making adverse effects less likely.

In Mexico, low-population-density areas fall into at least three broad categories: (i) the two states on the Baja California peninsula (Baja California and Baja California Sur); (ii) the mainly desert states on the northern border with the United States of America (including Sonora and Chihuahua); and (iii) three states on the Yucatán peninsula (Quintana Roo, Campeche and Yucatán). Since the 1980s, these three areas have been among the main drivers of Mexico's regional economic and demographic dispersal, a process which is examined in further detail in chapter VII. The opportunities these places offer are not agricultural but associated with mining (Campeche), industry (northern border, including Baja California), and services, particularly international tourism and the associated production linkages on the Yucatán and Baja California peninsulas. The Government has fostered this process using a series of measures, including subsidies, benefits, public investment, administrative decentralization and regionalized institutions.

The migration rates for each of the states can be calculated using the recently released 2010 census data, showing the extent to which these low-population-density areas have maintained their appeal (see figure V.1). Quintana Roo (where Cancun is located) retains its appeal, with a net immigration rate of 14.6 per 1,000 between 2005 and 2010. The international tourism industry is the springboard for the state's unflinching drawing power. Unexpectedly, the most sparsely populated state in the country, Baja California Sur, actually has the highest net immigration rate. The reason for this is not clear, but international tourism is undoubtedly a significant factor. Furthermore, it is likely that the violence and the economic crisis affecting the other state that makes up the peninsula, Baja California, may have shifted the direction of migration flows, not only from Baja California, but also from other states, especially Guerrero and Sinaloa. Conversely, the appeal of the northern border, particularly Chihuahua, has plummeted, probably on the back of the economic crisis in the United States and the increasing violence experienced in the region.

Figure V.1  
MEXICO: NET INTERNAL MIGRATION RATES BY STATE, 1985-2010  
(Per 1,000 inhabitants)



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) (1990 and 2000 censuses); and National Institute of Statistics and Geography (INEGI), calculations on the basis of special processing of census microdata (2010).

It is not possible to draw direct conclusions regarding the consequences of higher growth rates and the enduring appeal of the majority of the sparsely populated regions; however, it is clear that those areas continue to attract migrants (almost certainly because of the economic opportunities they offer) and a proactive approach should be taken to regulate these movements to avoid a repetition of the damage caused and problems seen in the past.

Chapter XI offers an analysis of the complex relationship between population trends in sparsely populated areas and sustainable development, evaluating the policies needed in that regard. Such policies must inevitably take into account the rights and world views of indigenous populations, which are so often ridden over roughshod in these circumstances, as well as the promises made to the migrants who move to these zones, frequently under the auspices of government schemes.

## Chapter VI

**BORDERLANDS: TERRITORIES AT STAKE****A. INTRODUCTION**

Border areas, districts, regions or zones are hubs of social and economic activity, as well as trade involving movements of people, goods and products and the interaction of frontier communities of neighbouring countries (municipalities, departments or localities). These special areas are vital for States not only because of the pattern or intensity of human settlement—which depends largely on the specific features of each border—but also because the constant passage of goods and people through these crossings may function smoothly or with difficulty. Moreover, these are hybrid spaces which offer great opportunities for development, but where interests that follow a quite different rationale are also played out, with risks of a different nature, notably the violence that breaks out at many crossings during transit and return migration. These areas need to be treated separately from the rest of the territory; indeed, the network of linkages and cross-border relationships between individuals, communities and businesses that they generate are so specific that they are often disregarded or even ignored by central authorities in each country.

Generally speaking, globalization and regional integration tend to facilitate the flow of people in these areas—in fact, geopolitical tendencies towards isolationism and distrust of neighbouring countries are on the wane—and these two trends could make migration less difficult and relieve the tensions between territories of origin and destination. Various efforts to streamline immigration and residence procedures under integration agreements such as the Southern Common Market (MERCOSUR) suggest that this is true. For some migrants, however, the persistent economic and social asymmetries between neighbouring countries usually result in disadvantages, stigmas and vulnerabilities. This means that this migration continues to cause friction and conflicts, albeit on a small scale, but remains functional overall for countries and migrants, and interaction between transborder communities continues to flourish.

A notable and persistent feature shared by several of the more mobile frontiers in the region is the way places of origin and destination are interlinked through strong historical and cultural ties between peoples of different origins (Canales, Vargas and Montiel, 2010a and 2010b). Apart from marking differences in the circumstance of having been born on one side or other of the border, borderlands predate the demarcation of national State boundaries and the subsequent delimitation of their political territories. They also develop through the family networks formed on either side of the boundary as a result of constant movement over the years. Of course, they are also areas where interaction can be restricted by various factors, where conflicts arise and are reproduced and where specific vulnerabilities and problems occur.

For all these reasons, special consideration is given in this document to issues relating to these territories. The existing sources for analysing migration and mobility are limited,<sup>1</sup> but, fortunately, a set of

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<sup>1</sup> Defining cross-border populations is a complex exercise since the limitations of traditional instruments are compounded by specificities based on various contextual factors, such as different forms of social and economic interaction between neighbouring localities, the existence of family arrangements that straddle borders; social and economic crises in one or other of the States; the persistence of territorial conflicts between adjacent States; or internal political conflicts. Thus, there must be an operating definition of what constitutes a migrant

studies was conducted recently by the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC in five selected border areas in the region: Mexico-Guatemala, Haiti-Dominican Republic (Canales, Vargas and Montiel, 2010a and 2010b), Costa Rica-Nicaragua, Colombia-Ecuador (Morales, Acuña and Wing-Ching, 2009a and 2009b) and Argentina-Plurinational State of Bolivia (Cerrutti, Liguori and Curtis, 2009). These have been used to systematize a substantial volume of background material and evidence relating to migration and mobility, with emphasis on sexual and reproductive health.

## **B. TYPOLOGY OF SELECTED BORDER AREAS IN THE REGION BY MIGRATION PATTERNS**

In terms of interaction, international borders in different countries present general as well as specific features. As regards movements of people, productive activities and trade have been crucial in shaping transborder circuits in a number of borderlands. In others, migration patterns predated the establishment of boundaries and included the mobility of indigenous peoples from time immemorial. As indicated in the above-mentioned studies, which examine a representative sample of binational borders, these areas can be classified from the point of view of migration in three broad categories:

- (i) The first group includes the Mexico-Guatemala and Ecuador-Colombia borders. In both cases, the border is a crossing area in the true sense. This is more obvious in the first case where the border ceases to be the boundary separating the two countries and becomes a border region in which population migration and mobility act as a mechanism for regional integration. Mobile populations, in particular migrant women, are exposed to specific risks, as indicated by their overall health (and their sexual and reproductive health, in particular), and to dangers such as people trafficking and smuggling, which are typical of border regions. Mobility enables them to escape from the poverty and precariousness they face in their home communities, but their dual status as women and migrants carries risks and heightens their vulnerability. Borderlands witness other migratory flows, notably the Central American and South American migration through Mexico towards the United States of America.

The Colombia-Ecuador border is a variant of this transborder model. It has a number of typical traits but also some peculiarities. It differs from national regions in terms of its social context and migratory dynamics. The populations involved, the pattern of mobility, the causes of migration, and other features differ from those observed at the national level both in terms of other Colombian emigrations and as regards immigration into Ecuador. The integrity of some Colombian populations is threatened by a host of factors that result in clearly forced, non-optional migration.

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population bearing in mind that the information is dispersed. Such a definition will recognize as migrants those registered by traditional instruments such as population censuses (persons who change their habitual place of residence or who were born in a country other than their present country of residence), persons in transit and those who move frequently across the border, who can be registered by non-traditional sources such as records of the health services, the police or non-governmental organizations.

In this case, violence and social and political instability are fundamental factors in transborder migration in Colombia's frontier regions. Unlike the Mexico-Guatemala border, emigration is driven not just by economic factors but also by political and social factors. The forced displacements of Colombian populations as a result of violence and drug-trafficking lead to vulnerable situations and risks not seen in other border areas.

These Colombian displacements represent the main immigration flow into Ecuador, which means that although the absolute numbers are still small, their political weight is significant, all the more so bearing in mind the triggers. Nevertheless, Colombian migration to Ecuador is limited basically to the border region.

- (ii) The situation along the Costa Rica-Nicaragua and Dominican Republic-Haiti borders is different. In both cases, migration flows are not limited to the border region of the host country but have become a nationwide phenomenon. The border area is defined as a place of migration crossings rather than a transborder region. The border dynamic is simply part of the national migration dynamic. A number of factors have an impact on this more limited share of the border as a region of migration. First, migration between the two countries is less significant than in the case of Guatemalans entering Mexico or Colombians entering Ecuador. Second, in relative terms, for both Costa Rica and the Dominican Republic, immigration from the neighbouring country is the main migratory flow into the country, which means that this flow assumes importance at the national level. Third, the border regions of Costa Rica and the Dominican Republic are very small, sparsely populated and remote from major urban and economic centres. In both cases, the population, social and economic dynamics are played out far from the border areas. Thus, to a certain extent these borders function more as a boundary separating two nations than as a space for transborder regional integration.

Nevertheless, some differences are worth highlighting. Whereas Nicaraguan immigrants account for more than 6% of the population (according to official sources) in Costa Rica, in the case of the Dominican Republic, Haitian immigrants add up to just 1% of the population (not including the impact of the last earthquake).

- (iii) Lastly, Bolivian migration to Argentina is a combination of, and link between, the other two. Indeed, the provinces of Salta and Jujuy in Argentina, and the departments of Tarija and Potosí in the Plurinational State of Bolivia constitute a veritable transborder region. This region has some similarities with the Mexico-Guatemala border and its history dates back to prehispanic times. During much of the twentieth century, Bolivian migration to Argentina was limited to this borderland, but even when the flows were substantial, they were small in comparison with the huge waves of migrants that Argentina was receiving from overseas.

Moreover, the traditional migration pattern among Bolivians has changed significantly in recent decades. In particular, it has swelled and spread to other destinations within Argentina, especially the province and city of Buenos Aires. This territorial spread means that inflows of Bolivian migrants are becoming increasingly significant across the country and can no longer be viewed as a strictly transborder flow limited to any one region, but must now be treated as a special and particular combination of the two aforementioned migration patterns: transborder migration and national migration.

### **C. THE POLITICAL CONTEXT AND MOBILITY IN BORDERLANDS**

Policies relating to the migrant population are very dispersed, which makes it difficult to ensure full respect for this group's rights. The problem is all the more worrying given that border areas are often far from the centres of political power and that rising criminality places migrants at risk of smuggling and trafficking, forced or unwilling involvement in the sex trade, violence against women or forced displacement. Legal instruments under international law have started to recognize these migration issues, while national legislations have progressively been adopting international standards, albeit not at the same pace or in the same depth. Migration policies have been introduced in regional integration schemes and binational cooperation mechanisms primarily for the purpose of regulating migration flows and providing health care. Nevertheless, the main obstacle is the lack of coordination with local governments and the traditional weakness of the State in border regions.

International organizations have played an important role in addressing migration issues and drawing attention to the vulnerability of migrants. First, they have built awareness of migrants' human rights issues through research, held negotiations with Governments to encourage them to incorporate the principles of international law in their national legislations and sought to ensure respect for human rights in border areas. They have also provided technical support to Governments in the implementation of policies and strategies and have undertaken specific actions in favour of migrant populations.

Since no two border situations are the same, while local resources are scarce and institutions in most cases are precarious, civil society organizations have emerged as another key actor in monitoring respect for the human rights of migrants. In the absence of public policies, these organizations are often the only support network available to migrants. This affords these organizations great legitimacy and enables them to speak out, act as interlocutors and claim rights on behalf of the migrant population.

The involvement and complementarities of these three types of organization (international organizations, civil society organizations and Governments) in monitoring migrants' rights suggest that cooperation forums would be useful in guaranteeing the rights of border migrants.

### **D. OUTLOOK FOR RESEARCH AND POLICY FOR BORDER AREAS: THE CASE OF SEXUAL AND REPRODUCTIVE HEALTH**

As indicated in studies on the five borders mentioned above, the lack of statistical data and of studies and research makes it imperative to continue to deepen knowledge and analysis of the sociodemographic characteristics of border migrant populations. It is also necessary to promote the generation and production of quantitative and qualitative information concerning issues such as access by border populations to sexual and reproductive health care, and the problem of gender-related violence and other phenomena that affect primarily women, indigenous peoples and other potentially disadvantaged groups. Such information may be obtained by upgrading existing instruments or carrying out ad hoc surveys and studies designed to investigate the needs of such populations. More specific research will be needed into the link between vulnerability, migration and violence, especially as regards gender, generational and ethnic considerations.

The different levels of government (local, provincial/ state and national) have tended to function disjointedly on health policy initiatives geared to the migrant population, which has fragmented government action. Levels of government therefore need coordination measures in order to respond effectively (Canales, Martínez, Reboiras and Rivera, 2010). Health services in border areas are clearly deficient or insufficient to cope with existing demand of the national population, much less that of migrants. Local governments should engage with designing and implementing strategies for strengthening the State presence and matching supply to the real needs of the border population, whether local or migrant.

The role of civil society organizations should be strengthened and greater support should be provided for the work of international and non-governmental organizations in the area, whether in terms of finances or at the level of political commitment by Governments. Governmental and non-governmental organizations should set up and pursue regular and systematic health and migration initiatives, programmes and projects. Border migrants should be recognized as deserving special protection, bearing in mind the heterogeneity of these populations. Initiatives will be needed to cater for groups that are at greater risk: children and adolescents, in particular those travelling unaccompanied, and women migrants. Other concerns, such as education and access to social services, are also extremely important, although these exceed the scope of this report.

Lastly, adequate logistics and technical and specialized staff, together with suitable training, are needed to deal with the migrant population in border areas. Non-governmental organizations are among the few support and welfare networks that border migrants can rely on and the most efficient channel for assistance, which makes them an indispensable part of the solutions explored in the region. However, they are overwhelmed by growing demand and the scarcity of resources; hence the need to explore regular financing channels and long-term solutions and to establish collaboration ties between public agencies and civil society organizations.



## Chapter VII

**REGIONAL INEQUALITIES WITHIN COUNTRIES:  
THE ROLE OF INTERNAL MIGRATION****A. INTRODUCTION**

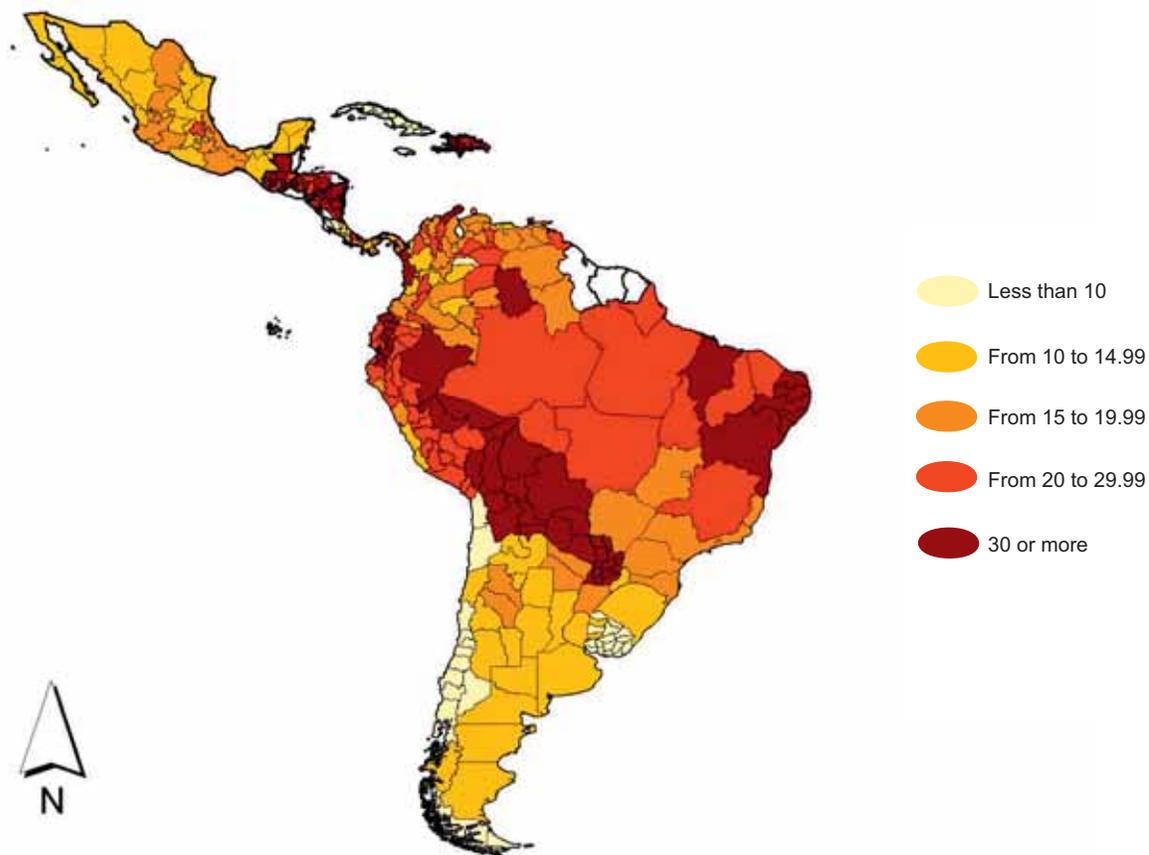
Levels of economic and social development vary within each country, not only at aggregate geographical scales—which reveal contrasts between rural and urban situations or between rich and poor regions—but also at more disaggregated scales between municipalities or neighbourhoods within the same metropolitan area.

This chapter draws attention to the territorial inequality existing between major regions of countries or at least between major administrative divisions (MADs) in a country. The focus is on regional territorial inequality as opposed to other types of territorial inequality, such as between urban and rural areas, municipalities of conurbations or districts within cities, which will be dealt with in other chapters. Two facets of this territorial inequality are shown for South America and Mexico in maps VII.1 and VII.2.

Differences in mortality rates reveal the most dramatic inequality, that is, inequality concerning the right to life. Map VII.1 shows countries where MADs with infant mortality rates of 10 per thousand or less exist alongside others where the rate is three times as high. Map VII.2, on the other hand, shows economic inequality, measured in this case in terms of per capita GDP. The contrast is clear, for example between MADs where per capita GDP is US\$ 10,000 or more (for the most part metropolitan MADs or natural resource enclaves) and MADs, where it does not exceed US\$ 2,500 (for the most part in the Andean area of the Plurinational State of Bolivia), Ecuador and Peru, as well as in north-west Argentina and north-east Brazil.

The inequalities shown on maps VII.1 and VII.2 are undeniable but are still the subject of debate. Governments usually declare their intention of reducing them and, to this end, implement initiatives of different kinds. Politicians tend to champion the same cause, especially those in the least developed and most disadvantaged regions, which suffer the frustration of being denied the conveniences and benefits enjoyed elsewhere in the country. This inequality is cause for concern because it tends to be self-perpetuating and, as pointed out in ECLAC (2010a), is an obstacle to sustainable development. Residents in disadvantaged territories have less access to public goods and services, and this narrows their opportunities and prevents them from exercising their rights; in this sense, the pursuit of greater territorial equality goes hand in hand with the pursuit of greater social equity. According to a significant number of researchers and experts, these inequalities lead to squandering, inefficiency and the unsustainable use of resources. A chapter on territorial inequalities was included in ECLAC (2010a) not just for social policy reasons (or in pursuit of greater social equity), but also for economic reasons (in pursuit of greater aggregate productivity).

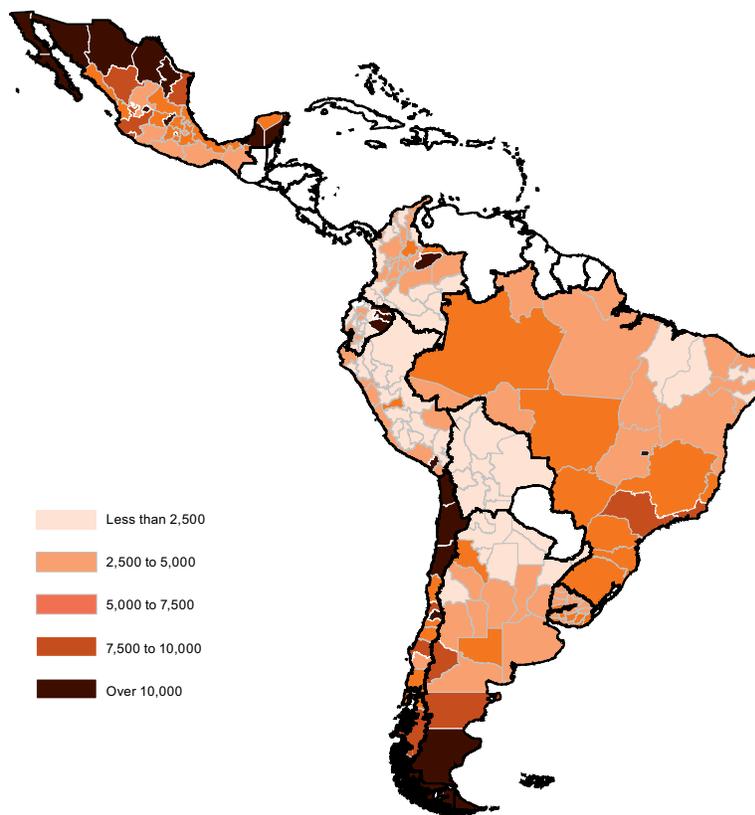
Map VII.1  
**LATIN AMERICA AND THE CARIBBEAN: INFANT MORTALITY RATE  
 BY MAJOR ADMINISTRATIVE DIVISION (MAD), AROUND 2010<sup>a</sup>**  
*(Per 1,000 live births)*



**Source:** CELADE-Population Division of ECLAC, on the basis of Argentina, Ministry of Health, Direction of Health Statistics and Information (DEIS), 2008; Brazil, IBGE/United Nations Population Fund (UNFPA) project : População e Desenvolvimento: Sistematização das Medidas e Indicadores Sociodemográficos Oriundos da Projeção da População por Sexo e Idade, por Método Demográfico, das Grandes Regiões e Unidades da Federação para o Período 1991/2030 (BRA/02/P02); Brazilian Geographical and Statistical Institute (IBGE), Pesquisa Nacional por Amostra de Domicílios 2007; Chile, Estadísticas vitales, 2009; Colombia, National Demographic and Health Survey 2010; Costa Rica, Panorama demográfico, 2010; Cuba, Anuario demográfico, 2010; Dominican Republic, Demographic and Health Survey 2007; Ecuador, Ecuadoran Demographic and Maternal and Child Health Survey (ENDEMAIN), 2004; Guatemala, Fifth National Maternal and Child Health Survey 2008-2009; Haiti, Enquête mortalité, morbidité et utilisation des services (EMMUS-IV), 2005-2006; Nicaragua, Nicaraguan Population and Health Survey (ENDESA) 2006-2007; Plurinational State of Bolivia, National Demographic and Health Survey (ENDSA), 2008; Uruguay, Anuario demográfico, 2011.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Map VII.2  
**LATIN AMERICA AND THE CARIBBEAN: PER CAPITA GROSS DOMESTIC PRODUCT  
 BY MAJOR ADMINISTRATIVE DIVISION, AROUND 2006**  
*(Dollars)*



**Source:** L. Riffo, “Desigualdades económicas regionales en América Latina y el Caribe”, paper presented at the Expert Group Meeting on Population, Territory and Sustainable Development, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 16-17 August 2011.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

In practice, Governments are usually ambivalent on the issue, since, in their discourse as well as in their policies, they normally prioritize economic growth, productivity and other objectives that are not generally designed to reduce regional inequalities. Thus, it would be difficult for political representatives to maintain positions of principle on this point, since their vision will depend on the territory they represent; for one thing, politicians in growth areas will request more support precisely to sustain that growth. Those in the most densely populated areas will invoke the size of their population, even if this is at the expense of less populated and less dynamic areas. And, at the conceptual level, there are researchers and institutions that do not consider these regional inequalities as problematic but rather as the natural, efficient and normally temporary outcome of economic development processes promoted by market forces (see World Bank, 2008). The political message of this approach is clear: “This integration can best be done by unleashing the market forces of agglomeration, migration, and specialization, not by fighting or opposing them” (World Bank, 2008, p. 21). Bearing in mind these contrasting positions, some further explanations are necessary.

First, this document reaffirms the strategic public policy position advocated by ECLAC concerning regional inequalities: “We want to reverse the huge disparities in the region by building more cohesive societies around productive dynamics, constructing positive social and territorial synergies” (ECLAC, 2010a, p. 12). This does not stem from any aspiration for territorial economic homogeneity that goes against natural production potential or against forces, such as geographical specialization and concentration, which, so far, have proven consubstantial with economic and social development. The concern relating to territorial inequalities arises from the fact that these inequalities are linked to social inequality and disregard for rights, from their adverse economic impact and their tendency to self-perpetuate to the detriment of the disadvantaged areas. There are a host of cumulative factors that justify this concern, but under no circumstances does this mean espousing territorial homogeneity, which, indeed, is not compatible with the ECLAC vision of development and equality.

Second, in terms of regional and local economic development, this document also endorses the work of ECLAC in particular that of the Latin American and Caribbean Institute for Economic and Social Planning (ILPES). The 2009 study on territorial economic development serves as a reference throughout this chapter and in particular for the policies discussed in chapter XI.

The third explanation, clearly related to the previous one, is that the contents of this chapter do not focus on economic and social inequalities between regions within countries but rather on linkages between these inequalities and the spatial distribution of the population and internal migration in particular.

## **B. BACKGROUND TO REGIONAL INEQUALITY IN LATIN AMERICA**

Historically, regional inequality has been a structural feature of several countries in the region. Each of these countries has followed a specific pattern of territorial development with regions displaying highly uneven levels of economic and social progress. In some cases, these disparities date back to the formation of national States (or even earlier), when the metropolitan MADs (those where the capital or main city is located) consolidated their role and started to accumulate the resources, investments, innovations, power and population necessary to promote industrial production, economic growth and build modern cities and institutions. Consequently, vast areas remained marginalized from this new dynamic, for the most part, those that had a high proportion of indigenous people and which were basically engaged in traditional subsistence agriculture, while others lost specific weight when the *hacienda* saw its power as the engine of economic growth wane and the boom in raw material extraction gave way to a cyclical downturn.

This highly uneven regional development generated different types of tension, including serious conflicts in a number of countries. In the aftermath of the Second World War, the Governments of Latin America and the Caribbean, prompted by the convergence of a series of factors, including the impact of international organizations such as ECLAC and the rise of what became known as “regional science” in the United States in the 1930s, decided to include regional development, that is, the promotion of progress in disadvantaged regions, as one of the priorities on their agenda.

Specifically, it was estimated that promoting development in the poorest sending regions was a relevant and appropriate policy insofar as it made for better resource management in all territories within countries, avoided developing a poverty trap in the poor regions and reduced the risks of capacity overload in the rich regions. Thus, between the 1950s and 1970s, a broad set of ambitious policies and programmes was implemented geared to the development of the less robust regions. An emblematic case was the creation of the Superintendency for the Development of the North-East (SUDENE) in Brazil.

Some of these programmes were superimposed on—or, at least coexisted with—those described in chapter II, which were designed to promote the occupation of low-density spaces, in particular border areas. But their origin, objectives and instruments differed, since the relatively less developed areas had already been settled, in many cases by pre-Colombian peoples and the ecosystems in these areas reflected the man-made changes wrought by the resident population. In many cases, these had been vibrant economic centres, typically one-crop systems (sugarcane, cocoa, coffee, wheat and cotton, among others) which underpinned the economic expansion and industrialization of the colonial mother country. Thus, almost all regional development policies of these areas were used to promote industrialization, in line with the spirit of the times, which considered that the only genuinely developmentalist sector was manufacturing (De Mattos, 1986).

These programmes were abandoned due to lack of financing, ideological dissent or technical criticism of their cost and outcome following a series of political upheavals, the lost decade of the 1980s and the reform (in the same decade) of the development model and its continuation in the following decades with different nuances depending on the country. Governments (in many cases, dictatorships) abandoned public industrial promotion programmes, placing their trust in market forces. Unsurprisingly, the market dictated specialization by territories based on areas of comparative advantage, in most cases, primary sectors, such as crop farming, forestry, fisheries and mining (Ramírez, Silva and Cuervo, 2009). In some countries, this process was hampered by civil conflict in vast rural areas (Colombia, El Salvador, Guatemala and Nicaragua), in spite of which a return to specialization in primary products was witnessed in a few particularly profitable sectors. For several years, evidence that these sectors were highly productive fuelled hopes of regional development in the spheres in which they were located (Daher, 1994). However, for the most part, these expectations were dashed, although a number of the more disadvantaged regions would not have benefited in any case because they did not have the commodities on which these primary export activities were based.

The first decade of the twenty-first century ushered in a new spirit in many respects and appreciation for regional land-use policies was revived. Clearly, these policies were updated and the objectives, emphasis and instruments were redefined. The salient new features of the recently deployed regional development policies are (i) the combination of measures, stakeholders and institutions, as opposed to the situation in the past when the State was the sole actor; (ii) the consideration of environmental, political and social factors and not just production factors in the sectors that they wish to boost; and (iii) the implementation of a raft of regional policies—rather than a single, exclusive major policy—in accordance with the widely diverse levels of regional development and territorial inequities (Ramírez, Silva and Cuervo, 2009). The results of this new impetus for public (not just State) action geared to subnational development in Latin America should be constantly monitored by technical institutions with regional scope, such as ILPES.

### **C. ECONOMIC STAGNATION AND DEMOGRAPHIC STAGNATION AT THE REGIONAL LEVEL: TWO SIDES OF THE SAME COIN?**

Recent studies by ILPES on regional economic development have provided new evidence and sound analyses concerning regional inequalities. One of the most significant findings in these studies is that theoretical predictions (widely accepted and empirically validated in other regions of the world) that subnational regions (MADs) would tend towards economic convergence (per capita GDP) have not been borne out in Latin America. This is mainly because a number of territories that are structurally weak in terms of productivity seem to be sunk in a poverty trap.

The ILPES analysis seeks to distinguish situations using a double-entry table and four segments according to the level and growth of per capita GDP. The first stylized fact that arises is worrying and is related precisely to the absence of territorial economic convergence referred to above. ILPES warns that the persistent wealth or poverty of the territory and lack of mobility are hallmarks of the region (Ramírez, Silva and Cuervo, 2009, p. 83). Other stylized facts that emerge from the ILPES analyses are (i) the halt in manufacturing operations in MADs where this activity was concentrated, precisely because of the crisis in the sector following the decline in State-led industrialization (expression preferred by José Antonio Ocampo to “import-substitution industrialization”), the only exceptions being the MADs on the northern Mexican border and others with a strong maquila presence; (ii) outstanding growth in mineral-rich MADs that actively exploit their resources; (iii) substantial growth in MADs that specialize in services, notably in metropolitan MADs, where services, but also industry, are prominent, hence the outlook is uncertain;<sup>1</sup> and (iv) chronic stagnation in MADs with a high proportion of rural dwellers and indigenous peoples, where the main activity is traditional agriculture.

At the demographic level, in accordance with the database Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) of CELADE-Population Division of ECLAC, 33% of MADs in the region registered low demographic growth during the period 1950-2000. They include the following: Santiago del Estero (0.94%) in Argentina; Boyacá (0.84%) in Colombia; El Seibo (-0.17%) in Dominican Republic; Bolívar (0.9%) in Ecuador; Departement du Sud (0.9%) and Departement du Sud-Est (0.9%) in Haiti; Los Santos (0.6%) in Panama; Ñeembucú (0.8%) and Paraguairí (0.5%) in Paraguay; Ayacucho (0.8%) and Apurímac (0.7%) in Peru; Potosí (0.5%) in Plurinational State of Bolivia; and La Valleja (-0.2%) and Flores (0.1%) in Uruguay.

In general, all these MADs fall in the category of major administrative regions with chronic stagnation in production (and which are therefore structurally and historically poor). Thus, a clearly identifiable pattern in the link between economic growth and demographic growth at the regional level is the layering of different types of stagnation. Obviously, this is not due to lower natural growth in these MADs, since, given their higher poverty rates, they are usually among the regions with the highest fertility levels and, therefore, with the highest natural increase in the population. Thus, the answer lies in migration. The following section shows the close relationship between stagnation of production and social lags suffered by regions and the factors that lead to out-migration of the population; this behaviour is only to be expected given the lack of opportunity and precarious living conditions associated with life in these areas.

Dynamic regions where living conditions are better usually have much lower than average natural growth levels. This does not necessarily detract from their appeal as a migration destination —another regular feature supported by data as well as by theory—, so that high growth in productivity is not always linked to high demographic growth. Furthermore, some of these growth regions are among the metropolitan MADs and migration trends in these centres are influenced by urban and residential factors that make them less attractive to migrants, often to the benefit of neighbouring areas, as will be seen in a subsequent chapter.

Be that as it may, the important linkage is between regional socioeconomic development and migration, and this is examined in greater depth in the following section.

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<sup>1</sup> In the medium term, metropolitan MADs could systematically record strong economic growth assuming that the economy is driven by the services sector.

## D. TERRITORIAL EQUITY, REGIONAL DEVELOPMENT AND INTERNAL MIGRATION: CURRENT TRENDS

One stylized fact concerning internal migration —adjusted, of course, in line with theoretical predictions— is that these movements tend to flow away from the less developed regions and towards the more developed ones. This is verified in a very basic way through the correlation between the net migration rate (indicative of whether the MAD is a pull or push area) and the Human Development Index. Almost without exception, the highest levels of human development are shown to be concomitant with net migration rates that are higher on average, that is, with a higher pull, and lower push, effect (see table VII.1).

Table VII.1  
**LATIN AMERICA AND THE CARIBBEAN (SELECTED COUNTRIES): SIMPLE LINEAR  
CORRELATION BETWEEN THE HUMAN DEVELOPMENT INDEX (HDI) AND THE NET  
INTERNAL MIGRATION RATE AT THE MAJOR ADMINISTRATIVE DIVISION  
LEVEL CENSUSES FROM THE 2000 ROUND**

	Country and year, indicator and reference year, number of major administrative divisions (MADs) with data		Index of simple correlation between the indicator and the net migration rate (p value in parentheses)	
Argentina, 2001	HDI 1996	24 MAD	0.407	(0.0242)
Bolivia (Plurinational State of), 2002	HDI 1994	9 MAD	0.619	(0.0378)
Brazil, 2000	HDI 1996	27 MAD	0.451	(0.0091)
Chile, 2002	HDI 1998	13 MAD	-0.01136	(0.5147)
Colombia, 2005	HDI 2000	24 MAD	0.414	(0.0222)
Cuba, 2002	HDI 1996	14 MAD	0.77	(0.0006)
Ecuador, 2001	HDI 1999	15 MAD	0.65	(0.0044)
Guatemala, 2002	HDI 1995-1996	22 MAD	0.442	(0.01972)
Honduras, 2001	HDI 1996	18 MAD	0.697	(0.0006)
Mexico, 2000	HDI 1995	32 MAD	0.408	(0.0102)
Nicaragua, 2005	HDI 2000	17 MAD	0.055	(0.4170)
Panama	HDI 2000	12 MAD	0.484	(0.0554)
Paraguay, 2002	HDI 2000	18 MAD	0.133	(0.29936)
Uruguay, 1996	HDI 1991	19 MAD	0.063	(0.60097)
Venezuela (Bolivarian Republic of), 2001	HDI 1996	23 MAD	0.0686	(0.3780)

**Source:** J. Rodríguez, “Spatial distribution, internal migration and development in Latin America and the Caribbean”, *CEPAL Review*, No. 96 (LC/G.2396-P/I), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2008, p. 142.

As indicated in the foregoing section, the most consistent pattern is that the push regions are those MADs with the highest relative poverty levels and the most serious cases of marginalization and which, historically, had been settled by indigenous people; almost all of these are situated in the north-west and north-east of Argentina (except Catamarca), the four provinces of the high plateau (*altiplano*) in the Plurinational State of Bolivia (Chuquisaca, La Paz, Oruro and Potosí), seven of the nine states of the Brazilian north-east, the centre and south of Chile (in particular the ninth region of Araucanía), the west of Costa Rica (although in this case, socioeconomic disparities between MADs are less marked),

practically the whole of Guatemala and the south of Mexico, the Sierra departments of Peru, many of the Andean provinces of Ecuador (except Pichincha, which is a metropolitan MAD) and the indigenous territories (*comarcas*) of Panama, among others (see table VII.2). Maps VII.3, VII.4 and VII.5 show three examples of areas that have traditionally been economically and socially disadvantaged, namely the regions VII, VIII and IX of Chile, situated in the centre-south of the country and where the Mapuche population is concentrated), in the Plurinational State of Bolivia (in the high plateau, where the Quechua and Aymara indigenous peoples live) and in Brazil (north-east). These three regions are well-known as areas of out-migration.

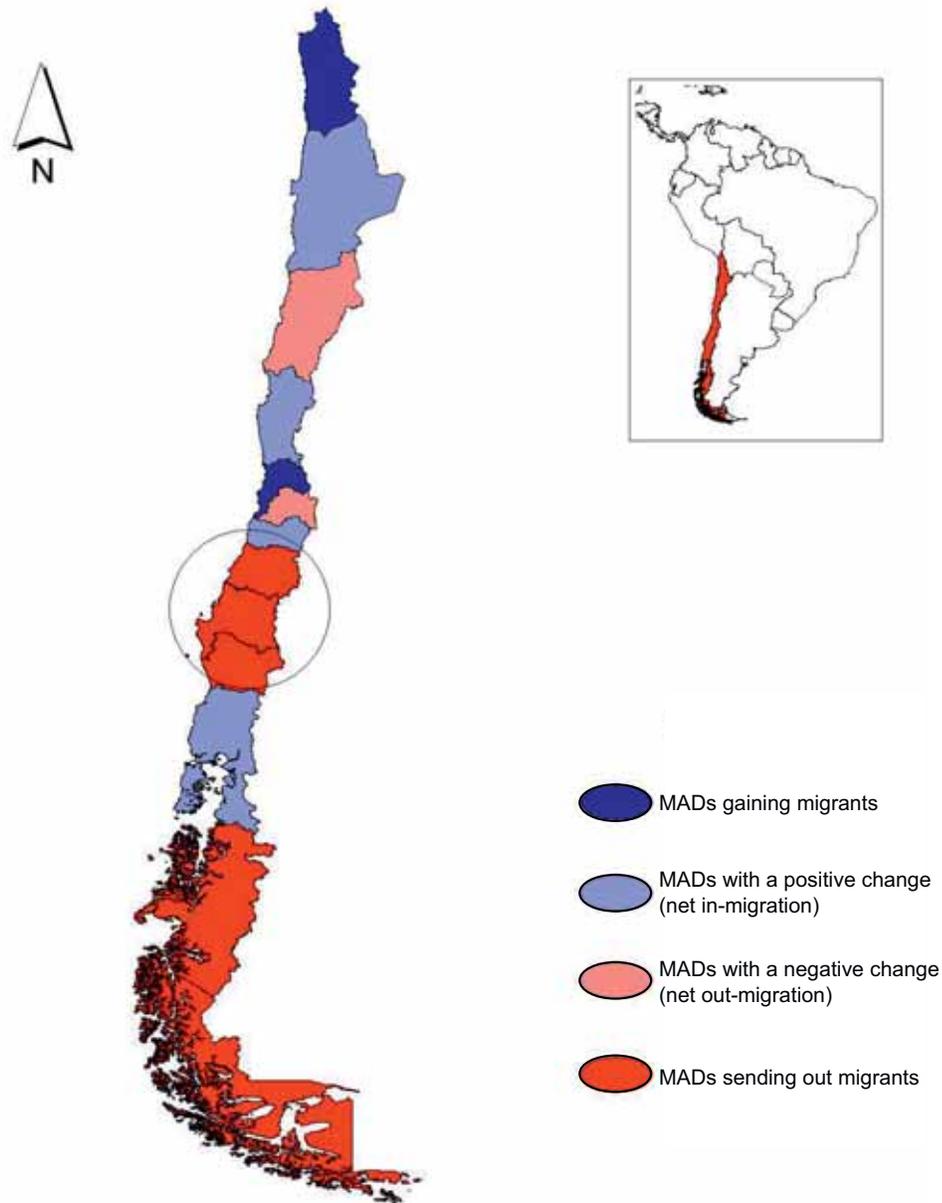
Table VII.2  
**ECUADOR: MIGRATION BALANCE AND NET INTERNAL MIGRATION  
 BY PROVINCE, 1977-2010**

*(Number of persons and annual average net migration per 1,000)*

Province	1977-1982		1985-1990		1996-2001		2005-2010	
	Migration balance	Net migration rate						
Azuay	-13 155	-7.0	-410	-0.2	10 256	3.9	8 392	2.7
Bolívar	-19 069	-28.8	-10 265	-14.8	-11 865	-15.2	-7 347	-8.7
Cañar	-7 225	-9.8	-2 685	-3.3	1 635	1.8	447	0.5
Carchi	-15 416	-27.1	-7 605	-12.2	-9 119	-13.1	-6 262	-8.5
Cotopaxi	-15 536	-13.1	-9 584	-8.0	-7 988	-5.1	-6 286	-3.4
Chimborazo	-23 908	-17.3	-13 296	-8.4	-16 455	-9.0	-8 137	-3.9
El Oro	4 244	3.1	11 810	6.7	2 609	1.1	-1 227	-0.5
Esmeraldas	-5 600	-5.7	-8 353	-6.4	-17 662	-10.2	-11 721	-5.0
Guayas	131 157	16.0	41 424	3.8	37 883	2.6	7 253	0.4
Imbabura	-12 573	-11.7	-3 662	-3.2	-2 870	-1.9	-1 344	-0.8
Loja	-41 191	-25.4	-19 813	-11.5	-17 027	-9.3	-8 632	-4.3
Los Ríos	-25 894	-13.3	-15 353	-6.6	-15 725	-5.4	-7 102	-2.0
Manabí	-104 030	-27.0	-40 913	-9.0	-70 254	-12.9	-26 833	-4.3
Morona Santiago	2 656	9.8	1 564	4.6	-614	-1.3	285	0.5
Napo	18 666	46.5	6 131	15.1	-446	-1.3	-5	0.0
Pastaza	2 149	17.4	2 862	17.0	3 277	12.8	3 175	9.0
Pichincha	121 875	22.2	53 154	7.1	100 063	9.7	45 339	4.0
Tungurahua	-9 787	-6.9	-3 437	-2.2	-3 560	-1.8	-1 004	-0.4
Zamora Chinchipe	3 222	18.1	4 123	16.0	-391	-1.2	270	0.7
Galápagos	606	27.7	1 114	31.1	1 545	20.7	1 125	10.9
Sucumbíos	...	...	7 311	25.4	4 032	7.6	-557	-0.8
Orellana	...	...	...	...	6 227	18.3	7 538	13.6
Santo Domingo	...	...	...	...	...	...	3 867	2.4
Santa Elena	...	...	...	...	...	...	6 484	4.9
Undemarcated areas	8 809	62.2	5 883	21.4	6 449	22.1	2 282	17.0

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of data from the 2010 census.

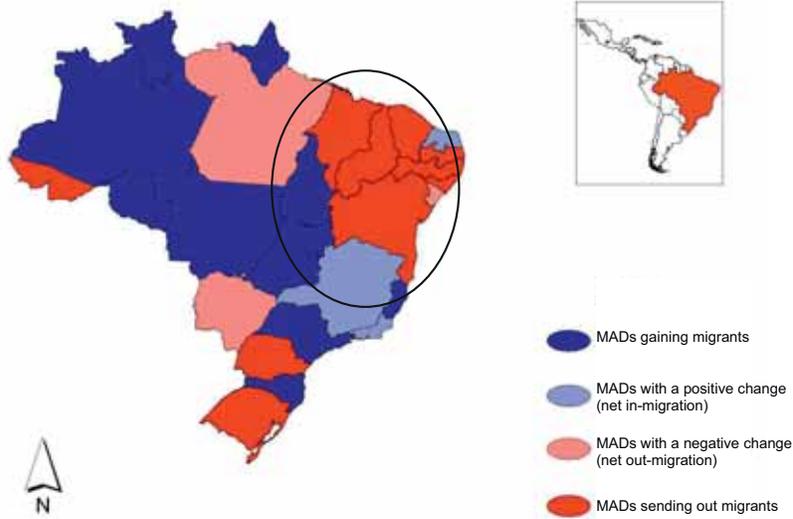
Map VII.3  
**CHILE: CLASSIFICATION OF MAJOR ADMINISTRATIVE DIVISIONS (MADs)  
 BY MIGRATION STATUS, CENSUSES OF THE 1990 AND 2000 ROUNDS<sup>a</sup>**



**Source:** J. Rodríguez and G. Busso, “Migración interna y desarrollo en América Latina entre 1980 y 2005. Un estudio comparativo con perspectiva regional basado en siete países”, *Libros de la CEPAL*, No. 102 (LC/G.2397-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

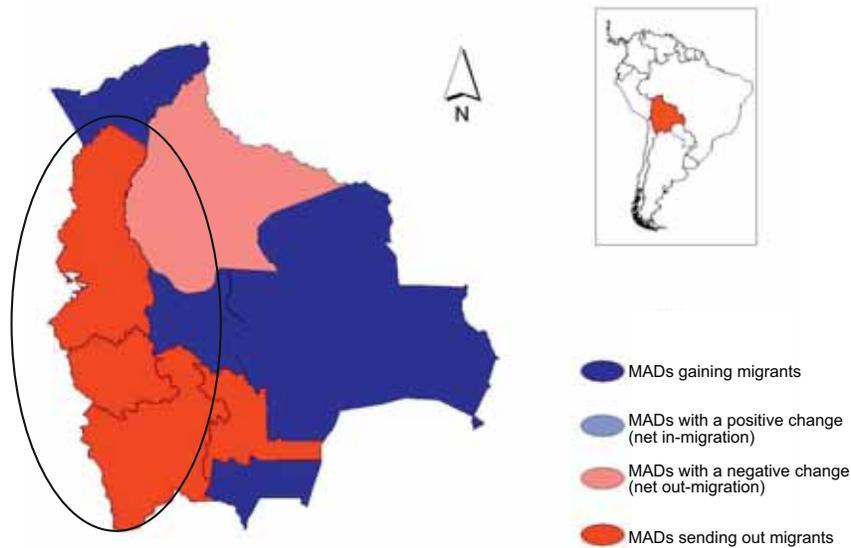
Map VII.4  
**BRAZIL: CLASSIFICATION OF MAJOR ADMINISTRATIVE DIVISIONS (MADs)  
 BY MIGRATION STATUS CENSUSES OF THE 1990 AND 2000 ROUNDS<sup>a</sup>**



**Source:** J. Rodríguez and G. Busso, “Migración interna y desarrollo en América Latina entre 1980 y 2005. Un estudio comparativo con perspectiva regional basado en siete países”, *Libros de la CEPAL*, No. 102 (LC/G.2397-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Map VII.5  
**PLURINATIONAL STATE OF BOLIVIA: CLASSIFICATION OF MAJOR ADMINISTRATIVE  
 DIVISIONS BY MIGRATION STATUS CENSUSES OF THE 1990 AND 2000 ROUNDS<sup>a</sup>**



**Source:** J. Rodríguez and G. Busso, “Migración interna y desarrollo en América Latina entre 1980 y 2005. Un estudio comparativo con perspectiva regional basado en siete países”, *Libros de la CEPAL*, No. 102 (LC/G.2397-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

In Mexico, most of the chronically poor states are in the south of the country, the worst affected being Oaxaca, Guerrero and Chiapas. The last three censuses, including that of 2010, show that these states are all characterized by net out-migration (see figure VII.1). Figure VII.2 shows the relationship between net migration from the period 2005-2010 (2010 census) and the Human Development Index (HDI) of 2006 of the federal entities in the country. The slope of the curve is positive and in general demonstrates that the MADs with a higher HDI tend to be pull areas, while those with a lower HDI tend to be sending areas. The exception is the MAD with the highest HDI, which experiences the highest net out-migration. But the reason for this is plain, since it is the Federal District and its status as a sending region is due to the expansion of Mexico City towards the periphery, a trend typical of all major cities in Latin America, as will be shown in chapter X of this document.

In Ecuador, the Sierra area has been typically a place of chronic poverty, although some provinces in the remaining ecological regions (Costa and Amazonia) also suffer persistently high poverty levels. Up to the mid-1990s, all the provinces of the Sierra were sending regions, with the exception of Pichincha, home to the capital, Quito (see table VII.2). The 2001 census showed a change in the case of Azuay and Cañar, the two southern Sierra provinces (Cuenca, the third largest city in Ecuador is located in Azuay). The 2010 census has confirmed this change, since Azuay and Cañar now benefit from positive net migration. This, together with the strong, sustained appeal of Pichincha,<sup>2</sup> shows that three of the ten Sierra provinces recorded net in-migration.<sup>3</sup> This diversification in migration does not alter the fact that chronically poor provinces are equated with sending provinces, since both Azuay and Cañar have achieved significant economic and social advances in recent years, which has lifted them out of chronic poverty. Overall, it is clear that in Ecuador, as in Mexico, there is a complex network of migration exchanges associated with these countries' multipolar economic development. This pattern occurs not only in the provinces where the three major cities are located —Quito, in Pichincha, Guayaquil, in Guayas (although the latter has lost much of its appeal for migrants) and Cuenca, in Azuay, but also in the Amazonia provinces (notably Orellana and Pastaza), which have already been studied in chapter V. Although the factors of attraction differ from one province to another, it is a clear example of multipolar regional development coexisting with the persistence of chronically poor provinces, which send population mainly towards high-growth provinces or those with greater opportunities and resources. This analysis is corroborated by figure VII.3, since provinces with higher net in-migration rates tend to have lower poverty rates, two exceptions being Orellana and Pastaza, which, notwithstanding their high poverty rates (over 60%) show high net in-migration rates, owing to their expanding demographic frontier and significant natural resource endowment.

The case of Panama differs from those of Mexico and Ecuador, not so much because a chronically poor province equates with a sending province, which tends to be the case insofar as the poorest areas —the *comarca* regions and the Darién<sup>4</sup>— are sending regions (see figure VII.4), but because of the overwhelming concentration of internal migration flows towards the Province of Panama (see table VII.3), which is also the MAD with the highest HDI (see figure VII.4).

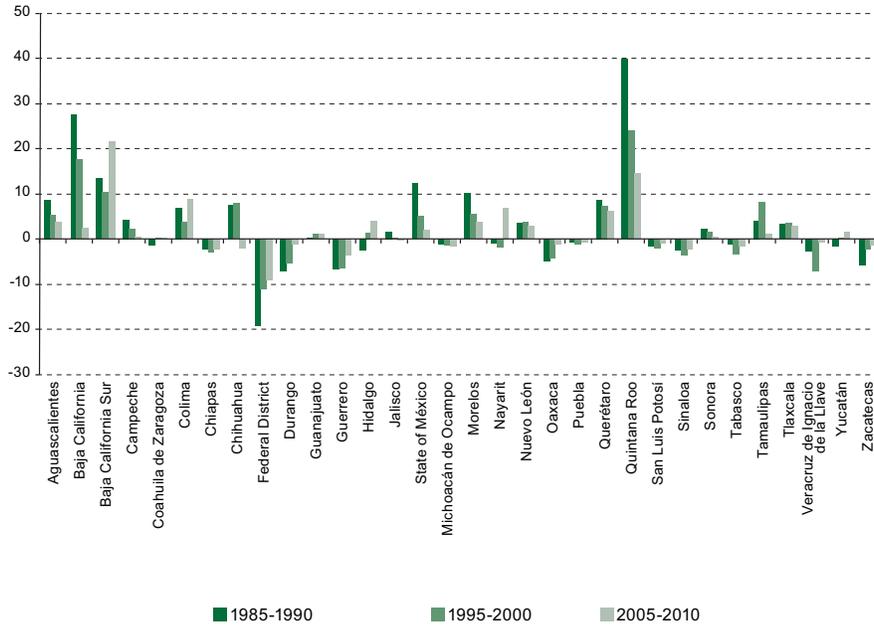
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<sup>2</sup> Pichincha's appeal is not due to the exodus from most of the Sierra provinces, since the most recent census, which covers migration during the 2005-2010 period, also reveals a net positive balance in the exchange with most of the Costa provinces. Indeed, the second highest balance goes to Manabi, a province in the Costa region, which has had high rates of out-migration for ages.

<sup>3</sup> The new province of Santo Domingo de los Tsáchilas is not considered a Sierra province because it is located essentially west of the Andes. This province, officially established in November 2007, also has a positive in-migration balance, as a result of the pull exerted by its capital, Santo Domingo de los Colorados.

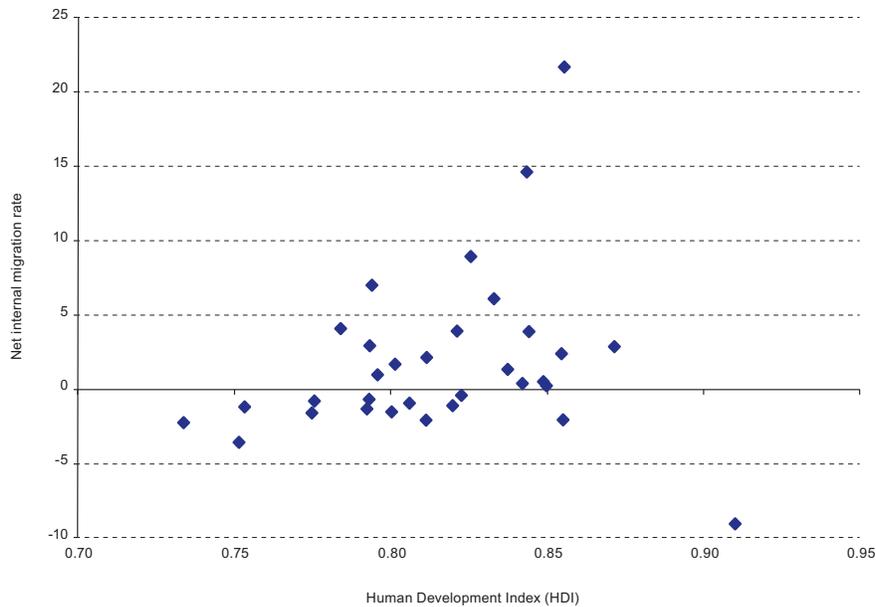
<sup>4</sup> *Comarcas* are indigenous territories and the Darién zone is practically uninhabitable owing to the humidity and the exuberant and almost impenetrable jungle. Its basically rural and indigenous character is associated with poverty and may be partly due to the characteristics of the measurement used, which is not always relevant in the case of indigenous populations.

Figure VII.1  
**MEXICO: NET INTERNAL MIGRATION RATES BY FEDERAL ENTITY, 1985-2010**  
*(Average annual rates expressed per 1,000)*



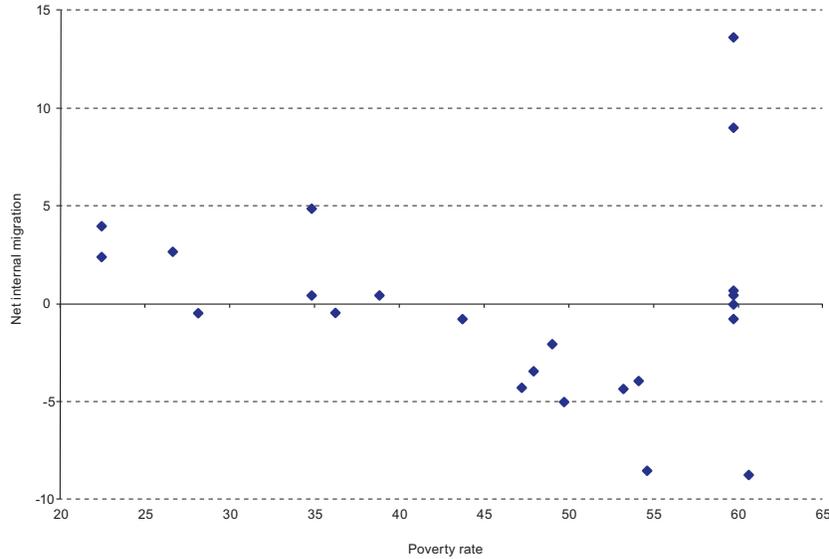
Source: Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of data from the 2010 census (extended form).

Figure VII.2  
**MEXICO: NET INTERNAL MIGRATION RATE, 2005-2010, AND HUMAN DEVELOPMENT INDEX BY FEDERAL ENTITY, 2006**  
*(Annual average net rates per 1,000)*



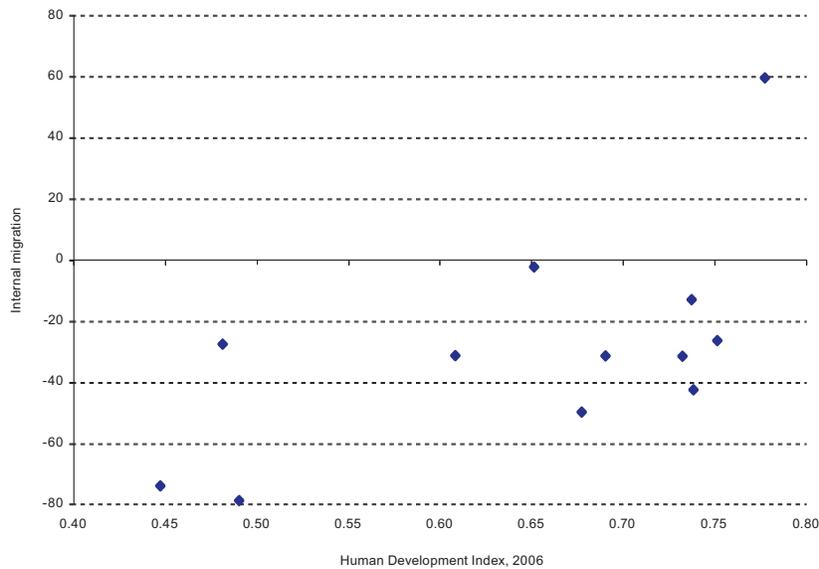
Source: United Nations Development Programme (UNDP), *Informe sobre desarrollo humano. Estado de México 2011* [online] [http://www.undp.org.mx/IMG/pdf/IDH\\_Estado\\_de\\_Mexico\\_2011-2.pdf](http://www.undp.org.mx/IMG/pdf/IDH_Estado_de_Mexico_2011-2.pdf).

Figure VII.3  
**ECUADOR: POVERTY RATES, 2005-2006, AND NET INTERNAL MIGRATION RATES BY PROVINCE, 2005-2010**  
*(Poverty rates and annual average net migration rates per 1,000)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of data from the 2010 census. National Statistics and Census Institute (INEC) of Ecuador. Survey on living conditions, 2005-2006, [online] [www.inec.gov.ec](http://www.inec.gov.ec).

Figure VII.4  
**PANAMA: NET INTERNAL MIGRATION RATE, 2005-2010, AND HUMAN DEVELOPMENT INDEX (HDI), BY PROVINCE, 2006**  
*(Annual average net migration rates per 1,000 inhabitants)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of data from the 2010 census. United Nations Development Programme (UNDP), *Human Development Report 2007-2008*, Panama City [online] <http://www.undp.org.pa/indice-desarrollo-humano/panama>.

Table VII.3  
**PANAMA: MIGRATION BALANCE AND NET INTERNAL MIGRATION RATE**  
**BY PROVINCE AND REGION (COMARCA), 1995-2010**  
*(Number of persons and annual average migration rate per 1,000 inhabitants)*

Province	2005-2010			1995-2000		
	Migration balance	Net migration rate	Migration effectiveness index (per hundred)	Migration balance	Net migration rate	Migration effectiveness index (per hundred)
Bocas del Toro	-267	-0.5	-2.0	-1 058	-3.3	-8.7
Coclé	-7 937	-7.8	-31.1	-11 357	-14.8	-44.2
Colón	-2 228	-2.1	-12.6	-408	-0.5	-2.2
Chiriquí	-18 012	-9.5	-42.2	-16 123	-11.5	-38.3
Darién	-3 526	-16.9	-31.0	-5 303	-34.9	-43.8
Herrera	-4 941	-9.9	-31.2	-6 212	-15.4	-40.9
Los Santos	-3 502	-8.6	-26.1	-5 643	-17.0	-40.7
<b>Panama</b>	<b>71 327</b>	<b>10.0</b>	<b>60.0</b>	<b>78 776</b>	<b>16.1</b>	<b>65.8</b>
Veraguas	-15 639	-14.9	-49.5	-20 682	-24.8	-64.1
Kuna Yala <i>comarca</i>	-5 789	-37.4	-78.4	-5 998	-45.6	-89.3
Emberá <i>comarca</i>	-202	-4.8	-27.2	-228	-7.9	-30.1
Ngöbe Buglé <i>comarca</i>	-9 284	-13.9	-73.6	-5 764	-14.4	-72.4

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC) and special processing of data from the 2010 census.

Clearly, in this country, there are no signs of territorial (or economic) decentralization of the population, to the extent that the Province of Panama, where the national capital Panama City is located, simply continues to absorb an increasing proportion of the population and to account for most of the country's economic activity. Panama City exerts a magnetic pull beyond its frontiers owing to its global and regional role as a financial and commercial centre and a zone for the transit of goods and even persons (its airport has become a regional hub). In many respects, Panama City competes not with any other city in the country or even in Central America but with Miami (United States of America) and other major cities in Latin America.

#### **E. THE QUALITATIVE EFFECT OF MIGRATION: AN UNDER-EXPLORED BUT CRUCIAL FACET**

Internal migration is linked in many ways with regional development, the main aspect being the logical movement of people towards more productive regions, where output and wages are higher. This movement boosts national production and raises personal income, thereby contributing to sustainable development and in the medium and long term to territorial convergence (UNDP, 2009).

Equally important is the human development aspect of migration, since the right to freedom of movement within countries is enshrined in the Universal Declaration of Human Rights, and must therefore be safeguarded. In view of these two factors, there is consensus that coercive, discriminatory or obstructive public policies relating to internal migration would be arbitrary and counterproductive.

However, internal migration can become an obstacle to sustainable development in some territories within a region. This hypothesis is put forward given the difficulty that many places of destination have in absorbing the huge influxes of in-migrants. Conversely, it is also claimed that chronic out-migration from poor regions leads to unsustainable development since the age- and education-selectiveness of migration from these regions erodes the already precarious human resource base of these territories. Most out-migrants are part of the working age population and at times are practically forced to migrate because of the lack of job opportunities. On the other hand, those who remain in the territory tend to be persons with limited resources or who are unable to migrate (older persons and less-skilled individuals).

Available evidence suggests that this scenario is the one that tends to generate poverty traps and to perpetuate inequality for poor regions, at least in the short and medium terms. Those regions that receive waves of in-migration, assuming they maintain their economic buoyancy—which is the source of their appeal—normally derive net benefits from the massive influx of working age migrants, although they may be less skilled than the average population born in these areas.

The erosion of the human resource base by out-migration from the chronically poor regions of various countries of Latin America can be illustrated by the methodology developed by CELADE-Population Division of ECLAC for estimating the impact of migration on the composition of the population (see box VII.1).

#### Box VII.1

#### **MEASURING THE IMPACT OF MIGRATION ON THE COMPOSITION OF THE POPULATION OF THE PLACES OF ORIGIN AND DESTINATION**

The methodology developed by CELADE-Population Division of ECLAC uses the flow indicators matrix obtained through special processing of census microdata.

The purpose is to check the marginal totals of this matrix—one of which corresponds to the attribute at the time of the census (with migration) while the other checks the attribute five years earlier (without migration, that is the counterfactual situation)—and to deduce from this difference whether migration has had a net and exclusive effect that raises or reduces this attribute.

The absolute value of the difference is then related to the counterfactual value in order to estimate the relative impact of migration. The simple correlation between the series of counterfactual values and the relative impact of migration of territorial entities is calculated in order to obtain a synthetic indicator of the total impact of migration, in particular to determine whether migration heightens or attenuates territorial inequalities. If the coefficients obtained are positive, this implies that migration tends to exacerbate territorial inequality, while negative values indicate that it tends to attenuate such inequalities.

Lastly, the difference between each marginal total and each diagonal value gives the impact (in absolute values) of in-migration (marginal row-diagonal) and for out-migration (diagonal–marginal column). The sum of these two impacts gives the total impact.

**Source:** J. Rodríguez, “Migración interna en ciudades de América Latina: Efectos en la estructura demográfica y la segregación residencial”, *Notas de población*, No. 93 (LC/G.2509-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2011. United Nations publication, Sales No. S.11.II.G.58.

Table VII.4 shows that migration in these MADs has adverse effects on the age structure—one of both rejuvenation (due to the rise in the proportion of children) and ageing, while the proportion of the working age population falls—as well as on the level of education, with a decline in the average years of schooling of heads of household. Table VII.5 presents the breakdown of in-migration and out-migration components using the methodology described in box VII.1. The pattern that emerges is very clear: the decline in the number of years of schooling in chronically poor MADs is due exclusively to out-migration. In-migration normally has a favourable impact, that is, it raises the average years of schooling of heads of household.

Table VII.4  
**LATIN AMERICA (SELECTED COUNTRIES AND YEARS): IMPACT OF MIGRATION ON THE AGE AND EDUCATIONAL STRUCTURE, DISADVANTAGED MAJOR ADMINISTRATIVE DIVISIONS (MADs)**  
*(Impact on net migration rates per 1,000 inhabitants and years of schooling)*

Net out-migration MAD	North-west of Argentina (2001)				Altiplano of Bolivia (Plurinational State of) (2001)				South central Chile (2002)					
	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household	Net out-migration MAD	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household	Net out-migration MAD	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household
Salta	-0.91	0.69	0.70	-0.082	Chquisasaca	-6.27	0.76	1.73	1.724	Maule	-0.42	1.73	1.22	0.19
Jujuy	-2.09	1.30	1.05	-0.735	La Paz	-3.11	0.14	0.20	-0.393	Bío Bío	-2.21	1.15	1.18	-0.46
Tucumán	-0.27	0.04	0.29	-0.006	Oruro	-8.88	2.38	2.94	-2.268	Araucanía	-0.48	1.66	1.19	0.25
Santiago del Estero	-1.40	0.87	0.71	-0.143	Potosí	-14.76	1.67	3.34	-2.168					

Net out-migration MAD	North-east of Brazil (2000)				Ecuadorian Sierra (2001)				South of Mexico (2000)					
	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household	Net out-migration MAD	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household	Net out-migration MAD	Net migration rate	Proportion of children	Proportion of older persons	Schooling of heads of household
Maranhão	-6.88	0.77	2.52	-0.248	Carchi	-13.13	2.91	2.27	-1.9833	Oaxaca	-4.24	0.79	1.68	0.039
Piauí	-4.06	1.32	1.83	-0.657	Imbabura	-1.89	1.08	0.85	0.2305	Guerrero	-6.42	0.36	2.14	-0.149
Ceará	-0.72	0.47	0.57	-0.599	Cotopaxi	-5.13	1.40	0.99	-0.2953	Chiapas	-2.85	0.69	0.99	-0.268
Paraná	-3.92	0.82	1.86	-0.173	Tungurahua	-1.79	0.94	0.20	0.2927	Puebla	-1.14	0.28	0.37	0.068
Pernambuco	-3.21	0.49	1.14	-0.072	Bolívar	-15.16	3.67	2.36	-3.0228	Veracruz	-6.89	1.66	2.98	-0.971
Alagoas	-5.70	0.40	2.61	-0.033	Chimborazo	-9.01	1.91	2.56	0.1505					
Sergipe	-0.61	0.31	1.13	-0.063	Loja	-9.3	2.47	2.3	-0.5514					
Bahia	-4.50	0.42	1.95	0.081										

**Source:** J. Rodríguez and G. Busso, " Migración interna y desarrollo en América Latina entre 1980 y 2005. Un estudio comparativo con perspectiva regional basado en siete países", *Libros de la CEPAL*, No. 102 (LC/G.2397-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

Table VII.5  
**LATIN AMERICA (SELECTED COUNTRIES AND YEARS): IMPACT OF MIGRATION, IN-MIGRATION, IN-MIGRATION AND OUT-MIGRATION  
 ON THE AVERAGE YEARS OF SCHOOLING OF HEADS OF HOUSEHOLD, DISADVANTAGED MADS**  
*(Average variation in number of years of schooling)*

North-west of Argentina (2001)		Altiplano of Bolivia (Plurinational State of) (2001)			South central Chile (2002)						
Net out-migration MAD	Impact of migration	Impact of in-migration	Impact of out-migration	Net out-migration MAD	Impact of in-migration	Impact of out-migration	Impact of in-migration	Impact of out-migration			
Salta	-0.06	0.05	-0.11	Chuquisaca	0.090	0.336	-0.245	Del Maule	0.01	0.16	-0.15
Jujuy	-0.01	0.07	-0.08	La Paz	-0.028	0.076	-0.105	Bío Bío	-0.04	0.11	-0.15
Tucumán	0.00	0.05	-0.05	Oruro	-0.169	0.110	-0.280	Araucanía	0.02	0.19	-0.17
Santiago del Estero	-0.01	0.04	-0.05	Potosí	-0.105	0.187	-0.293				
North-east of Brazil (2000)		Ecuadorian Sierra (2001)			South of Mexico (2000)						
Net out-migration MAD	Impact of migration	Impact of in-migration	Impact of out-migration	Net out-migration MAD	Impact of in-migration	Impact of out-migration	Impact of in-migration	Impact of out-migration			
Maranhão	-0.01	0.051	-0.06	Carchi	-0.16	0.1	-0.26	Oaxaca	0.002	0.105	-0.103
Piauí	-0.025	0.055	-0.079	Imbabura	-0.12	0.1	-0.22	Guerrero	-0.008	0.077	-0.086
Ceará	0.025	0.061	-0.036	Cotopaxi	-0.02	0.13	-0.15	Chiapas	-0.014	0.079	-0.093
Paraná	-0.007	0.053	-0.06	Tungurahua	0.01	0.15	-0.14	Puebla	0.004	0.101	-0.096
Pernambuco	-0.003	0.034	-0.038	Bolívar	0.01	0.14	-0.13	Veracruz	-0.058	0.101	-0.159
Alagoas	-0.001	0.041	-0.043	Chimborazo	-0.04	0.09	-0.13				
Sergipe	-0.003	0.048	-0.051	Loja	-0.02	0.1	-0.12				
Bahia	0.003	0.045	-0.041								

**Source:** Latin America and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of census microdata.

Strictly speaking, it is not an exclusive pattern for these MADs, since it also occurs in many other MADs. This is attributable to the educational selectivity of migrants, which is more marked when disaggregated, that is, not following the classic method of comparing migrants and non-migrants as a whole, but of checking out-migrants and in-migrants for each MAD with non-migrant population of the home and destination MADs, respectively. Whatever the case, table VII.5 leaves no room for doubt: out-migration from these MADs due to selectivity of the out-migrants, who usually have higher levels of education than those who remain in the home MAD, does damage the human resource base of these regions and worsens the problem of stagnation.

The data on migration derived from the censuses conducted between 2005 and 2010 (Colombia, El Salvador and Peru) and from those conducted in 2010 (Argentina, Brazil, Dominican Republic, Ecuador, Mexico and Panama, although to date data are only available for Ecuador, Mexico and Panama) indicate that migration continues to play a dual role draining the population from the chronically poor MADs and eroding their human resource base due to age, educational and labour selectivity of the out-migrants.

In the case of Peru, the latest census, which took place in 2007, reveals that the chronically poor area is Sierra, consisting of ten departments with a predominantly indigenous population. All of these departments are characterized by net out-migration, the rates varying between 5 and 10 per thousand (see table VII.6). Thus, the first stylized fact reiterated in this study is corroborated: the chronically poor MADs are sending regions. As regards the second stylized fact, namely the erosion of the human resource base as a result of out-migration, in the case of Peru, estimation of the education variable poses technical difficulties so that table VII.7 shows the impact on the age structure, in particular on the demographic dividend (measured in terms of the demographic dependency ratio). The stylized fact is corroborated: the demographic dividend is eroded by migration in all departments of the Sierra. As is to be expected in the light of the previous findings, it is precisely out-migration that raises the dependency ratio, as a result of the pronounced age bias of the out-migrants (young people of working age).

Table VII.6  
**PERU (SIERRA DEPARTMENTS): NET MIGRATION INDICATORS, 2002-2007**  
*(Number of persons and net annual migration rates per 1,000)*

Department of habitual residence	2007	2002	Net migration	Net migration rate
Apurímac	360 497	378 847	-18 350	-9 928
Arequipa	1 049 562	1 033 525	16 037	3 079
Ayacucho	542 730	560 424	-17 694	-6 416
Cajamarca	1 246 631	1 321 438	-74 807	-11 652
Cusco	1 046 033	1 072 316	-26 283	-4 963
Huancavelica	406 930	431 601	-24 671	-11 769
Huánuco	679 650	712 308	-32 658	-9 385
Junín	1 103 423	1 144 698	-41 275	-7 344
Pasco	252 770	262 864	-10 094	-7 830
Puno	1 151 310	1 181 406	-30 096	-5 161

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of census microdata.

Table VII.7  
**PERU (SIERRA DEPARTMENTS): IMPACT OF MIGRATION ON THE DEMOGRAPHIC  
 DEPENDENCY RATIO, MAJOR ADMINISTRATIVE DIVISIONS  
 WITH CHRONIC POVERTY, 2007**  
*(Impact on demographic dependency ratio)*

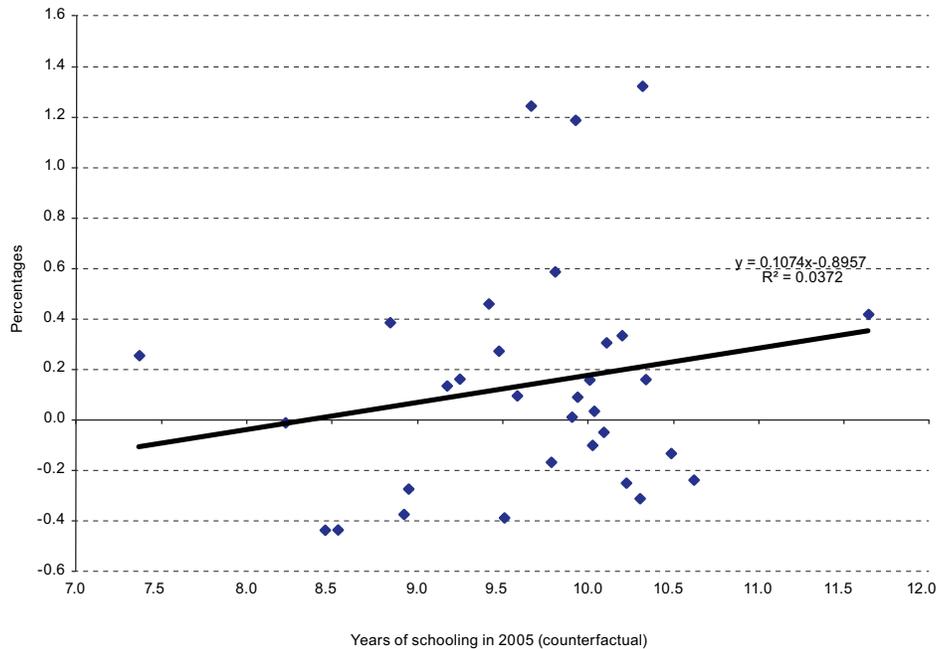
	<b>Total</b>	<b>Counter-factual</b>	<b>Absolute difference</b>	<b>Relative difference (percentages)</b>	<b>Impact of in-migration</b>	<b>Impact of out-migration</b>
Apurímac	0.609	0.586	0.023	3.865	-0.02	0.04
Arequipa	0.383	0.381	0.002	0.580	-0.01	0.01
Ayacucho	0.574	0.563	0.010	1.845	-0.01	0.02
Cajamarca	0.517	0.501	0.016	3.171	-0.01	0.03
Cusco	0.509	0.502	0.008	1.506	-0.01	0.02
Huancavelica	0.629	0.614	0.015	2.482	-0.02	0.03
Huánuco	0.545	0.527	0.017	3.267	-0.01	0.03
Junín	0.474	0.460	0.015	3.168	-0.01	0.02
Pasco	0.441	0.438	0.003	0.733	-0.02	0.02
Puno	0.483	0.477	0.007	1.374	-0.01	0.01

**Source:** Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, on the basis of special processing of census microdata.

With respect to Mexico, figure VII.1 already reflects the persistence of out-migration from the five major administrative divisions characterized by chronic poverty—four in the south (Chiapas, Guerrero, Oaxaca and Puebla) and one in the east (Veracruz)—each with negative net migration rates as shown in the last three censuses, that is between 1985 and 2010. Furthermore, figure VII.5 shows that, on average, migration has not helped to reduce the educational gaps between the federal entities in the country between 2005 and 2010. This is due, among other factors, to the fact that in almost all the MADs where the population suffers chronic poverty, migration results in a fall in average schooling (Chiapas was the exception to this rule in the 2010 census). The figures on the impact of in-migration and out-migration (not shown here due to lack of space) reflect the familiar pattern: all federal entities gain from in-migration, except for Baja California, where the number of years of schooling for the 25-39-year old group has dropped by about 2%. Conversely, all the federal entities, except Baja California and the Federal District, see the number of years of schooling fall as a result of out-migration. These results confirm the educational selectivity of interregional migration, even in cases where age is monitored, and have a strong impact on the net out-migration/schooling loss ratio in the most socioeconomically deprived MADs.

In the case of Panama, the results (see table VII.8) are particularly revealing owing to the special pattern of migration flows between MADs (provinces) in the country. Population movements continue to flow overwhelmingly towards the province of Panama (a metropolitan MAD, which will be the subject of another chapter in this document). Hence it is the only (or practically the only) province with a positive migration balance, which contributes to a paradoxical outcome: all or almost all the provinces experience an average fall in the number of years of schooling as a result of internal migration. But the loss is really significant in the case of one indigenous territory (Kuna Yala), which, given its standards of living, may be described as chronically poor (although, owing to its special status, the relevance of an approach based on indicators unrelated to ethnicity seems debatable). In any case, in 2000 and 2010, migration has done little to close the educational gaps between MADs in Panama. Overall, the exceptional case of the Emberá territory in the 2010 census—the only region in which migration results in higher rates of schooling—points to the existence of innovative methodologies that call for special research, which, however, lies beyond the scope of this study.

Figure VII.5  
**MEXICO: IMPACT OF MIGRATION ON YEARS OF SCHOOLING OF THE POPULATION  
 AGED 25 TO 39, BY FEDERAL ENTITY, 2010 CENSUS**  
*(Percentage variation in years of schooling)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of a 10% sample of the census microdata.

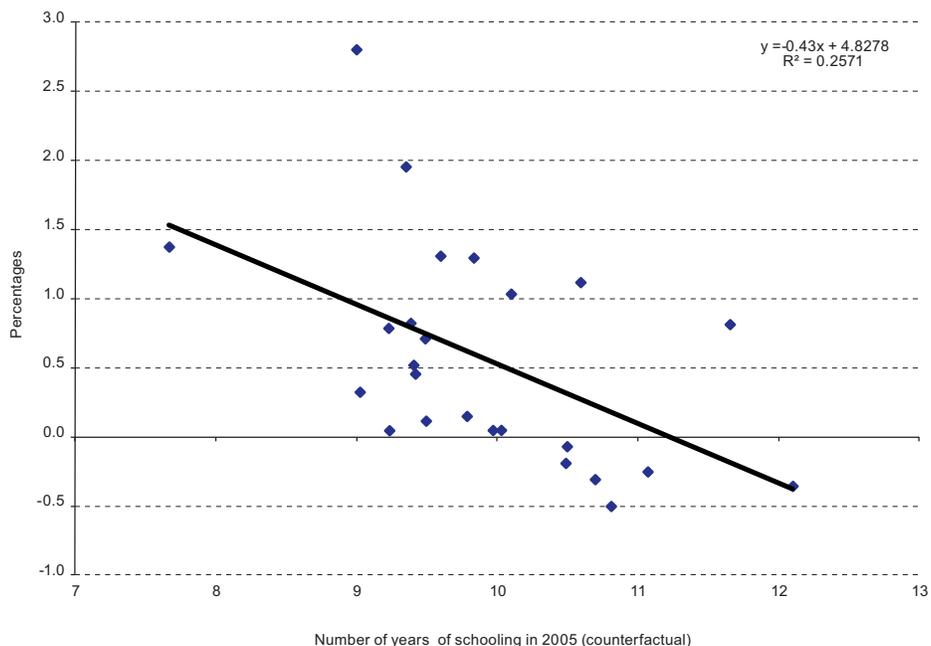
Table VII.8  
**PANAMA: IMPACT OF MIGRATION, IN-MIGRATION AND OUT-MIGRATION ON THE AVERAGE  
 NUMBER OF YEARS OF SCHOOLING OF THE POPULATION AGED 25 TO 39, 2010**  
*(Years of schooling)*

Provinces	Total	Counter-factual	Absolute difference	Percentage difference	Impact of in-migration	Impact of out-migration	Verification	Correlation
Bocas del Toro	7.9	8.1	-0.15	-1.90	0.07	-0.23	-0.15	
Coclé	9.3	9.4	-0.08	-0.81	0.09	-0.17	-0.08	
Colón	10.8	10.9	-0.13	-1.22	-0.06	-0.07	-0.13	
Chiriquí	10.2	10.4	-0.21	-2.00	-0.07	-0.14	-0.21	
Darién	6.9	7.1	-0.28	-3.97	0.17	-0.45	-0.28	
Herrera	10.3	10.5	-0.18	-1.71	0.11	-0.29	-0.18	
Los Santos	10.4	10.7	-0.29	-2.71	0.04	-0.33	-0.29	0.31
Panamá	11.6	11.7	-0.06	-0.50	-0.06	0.01	-0.06	
Veraguas	9.8	9.8	-0.08	-0.85	0.06	-0.15	-0.08	
Kuna Yala <i>comarca</i>	5.1	5.7	-0.57	-9.96	0.20	-0.77	-0.57	
Emberá <i>comarca</i>	5.8	5.8	0.06	1.12	0.18	-0.12	0.06	
Ngöbe Buglé <i>comarca</i>	4.0	4.1	-0.07	-1.60	0.07	-0.14	-0.07	

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of census microdata.

Lastly, in the case of Ecuador, the 2010 census shows that the relationship between socioeconomic status and the impact of migration on human resources is more complex than is apparent at first glance. In fact, figure VII.6 shows that in Ecuador, migration tends to reduce educational inequalities between provinces. This is due largely to the educational gains generated by migration to eastern provinces with low levels of education, but also to the fact that among these provinces of the Sierra, there are some that gain in terms of years of schooling thanks to migration and others that lose. Thus, in Ecuador, there has been a gradual and partial change in the historical relationship between migration and territorial poverty and the way it is perpetuated. The 2001 and 2010 censuses show that in this country, migration is ceasing to be a poverty trap (at least in terms of education) for the Andean provinces. The figures of table VII.9 corroborate this statement. For almost all provinces (with the exception of Manabí and Pichincha), out-migration continues to have a negative impact on the level of education, owing to the point, discussed earlier, concerning the educational selectivity of migration. Conversely, in-migration tends to raise education in almost all provinces, and in several of the Sierra provinces, this impact exceeds that of out-migration, so that the final outcome is an educational gain due to migration.

Figure VII.6  
**ECUADOR: IMPACT OF MIGRATION ON SCHOOLING (POPULATION AGED 25 TO 39), 2010 CENSUS**  
*(Percentage variation in the number of years of schooling)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of census microdata.

Table VII.9  
**ECUADOR: IMPACT OF IN-MIGRATION AND OUT-MIGRATION ON AVERAGE YEARS  
 OF SCHOOLING OF HEADS OF HOUSEHOLD AT THE LEVEL OF MAJOR  
 ADMINISTRATIVE DIVISIONS (PROVINCES), 2010 CENSUS**  
*(Years of schooling)*

Province of habitual residence	Impact of in-migration	Impact of out-migration
Azuay	0.03	-0.08
Bolívar	0.20	-0.15
Cañar	0.05	-0.04
Carchi	0.24	-0.11
Cotopaxi	0.13	-0.08
Chimborazo	0.15	-0.15
El Oro	0.02	-0.03
Esmeraldas	0.06	-0.03
Guayas	-0.01	-0.02
Imbabura	0.12	-0.11
Loja	0.06	-0.08
Los Ríos	0.04	-0.03
Manabí	0.05	0.02
Morona Santiago	0.34	-0.16
Napo	-1.20	1.31
Pastaza	0.30	-0.18
Pichincha	-0.05	0.00
Tungurahua	0.09	-0.11
Zamora Chinchipe	0.25	-0.12
Galápagos	0.28	-0.18
Sucumbíos	0.23	-0.15
Orellana	0.41	-0.16
Santo Domingo	0.03	-0.01
Santa Elena	0.15	-0.07
Undemarcated areas	0.12	-0.01

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of census microdata.

As things stand, formulating territorial policies to relieve regions where populations suffer chronic poverty continues to pose a huge challenge. On the one hand, policies that seek to impose permanent settlement in a territory or that limit internal migration are inconceivable since: (i) people have the inalienable right to leave a region (and, generally speaking to move unrestrictedly within national boundaries, except if such movement conflicts with other rights); (ii) out-migration from areas of chronic poverty is usually successful for those who exercise this right, or at least the out-migrants tend to view it as such, although it may simply be because they see no opportunities in their region of origin (that is, their departure usually stems from push factors, rather than from knowledge of, or any rational expectations concerning, the place of destination) and (iii) in theory, out-migration can alleviate pressure on some markets, in particular the labour and land markets, as well as some deficient social sectors in areas of chronic poverty.

On the other hand, studies and calculations produced in recent years by CELADE-Population Division of ECLAC and systematized and updated in this document identify the following stylized fact: that the age, labour and educational selectivity of out-migrants tends to weaken the human resource base of the sending regions and means that out-migration becomes yet another link in the chain of factors that perpetuate poverty and under-development in those regions. It is therefore crucial to act promptly to regulate out-migration from areas of chronic poverty. Clearly, such action cannot be coercive; moreover it must be transparent and provide a broad range of incentives and legal and administrative provisions; above all, steps must be taken to foster sustainable regional and local development projects. Such projects will be key to turning the disadvantaged climate into one that is both economically and socially attractive for workers and the skilled population. If this is achieved, it will help to trigger long-term development at both the national and the subnational level. More specific guidelines for the adoption of appropriate policies in this area are set out in chapter XI.

## Chapter VIII

**SUSTAINED URBANIZATION: BETWEEN FUNCTIONALITY  
AND URBAN DEFICIENCIES****A. INTRODUCTION: URBANIZATION, TERRITORY  
AND SUSTAINABLE DEVELOPMENT**

The relationship between urbanization, territory and sustainable development is complex and polemical. There is a general consensus that urbanization facilitates development or at least that the two come hand in hand. However, based on the experience of different world regions, especially Latin America, there is also a consensus that urbanization does not ensure development (Glaeser, 2011; IDB, 2011).

The technological change currently under way (in particular, virtual connectivity) substantially increases the potential for long-distance interaction and coordination in real time. It also reduces the trade friction caused by distance. In theory, this supports deterritorialization hypotheses, according to which physical distance and location become less relevant for economic and social life. One ramification of the deterritorialization hypothesis is that it leads directly to questions as to the strength of “urban” as a competitive advantage. Essentially, population concentration or agglomeration, which is the defining physical characteristic of the urban condition, would no longer be necessary for production or trade. The bulk of economic and social theory still goes against this view, so it does not seem reasonable to adopt it as a frame of reference (Jordán, Rehner and Samaniego, 2010; Linn, 2010 and Martine and others, 2008). It is important, however, to at least recognize the new scenario and the question marks posed by the growing importance of technology and the virtual world in the economies and societies of today, as well as the implications they could have for urbanization.

Another widely debated issue is the relationship between urbanization and sustainable development, in particular with regard to ecosystem transformations, climate change and natural disasters. As explained in chapter II on the links between population, territory and sustainable development, urbanization creates an artificial environment because its higher population density generates greater pressure per unit of territory and because urban life styles and higher incomes are typically associated with production, consumption and waste generation patterns that are more damaging to the ecosystem. The consequences of urbanization are not limited to the territory and its surroundings but also affect distant ecosystems (ECLAC, 2011). Furthermore, in the new scenario of global uncertainties urbanization is among the factors that cause climate change and global warming. This is basically due to the higher carbon emissions associated with the activities that take place in cities, as described in the chapter on the links between population, territory and sustainable development.

Although there is consensus that traditional agriculture usually produces less carbon emissions —“true rural poverty involves relatively low levels of energy use” (Glaeser, 2011, p. 594)— it is not as clear that this would apply to energy-intensive modern agriculture. Additionally, a very significant finding confirms the idea that production and consumption patterns, rather than population density, are responsible for the relationship between urbanization and climate change: specifically, sprawling cities have higher carbon emissions than compact cities (Glaeser, 2011, p. 594).

In this sense, there is something of a debate as to general relationship between urbanization and environmental sustainability. Urbanization clearly generates a new scenario, not only in terms of the causal factors behind environmental damage and transformation, but also with regard to prevention and mitigation. The number of specific links is determined by geography to the extent that any given urbanization process establishes particular relationships with the ecosystem, in both the immediate environment (within the urbanized area) and the mediate environment (which in some cases can extend a long distance from the urban area). It is therefore impossible to cover all of these relationships, and even a small sample is beyond the scope of this report. But it is fitting herein to look at some relevant, instructive cases –indeed, this would seem a promising field for policy-design-oriented research. This study thus presents some cases based on the available research and the systematization work being carried out by the United Nations system in preparing the regional document for the United Nations Conference on Sustainable Development (Río+20) to be held in Río de Janeiro in 2012.

Urbanization is also associated with natural disasters, which are climbing up the political, academic and environmental agendas because of a combination of factors, including (i) evidence that these events are increasing;<sup>1</sup> (ii) the potential connections between these events and global environmental changes, in particular climate change; (iii) recognition of the importance of the human factor in these disasters (at the very least making them a little less “natural”), which operates through acts of both commission and omission on the part of businesses and production centres, governments and government policies, and the population through decisions and activities; and (iv) frustration with the inability to control these events despite all the technological and scientific advances of humankind, which has translated into a sort of resignation in the light of recent risk-society theories (Beck, 1998).

The link between urbanization and disasters is intricate. Urbanization is one of the forces intensifying and expanding the human factor in today’s natural disasters. Essentially, urbanization necessarily creates an artificial environment and encourages production and consumption patterns that put pressure on the ecosystem, increasing the likelihood of local and global ecosystem imbalances that lead to natural disasters. Moreover, urbanization has a multiplier effect on the damages, in that many more people and goods are exposed when disasters hit cities. On the other hand, urbanization facilitates a much more effective deployment of mitigation measures, early warning systems and rapid response to natural disasters.

In Latin America and the Caribbean, these complex relationships tend to heighten vulnerability to natural disasters. This reflects the specific characteristics of urbanization in the region, in particular the geographic and demographic expansion and configuration of cities. Cities have evolved haphazardly from an environmental perspective and insufficiently from a socioeconomic perspective. This is illustrated dramatically by the multiplicity of densely populated areas, many of which are highly exposed to natural disasters and poorly equipped to prevent or mitigate them. Fernández and Sanahuja (2011) argue, unsurprisingly, that this “growing vulnerability is not merely a reflection of the increase in the number of people living in areas under the threat of disasters, but a process that has to do with access to land and to resources in general, where vulnerability to disasters feeds back into poverty conditions, environmental degradation and weak governance”.

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<sup>1</sup> Fernández and Sanahuja (2011) and Adamo (2011, table II.1, p. 4,) confirm this upward trend for Latin America based on systematic data from the Centre for Research on the Epidemiology of Disasters at the Catholic University of Louvain, showing an increase from 166 natural disasters in the 1970s to 633 in the 2000s. Adamo calculates that the death rate from natural disasters fell slightly in Latin America between 1970 and 2009, but the deadly earthquake in Haiti in early 2010 will reverse this trend for the 2010s.

This chapter presents the most recent evidence available on urbanization in Latin America, exploring both regional and national trends. This detailed description is complemented by a specific empirical analysis of the links between urbanization, territory and sustainable development along the dimensions identified above—that is, economic and social progress, environmental sustainability and natural disasters. The goal is not to define these relationships or provide support for one hypothesis or another, but rather to offer a general description of the urbanization process that will be useful for general policy guidance and to provide specific analytical inputs in these areas for the design of policies and programmes aimed at achieving manageable, equitable, efficient and sustainable urbanization.

## **B. URBANIZATION, MIGRATION AND DEVELOPMENT**

As discussed in chapter IV, almost all the countries in Latin America and the Caribbean have seen massive migration from rural areas to urban ones. The trend continues despite the high degree of urbanization in the region, due to the persistent socioeconomic gaps between the two environments that typically work against rural areas. In addition, burgeoning production in many rural areas as a result of what is called “reprimarization” and the agribusiness boom appears to yield scarce direct dividends for the rural population—and in some cases has even resulted in an exit of rural residents. By contrast, cities that are close to the primary sector (e.g., agriculture and mining) do capture some of the resources generated by this growth. Examining this migration is therefore a must, but without repeating the data and analysis already set out in chapter IV. Thus this section builds on the conceptual discussion of migration and its link to sustainable development and territorial transformations. A later section explores the specific relationship between urbanization and rural-urban migration, based on data derived from applying the indirect procedure of intercensus survival ratios. The findings in terms of net rural-urban transfer were presented in chapter IV.

Initially (from the 1940s to the 1960s), country-to-city migration was met with enthusiasm largely driven by experiences, theory and researchers from elsewhere. First, comparative experience demonstrated a close association between industrialization and development in the industrialized countries. Second, the dominant conceptual approaches to economic and social development—in all their variations, with sociological “modernization theory” being the best example—proposed a synergetic relationship between urbanization and development and between rural-urban migration, rising productivity and institutional and personal modernization. In other words, urbanization and rural-urban migration were seen as prerequisites for development (Rodríguez and Busso, 2009). Furthermore, the dominant political approach in the region, promoted within the region by ECLAC, was based in State-led industrialization (Ocampo, 2006), which was clearly in line with urbanization.

Over time, a number of less encouraging explanations and forecasts of urbanization emerged. Most of these were based on the regional reality and had both theoretical and practical foundations. Conceptually, these studies highlighted the push factors that characterized the Latin American countryside, associated with highly concentrated land ownership, the low productivity of traditional small farmers and the structure of economic, political and cultural dominance that completely neglected public and social investment for the rural population. All of this resulted, at least around the middle of the twentieth century, in substantial socioeconomic gaps between a sluggish countryside characterized by precarious living conditions and a dynamic urban environment with more options and better opportunities, which understandably made rural-urban migration attractive. The structural nature of social exclusion in the countryside meant that for many individuals the exodus reflected necessity and obligation (push) rather than a rational, informed decision. Consequently, one of the main conclusions of this initial

theory coming out of the region was that rural-urban migration would continue even under adverse or uncertain scenarios for the migrants leaving rural areas. Even further, the outcome for the migrants was systemically regarded as irrelevant, insofar as the aggregate functionality of migration was based on “maintaining an abundant labour reserve in the capitalist industrial society” (Martine, 1979, pp. 15–16). This pointed to a natural, albeit sometimes hidden, interest on the part of the region’s dominant social actors in continuing to promote urbanization driven by migration from the countryside, even under precarious conditions for the new city residents.

One of the contributions of the so-called Latin American approach to internal migration, which came to be very influential and widely recognized in the 1960s and 1970s, was to question the potential for retaining the rural population through modernization programmes and improvements in living conditions in the Latin American countryside (CLACSO, 1972), because such programmes ultimately reinforced the tendency to migrate by generating expectations in terms of employment, education and cultural opportunities that could only be satisfied in the cities. Conceptual and policy ambivalence in the face of rural-urban migration, plus the complexity of any attempt at intervention, were behind the imbalance between robust policy discourse and academic research and weak policies and programmes. The most promising initiatives (albeit with no guaranteed impact as to retention), such as those oriented toward improving land distribution via agrarian reform and strengthening the role of communities and producer associations by promoting agricultural cooperatives, were fostered and implemented to serve other objectives related to social transformation and revolution, and they were very dependent on the correlation of political forces within the countries. For different reasons, their implementation fell short on a number of levels, which ultimately eroded the results not only in terms of agricultural output and productivity, but also with regard to the formation of a dynamic rural sector. Worse still, almost all the military coups staged in the region before the 1980s (after which time there were very few) were conservative in nature. One of their first measures was to reverse these policies, curtailing their long-term effect on rural emigration.

Beyond the conceptual debate, the actual experience of the region’s countries and cities began to make the pessimists look right as the signs of strain became increasingly visible and the cities outgrew their capacity to productively absorb their endless expansion, in large part driven by immigrants from rural areas. These concerns snowballed, and they were magnified when two interrelated events shook the region in the early 1980s. The first was the so-called debt crisis, which had a severe effect on all economic and social actors by jeopardizing the solvency of the State and was followed by a widespread economic crisis and a sharp contraction in sectoral and social spending. The second was the response of most countries to this crisis, which consisted of abandoning the earlier development strategy and replacing it with one geared towards economic deregulation, privatization of public assets and export promotion in sectors with immediate comparative advantages, typically commodities. This change was accompanied by severe structural adjustments marked by budgetary restrictions, wage freezes, rate increases, a decrease in investment in public services, government payroll cut-backs and the sell-off of State-owned enterprises.

The development model underpinning urbanization thus came to a crisis and was replaced by a model with a very different sectoral focus (tradable commodities over manufactures) and what would seem to be a shift in territorial preferences. The locus of the promoted sectors —basically, the countryside, mines, forests and aquifers located in rural areas— was far from the large cities and the urban environment. It is not surprising, therefore, that metropolises, cities, and the urban setting in general underwent a weakening that was both objective and symbolic. It was objective in that metropolises and cities were hit especially hard by the economic crisis as unemployment and poverty levels rose, government budgets were slashed and social services shrank even more (IDB, 2011; Rodríguez and

Busso, 2009; and ECLAC-UN-HABITAT, 2001). All of this caused a proliferation of what are called urban problems (such as congestion, crime, pollution and inadequate infrastructure) in cities that were already hard to manage given their size and complexity. The weakening was symbolic in that the image of the cities, and especially the metropolises, was tarnished, and their prestigious standing in the social imaginary and public discourse gave way to a stigmatized view where living in the city was dangerous, chaotic and impoverishing. This experience and its consequences are examined more closely in chapter X, which focuses on large cities in the region.

Nevertheless, this did not increase appreciation for the countryside or the rural environment as a way of life, largely because of the persistent inequality between the countryside and the city and the substandard living conditions and limited options available in the former. As previous studies (Pinto da Cunha and Rodríguez, 2009; Rodríguez and Busso, 2009) have shown, even during dark times for cities in the 1980s and 1990s the urbanization process continued in Latin America, driven by a rural exodus that appears to continue today, as shown in chapter IV.<sup>2</sup>

### C. BASIC TRENDS IN AND CURRENT STATUS OF URBANIZATION

According to official statistics from the United Nations and CELADE-Population Division of ECLAC, the degree of urbanization in Latin America and the Caribbean is currently on the order of 80%. This is higher than the average for industrialized countries. Of all the major subregions of the world, only North America posts a similar level.<sup>3</sup> It is thus clear that rapid urbanization and the large urban population percentage are specific to the region. Given its demographic importance, continuity and socioeconomic, political, cultural and environmental consequences, urbanization is considered the main process of spatial redistribution in the region over the past 60 years.

As figure VIII.1 shows, in the early twentieth century the region ranked between the currently developed regions (such as Australia/New Zealand, Canada, the United States, Europe and Japan), which had a 40% urban population, and Africa and Asia, which had less than 10%. Continuing urbanization in the second half of the twentieth century consolidated the region's position as the most urbanized in the developing world. Between 1950 and 2000, the number of urban dwellers grew from 69 million to 393 million, and the urban share of the region's total population rose from 41% to 75%. At the same time, the rural population only increased from 98 million to 128 million. By 2010 the urban population stood at 469 million and accounted for 80% of the total population.

These figures are often called into question because they are based on national urban population percentages that are measured according to different definitions. While the available data do not provide uniform objective criteria for making global comparisons, these criteria do exist for the countries of Latin America. The Spatial Distribution and Urbanization in Latin America and the Caribbean (DEPUALC)

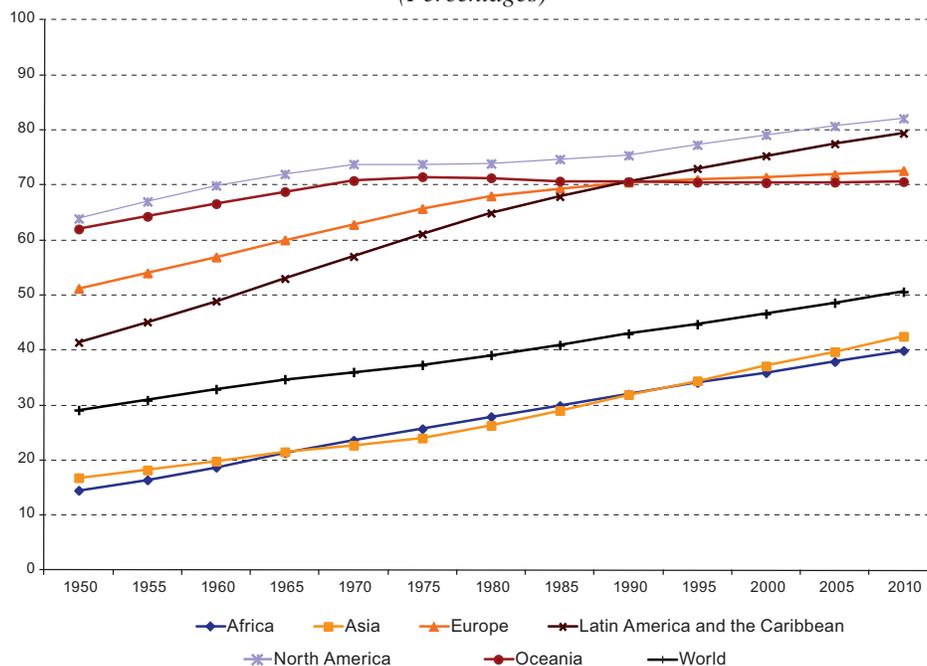
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<sup>2</sup> This point is further addressed below, to avoid confusion. Essentially, urbanization in the region (that is, the increase in the urban share) is due to positive net migration in urban areas in their exchange with rural areas (since there are only two categories, a positive balance in one necessarily implies a negative balance in the other), because natural growth in rural areas continues to be higher than in urban areas (so in the absence of the rural exodus, the region would be ruralizing). Thus, and this is the confusing point, with important policy implications, the growth of the urban population is mainly explained by its own natural growth and not by immigration from the countryside.

<sup>3</sup> See United Nations [online] <http://esa.un.org/unpd/wup/index.htm>.

database maintained by CELADE-Population Division of ECLAC contains population data by locality from censuses conducted in the 1950s to the 2010s, for all the countries in Latin America. The database breaks down and tracks the population in all localities (urban agglomerations) that were recorded as having 20,000 or more inhabitants in at least one census in the reference period (1950-2010). In the case of agglomerations composed of several localities or minor administrative divisions, the population data are disaggregated. For localities with between 2,000 and 19,999 inhabitants, the population is merged into a single category. The 2000 census round incorporated proxy variables for some of the Millennium Development Goals indicators, providing a snapshot of the cities.

Figure VIII.1  
**WORLD AND MAJOR REGIONS: URBAN POPULATION, 1950-2010**  
 (Percentages)



**Source:** United Nations, *World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2007 Revision*, Department of Economic and Social Affairs [online] <http://esa.un.org/unup> [date of reference: 3 August 2011].

The DEPUALC database shows that the high degree of urbanization in the region is not a methodological construct or an error stemming from improper definitions. This can be illustrated with just one indicator: two thirds of the region's population live in cities with 20,000 or more inhabitants, which is an exceptionally high rate on a world scale. The percentage is below the estimated 80% urban population because the criterion of 20,000 residents is very strict. Only in Mexico do researchers work with a criterion that is close to this threshold.<sup>4</sup> Moreover, tests conducted by CELADE-Population Division of ECLAC using the DEPUALC database systematically show that rankings of the countries in the region by urbanization level are highly correlated<sup>5</sup> when based on official criteria, such as localities with 2,000 or more inhabitants or those with 20,000 or more inhabitants. The main conclusion of these studies is that while official definitions of the urban and rural categories are not objectively comparable, in practice they can be used to rank countries by their degree of urbanization and to provide an accurate and comparable

<sup>4</sup> 15,000 or more inhabitants (Sobrino, 2011).

<sup>5</sup> A Pearson's correlation coefficient of 0.95 or over.

estimate of the urban population, defined as the population living in localities with 2,000 or more inhabitants. If this threshold seems weak, then estimates and comparisons can be made using data on localities with 20,000 or more inhabitants, which are available in the DEPUALC database.

The rapid urbanization of the region, and its high urban population percentages, mask substantial differences among countries. Latin American countries can be classed into different groups based on their initial levels (in 1950) and their current rates (2010).<sup>6</sup>

The findings are presented in table VIII.1. The degree of urbanization recorded in the 1950s is broken into three segments: high (over 50%), medium (between 30% and 50%) and low (less than 30%). The degree of urbanization in 2010 is then similarly disaggregated: high (over 85%), medium (between 60% and 85%) and low (less than 60%). This produces a double-entry table that classifies the countries into nine categories. Three of them, which were leaders in urbanization in 1950 and remain so in 2010, are cases of early and sustained urbanization. The fact that all three are Southern Cone countries with some of the highest levels of human development in the region (as highlighted in the next section) is not irrelevant. Cuba falls outside of this group because while it started early, its urbanization rate was slower, largely due to the specific policies implemented in this area. Next come two countries that can be described as undergoing rapid urbanization: namely, the Bolivarian Republic of Venezuela and Brazil. These countries got a late start on urbanization, but they caught up quickly. The process in Brazil, in particular, is a key factor in the rapid urbanization in Latin America, because its demographic weight has a strong effect on regional averages. The category that includes the most countries is medium urbanization in both 1950 and 2010; no further comment is needed here. The countries that show slow urbanization, dropping from the intermediate group in 1950 to the low segment in 2010, do not readily fit a stylized description, except that the majority are located in Central America. The group includes countries with a relatively lower level of economic and social development (Honduras and Nicaragua) as well as more robustly developing countries (Costa Rica). In any event, this category and the one below it (low urbanization both currently and in 1950) encompass the countries with the lowest levels of socioeconomic development in the region. The exception of Costa Rica does not disprove the existence of a relationship between a low level of development and low and slow urbanization, a point that is taken up further in the next sections of this chapter.

Table VIII.1  
LATIN AMERICA AND THE CARIBBEAN (SELECTED COUNTRIES):  
DEGREE OF URBANIZATION IN 1950 AND 2010

Degree of urbanization 1950	Degree of urbanization, 2010		
	High (85% and over)	Medium (60% to 85%)	Low (Less than 60%)
High (50% and over)	Argentina, Chile and Uruguay	Cuba	
Medium (30% to 50%)	Bolivarian Republic of Venezuela and Brazil	Colombia, El Salvador, Mexico, Panama, Peru and Plurinational State of Bolivia	Costa Rica, Honduras, Nicaragua and Paraguay
Low (Less than 30%)		Dominican Republic and Ecuador	Guatemala and Haiti

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2011.

<sup>6</sup> Similar exercises have been carried out by Villa (1992), who developed a typology based on the countries' urban population percentage in 1990, and by Rodríguez and Villa (1998), who compared the degree of urbanization in the countries of the region in 1950 and 1990.

#### **D. URBANIZATION, SUSTAINABLE DEVELOPMENT AND RURAL-URBAN MIGRATION**

The leading theories and the historical evidence all continue to point to a close link between urbanization and economic and social development: “There is a strong correlation between urbanization and economic development across countries, and within-country evidence suggests that productivity rises in dense agglomerations” (Glaeser, 2011).

With regard to economic progress, the link has been evident for many centuries, but it gained traction along with the industrial revolution. Population and production concentration reduces costs (economies of scale and agglomeration); increases the return on investment; fosters exchange, networking and association; and promotes the division of labour and competition. It is therefore one of the driving forces behind technical progress and innovation, provides a natural base for secondary and tertiary activities and favours the diffusion of knowledge and technology. Thus, population concentration is naturally associated with economic development.

The connection to social progress is not as obvious, at least historically (Hall, 1996). In the currently developed countries, industrialization was based on extremely unjust, ruthless urbanization, as evidenced in unhealthy, abysmal slum districts for the emerging working class. These unfair, substandard living conditions were exposed by social analysts, the new urban planners, State investigative commissions, articles in the press and denunciations by various social actors, including physicians and churches. Exposure sparked government response on housing and urban issues, and the advantages of concentration for deploying active social policy began to be leveraged and yield direct results in terms of living conditions and the functioning of cities. In practice, urbanization facilitates the provision of basic services and, therefore, the expansion of coverage and improvement in service quality.<sup>7</sup> Urbanization also increases the value of education and makes universal education feasible, and it broadens options for the exercise of citizens’ rights.

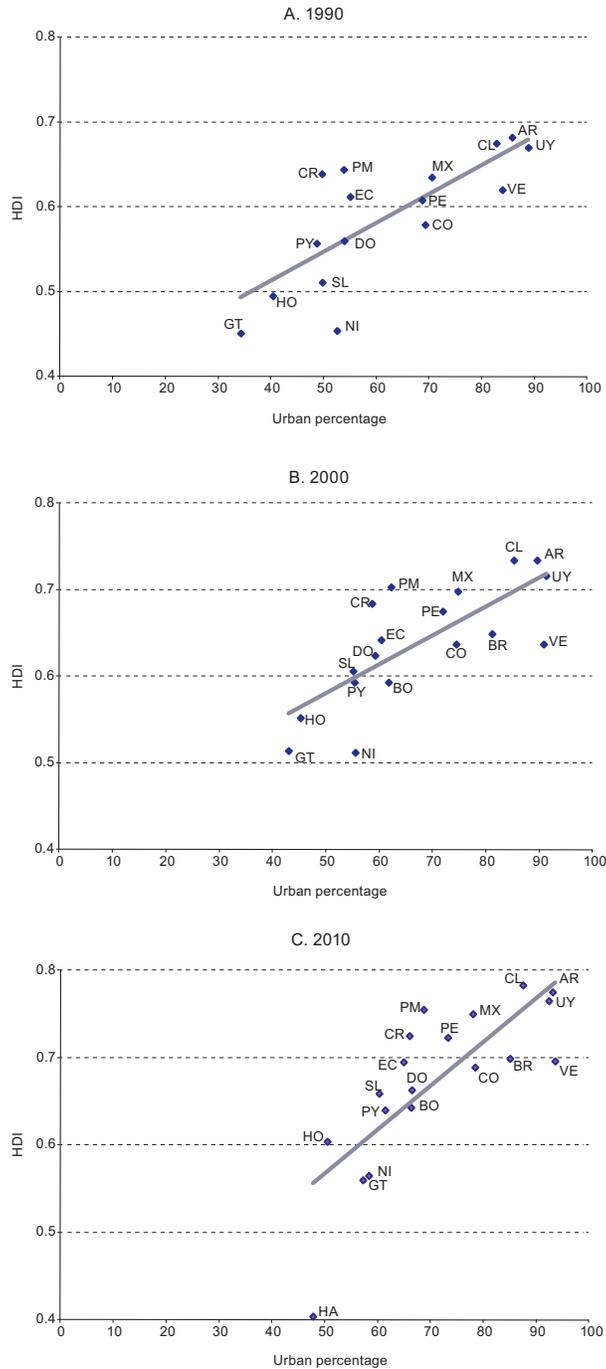
In examining the sustained urbanization of Latin America, one point that stands out is that regardless of the economic and social development indicators used, higher levels of urbanization are, on average, invariably associated with higher levels of economic and social development, as argued at the start of this section. This is illustrated in figures VIII.2 and VIII.3 using the human development index and per capita GDP, respectively. Both figures confirm the close positive relationship between urbanization and economic and social development. They also show that the trend has held over time.

With that in mind, does it make sense to examine the link between urbanization and development in Latin America? The answer is that yes, it does, for at least three reasons, although only one will be explored systematically in this report.

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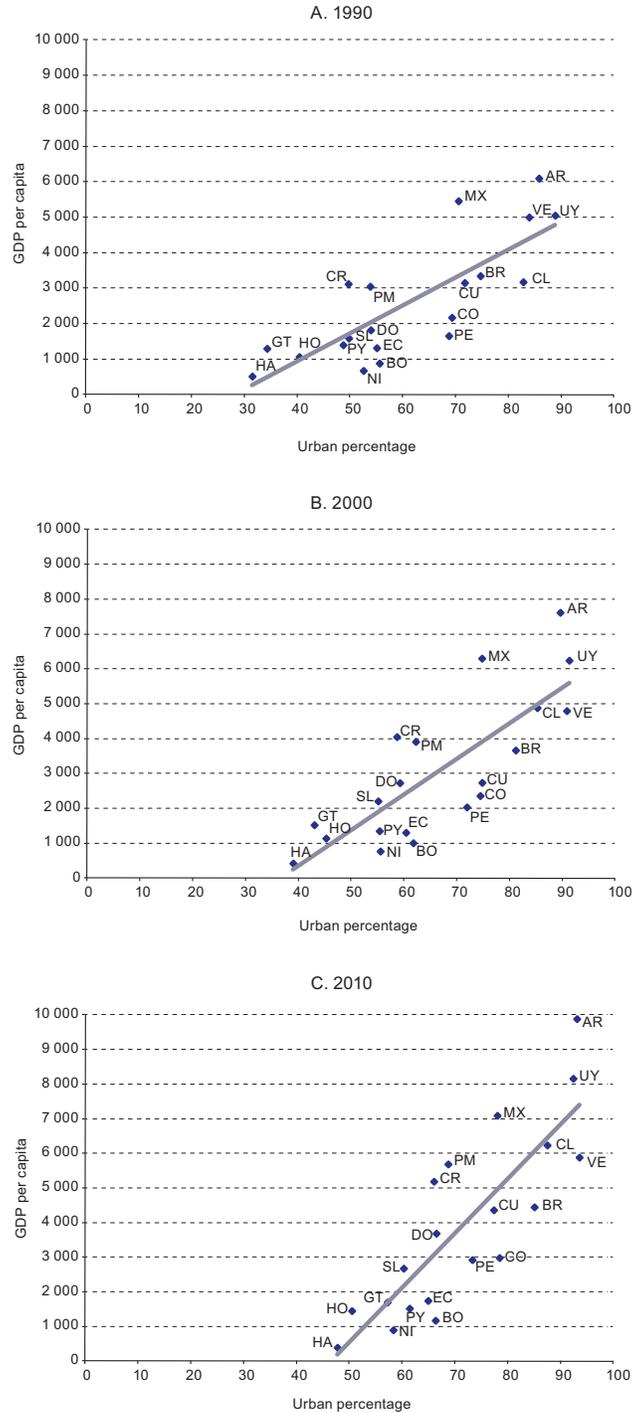
<sup>7</sup> Urban economies of scale and proximity should translate into access to better services for all urban dwellers. Extending services to poorer neighbourhoods costs much less than reaching the same numbers of people in remote and scattered rural settlements (UNFPA, 2007, p. 30).

Figure VIII.2  
**LATIN AMERICA AND THE CARIBBEAN: URBAN POPULATION  
 AND HUMAN DEVELOPMENT INDEX, 1990, 2000 AND 2010**  
 (Percentages)



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database and United Nations Development Programme (UNDP), *Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development* [online] <http://hdr.undp.org/en/reports/global/hdr2010/>.

Figure VIII.3  
**LATIN AMERICA AND THE CARIBBEAN: URBAN POPULATION AND PER CAPITA GROSS DOMESTIC PRODUCT, 1990, 2000, AND 2010**  
*(Percentages)*



Source: Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of CEPALSTAT and Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) databases.

First, the region's economy is essentially based on natural resources and on sectors that are ecosystem-intensive (like tourism), making it possible to imagine a different, and even non-industrial, type of development. Tourism is the main industry in many Caribbean countries (Bolaky, 2011), and the primary sector (e.g. agriculture and mining) is essential in the export structure of most Latin American countries. However, ECLAC estimates that this dependence on natural resources entails a threat of reprimarization, with dependence on static comparative advantages and a tendency towards rent-seeking that give rise to vulnerability and low sustainability. ECLAC thus rules out any strategic proposal for development based on reprimarization.

Second, in certain countries urbanization is clearly uncoupled from economic and social development. Costa Rica has a very low degree of urbanization for its human development index, while the Bolivarian Republic of Venezuela has very high one, which suggests partial autonomy in the two processes. This may, however, be a case of exceptions that prove the rule, since the figures above show that the stylized relationship between urbanization and development is clear and sustained in the region.

Third, urbanization and economic and social development have been less closely linked in Latin America than in currently developed countries, and regional urbanization has many comparative weaknesses. In Latin America, urbanization has far outpaced production and technology development, brought about less substantial and sustained reduction in poverty, has unfolded in a framework of profound asymmetries in the distribution of resources and power and has taken place without a solid institutional structure or a robust, sustained and forward-looking technical and political stance. In a recent work, the Inter-American Development Bank alludes to the “over-urbanization” of the region and suggests that the problem is not the degree of urbanization itself, but push factors in the countryside, large concentration in metropolises—a hypothesis defended recently, from a global perspective, by Henderson and other economists (Ramírez, Silva and Cuervo, 2009)—and the accumulation of urban deficits (IDB, 2011). This last point is addressed in detail elsewhere in this chapter. The issue of metropolises is covered in a subsequent chapter, while the rural exodus and its determinants were analysed in chapter IV.

## **E. URBANIZATION, RURAL-URBAN MIGRATION AND URBAN POPULATION COMPOSITION**

Chapter IV presented evidence on two trends that define the main demographic link between urbanization and rural-urban migration. The first is the persistence of the rural exodus, that is to say that in the migration exchange between rural and urban areas, the former continue to record a negative balance while the latter, as counterpart, post a positive one. The second trend is birth rates: they continue to be higher in rural areas and provide grounds for assuming that natural growth rates are higher there despite higher mortality (see chapter IV). A third trend, described in section C, involves the continuation of urbanization in the demographic sense, that is, an increase in the urban population percentage in Latin America. Since this is not compatible with the higher natural growth rate in rural areas (which would imply, *ceteris paribus*, a “ruralization” of the region), the demographic factor driving urbanization is the transfer of the population from rural areas to urban ones. The transfer has several sources: (i) internal migration between urban and rural areas; (ii) international migration differentials by rural and urban zones; and (iii) the reclassification of localities. Given that there is decisive evidence for the first factor and very little information on the other two, it is natural to assume that net internal migration in urban areas is the demographic cause of urbanization.

As has been seen, the net rural-urban transfer can be estimated by applying the indirect survival ratio method.<sup>8</sup> If the resulting value is then interpreted through the lens of the rural population (20% of the population of the region), as in chapter IV, the levels point to a continuation of the rural exodus. If, on the other hand, they are examined from the perspective of the urban population (80% of the total), the conclusion is muddled, as it becomes clear that this is not a “rural avalanche,” although it is still an important trend. The main finding and the main distinction that arise from this analysis is that the net rural-urban transfer is not the main source of urban population growth, because it explains around 30% of the increase (see table VIII.2). The remainder is explained by natural growth of the urban population itself.

Table VIII.2  
**LATIN AMERICA AND THE CARIBBEAN (20 COUNTRIES): RELATIVE CONTRIBUTION  
 OF NET RURAL-URBAN TRANSFER TO URBAN POPULATION GROWTH, 1980-2010**  
*(Percentages)*

Country	1980-1990		1990-2000		2000-2010	
	Male	Female	Male	Female	Male	Female
Argentina	29.0	29.0	25.2	24.6		
Bolivia (Plurinational State of)	55.5	57.0	24.9	30.4		
Brazil	40.3	41.9	37.5	38.1		
Chile	8.0	11.2	22.6	23.1		
Colombia	30.6	34.0	31.2	32.8		
Costa Rica	42.7	45.1	45.7	46.3		
Cuba	61.4	59.4	44.8	45.2		
Dominican Republic	27.9	27.9	42.6	52.3		
Ecuador	45.5	47.8	38.0	38.6	24.2	24.6
El Salvador	56.0	55.1	81.5	76.1		
Guatemala	39.9	42.1	55.3	54.9		
Haiti	48.3	50.9	58.2	118.5		
Honduras	42.2	49.0	41.5	45.6		
Mexico	40.1	34.3	32.4	32.9	20.5	30.6
Nicaragua	23.8	27.7	28.9	37.8		
Panama	36.3	40.6	51.5	51.9	30.7	32.7
Paraguay	45.6	50.6	42.4	48.0		
Peru	32.3	35.0	38.3	41.1		
Uruguay	37.5	35.5	30.9	35.9		
Venezuela (Bolivarian Republic of)	20.6	23.3	19.2	20.4		
Total	37.1	37.6	35.1	36.1		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of census data using indirect survival ratio procedures.

These percentages vary by country. In some, rural-urban transfer still represents over 50% of urban population growth; in others the share is less than 30% (see table VIII.2). The countries where rural-urban transfer accounts for a higher relative share of urban population growth are generally less

<sup>8</sup> These estimates are orders of magnitude and not precise figures, since they are based on procedures whose assumptions are not robust. Moreover, they provide the net rural-urban transfer rate, which combines the net rural-urban migration balance and the reclassification of localities. The results therefore tend to be overstated, because the reclassification of localities usually involves the “upgrading” of localities from rural to urban due to population growth.

urbanized; the rural population base that is the source of migration to the cities is still large in relative terms, while the urban population base on the receiving end is not, so that the final effect on the destination point is magnified. The Central American countries are examples, with the exception of Nicaragua. In highly urbanized countries, however, the net rural-urban transfer tends to represent less than 30% of urban population growth. Thus, the contribution of rural-urban transfer to the expansion of the urban population can be expected to drop as the urbanization process advances. This trend is illustrated in table VIII.2: the three countries for which 2010 census data are available record a substantial drop in this factor as a driver of population growth, both male and female.

Obviously, this negative statistical relationship between the level of urbanization and the weight of rural-urban transfer in urban population growth is not irreversible. If fertility rates continue to fall in urban areas to the extent that they produce null or negative natural growth rates, and if net rural-urban population transfer continues, its contribution to urban population growth could increase sharply and significantly.

It bears repeating that the decreasing impact of rural-urban transfer on urban population growth in no way invalidates the fact that this transfer continues to be the demographic explanation of the increase in the urban percentage (urbanization).

Looking back to chapter IV, the fact that population transfer from rural to urban areas is contributing less and less to urban population growth should not obscure the sustained and significant impact it is having on rural population growth in the region, which has been stable or even negative for decades. As with any average, this average stability masks opposing trends. In rural areas where the trend is towards depopulation, the shift is concerning because it usually involves a loss or under-use of resources (infrastructure, facilities, land) and can lead to food insecurity or even erosion of sovereignty in border areas.

Rural-urban migration has an impact not only on population growth but also on population composition in both areas. As seen in Chapter IV, the dependency ratio of the rural population is higher because rural emigration is age-selective and mainly involves young working-age persons. The gender composition of the rural population is also affected by migration selectivity. Rural emigration in Latin America has generally been selective for females (although there are countries that follow a different pattern), so it is not unusual for the sex ratio to be higher in the rural areas of the region.

The effects of rural-urban migration on the gender and age structure of rural and urban areas can be estimated more precisely using the procedures described and employed in chapter V. These procedures, however, can only be applied in a handful of countries whose censuses provide the necessary data for making direct estimates of rural-urban migration, that is, for building rural-urban migration matrices. These include Panama, whose 2010 census findings are presented in tables VIII.3, VIII.4 and VIII.5.

Table VIII.3 highlights the marked disparity in the gender composition of urban and rural areas.<sup>9</sup> The sex ratio for urban areas in 2010 was around 95, versus as much as 111 for rural areas. Rural-urban migration in the 2005-2010 period widened the gap, reducing the ratio of males to females in the urban population by 0.25% and increasing it by 1.1% in rural areas.

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<sup>9</sup> These figures are from an internal migration matrix for the 2005-2010 period. Some cases are therefore excluded, such as children under the age of five, international migrants during the period and people who did not answer some of the relevant questions (habitual place of residence, previous place of residence, duration of residence). Even so, the matrix considers over 90% of the population covered by the census, so the indicators are representative of the demographic reality of the two areas.

Table VIII.3  
**PANAMA: ESTIMATED IMPACT OF RURAL-URBAN MIGRATION  
 ON THE SEX RATIO IN RURAL AND URBAN AREAS, 2005-2010**

Habitual residence	Residence 5 years earlier			Migration impact ( <i>absolute</i> )	Migration impact ( <i>percentage</i> )
	Urban	Rural	Total		
Urban	0.95203	0.96376	0.95252	-0.00247	-0.2588031
Rural	1.12246	1.11230	1.11265	0.01236	1.11092905
Total	0.95498	1.10028	1.00542		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of 2010 census microdata.

Table VIII.4  
**PANAMA: ESTIMATED IMPACT OF RURAL-URBAN MIGRATION ON CHILD POPULATION  
 PERCENTAGE <sup>a</sup> IN RURAL AND URBAN AREAS, 2005-2010**

Habitual residence	Residence 5 years earlier			Migration impact ( <i>absolute</i> )	Migration impact ( <i>percentage</i> )
	Urban	Rural	Total		
Urban	0.20142	0.10748	0.19746	-0.00464	-2.352282
Rural	0.23772	0.27255	0.27135	0.01128	4.15776
Total	0.20211	0.26007	0.22318		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of 2010 census microdata.

<sup>a</sup> Proportion of the population aged 5 to 14 in the population aged 5 and over in the matrix.

Table VIII.5  
**PANAMA: ESTIMATED IMPACT OF RURAL-URBAN MIGRATION ON THE PROPORTION  
 OF OLDER PERSONS <sup>a</sup> IN RURAL AND URBAN AREAS, 2005-2010**

Habitual residence	Residence 5 years earlier			Migration impact ( <i>absolute</i> )	Migration impact ( <i>percentage</i> )
	Urban	Rural	Total		
Urban	11.48	6.75	11.28	-0.10627	-0.941953
Rural	6.54	12.44	12.23	0.22661	1.852441
Total	11.39	12.01	11.61		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of 2010 census microdata.

<sup>a</sup> Proportion of the population aged 60 and over in the population aged 5 and over in the matrix.

With regard to the age structure, tables VIII.4 and VIII.5 also clearly show the differences between the two areas and how migration is widening them. As for the child population percentage,<sup>10</sup> the marked disparity (19.7% in urban areas and 27.1% rural ones) is due in part to higher fertility in rural areas. The matrix findings show, however, that rural-urban migration also contributes to the difference, reducing the share in urban areas by 2.3% and increasing it in rural areas by 4.15% (see table VIII.4). Turning now to the proportion of older persons, the higher fertility and mortality rates in rural areas should result in a younger population there than in urban areas. This is not the case, however: the proportion of older persons in the population aged five and older is 11.3% in urban areas and 12.3% in

<sup>10</sup> Proportion of the population aged 5 to 14 in the population aged 5 and over in the matrix.

rural areas. According to the same table, the rural population is older because of migration: in the 2005-2010 period, migration tended to increase the proportion of older persons by 1.85% in rural areas and reduce it by 2.3% in cities. As emphasized in earlier studies (Rodríguez and Busso, 2009), this impact is not due to child-selective rural-urban migration but rather to young-adult selectivity, which has indirect effects on the proportion of other age groups.

In sum, the results obtained using the 2010 Panama census fully support the statements above on the effects of rural-urban migration on the gender and age structure in the two areas –effects that exacerbate these differences between the two areas. For age composition at least, the effect is clearly favourable for urban areas (in that it reinforces the so-called demographic dividend) and unfavourable for rural ones.

Migration also tends to be education-selective, although the pattern can have paradoxical effects in countries with a very large rural-urban education gap. In general, emigrants moving from rural to urban areas have a higher education level than the inhabitants of rural areas who do not migrate, even after controlling for age selectivity. It thus tends to act as a deflator of the average education level and normally is not offset by the higher education level of immigrants from urban areas compared with rural non-migrants. In short, migration generally tends to reduce the average education level of the rural population. But it also tends to reduce the education level in urban areas, because migrants from the countryside have a lower level of schooling than urban non-migrants. These results are confirmed for Panama using the 2010 census (tables VIII.6 and VIII.7). The two areas show a clear difference in years of schooling: 11.7 years in urban areas versus 7.1 years in rural areas for the population aged 30 to 49 (table VIII.6) and 10.7 years versus 5.9 years in the case of heads of household (table VIII.7). For both of these population groups, rural-urban migration reduces the education level in both rural and urban areas. The relative impact is stronger in rural areas, though, where it reduces the average education level of the population aged 30 to 49 years by 2% and that of heads of household by 3.4%.

The difference between the two areas holds when the findings are broken down into immigration and emigration effects. In urban areas, it is immigration that tends to reduce the average education level ( $11.67 - 11.76 = -0.09$ ). In rural areas, this effect is the result of emigration ( $6.98 - 7.25 = -0.27$ ) because immigration from cities tends to raise the education level in the countryside ( $7.10 - 6.98 = 0.12$ ).

Table VIII.6

**PANAMA: ESTIMATED IMPACT OF RURAL-URBAN MIGRATION ON THE AVERAGE EDUCATION LEVEL OF THE POPULATION AGED 30 TO 49 IN RURAL AND URBAN AREAS, 2005-2010**

Habitual residence	Residence 5 years earlier			Migration impact ( <i>absolute</i> )	Migration impact ( <i>percentage</i> )
	Urban	Rural	Total		
Urban	11.76	9.83	11.67	-0.05204	-0.445837
Rural	10.00	6.98	7.10	-0.14456	-2.034652
Total	11.72	7.25	10.28		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of 2010 census microdata.

Table VIII.7

**PANAMA: ESTIMATED IMPACT OF RURAL-URBAN MIGRATION ON THE AVERAGE EDUCATION LEVEL OF HEADS OF HOUSEHOLD IN RURAL AND URBAN AREAS, 2005-2010**

Habitual residence	Residence 5 years earlier			Migration impact ( <i>absolute</i> )	Migration impact ( <i>percentage</i> )
	Urban	Rural	Total		
Urban	10.82	9.70	10.77	-0.02370	-0.220021
Rural	9.41	5.81	5.93	-0.19984	-3.370751
Total	10.80	6.13	9.20		

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of special processing of 2010 census microdata.

This deflator effect that rural migration has on the education level of the urban destination makes it harder for labour markets, public services, social housing, facilities and even urban culture and institutions to productively, efficiently and smoothly absorb immigrants from rural areas. This set of complications underlies the negative reaction to such migration in urban areas, which is discussed in the next section.

## F. URBANIZATION, POVERTY AND URBAN DEFICIENCIES

Devoting a chapter to poverty and urban deficiencies does not imply a condemnation or negative view of rural-urban migration. In fact, throughout the report the positive impacts of rural-urban migration have been stressed, both for development at the country level (see sections B and C on how urbanization contributes to progress and improved living standards in countries) and for the development of cities, including its impacts on gender and age structure discussed above. And the focus has been on the structural linkage between rural and urban areas in the region, in keeping with the approach taken by other organizations in the United Nations system (UN-HABITAT, 2009; UNDP, 2009; World Bank, 2008; UNFPA, 2007). The gaps between rural and urban areas that shape the structural and historical forces behind the rural exodus have been spotlighted, including significantly higher poverty indices and sharply unequal allocation of production resources in the countryside (whether through the traditional division of land ownership in large estates or modern agribusiness concentration).

But the precariousness of urbanization in the region cannot be ignored. It is analysed here from the perspective of urban deficits, some of which originated in, were worsened by or became entrenched because of the difficulties that cities in the region encountered in absorbing the rural exodus. Rural-urban migration clearly is not responsible for these deficits, which instead stem from the lack of strategic urban policies, market deregulation and dysfunction (especially the market for land) and the State's weakness as a provider of integrated public services. This section examines a set of deficits that characterize urbanization in the region, while the next two chapters address other factors that contribute to the precariousness of urbanization in the region: informality and mismanaged and unplanned peripheral expansion.

The idea of an urban housing deficit has recently been introduced to guide integrated urban policy design (MINVU, 2009, pp. 13 and 14). However, urban deficits can range from general living conditions to infrastructure, facilities, connectivity, institutions, civic participation and city management and governance capacity. These deficits have accumulated as a result of two distinct factors: (i) a historical inability to absorb productively, coherently and with dignity the rapid growth of the population, surface area and activity of the cities, due to scarce and unequally allocated resources, weak urban institutions,

the absence of a strategic vision and the lack of technical and administrative tools for designing and applying appropriate city policies; and (ii) the 1980 debt crisis, which devastated the region's economy and whose impacts were magnified in urban and metropolitan areas, resulting in years of lack of investment and a period during which problems such as poverty, unemployment, crime, pollution and traffic congestion spun out of control and shook the foundations of city governance. The 1980s also saw a shift in the development model from State-led industrialization to market-led primary production, which, in principle, had a rural bias (or rather, a bias toward primary production, which is usually located in rural areas). Some of these urban deficits are briefly examined below.

### **1. Living conditions, urban poverty and slums**

Latin America is the developing region that best exemplifies what is referred to as the “urbanization of poverty”, where a large share of the poor population lives in urban areas. This is not because the incidence of poverty is higher there (which is not the case in any country in the region, as explained in chapter IV on population, territory and rural development), but because of the composition effects of 80% of the population being urban.

The fact that most persons in situations of poverty live in urban areas has quantitative and qualitative implications for policies aimed at reducing poverty. The quantitative implications are associated with the location of resources, which must increasingly be allocated to cities even though they are not the areas that are most affected by poverty. This issue is politically sensitive, then, but population-targeted programmes are unavoidable. Moreover, it is not a minor issue considering that the main innovation in poverty reduction policies in the twenty-first century in the region is conditional cash transfer programmes (ECLAC, 2009b). Since these programmes involve the direct transfer of money to the poor population (as identified through various mechanisms and in compliance with national procedures and criteria), the pressure to allocate them to urban areas will grow. According to some recent studies, this involves highly complex challenges.<sup>11</sup> Moreover, the starting point for many of these programmes was exclusively rural in focus, and some maintain that focus today. For example, the Tekopora programme in Paraguay is directed at the poorest districts of the country, which are typically rural. Consequently, the initial design may require adjustments before the programme can be deployed in urban areas. Besides, regardless of the scope of these challenges, the urban bias must be considered when designing programme eligibility rules, which will have to be tailored to the profile of poverty and urban life in general. In particular, it will be necessary to link eligibility to compliance with commitments that are compatible with the exercise of citizens' rights and satisfactory social and economic performance on the part of cities.

The qualitative implications, in turn, are related to the particular characteristics of urban poverty. While conditional cash transfer programmes address one of the key dimensions of urban poverty (namely, insufficient income), it is well documented that urban poverty has other components. This expands on the idea of the multidimensionality of poverty<sup>12</sup> in that it includes the territorial dimension, in particular the physical, infrastructural, social and culture aspects of the environment in which the poor reside. Some of these dimensions are addressed in this chapter (housing, connectivity and transport, exposure to

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<sup>11</sup> “A recent review of the application of these programmes in urban Latin America showed that a significant set of obstacles has arisen in the application of conditional cash transfers in urban areas, which raises questions about the applicability of such programmes in cities” (Linn, 2010, p. 13).

<sup>12</sup> Although the issue is complex, some countries in the region have adopted official methodologies for the multidimensional measurement of poverty. Mexico is the most widely-known example (CONEVAL, 2011).

environmental risks and the coverage and quality of basic services), while others are taken up in subsequent chapters (for example, peripheral expansion, residential segregation and the associated exclusion and stigma, in the chapter on large cities).

The first urban deficit to spotlight is housing. A first look at comparative world data (based on Millennium Development Goal monitoring and thus using the indicator for the proportion of the urban population living in slums)<sup>13</sup> suggests that while the housing situation in Latin America is not especially dramatic (see table VIII.7), the region's high degree of urbanization means that proportion of the total population living in slums is high among developing regions. Action to address this issue is thus central for poverty reduction policy. The inclusion of slum populations in the Millennium Development Goals<sup>14</sup> established the issue as one of international concern and priority, based on the idea that the population living in these marginal, unprotected and impoverished areas has almost no probability of emerging from poverty. This pessimistic view of slums has its detractors. In particular, some institutions and researchers emphasize some of the strengths of slums. This debate has been going on for decades. For example, Perlman's paper (1977) on the myth of marginality in the *favelas* of Rio de Janeiro clearly remains relevant (Linn, 2010, p. 8).

Although the extremes of this debate may seem irreconcilable, the discussion has led to consensus on a set of policy issues. These include recognizing and assessing the history of slums and questioning solutions recommended in the past, such as eradication. Because relocation severs the internal and external ties developed in a slum over time, current approaches are more frequently based on programmes geared towards establishment or improvement of neighbourhoods in situ. There is a wide range of possible initiatives to improve living conditions in slums, which has generated an extensive debate on the priority and appropriateness of the different options (UN-HABITAT, 2009; UNFPA, 2007; Clichevsky, 2002). According to Linn (2010), some of the most common initiatives include land titling, support for microcredit schemes, the installation or low-cost provision of basic services, the provision of construction materials and technical assistance for subsidized self-building, the establishment of early warning and relief mechanisms for natural disasters, the formalization of street names, routes, and house numbers and the provision of connectivity. Many countries have combined one or more of these initiatives in neighbourhood improvement programmes that have consolidated settlements in their original locations and thus avoided the social and economic costs of eradication.

Slums should not be idealized, however. Apart from their intrinsic social capital and economic drive, they generally imply adverse objective and symbolic conditions for slum dwellers. Many are located in areas subject to environmental risk and are thus highly exposed to natural disasters. Given the historical absence of public institutions, they also have a higher probability of being co-opted or captured by interest groups. When the community itself organizes this it can be seen as empowerment, but if criminal groups are involved it can lead to the formation of enclaves in which the inhabitants are used as a front, shield or recruiting base.

In sum, policies targeting slums are still needed. In contrast with past approaches, however, they should make formal establishment priority, be tailored to the specific characteristics of each settlement, be multidimensional and involve the active participation of the local community.

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<sup>13</sup> In the original (Spanish-language) version of this report, the term used for slums is *asentamientos precarios*.

<sup>14</sup> Millennium Development Goal 7d: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.

The need to design ad hoc interventions for each settlement was brought to light by global programmes and studies that found substantial heterogeneity among slums. This is due not only to the nature of the population or its ties to the surroundings, but also to factors that would appear, by definition, to be common to all informal settlements: non-permanent structures, absence of services, irregular tenure, lack of facilities and roads, and so on (UN-HABITAT, 2008). This diversity arises because the settlements become consolidated over time as resources are accumulated, inhabitants are mobilized and State actions are taken. In many cases, this process leads to integration with the formal city. The settlements thus cease to be areas of misery, exclusion and legal insecurity, although they usually remain poor and sometimes maintain their initial identity (or stigma) as a land invasion or squatter settlement.

In the late 1990s, census microdata began to be used to support innovative and comprehensive slum intervention programmes, such as the successful Chile Barrio programme. Some methodological studies in the mid-2000s enhanced these procedures, and slums in several Latin American cities were identified, quantified and classified (Candia, 2005 and 2007; Rodríguez, 2003). The main conclusions of the empirical analysis carried out in these studies included confirmation of sociodemographic diversity among informal settlements and a change in the inhabitants' place of origin to mostly city natives, not migrants as during the metropolitan boom (1950-1980).

Table VIII.8  
**WORLD (MAJOR REGIONS): URBAN POPULATION LIVING IN SLUMS**  
(Percentages)

Percentage of urban population living in slums <sup>a</sup>	1990	2000	2010
Developing regions	46.1	39.3	32.7
North Africa	34.4	20.3	13.3
Sub-Saharan Africa	70.0	65.0	61.7
Latin America and the Caribbean	33.7	29.2	23.5
East Asia	43.7	37.4	28.2
South Asia	57.2	45.8	35.0
South-East Asia	49.5	39.6	31.0
Western Asia	22.5	20.6	24.6
Oceania	24.1	24.1	24.1

**Source:** United Nations, The Millennium Development Goals Report 2011 [online] <http://mdgs.un.org/unsd/mdg/Resources/Static/Data/2011%20Stat%20Annex.pdf>.

<sup>a</sup> Refers to the urban population living in households with at least one of the following four characteristics: (a) lack of access to improved sources of drinking water; (b) lack of access to improved sanitation; (c) overcrowding (three or more persons per room); and (d) dwellings made of non-durable material. These new slum figures are not comparable with estimates published previously where all households using latrines were classed as substandard. Here, households with pit latrines are classed as having improved sanitation.

## 2. Basic services deficit

The Millennium Development Goals include other targets related to habitability of living spaces: namely, access to potable water, sanitation and secure tenure, all of which are critical in urban areas, where the alternatives are unhealthy and dangerous. Census data for the 2000s show that in the 16 countries where data are available, over 90% of the urban population has access to electricity in their homes, and in several of the countries the figure approaches 100% (see table VIII.9). Access to potable water varies among the countries. Only in three countries (Chile, Costa Rica and Mexico) does over 90% of the

population have this service in their homes; in others (Argentina, Bolivarian Republic of Venezuela, Brazil, Ecuador, El Salvador, Guatemala, Panama and Peru) the share ranges from 80% to 89%. The lowest percentages of access to potable water are in the Dominican Republic and the Plurinational State of Bolivia, with under 50%. Access to sanitation is generally lower than for water and electricity: only two countries (Chile and Costa Rica) have a rate of over 95%; seven countries range between 70% and 89%. At the other extreme, just 46% of the urban population of Nicaragua has sanitation in their homes; in Paraguay the figure is 16% (see table VIII.9).

Table VIII.9  
**LATIN AMERICA AND THE CARIBBEAN (SELECTED COUNTRIES): INDICATORS FOR ACCESS TO BASIC SERVICES IN URBAN AREAS, CENSUS DATA FROM THE 2000s**  
*(Percentages)*

Country	Proportion of the population				Secure tenure index	Proportion of households		
	With access to potable water	With access to sanitation	With access to electricity	Living in houses made of conventional building materials		With access to potable water	With sanitation available	Connected to electric utility
Argentina	87.9	74.7	97.8	97.8	65.6	90.1	78.1	98.0
Bolivia (Plurinational State of)	48.8	58.7	90.3	99.2	33.9	49.1	60.2	89.5
Brazil	88.8	54.0	98.4	...	48.8	90.2	56.4	98.7
Chile	98.9	97.1	99.1	92.4	88.2	98.8	97.0	98.9
Costa Rica	96.7	96.0	99.7	87.5	87.4	96.6	96.2	99.7
Dominican Republic	46.2	70.3	98.9	95.9	47.7	45.7	70.4	98.6
Ecuador	89.5	63.4	96.0	87.5	52.9	90.8	66.4	96.6
El Salvador	87.5	70.9	95.4	91.8	1.3	88.2	73.0	95.4
Guatemala	89.0	69.2	94.4	79.3	55.2	89.5	72.0	95.1
Honduras	50.6	72.7	92.2	95.6	63.9	51.2	74.2	92.6
Mexico	91.7	77.7	98.1	91.2	66.3	92.2	78.8	98.2
Nicaragua	62.7	42.8	93.0	88.2	2.5	63.2	44.0	92.8
Panama	79.1	68.9	97.5	97.9	60.8	78.8	70.7	97.2
Paraguay	54.8	16.2	97.4	99.2	10.9	55.5	17.2	97.2
Peru	79.5	78.1	90.8	93.6	59.9	78.5	77.2	89.6
Venezuela (Bolivarian Republic of)	89.3	89.7	97.9	91.7	74.3	90.3	90.9	98.9

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

These data are similar to the findings of 2006 and 2007 household surveys, which show that over 80% of urban households have potable water and that the figure is over 90% in more than two thirds of the countries. As with the census data, the figures show that access to sanitation continues to be the weakest component of basic urban sanitation services: in some countries, less than a third of the urban population has access (Jordán and Martínez, 2009).

These data suggest that in the majority of countries, access to basic services is high in urban areas, which points to the gradual resolution of a complex and crucial deficit that affects health, spending (one way or another, households have to gain access to these services, especially water, and they often pay a higher cost than under formal distribution) and the quality of life of people and households that do not have access to these services. But the findings also reveal that quantitative problems remain, either because the growth of the urban population in specific areas was not foreseen, because the basic infrastructure has deteriorated due to lack of maintenance or because certain areas (typically, informal

settlements with low-income populations) are still excluded from service coverage. This is why policies and programmes oriented toward achieving the Millennium Development Goal of improving the lives of at least 100 million slum dwellers continue to be so important in the region.

The high degree of urbanization and the average income levels in most countries in the region have contributed to an expansion in service networks. Paradoxically, however, in some countries this expansion has not led to quality improvements or reliable service. Services are often unreliable (water for a few hours a day, constant blackouts, and other problems) and in some cases very poor (few people drink piped water directly in countries like the Dominican Republic). Achieving coverage thus opens a new challenge in terms of supplying good quality, reliable services.

### 3. Urban mobility and transport

The transformations taking place in urban areas brought a disconnect between the urban landscape and the mobility and transport system that changed living conditions for the population, especially the lower-income segment. Transport inside cities (especially the bigger ones) has become crucial for the proper functioning of cities, for the family budget, and for the quality of life of residents. This is especially the case in large cities, or metropolises, whose functioning depends on means of transport for traveling long distances (several kilometres). This issue is therefore taken up again in the chapter on metropolitan areas, where it is analysed less from a supply perspective (that is, the transport system) and more from a demand standpoint, in particular from the angle of trip origins and destinations (that is, commuting, *conmutación* in Spanish, *pendularidade* in Portuguese) and costs in terms of both time and money.

Montezuma (2003) argues that five factors have hindered urban mobility, especially for women, children and the poor: (i) the unfavourable economic situation characteristic of globalization; (ii) the centrifugal growth of cities; (iii) difficult access to housing and public services; (iv) the never-ending mass-transit crisis; and (v) the increased investment of time and money in commuting.

The majority of countries have, unsurprisingly, implemented urban transit policies in recent years, following the seminal example of Curitiba and, later, the TransMilenio rapid transit system in Bogotá (ECLAC, 2011). This was preceded by a gradual withdrawal of the State from public transport over the course of many years or even decades and the transfer of this service to small business owners. The transition involved a gradual deregulation of public transport, which resulted in uncontrolled, cut-throat competition for the streets. When the social and economic costs of this self-regulated model became devastating and threatened to disrupt the functioning of cities, it became clear that a new approach by the State was in order. There has been a wide range of national and subnational arrangements, but in general it has entailed the extension, expansion and/or improvement of mass transit (city buses and subways), greater coordination and integration of components, increased government regulation and oversight and centralized planning and design. Despite heavy investments and high-profile innovations, few cases have achieved resounding success, with the majority seeing partial progress and, unfortunately, some failures and frustrations.

With regard to private transport, public policies have basically been permissive and reactive —permissive because there have been few containment initiatives (such as driving restrictions, toll roads, commuter or fuel taxes, construction standards and parking requirements for streets and buildings); reactive because the response to the growing number of vehicles, which more than doubled from 8 vehicles per 100 people in 1990 to 17 in 2007 (ECLAC, 2011, p. 74), has been to expand road infrastructure, build urban highways and widen streets to support more vehicles. This

approach has clear physical limits, although they can be stretched by technological advances and traffic flow measures. The main weakness is that it feeds an upward spiral in the number of vehicles on the road and their indiscriminate use, which is seen as unsustainable.

Several factors tend to magnify the social inequalities in daily mobility and transport: (i) excessively high fares that the low-income population cannot afford; (ii) increased congestion that means longer trip times for lower-income passengers; and (iii) the concentration of the lower-income population in city peripheries (mostly in slums) generates unequal access to basic infrastructure, education, health care and cultural facilities, as well as to the benefits of urbanization. While the urban poor have better living conditions than their rural counterparts, lower-income city dwellers are therefore exposed to a set of deficits and other adversities (segregation, exclusion from access to urban services and infrastructure, lower quality of life, housing insecurity, and others) that call for an immediate government response.

#### **4. Social and community facilities and public space**

This section considers a set of needs associated with the sectoral and functional components of services that impact the quality of life of the urban population (MINVU, 2009). These include access to health care, education, emergency and security services (police and fire department), and cultural events and recreation. They also encompass private services, such as retail shops, supermarkets and financial, technical and professional services.

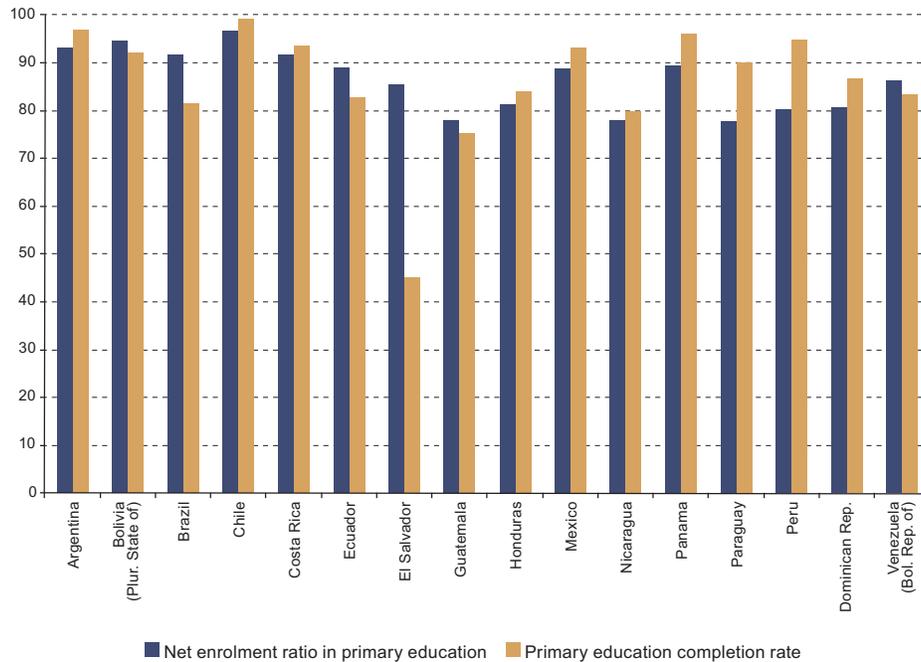
The problems associated with these services have to do with access and also to the type of service provided, with significant heterogeneity on the supply side. The technology gap in public services is very wide in the urban areas of the countries of the region, especially because several of these services (above all, health care and education) are also provided by the market, but supply also varies for services that are only offered by the public sector (Antúnez and Galilea, 2003).

The urban areas of the countries of the region have accumulated a complex set of historical deficits in terms of service access and reliability (Antúnez and Galilea, 2003). In particular, there is a yawning gap between supply and demand in health care, education, public safety and local services in general. These shortfalls affect a large segment of the urban population, especially those with fewer resources.

Health-care services exhibit both quantitative and qualitative deficiencies. In the cities in the region, state-of-the-art health-care modalities (which are mostly associated with private health care) coexist with substandard care (especially in public hospitals and primary health-care centres, where demand far exceeds supply). Unequal coverage, standards and accessibility are particularly sharp in neighbourhoods located in the urban periphery, where services were set up after the population settled in these areas.

The coverage of education services also varies both quantitatively and qualitatively in urban areas. Primary education coverage and completion are now almost universal in Latin America (ECLAC, 2010a). Figure VIII.4 shows that in urban areas, the net enrolment ratio in primary education and the primary completion rate are over 75% in all the countries in the region.

Figure VIII.4  
**LATIN AMERICA AND THE CARIBBEAN (16 COUNTRIES): NET ENROLMENT RATIO  
 IN PRIMARY EDUCATION AND PRIMARY EDUCATION COMPLETION RATE  
 IN URBAN AREAS, CENSUS DATA FOR THE 2000s**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

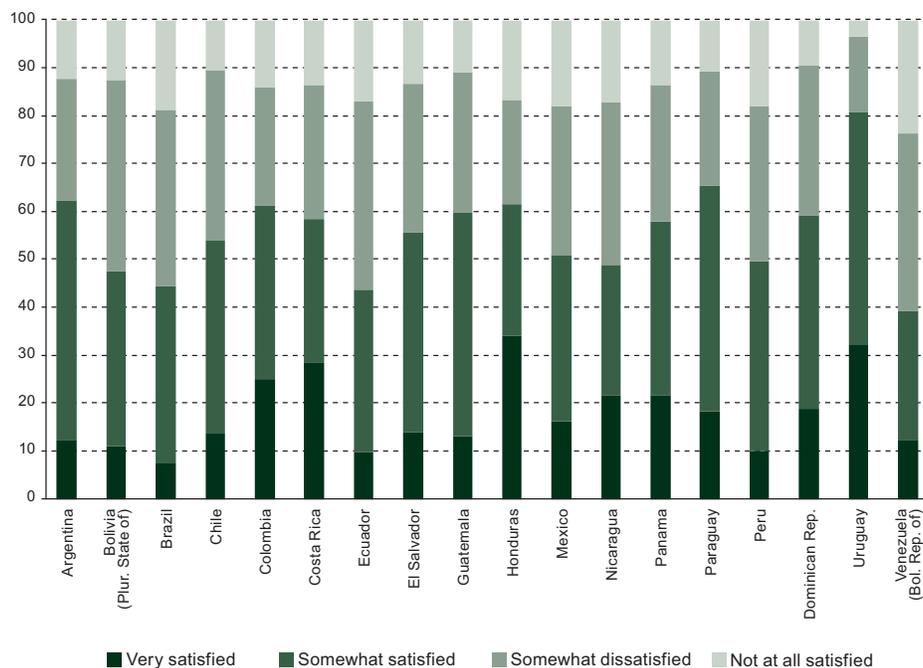
But recent urban growth areas and neighbourhoods are plagued by a shortage of education infrastructure, while the quality of learning varies with the location of the institution. In general, wealthier neighbourhoods are characterized by a more extensive supply and better quality. In addition, the better quality public institutions tend to be concentrated in the city centre, which means longer trips and higher transport costs for lower-income segments of the population. There are also deficits in preschool coverage and in the lengthening of the school day in public education.

Reducing these gaps is crucial: “Education plays a decisive role in the search for equality. Learning that is less segmented by socioeconomic level, gender, territory and ethnic origin will help reduce the inequality gap from one generation to the next” (ECLAC, 2010a).

The deficit in public spaces is defined as the unmet need for public use areas, spaces or places (open or closed) that promote recreation, relaxation, interchange, social integration, the preservation of historical and cultural heritage and contact with nature (MINVU, 2009). All the countries of the region have a public-space deficit in urban areas. In some cases, the number of green areas per inhabitant is far below the recommended ratio at both national and international levels, especially in poorer urban areas or neighbourhoods. Another problem associated with this deficit is the inadequate, scarce or non-existent maintenance of plazas, parks and green areas in general, which leads to a degeneration of public real estate, trees and plants. There is also a shortage of public sports and recreation facilities (stadiums, indoor gymnasiums, multipurpose fields, and so forth), which is most evident in the lowest-income districts in the cities. The creation and maintenance of public spaces usually falls to local governments, which

frequently do not have the budget to manage them. Several countries have allocated resources to participatory projects in which community residents themselves have created parks, plazas, gymnasiums or sports centres. But data from the Latinobarómetro survey on the degree of public satisfaction with the availability of green areas and public spaces show that 44% of the population of the region is not satisfied in this regard. In some countries, the share is higher than the regional average: over half the population of the Bolivarian Republic of Venezuela, Brazil, Ecuador, Nicaragua, Peru and the Plurinational State of Bolivia is not satisfied with the availability of green areas and public spaces in their countries, while Paraguay and Uruguay have the lowest percentage of dissatisfaction (see figure VIII.5).

Figure VIII.5  
**LATIN AMERICA AND THE CARIBBEAN (18 COUNTRIES): LEVEL OF SATISFACTION WITH THE AVAILABILITY OF GREEN AREAS AND PUBLIC SPACES, 2009**



Source: Online processing of the 2009 Latinobarómetro survey ([www.latinobarometro.org/latino/latinobarometro.jsp](http://www.latinobarometro.org/latino/latinobarometro.jsp)).

Carrión (2003) argues that public spaces are losing ground to new modalities of urban development. He suggests that public spaces are being rejected or disparaged and that in many cases residents consider them to be dangerous because they neither protect nor are protected. The lack of public spaces represents a loss of possibilities for social construction and cohesion in cities and neighbourhoods, because it “reduces participation, limits the exercise of citizenship and removes the incentives for practicing tolerance” (Carrión, 2003).

The problems or deficiencies in the region’s urban areas in terms of the coverage of basic services, health care, education, infrastructure, transport and public spaces is associated, in part, with the financial difficulties faced by national and local governments and with the modalities for providing urban services (public, private or mixed). As the State has acquired new functions its financial capacity has been reduced, but the demands and expectations of citizens have increased.

At the same time, decentralization has put urban services policy in the hands of local governments. However, the actions needed to fulfil this responsibility are complex, and local governments do not always have the financial, technical and management capacity to carry it out (ECLAC, 2002). Nevertheless, efforts need to be made to achieve universal coverage of these services, because they are critical for social integration and the exercise of citizens' rights by all.

## **5. Conclusions on urban deficits**

The most recent position papers issued by United Nations agencies (UNFPA, 2007; UN-HABITAT, 2009; World Bank, 2009; ECLAC, 2011 and 2010a) all concur that the biggest lesson of the last 20 years is that urbanization is inevitable. Rather than fight it as the enemy of the environment or a source of problems and tensions, governments need to address its deficits, capitalize on its potential and promote its democratic governance through appropriate policies. As with other chapters, policy options in this area are presented and discussed in chapter XI.

Urban deficits are discussed further in the next two chapters, on city systems and metropolises. These chapters explore how the levels and combinations of deficits vary among cities depending on their population, size, degree of development, the country in which they are located and the institutions that govern them.



## Chapter IX

**THE SYSTEM OF CITIES: AN EXPANDING UNIVERSE****A. INTRODUCTION**

The previous chapter examined urbanization as a generic population process. Indeed, the defining indicator was the percentage of the population living in urban locations or regions.

The urban population does not live in a single, homogeneous space, however, but rather in a set of nodes that, while sharing some attributes such as density, artificiality, economic secundarization and tertiarization and individuation, vary significantly. These nodes are cities that, when grouped at the national scale, form each country's system of cities.

For many reasons (including lack of data and technical difficulties in information management, gaps in theory and complications arising from the need for policy guidance on a wide range of situations), analyses often leap from a general view of urbanization to specific studies of cities, typically large ones. This leaves the vast majority of cities unstudied and out of the policy spotlight and may ignore key aspects of the configuration of urban settlements.

The report seeks to avoid this oversight by devoting the current chapter to a detailed look at the system of cities. Of necessity, this is a broad approach because it would be impossible and inappropriate to examine individual cases here. Some specific situations are referenced by means of bibliography, boxes or footnotes. The data are arranged using population size categories for the system of cities, and the focus is on comparing their demographic and socioeconomic features and patterns.

Included in this study for the first time is the issue of migration between cities. As discussed in the previous chapter, high urbanization rates throughout the region have made migration between cities the prevalent trend. More research on this kind of migration is needed in order to address gaps in both theory and data, particularly regarding the volume, direction, and composition of flows. Now that historical barriers to capturing and quantifying these characteristics have been overcome, these movements can be broken down and examined for the first time here.

**B. LATIN AMERICA'S MUSHROOMING SYSTEM OF CITIES**

Focusing on large cities (more than one million inhabitants) in Latin America has detracted from research on the other nodes that make up the system of cities. A more integral approach to urbanization in the region calls for closer study of small and medium-sized cities. In fact, this is one of the main conclusions of a recent study on urban poverty in developing countries (Linn, 2010) and new work by ECLAC.<sup>1</sup>

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<sup>1</sup> The study puts forward that the pattern of urban growth is shifting towards small and medium-sized cities. In spite of the dominance of megacities during the last decades of the 1990s, population growth has been concentrated in large but not primacy cities, and the current trend in Latin America is towards a growing importance of small and medium-sized cities. Almost 40% of the regions' urban population lives in medium-

The rest of the system of cities (that is, other than the large cities that are dealt with in detail in the next chapter) is heterogeneous, making it useful to break cities into categories to identify workable policy solutions. For a regional analysis involving almost 2,000 cities with 20,000 or more inhabitants, the only way to do this is by population size. This is very different from national analyses of systems of cities, which use other criteria, particularly functional integration, physical proximity and labour exchange. These national analyses are more precise and detailed because they seek to identify city subsystems that reflect actual social, economic and physical interactions among cities located relatively close together. Since such an analysis is beyond the scope and objectives of a regional study like this, some of the wealth of data on systems of cities in selected countries is set out in boxes, such as box IX.1 on Mexico's system of cities.

Box IX.1

**MEXICO: A FUNCTIONAL VIEW OF THE SYSTEM OF CITIES**

Mexico's system of cities occupies a land of striking physical contrasts between regions, complex geographies and diverse climates. Two interrelated aspects make the system particularly complex. The first reflects the individual towns and hubs that compose the urban network, ordered by population size, economic activities and other attributes that define their place in the hierarchy. The second is the functional complementarity between different tiers of cities, expressed in flows of goods, services and people. Both the size and direction of these flows are relevant, as they shape the limits of each central location and its area of influence.

The National Programme for Urban Development and Management 2001-2006 classifies cities in the national urban system to correctly interpret, analyse and manage the urban structure of the territory, taking into account its complexity and current dynamics. The purpose of this classification system is to serve as a functional instrument that takes into consideration the spatial characteristics of each place and leads to a consistent body of government actions and policies suited to each city or network of cities. This new system divides what is now referred to as metropolitan areas into three categories, recognizing a megalopolis in the middle of the country and distinguishing between metropolization and conurbation.

Thus, five city types comprise the national urban system:

- **The central megalopolis:** This is the result of the metropolization of urban areas and agglomerations in the middle of the country, made up of the metropolitan areas of the Valley of Mexico, Puebla-Tlaxcala and Toluca-Lerma and the urban agglomerations of Cuernavaca-Jiutepec, Cuautla, Pachuca and Tlaxcala.
- **Metropolitan areas:** Metropolitan areas are networks of cities where metropolization spans cities in Mexico and the United States, cities with two or more federated entities, or cities with more than one million inhabitants.
- **Urban agglomerations:** These are cities that have expanded into adjacent municipal areas in the same federated entity, with a combined population of fewer than one million inhabitants.
- **Cities:** These are places whose urban growth has not extended beyond the city limits (75 cities).

The other 2,139 localities in Mexico, ranging from 2,500 to 15,000 inhabitants, are classed as population centres.

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sized cities (between 100,000 and 500,000 inhabitants), and their economic importance is growing. This trend is reflecting not only a decentralization process (for example in Mexico with the northern frontier area and the so-called Bajío) but is also related to suburban growth and the growing importance of secondary centres in proximity to megacities (Jordán, Rehner and Samaniego, 2010).

## Box IX.1 (concluded)

The national structure is defined by territorial links through central places of varying hierarchy and function. Nationally, six tiers reflect cities' weight within the national urban system. The major cities of the states in the central area of the country are classified as follows:

**First tier** (18,396,770 inhabitants): The metropolitan region of the Valley of Mexico (ZMCM), which produces around half the country's manufactured goods and services (by value), is home to one quarter of the economically active population and receives much of the domestic migration flow. This systemic approach identifies the ZMVM as the centre dominating all other Mexican cities directly or indirectly through the principle of transitivity. No city falls outside the national urban system, since each one is subordinate to others.

**Second tier** (9,032,800 inhabitants): Puebla-Tlaxcala falls within this tier, along with Monterrey and Guadalajara (Jalisco). These cities concentrate enormous economic power and are major service centres. This is clearly seen in their influence over cities in neighbouring states in this large region, where they complement Mexico City in some functions.

**Third tier** (14,763,111 inhabitants): Cuernavaca-Jiutepec (Morelos) and Toluca-Lerma (state of Mexico and Querétaro) fall within this tier, along with the cities of Saltillo-Ramos, Arizpe-Arteaga, Torreón-Gómez, Palacio-Lerdo, Tampico-Madero-Altamira, San Luis Potosí- Soledad de Graciano Sánchez, Chihuahua, Ciudad Juárez, Hermosillo, Tijuana, Culiacán, León, Morelia-Tarimbaro, Acapulco, Veracruz-Boca del Río-Alvarado, Mérida-Progreso and Oaxaca de Juárez. These cities show enormous capacity for integrating the surrounding areas, which are usually in the same state; their influence wanes as distance from their own city limits increases.

**Fourth tier** (8,355,171 inhabitants): Pachuca (Hidalgo) is in this tier, as are Reynosa-Río Bravo, Nuevo Laredo, Durango, Ciudad Obregón, Mexicali, Los Mochis, Topolobampo, Mazatlán, Irapuato-Salamanca, Celaya, Aguascalientes-Jesús María, Tepic-Xalisco, Tuxtla-Gutiérrez, Xalapa-Banderillas-Coatepec, Coatzacoalcos, Villahermosa and Cancún.

**Fifth tier** (5,973,507 inhabitants): This tier includes Cuautla (Morelos), Tulancingo (Hidalgo), Tlaxcala (Tlaxcala), Apizaco (Tlaxcala), Tehuacán (Puebla), and another 25 cities. These cities shape population centres and small regions in their own states and are distributed throughout the country.

**Sixth tier** (5,973,507 inhabitants): This tier includes Atlixco (Puebla) and another 51 locations. This group's small influence is limited to towns nearby.

**Source:** L. Herrera, W. Pecht and F. Olivares, "Crecimiento urbano de América Latina: mapas y planos de ciudades", *serie E*, No. 22, Santiago, Chile, Latin American Demographic Centre (CELADE), 1976; Secretariat of Social Development, *Programa Nacional de Desarrollo Urbano y Ordenación del Territorio 2001-2006*, Mexico City, 2001; G. Garza, "La urbanización metropolitana en México: Normatividad y características socioeconómicas", *Papeles de población*, April-June, No. 052, Toluca, Autonomous University of the State of Mexico, April-June 2007 [online] <http://redalyc.uaemex.mx/pdf/112/11205204.pdf>.

In nearly all of the countries in the region, urbanization has significantly increased the number of cities making up urban systems, establishing alternatives and counterweights to the main city. The growing number of cities can be seen in table IX.1, which refers to the period 1950-2000, and in maps IX.1 and IX.2. Table IX.1 shows that in Latin America one third of the population lives in large cities, two thirds in cities of 20,000 inhabitants or more, and almost 80% in urban areas. Thus, most of the region's urban population lives in cities or towns with fewer than one million inhabitants.

Table IX.1  
**LATIN AMERICA: NUMBER OF CITIES BY POPULATION SIZE, 1950-2000**

Size	1950 <sup>a</sup>		1960 <sup>b</sup>		1970 <sup>c</sup>		1980 <sup>d</sup>		1990 <sup>e</sup>		2000 <sup>f</sup>	
	Number	Population	Number	Population	Number	Population	Number	Population	Number	Population	Number	Population
1,000,000 or more	6	16 121 704	10	30 159 270	19	58 202 286	26	89 629 921	37	119 340 999	47 <sup>g</sup>	156 219 434
500,000 to 999,999	5	3 209 130	13	9 124 459	17	11 491 650	26	18 049 868	33	22 210 323	44	30 328 031
100,000 to 499,999	51	11 215 663	75	14 939 296	133	26 546 840	191	38 144 478	226	47 659 577	299	62 841 816
50,000 to 99,999	65	4 416 455	106	7 128 145	154	10 772 495	198	13 489 087	292	20 530 868	398	28 165 024
20,000 to 49,999	193	5 816 115	293	8 936 450	450	13 635 695	634	19 423 954	835	25 879 080	1 175	35 874 277
Total 20,000 and over	320	40 779 067	497	70 287 620	773	120 648 966	1 075	178 737 308	1 423	235 620 847	1 963	313 428 582

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

<sup>a</sup> The 1950 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and the Plurinational State of Bolivia.

<sup>b</sup> The 1960 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay.

<sup>c</sup> The 1970 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

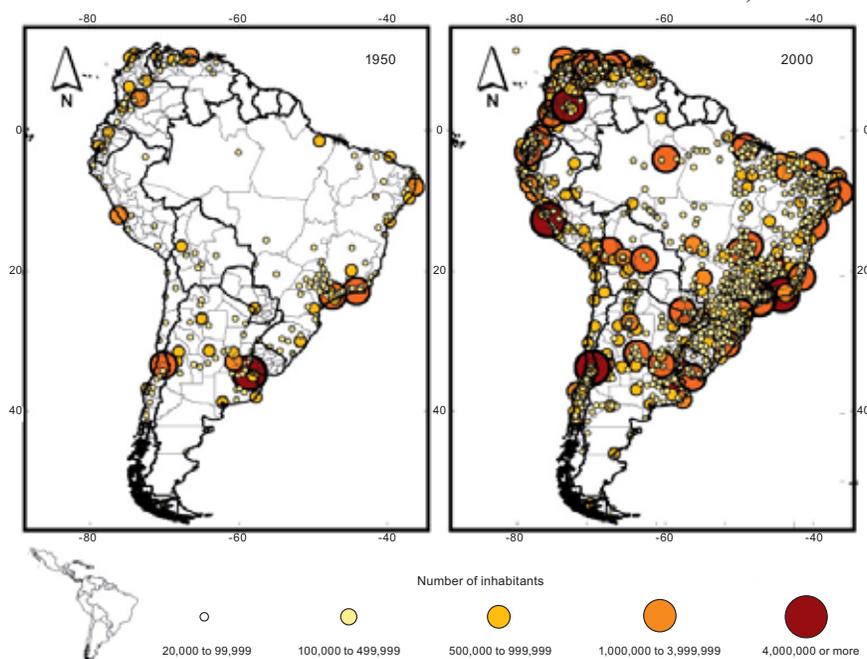
<sup>d</sup> The 1980 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Panama, Paraguay, Peru and Uruguay.

<sup>e</sup> The 1990 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

<sup>f</sup> The 2000 figures reflect census data from Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

<sup>g</sup> The city that would complete the list of 48 cities with one million or more inhabitants according to estimates made by the United Nations in 2000 (see table VI.2) is Kingston, which is not in the DEPUALC database because data is still lacking for most Caribbean countries (except Cuba, the Dominican Republic and Haiti).

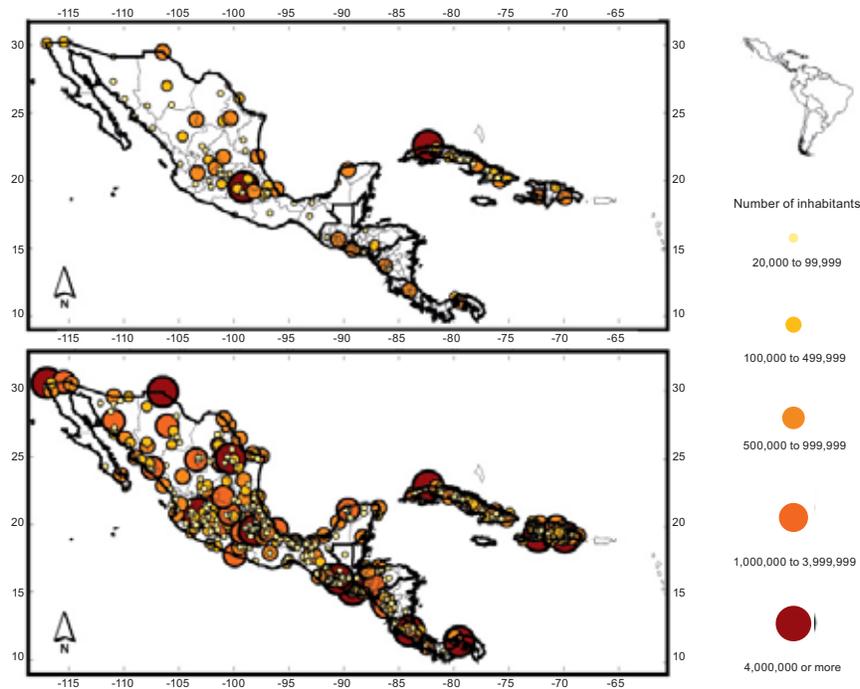
Map IX.1  
**SOUTH AMERICA: NUMBER AND POPULATION SIZE OF CITIES, 1950 AND 2000<sup>a</sup>**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Map IX.2  
**CENTRAL AMERICA AND THE CARIBBEAN: NUMBER AND POPULATION SIZE  
 OF CITIES, 1950 AND 2000<sup>a</sup>**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

### C. POPULATION SIZE TRENDS IN THE SYSTEM OF CITIES

Figures IX.1 and IX.2 summarize shifts in the region's system of cities according to population size and lead to several conclusions concerning these trends.<sup>2</sup>

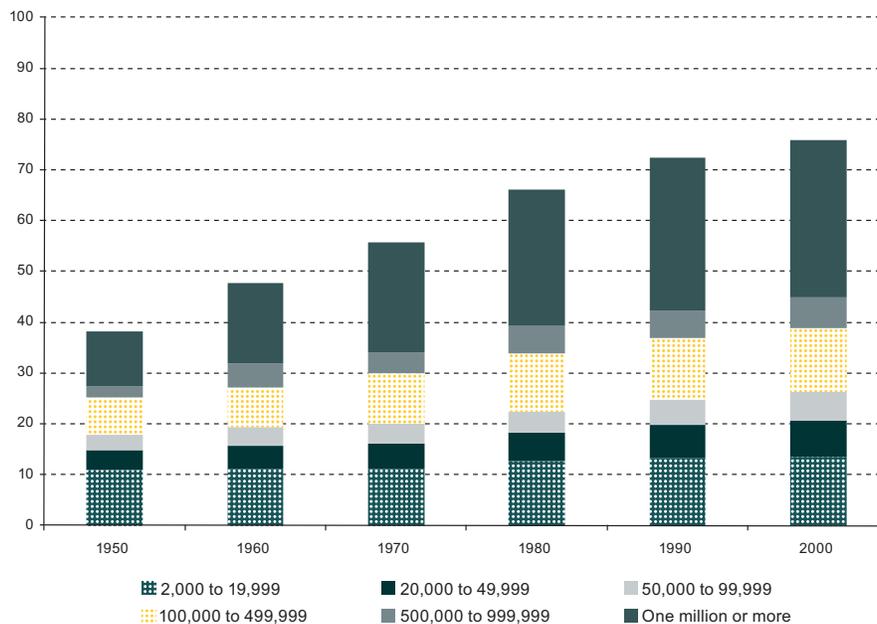
<sup>2</sup> The following categories are used: 1,000,000 or more; 500,000 to 999,999; 100,000 to 499,999; 50,000 to 99,999; 20,000 to 49,999. These population sizes can be grouped according to three broad categories whose application should be adjusted to the reality of each country. The first are large cities with one million or more inhabitants, which can also be called metropolises or "millionaire" cities. Then there are medium-sized cities, whose size ranges from 50,000 to just under one million inhabitants. Finally, there are small cities with from 20,000 to just under 50,000 inhabitants. Anything under 20,000 is classified as the smallest segment in the system and is not individualized any further in the Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, so there is little information on them.

This classification does not hold for analysing individual countries. Several countries have no cities with one million or more inhabitants, making any city with from 500,000 to 999,999 inhabitants (or even fewer, if there are no cities in this category) a large city by default.

The idea of a medium-sized city, meanwhile, is doubly complex because, aside from requiring adjustment to the national reality, this category tends to require substantive functional specification as well. While large cities by definition play a dominant role at the national or regional level, and small cities are subordinate in terms

First is the demographic scope of urbanization in the region. Using a common indicator that, generally speaking, reflects the most basic definition of “urban” (locations with 2,000 inhabitants or more), the urban population of Latin America has doubled, going from 40% in 1950 to almost 80% in 2000. Using a narrower criterion (20,000 or more inhabitants, which is unquestionably urban), the increase is even more significant: the urban population rose from 30% of the total population in 1950 to 62% in 2000 (figure IX.1).

Figure IX.1  
**LATIN AMERICA: PERCENTAGE OF THE POPULATION LIVING IN LOCALITIES  
 WITH 2,000 OR MORE INHABITANTS, BY SIZE, 1950-2000**  
*(Percentages)*



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

Second, cities of one million and more inhabitants grew at a brisk pace until the 1980s, but their share of the total population rose only slightly during the ensuing decades and reached 31% of total population by 2010. This confirms the importance of large cities in the urbanization of the region, since one of every three Latin Americans lives in a city of one million or more—a remarkable figure at the global level.

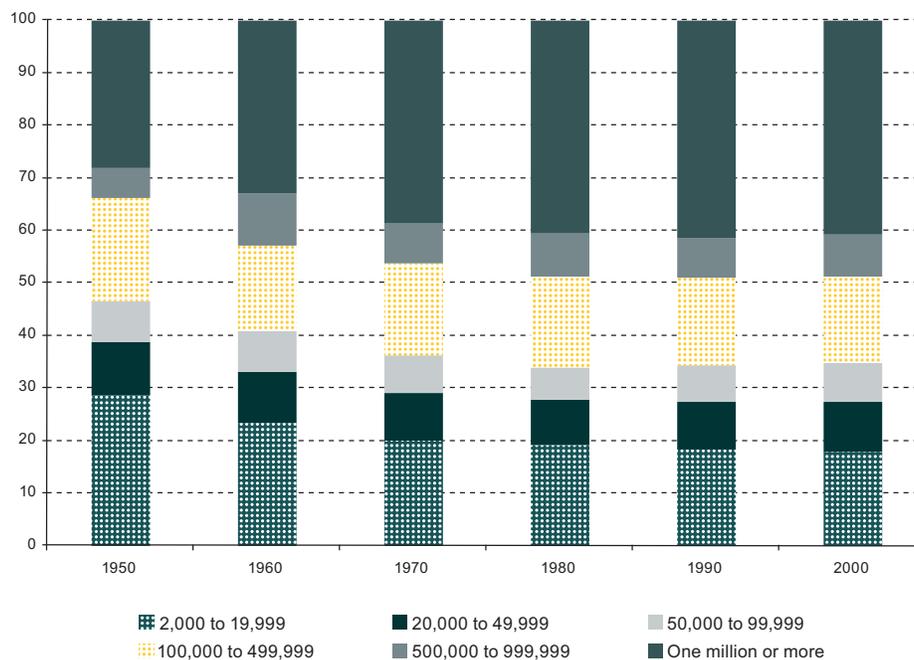
of their links with larger cities, medium-sized cities should mediate within the national urban system and regional subsystems. Given the comparative and demographic nature of this study, the distinction between a city of medium-sized size versus medium-sized function (Rigotti and Campos, 2009) is not used and cities are classified solely in terms of their population. In this sense, the idea of a system of cities used in this study is essentially formal and refers to all localities with 20,000 or more inhabitants. The idea of a national system of cities, or subsystems within countries, on the basis of functional relationships and hierarchies does not form part of this study, given that this kind of analysis requires specialized knowledge of each country that can better be applied in national studies conducted by local experts. For Mexico, for example, see box IX.1. In any case, the conceptual framework, the methodologies, the indicators and the results of this study may eventually be useful for these national studies.

Third, the complexity and diversity of the system of cities have grown, as the number of cities in each category increased. For example, the number of cities with 20,000 and more inhabitants rose from 320 in 1950 to 2,000 in 1963.

Fourth, since 1980 the percentage of cities in the lowest segment of the urban hierarchy has stabilized. These are places with between 2,000 and 19,999 inhabitants where living conditions may be more like those of the countryside than the city. Because there are so many (and because the DEPUALC database groups them in a single category), it is difficult to provide a more detailed profile of their diverse characteristics.

Taking as the universe the population living in towns with 2,000 or more inhabitants yields a more exact idea of how urban structure has changed.<sup>3</sup> The most significant finding shown in figure IX.2 is the rapid growth of medium-sized cities, especially in the past 30 years. The weight of large cities within the urban system has remained virtually constant since 1980. The percentage of towns with fewer than 20,000 inhabitants has also tended to remain at around 18%, after strong declines posted during the first two decades (in 1950 they accounted for 28.6% of the urban population). Together, these trends suggest that 41.2% of the urban population lives in medium-sized cities (20,000 to 999,999 inhabitants), making this the most populous segment of the system of human settlements.

Figure IX.2  
**LATIN AMERICA: BREAKDOWN OF THE POPULATION LIVING IN LOCALITIES WITH 2,000 OR MORE INHABITANTS, 1950-2000**  
(Percentages)



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2010.

<sup>3</sup> These criteria are used for comparative purposes because (a) the chapter on urbanization notes that this leads to figures and realities very similar to those obtained from the data using the census definition of urban; (b) in operational terms, it provides for relative structures that always add up to exactly 100%.

Basing the same series on towns with 2,000 or more inhabitants (and not the total population or official urban population, as done traditionally) provides new insight into demographic patterns in categories of cities according to population size. The proportion of a broad range of medium-tier cities has remained rather constant over the past 50 years, peaking in 1960 at 43.8% (versus 41.2% in 2000). This finding contradicts the dominant view, cited at the start of this chapter, concerning the rapid growth of medium-sized cities. Although this segment increased slightly within the overall system between 1980 and the present, the general trend is towards stability. Previous censuses (1950 to 1970) had shown a marked increase in the proportion of big cities, so subsequent stabilization might have exaggerated the rapid growth of middle-sized cities.

There is another explanation for these figures. Reclassification has pushed the portion living in the top segment (large cities) up by adding cities that pass the threshold of one million inhabitants. Since this reclassification applies to the other segments of the system, and in both directions (entering and exiting, not just entering as occurs with the top segment), the overall shift in the relative structure of the system of human settlements presented in figures IX.1 and IX.2 could be biased. That is, it is real but does not distinguish between the growth of large cities at the start of the period and the inclusion of new cities at the end.

In fact, and in contradiction to the conclusions derived from the overall analysis, figure IX.3 shows that there is a negative correlation between city size in 1950 and the pace of growth during 1950-2000. On average, then, in 1950 the smaller cities grew the fastest. So, they did not remain small but rather became medium-sized and large cities and showed as such in cross-cutting measurements. This pattern has two explanations (one substantive, the other statistical), which prevents identifying any causal relationship between initial size and growth. The substantive explanation is that high growth is usually hard to sustain once a certain size threshold has been reached, because diseconomies of scale and diverse types of congestion appear. The second explanation, which is more useful from a methodology perspective, is the large and significant bias in the 1950 small city sample, since by definition they grew to over 20,000 inhabitants in the second half of the twentieth century. In other words, they were small in 1950 but already rapidly growing. Thus, this analysis does not take in the large majority of small cities with low growth in 1950 that did not cross the threshold of 20,000 inhabitants.

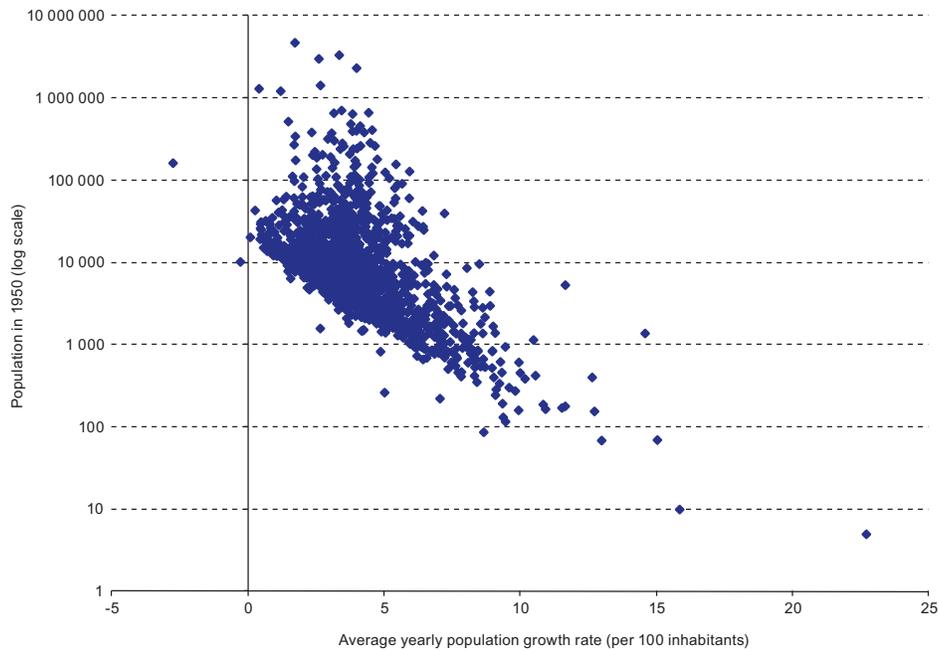
Tables IX.2 and IX.3 use prospective and retrospective longitudinal studies according to size-based cohorts of cities in a final effort to separate the effect of cities' own growth from growth derived from adding more cities.

The main finding arising from table IX.2 (prospective approach, that is, for cities according to their size in 1950) is that cities with one million or more inhabitants in 1950<sup>4</sup> grew the least in 1950-2000, while cities in the other size categories grew at very similar rates, about 3.7% annually, on average. The figures for relative distribution confirm this point, revealing that this is the only group of cities whose share of the total urban population fell sharply (from 26.1% to 17.0%). Table IX.3 (retrospective longitudinal approach, that is, taking all cities according to their size in 2000, keeping them in that size category, and tracking them backwards) yields different results: the similarity and slightly higher growth rate of middle-sized cities ranging from 50,000 to fewer than one million inhabitants.

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<sup>4</sup> There are only six such cities: Mexico City, Buenos Aires, São Paulo, Rio de Janeiro, Santiago and Havana. Montevideo should be included, but the censuses conducted by Uruguay in the 1950s are not in the DEPUALC database.

Figure IX.3  
**LATIN AMERICA: CITIES THAT HAD 20,000 OR MORE INHABITANTS IN SOME CENSUS DURING THE SECOND HALF OF THE TWENTIETH CENTURY, POPULATION IN 1950 (AXIS AND LOGARITHM) AND RATE OF GROWTH, 1950 AND 2000**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2010.

In short, the wealth of information in the DEPUALC database, updated using censuses from 2005 to 2007 (Colombia, El Salvador, Nicaragua and Peru) and the studies set out herein (some for the first time) paint a more complex picture than the literature on trends in the system of cities to date. Certain key turning points emerge, as patterns of concentration shifted in the 1980s and middle-sided cities became the category showing faster population growth. This gain, however, is less substantial than the current literature suggests and cannot be considered irreversible.

Table IX.2  
**LATIN AMERICA: PROSPECTIVE LONGITUDINAL ANALYSIS OF POPULATION TRENDS  
 IN THE SYSTEM OF CITIES, BY POPULATION SIZE<sup>a</sup>**

320 cities in 1950	Number of cities	Growth rates (per 100 inhabitants)											
		1950-1960		1960-1970		1970-1980		1980-1990		1990-2000			
		1950	1960	1970	1980	1990	2000	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	
1,000,000 or more	6	16 121 704	22 870 422	36 571 192	50 843 018	55 778 138	65 361 585	3.5	4.7	3.3	0.9	1.6	2.8
500,000 to 999,999	5	3 209 130	6 653 475	10 828 799	14 459 746	18 172 196	22 997 701	7.3	4.9	2.9	2.3	2.4	3.9
100,000 to 499,999	51	11 215 663	18 182 178	29 898 704	41 918 939	55 407 226	72 402 958	4.8	5.0	3.4	2.8	2.7	3.7
50,000 to 99,999	65	4 416 455	6 551 504	11 040 381	16 082 274	20 927 864	28 590 460	3.9	5.2	3.8	2.6	3.1	3.7
20,000 to 49,999	193	5 816 115	8 935 373	15 176 884	22 095 322	30 143 039	39 839 267	4.3	5.3	3.8	3.1	2.8	3.8
<b>Total 20,000 and more</b>	<b>320</b>	<b>40 779 067</b>	<b>63 192 952</b>	<b>103 515 960</b>	<b>145 399 299</b>	<b>180 428 463</b>	<b>229 191 971</b>	<b>4.4</b>	<b>4.9</b>	<b>3.4</b>	<b>2.2</b>	<b>2.4</b>	<b>3.5</b>
<b>Percentage of total population</b>		<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>						
1,000,000 or more		10.8	11.8	13.5	15.2	14.0	13.0						
500,000 to 999,999		2.1	3.4	4.0	4.3	4.6	4.6						
100,000 to 499,999		7.5	9.3	11.0	12.6	13.9	14.4						
50,000 to 99,999		3.0	3.4	4.1	4.8	5.2	5.7						
20,000 to 49,999		3.9	4.6	5.6	6.6	7.6	7.9						
<b>Total 20,000 and more</b>		<b>27.3</b>	<b>32.5</b>	<b>38.3</b>	<b>43.6</b>	<b>45.3</b>	<b>45.6</b>						
<b>Percentage of total population</b>		<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>						
1,000,000 or more		26.1	23.6	23.4	22.9	19.2	17.0						
500,000 to 999,999		5.2	6.9	6.9	6.5	6.3	6.0						
100,000 to 499,999		18.1	18.7	19.1	18.9	19.1	18.8						
50,000 to 99,999		7.1	6.7	7.1	7.3	7.2	7.4						
20,000 to 49,999		9.4	9.2	9.7	10.0	10.4	10.4						
<b>Total 20,000 and more</b>		<b>65.9</b>	<b>65.1</b>	<b>66.3</b>	<b>65.6</b>	<b>62.2</b>	<b>59.6</b>						

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2011.

<sup>a</sup> Includes cities in the following countries that conducted population censuses in 1950: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and the Plurinational State of Bolivia.

Table IX.3  
**LATIN AMERICA: RETROSPECTIVE LONGITUDINAL ANALYSIS OF POPULATION TRENDS  
 IN THE SYSTEM OF CITIES, BY POPULATION SIZE<sup>a</sup>**

1,963 cities in 2000	Number of cities	1950	1960	1970	1980	1990	2000	Growth rates (per 100 inhabitants)					
								1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	1950-2000
1,000,000 or more	47	27 398 129	44 938 362	73 732 738	103 001 714	125 142 162	156 219 434	4.9	5.0	3.3	1.9	2.2	3.5
500,000 to 999,999	44	4 376 200	7 043 305	11 287 394	16 594 365	23 521 944	30 328 031	4.8	4.7	3.9	3.5	2.5	3.9
100,000 to 499,999	299	8 634 523	13 676 793	23 090 705	34 599 224	46 315 276	62 841 816	4.6	5.2	4.0	2.9	3.1	4.0
50,000 to 99,999	398	4 051 952	6 674 641	10 348 170	14 738 452	21 038 223	28 165 024	5.0	4.4	3.5	3.6	2.9	3.9
20,000 to 49,999	1 175	5 963 872	8 578 729	13 689 920	19 533 066	25 983 408	35 874 277	3.6	4.7	3.6	2.9	3.2	3.6
Total 20,000 and more	1 963	50 424 676	80 911 830	132 148 927	188 466 821	242 001 013	313 428 582	4.7	4.9	3.5	2.5	2.6	3.7
<b>Percentage of total population</b>		<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>						
1,000,000 or more		18.3	23.1	27.2	30.9	31.4	31.1						
500,000 to 999,999		2.9	3.6	4.2	5.0	5.9	6.0						
100,000 to 499,999		5.8	7.0	8.5	10.4	11.6	12.5						
50,000 to 99,999		2.7	3.4	3.8	4.4	5.3	5.6						
20,000 to 49,999		4.0	4.4	5.1	5.9	6.5	7.1						
Total 20,000 and more		33.7	41.6	48.8	56.5	60.7	62.3						
<b>Percentage of urban population</b>		<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>						
1,000,000 or more		44.3	46.3	47.2	46.4	43.1	40.6						
500,000 to 999,999		7.1	7.3	7.2	7.5	8.1	7.9						
100,000 to 499,999		14.0	14.1	14.8	15.6	16.0	16.4						
50,000 to 99,999		6.6	6.9	6.6	6.6	7.3	7.3						
20,000 to 49,999		9.6	8.8	8.8	8.8	9.0	9.3						
Total 20,000 and more		81.5	83.3	84.6	85.0	83.4	81.5						

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2011.

<sup>a</sup> Includes cities from the following countries that conducted population censuses in 2000: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia, and Uruguay.

The data emerging from 2010 censuses will help clarify recent trends. In Panama the number of cities with 20,000 inhabitants went from 7 to 10 between 2000 and 2010, but this has had no effect on the primacy and rapid growth of its main city, Panama City. Concentration continues to define Panama's system of cities. Of the total population living in cities of 20,000 people or more, 73% lives in Panama City, leaving only a small share for other cities in the system (see table IX.4).

Table IX.4  
PANAMA: NUMBER OF CITIES BY POPULATION CATEGORY, 1950-2010

Size	Number of cities						
	1950	1960	1970	1980	1990	2000	2010
1,000,000 or more	0	0	0	0	0	1	1
500,000 to 999,999	0	0	1	1	1	0	0
100,000 to 499,999	1	1	0	0	0	2	2
50,000 to 99,999	1	1	1	2	2	0	1
20,000 to 49,999	0	1	1	2	2	4	6
<b>Total 20,000 and more</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>10</b>
Size	Population						
	1950	1960	1970	1980	1990	2000	2010
1,000,000 or more	0	0	0	0	0	1 212 435	1 500 189
500,000 to 999,999	0	0	453 416	610 489	844 532	0	0
100,000 to 499,999	174 604	289 328	0	0	0	242 357	290 724
50,000 to 99,999	52 204	59 598	69 418	130 536	184 034	0	53 459
20,000 to 49,999	0	22 924	35 680	50 219	65 307	142 481	201 432
<b>Total 20,000 and more</b>	<b>226 808</b>	<b>371 850</b>	<b>558 514</b>	<b>791 244</b>	<b>1 093 873</b>	<b>1 597 273</b>	<b>2 045 804</b>
Size	Growth rates (per 100 inhabitants)						
	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1950-2010
1,000,000 or more	-	-	-	-	-	2,1	-
500,000 to 999,999	-	-	3,0	3,2	-	-	-
100,000 to 499,999	5,0	-	-	-	-	1,8	0,9
50,000 to 99,999	1,3	1,6	6,3	3,4	-	-	0,0
20,000 to 49,999	-	4,7	3,4	2,6	7,8	3,5	-
<b>Total 20,000 and more</b>	<b>4,9</b>	<b>4,3</b>	<b>3,5</b>	<b>3,2</b>	<b>3,8</b>	<b>2,5</b>	<b>3,7</b>

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2011.

In Ecuador, the number of cities with 20,000 or more inhabitants rose from 46 to 55, mostly in the category of 20,000 to 100,000 inhabitants (see table IX.6). The number of cities with one million or more inhabitants (including Guayaquil and Quito) has not risen since 1990. While the number of inhabitants in this category has risen in absolute terms and accounts for about 51% of the population of cities with 20,000 inhabitants or more, population growth in 2000-2010 was slower than during the previous period (see table IX.5).

Table IX.5  
ECUADOR: NUMBER OF CITIES BY POPULATION CATEGORY, 1950-2010

	Number of cities						
	1950	1960	1970	1980	1990	2000	2010
1,000,000 or more	0	0	0	1	2	2	2
500,000 to 999,999	0	1	2	1	0	0	0
100,000 to 499,999	2	1	1	5	6	11	12
50,000 to 99,999	0	2	7	7	8	6	9
20,000 to 49,999	3	9	10	9	16	27	32
<b>Total 20,000 and more</b>	<b>5</b>	<b>13</b>	<b>20</b>	<b>23</b>	<b>32</b>	<b>46</b>	<b>55</b>
	Population						
	1950	1960	1970	1980	1990	2000	2010
1,000,000 or more				1 250 367	2 691 650	3 559 288	4 177 673
500,000 to 999,999		522 958	1 447 851	866 472			
100,000 to 499,999	474 456	354 746	104 470	561 347	836 208	1 776 519	2 308 313
50,000 to 99,999		113 774	442 751	504 163	652 299	440 700	608 955
20,000 to 49,999	101 125	271 284	307 872	278 012	472 403	828 310	1 053 873
<b>Total 20,000 and more</b>	<b>575 581</b>	<b>1 262 762</b>	<b>2 302 944</b>	<b>3 460 361</b>	<b>4 652 560</b>	<b>6 604 817</b>	<b>8 148 814</b>
	Growth rate (per 100 inhabitants)						
	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1950-2010
1,000,000 or more				9,6	2,5	1,8	
500,000 to 999,999		8,8	-6,1				
100,000 to 499,999	-2,4	-10,6	19,8	5,0	6,8	2,9	2,6
50,000 to 99,999		11,8	1,5	3,2	-3,6	3,6	
20,000 to 49,999	8,2	1,1	-1,2	6,6	5,1	2,7	3,9
<b>Total 20,000 and more</b>	<b>6,5</b>	<b>5,2</b>	<b>4,8</b>	<b>3,7</b>	<b>3,2</b>	<b>2,3</b>	<b>4,4</b>

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2012.

Table IX.6  
**LATIN AMERICA (14 COUNTRIES) (1,439 CITIES WITH MORE THAN 20,000 INHABITANTS,  
 BY POPULATION SIZE): TOTAL NET MIGRATION (ABSOLUTE AND RELATIVE) WITH  
 THE REST OF THE URBAN SYSTEM AND THE REST OF THE SYSTEM OF CITIES**

City size	Population	Balance (population)			Net migration over total population (ad-hoc relative measure)		
		Total net migration	Net migration with the rest of the system of cities	Net migration with "the rest" of the municipalities	Total net migration rate	Net migration with the rest of the system of cities	Net migration with "the rest" of the municipalities
1 million and over (34)	115 527 363	1 106 606	205 319	901 287	9.6	1.8	7.8
500,000 to 999,999 (32)	21 256 131	230 211	23 193	207 018	10.8	1.1	9.7
100,000 to 499,999 (215)	43 884 324	691 925	145 148	546 777	15.8	3.3	12.5
50,000 to 99,999 (295)	20 754 659	234 686	19 214	215 472	11.3	0.9	10.4
20,000 to 50,000(863)	26 506 384	-241 309	-392 873	151 564	-9.1	-14.8	5.7
Total (1,439)	227 928 861	2 022 118	0	2 022 118	8.9	0.0	8.9

**Source:** J. Rodríguez, "Migración interna en ciudades de América Latina: Efectos en la estructura demográfica y la segregación residencial", *Notas de población*, No. 93 (LC/G.2509-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2011. United Nations publication, Sales No. S.11.II.G.58, p. 27.

#### **D. SOCIOECONOMIC DIFFERENTIALS BY CITY SIZE AS PROXIES FOR MILLENNIUM DEVELOPMENT GOALS INDICATORS**

The relationship between city size and standard of living has been the object of broad debate, since, theoretically, countervailing forces come into play. Some of them favour high population concentration (political centrality and pressure for resources exerted by a large population); others favour smaller scales (easier to manage, govern and service).

Historically, there has been little comparative empirical data for evaluating which forces are stronger (Rodríguez, 2010b). The information for 1,735 cities contained in the new version of the DEPUALC database,<sup>5</sup> however, offers a starting point for working towards an empirical answer to these questions. An initial review of the data confirms inequalities among and within cities and underlines the need to step up efforts in critical areas (CEPAL, 2010b; Cecchini, Rodríguez and Simioni, 2006).

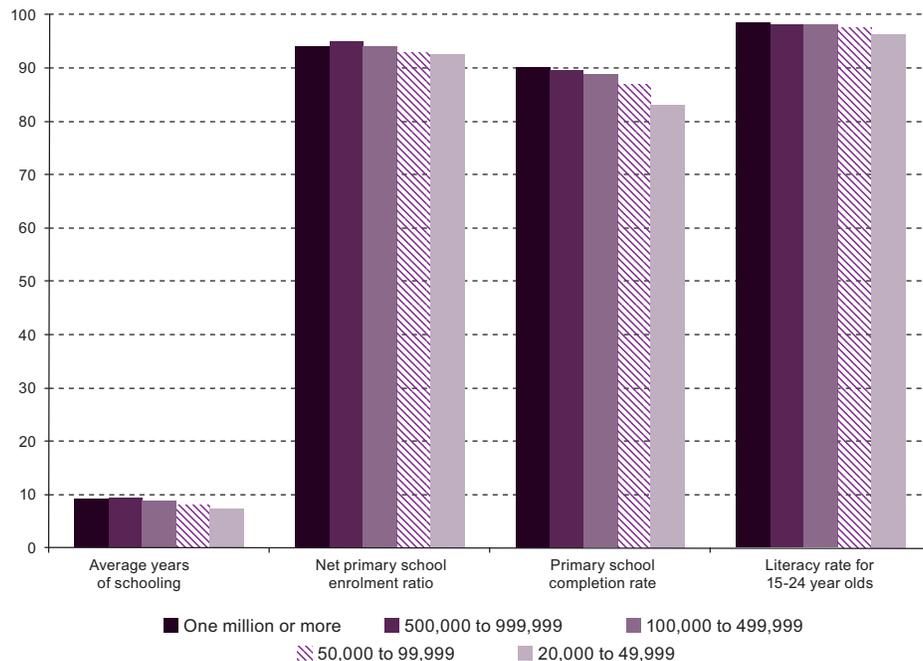
In terms of socioeconomic differences by city size, figures IX.4, IX.5 and IX.6 allow for some conclusions. The first is that there is still a relationship between city size (by population) and certain living conditions, and that more populated cities tend to have higher education levels (expressed in higher average years of schooling, higher primary education completion rates and higher literacy rates) and modern information and communication technology infrastructure (see figure IX.4). Second, unemployment rates are higher in big cities than in others (see figure IX.5). Third, the relationship between population size and basic service coverage is not as clear, although figure IX.6 shows that the percentage of people with access to drinking water, sanitation and electricity is higher in large cities and lower in smaller ones. The smallest cities in the system (20,000-50,000 inhabitants) still lag behind on

<sup>5</sup> Includes living-standards variables (proxy indicators for Millennium Development Goals) from the 2000 census that can be calculated by processing census microdata.

almost every indicator, suggesting that they are unlikely to attract migrants compared with other segments in the system of cities. Medium-sized cities, especially those with 100,000 to 999,999 inhabitants, post higher living standards, with more years of schooling, less unemployment and, along with large cities, better service coverage. This combination of factors suggests that medium-sized cities may be particularly attractive for migrants. In contrast, small cities seem to have little draw. Large cities, meanwhile, show mixed conditions, making it difficult to predict how much of a draw they may have.

So far, the analysis has used the universe of cities (1,735) available in the DEPUALC database. These aggregated averages mask diverse national realities, however, and once again skew towards Brazil and Mexico because they have so many cities. Therefore, any particular relationship between city size and standard of living in these countries will markedly influence the relationship for the whole region.

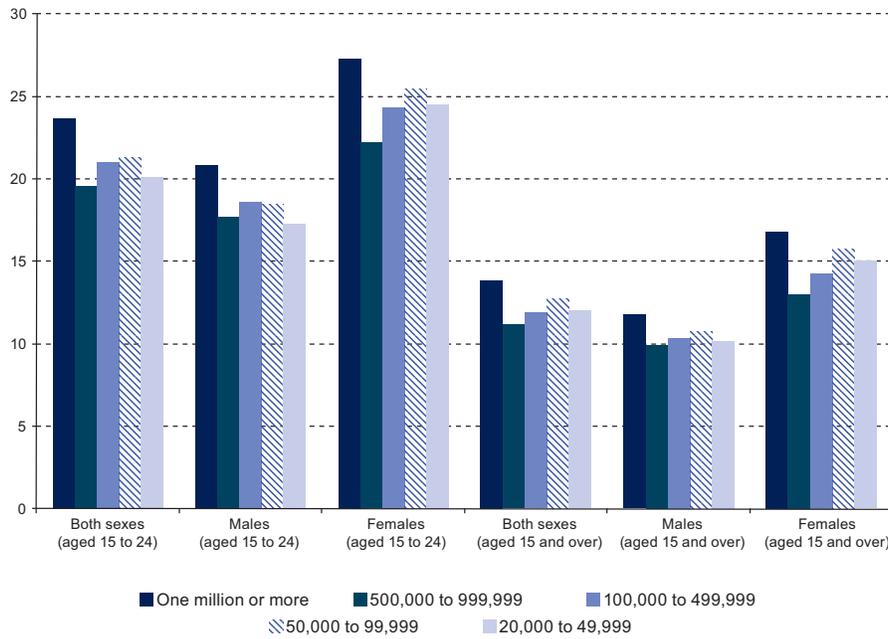
Figure IX.4  
**LATIN AMERICA (1,735 CITIES): EDUCATION INDICATORS BY CITY POPULATION SIZE, CENSUSES FROM THE 2000s**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

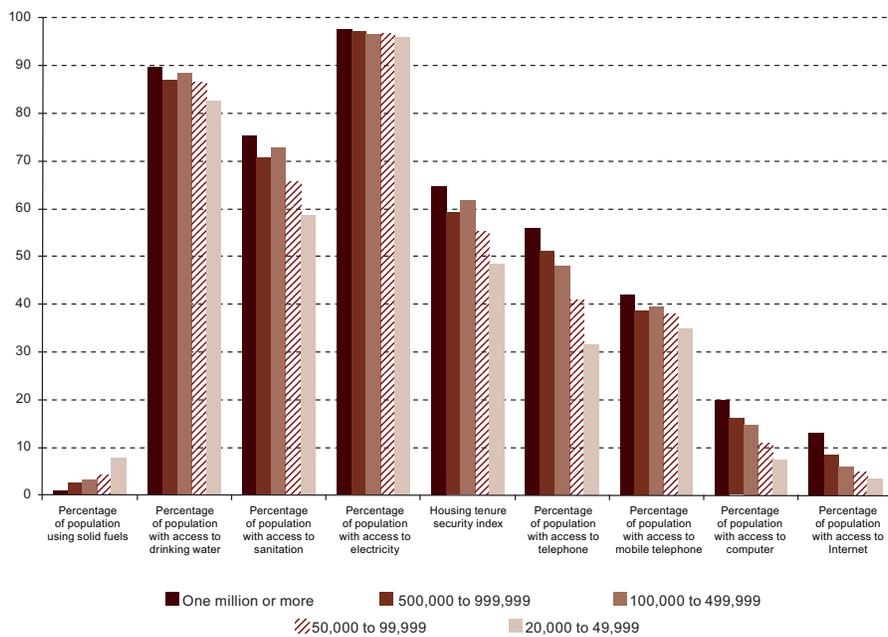
Figure IX.7 shows indicators for several countries; there is a strong positive relationship between city size and living standards, particularly for education (average years of schooling, youth literacy rate, primary education coverage) and availability of information and communication technologies (telephone, mobile telephone, computer and Internet). In two countries, the relationship between city population size and access to basic services (drinking water, sanitation and electricity) is not as direct, since there are no obvious differences between categories. Panama is an interesting case in that basic service coverage is slightly better in medium-sized cities than in Panama City. In most of the countries, however, there is a positive relationship between city size and service coverage.

Figure IX.5  
**LATIN AMERICA (1,735 CITIES): UNEMPLOYMENT RATE BY CITY POPULATION SIZE, CENSUSES FROM THE 2000s**



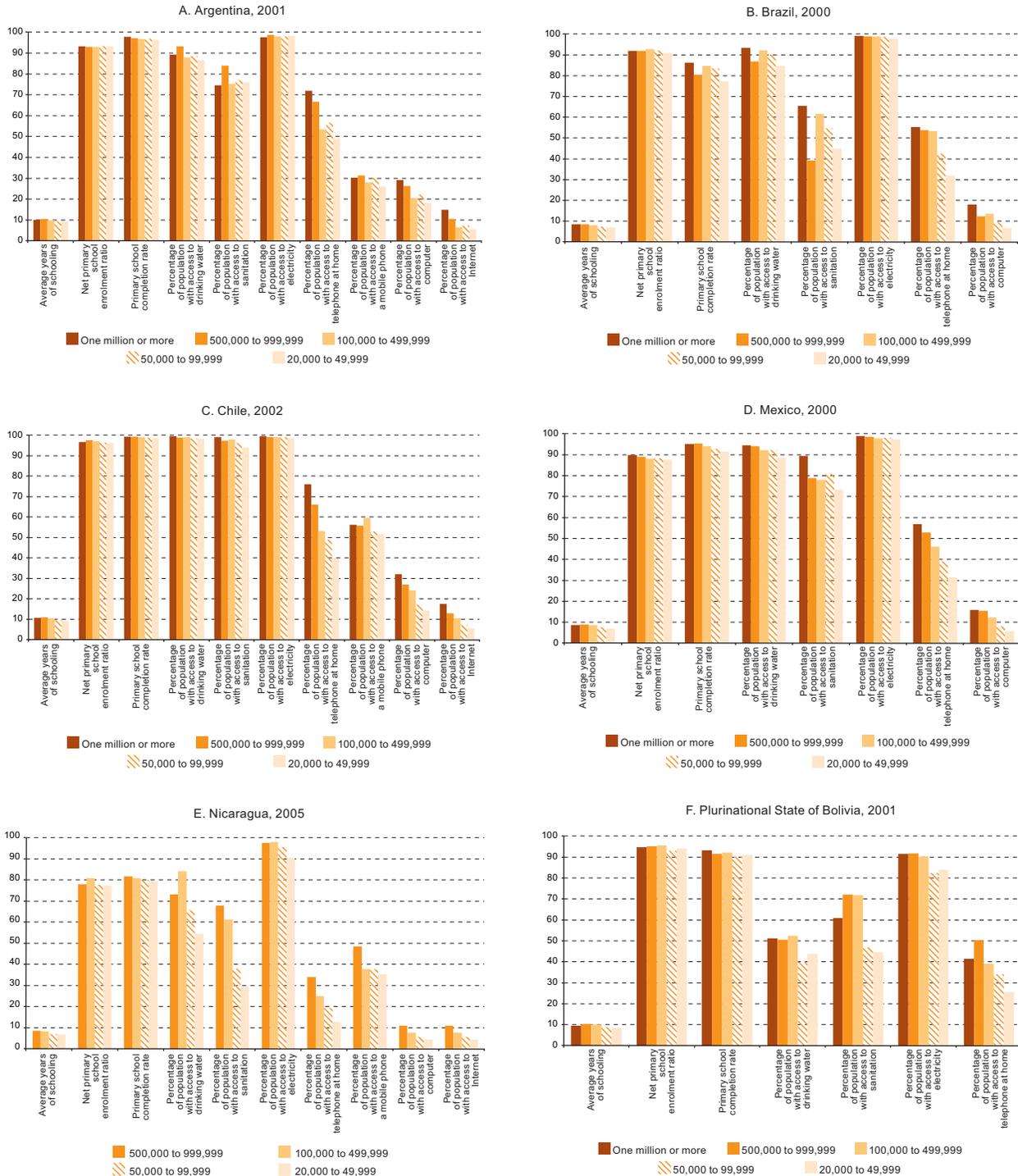
Source: Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

Figure IX.6  
**LATIN AMERICA (1,735 CITIES): INDICATORS OF ACCESS TO BASIC SERVICES AND HOUSEHOLD ITEMS BY CITY POPULATION SIZE, CENSUSES FROM THE 2000s**



Source: Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

Figure IX.7  
**LATIN AMERICA (1,735 CITIES): INDICATORS OF ACCESS TO BASIC SERVICES AND HOUSEHOLD ITEMS BY CITY POPULATION SIZE, CENSUSES FROM THE 2000s**



**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

For unemployment, the picture is complex and heterogeneous. For some countries, there is a direct relationship between city population size and unemployment: the larger the city, the higher the unemployment rate. For others, the highest unemployment rates are seen in the outliers, while medium-sized cities experienced the lowest rates. But other countries posted the opposite relationship: the larger the city, the lower the unemployment rate. This suggests that the relationship between unemployment levels and city size is complex and country-specific but does not rule out the possibility that, at the country level, evidence from the entire sample will again show that the most unfavourable labour markets are found in the outliers of the system of cities and the most favourable ones in medium-sized cities.

In conclusion, a more complex, integrated urban system constitutes an asset for sustainable development and can be leveraged even more according to the specific qualities of each city type. Along these lines (and very generally speaking), within the group of cities that are not large it seems that medium-sized ones have a greater population draw than small ones, which still suffer from gaps and weaknesses. This conclusion, of course, does not consider quality of life aspects not captured by censuses, which may contribute decisively to the draw of a city.

## **E. MIGRATION PATTERNS BY CITY AND CLASS OF CITY**

As has been widely reported (Rodríguez and Busso, 2009; Rodríguez, 2008), migration in the region currently occurs mainly between cities because the region is so highly urbanized.

Unlike rural-urban migration, there is no single conceptual framework for understanding internal migration among cities. This largely reflects the fact that the two main explanations (one “macro”, reflecting socioeconomic inequalities between territories; and the other “micro”, reflecting economic rationales behind individual decisions to migrate, in a broad sense) do not operate simply and clearly for migration between cities. A set of factors differentiating origin and destination for rural-urban migration is blurred by the similarity (urban) between the two. There are socioeconomic and other disparities among cities, which can also influence the decision to migrate. But these differences no longer operate in the blanket averages (as occurs with rural-urban differentials) but rather in case-by-case comparisons (between a city of origin and a city of destination, according to principle  $n-1$ , where  $n$  is total cities in the urban system). This complexity is not unknown in migration studies; it has been considered in theoretical models for interregional migration since empirical studies began (Greenwood, 1997; Villa, 1991). Overall, though, these models have grown far less complex because interregional migration is essentially job-driven, and they focus on a few parameters of comparison, typically income and employment (Aroca, 2004). These, however, are less useful in city-to-city migration, since residential, educational and quality of life factors figure more heavily and can act autonomously or even in the opposition direction to income and employment parameters.

A recent paper (Rodríguez, 2011) estimates internal migration between cities and between cities and the rest of the system of settlements. By processing census microdata, a consolidated database was constructed for 1,439 cities in 14 countries in the region. These cities had 20,000 or more inhabitants during the 2000 round of censuses. For each country a specific base was created, to facilitate national analysis. The methodology has a margin of error (explained in detail in the report cited), so results should be treated with caution. Nonetheless, tests with countries for which sufficient data is available suggest that, generally speaking, the margin of error is rather small.

Table IX.7 summarizes results at the regional level. Migration does not seem to contribute to deconcentration, for two reasons. First, the only segment within the system of cities that loses population is the bottom one (the smallest cities), since the 863 cities with 20,000 to 49,999 inhabitants show net emigration of 390,000 in their exchanges with cities in other segments (their net migration is positive, because the positive balance with the rest of the system of human settlements exceeds the loss to the rest of the system of cities). Second, the top segment (cities with one million or more inhabitants) show positive balances, even in their exchanges with the rest of the system of cities. While almost all cities with five million or more inhabitants (except Lima and probably Bogotá, although the microdata from the 2004-2005 Colombia census was not available for this study) show a migration loss, the group of cities in the one-to-five-million range has a positive balance that more than offsets the outflow from the top level of this segment.

Table IX.7  
**LATIN AMERICA (9 COUNTRIES) (917 CITIES WITH MORE THAN 20,000 INHABITANTS,  
 BY POPULATION SIZE): TOTAL NET MIGRATION AND WITH THE REST OF THE  
 URBAN SYSTEM (TOTAL AND PERCENTAGE POSITIVE NET MIGRATION),  
 CENSUSES FROM THE 1990s<sup>a</sup>**

Category	Total net migration			Migration within the urban system		
	Positive	Negative	Percentage	Positive	Negative	Percentage
1,000,000 and over (19)	18	1	94.7	15	4	78.9
500,000 to 999,999 (14)	13	1	92.9	11	3	78.6
100,000 to 499,999 (146)	86	60	58.9	71	75	48.6
50,000 to 99,999 (295)	120	175	40.7	87	208	29.5
20,000 to 49,999 (443)	205	238	46.3	170	273	38.4
<b>Total (917)</b>	<b>442</b>	<b>475</b>	<b>48.2</b>	<b>354</b>	<b>563</b>	<b>38.6</b>

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, Database on Internal Migration in Latin America and the Caribbean (MIALC).

<sup>a</sup> Countries included in the study: Brazil, 1991; Chile, 1992; Costa Rica, 1984; Ecuador, 1990; Guatemala, 1994; Honduras, 1988; Nicaragua, 1995; Panama, 1990; and Paraguay, 1992.

The persistent migration draw of the top segment of the system of cities does not mean that concentration is advancing. Rather, the system of cities is diversifying, with the medium-sized segments growing. The key evidence supporting this observation is that the segment with the strongest draw is medium-sized cities (100,000-499,999 inhabitants). This explains at least in part why this group has posted the most rapid population growth in recent decades.<sup>6</sup>

Given this evidence, the region presents a complex mix of large cities with a persistent draw (except the very largest ones) and medium-sized cities whose draw is even stronger, with small cities that continue to lose population: a sort of reversal of polarization without deconcentration.<sup>7</sup> Studies to date on structural trends in the system of cities, and the discussion in section C hereof, are based on the growth

<sup>6</sup> In general, these cities experience higher natural population growth, which explains part of their faster pace of population growth.

<sup>7</sup> On this basis, “urbanization” is said to be occurring when the large cities are, in aggregate, growing faster than both the medium-sized and the small ones, while “polarization reversal” occurs when the medium-sized cities outpace the others and “counterurbanization” is when the small cities are in the ascendancy (Champion, 2008, p. 13).

rate differential among the different size categories of the system of cities.<sup>8</sup> Using figures for migration (expressed as absolute and relative findings), as this report does, is more appropriate for reaching a conclusion as to the draw of different-sized cities than examining full (and mixed) demographics.

These findings may be biased. The fact that these are net balances means that a high value for one city (whether positive or negative) may exceed the sum of small values for several cities posting the opposite sign. Thus, the segment may seem to have a draw even though most of the cities have an outflow of migrants. To evaluate this factor, table IX.6 shows the number of cities in each category and whether they are migrant receivers or senders, both for total internal migration and for internal migration within the urban system. The findings confirm that the bottom segment is not drawing migrants, since most of the cities in this group show net emigration—for migration within the urban system the percentage is in excess of 60%. Tables IX.7 and IX.8 show that the top two segments contain the highest percentage of receiving cities, confirming that large cities remain a significant destination for internal migration (although in the case of the largest cities—the metropolises—several post net emigration). Finally, these results qualify the figures in table IX.6, because there is no evidence that medium-sized cities exert a particularly strong draw, particularly those with 100,000 to 499,999 inhabitants.

Table IX.8  
**LATIN AMERICA (14 COUNTRIES) (1,439 CITIES WITH MORE THAN 20,000 INHABITANTS,  
 BY POPULATION SIZE): NET TOTAL MIGRATION AND WITH THE REST OF THE  
 URBAN SYSTEM (TOTAL AND PERCENTAGE POSITIVE NET MIGRATION),  
 CENSUSES FROM THE 2000s<sup>a</sup>**

Category	Total net migration			Migration within the urban system		
	Positive	Negative	Percentage	Positive	Negative	Percentage
1,000,000 and over (34)	25	9	73.5	22	14	58.8
500,000 to 9,99999 (32)	24	8	75.0	18	14	56.3
100,000 to 49,9999 (215)	137	78	63.7	101	112	47.4
50,000 to 9,9999 (295)	146	149	49.5	126	102	55.3
20,000 to 50,000 (863)	360	503	41.7	305	475	39.1
<b>Total (1,439)</b>	<b>692</b>	<b>747</b>	<b>48.1</b>	<b>570</b>	<b>717</b>	<b>44.3</b>

**Source:** J. Rodríguez, “Migración interna en ciudades de América Latina: Efectos en la estructura demográfica y la segregación residencial”, *Notas de población*, No. 93 (LC/G.2509-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2011. United Nations publication, Sales No. S.11.II.G.58, p. 28.

<sup>a</sup> Countries included in the study: Brazil, 2000; Chile, 2002; Costa Rica, 2000; Dominican Republic, 2002; Ecuador, 2001; El Salvador, 2007; Guatemala, 2002; Honduras, 2001; Mexico, 2000; Nicaragua, 2005, Panama, 2000; Paraguay, 2002; Peru, 2007 and Plurinational State of Bolivia, 2001.

Census data from 2010 do not yet reveal a clear trend for whether metropolitan cities are losing their migration draw, partly because information is available for three countries only. Table IX.9 reveals mixed results. Panama City is a draw for both close and distant minor administrative regions, while Mexico City continues to lose population, as it has since the 1990s, in its exchange with the rest of the minor administrative divisions, whether close or distant. The data for Ecuador does not yield definitive conclusions, since Quito posts negative net migration with nearby minor administrative divisions but a

<sup>8</sup> Nevertheless, despite the focus in the media on the growth of large and mega-cities, medium-sized and small cities (with fewer than 500,000 residents) were growing more rapidly, and that trend was expected to continue in both developed and developing countries (United Nations, 2008, p. 5).

positive balance with more distant ones, making total net migration positive. In contrast, Guayaquil posts negative net migration in its population exchange with nearby minor administrative divisions; despite positive net migration with distant minor administrative divisions, total net migration is negative.

Table IX.9  
**LATIN AMERICA (3 COUNTRIES): METROPOLITAN CITIES BY TOTAL NET MIGRATION,  
 CLOSE AND DISTANT (ABSOLUTE BALANCES), CENSUSES FROM 2010 ONWARDS<sup>a</sup>**

	Net migration		
	Total	Close	Distant
Panama City	70 789	2 553	68 236
Mexico City <sup>b</sup>	-200 201	-24 386	-175 815
Quito <sup>c</sup>	23 284	-6 992	30 276
Guayaquil	-7 487	-11 388	3 901

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of processing of census microdatabases of Ecuador, Mexico and Panama using Retrieval of data for small areas by microcomputer (REDATAM), 2010.

<sup>a</sup> Total migration: population exchange between the city and the rest of the country's minor administrative divisions; close migration: population exchange between the city and minor administrative divisions that form part of the major administrative divisions in which the city is located; distant migration: population exchange between the city and minor administrative divisions outside the metropolitan major administrative division.

As explained above, the results are subject to bias due to the impact of Brazil and Mexico on data for the set of cities as a whole. Figures for individual countries (not provided herein but available in Rodríguez, 2011), however, confirm the conclusions set out above. In almost all countries, the bottom tier of the system of cities shows net emigration, above all in exchanges with the other categories in the urban system. For most countries, all cities with one million or more inhabitants (normally just one city per country) post positive balances for both types of migration. For the broad spectrum of categories considered medium-sized cities, the country-by-country analysis once again reveals a diversity that belies the traditional, excessively optimistic idea that "medium-sized city = better-functioning city = more attractive city for investment and population". Altogether, they seem to have draw and, as discussed in section C, in the past 30 years they have posted the fastest population growth. Within this group, however, there are significant disparities and many medium-sized cities are senders of migrants (usually to other medium-sized or large cities), whether due to structural weaknesses or particularly difficult moments in their history.

Given the heterogeneity of the countries' urban systems, national studies that identify factors that differentiate medium-sized cities are key to better understanding the general population push and pull factors in them. There is considerable knowledge about these factors for the outlying segments within the system of cities (millionaire cities with quality of life problems, assorted risks and economic crises; and small cities with their still limited infrastructure and opportunities), but in the case of medium-sized cities there is much less. Recent studies in Brazil are worth noting, then, as they explore the factors retaining people in medium-sized cities. Matos (2009) studied 55 medium-sized cities in Brazil between 2008 and 2009 and surveyed samples of inhabitants about three groups of stay factors: socioeconomic, geocultural and cultural. Key findings noted that (i) age was a relevant factor (for persons aged 50 and over, geocultural and cultural factors were more important; persons aged 26 to 49 valued socioeconomic factors more; and those under 26 considered cultural and socioeconomic factors); (ii) for immigrants, socioeconomic factors were more important, while non-migrants valued cultural factors the most; (iii) higher-income individuals were more sensitive to socioeconomic factors, while lower-income

individuals valued cultural factors more; all groups valued neocultural factors (particularly landscape) equally; (iv) the family was an even stronger stay factor than employment; (v) access to health and education were important across the board, as were religious and lay celebrations, confirming a broad spectrum of factors underling people's decisions to stay in or migrate to medium-sized cities.

This analysis must be complemented by studies of investment and production location patterns, since there are two-way relationships between the location of these factors and population location and migration (Greenwood, 1997). In this sense, studies in Brazil have shown that the pattern of deconcentration of formal employment has been less marked and more restricted (primarily to medium-sized cities near the metropolises) than the pattern of population 'diffusion' toward medium-sized cities (Matos, 2009). In other countries, such as Mexico, the shifting locations of dynamic, labour-intensive economic sectors seem to have impacted deconcentration. The relocation and massive emergence of manufacturing near the northern border, seeking proximity to the enormous United States market and driven by investment flows and decisions by global and national conglomerates, has been a powerful magnet to the labour force, which for decades has been migrating to a chain of border cities, some of which do not even offer continuity with their sister city across the border (Tijuana-San Diego is the prime example). Also in Mexico, booming global tourism to areas historically of secondary importance (or at least far from the central plateau and Mexico City) explains the explosive growth of cities such as Cancún.

In many countries, the main city's loss of pull (as this study both demonstrates and qualifies, because in many countries the main city is still a strong draw) is due to a complex set of factors. These include production and economic factors, because the shifting development model throughout most of the region (away from State-driven substitution industrialization in favour of market-driven, primarily export-oriented economies) hit the big cities (where the substitution industry was located) especially hard. Political factors, particularly decentralization and the shrinkage of the State, have also affected employment in the metropolises, where the seat of government and government agencies are found. Altogether these trends meant that the economic crisis of the 1980s was particularly strong in the metropolises, significantly reducing their ability to "function".

The natural result of this complex scenario was that the big cities lost some of their draw or even shifted to net emigration status.<sup>9</sup> Now that 20 years have gone by since those crises and their migration signals, conditions have changed. Large cities survived and are recovering. In several, chaotic public transport systems have undergone profound transformations that should bring improvements. In others, public housing programmes are reversing long-standing deficits. All of these cities are seeing slower population growth, thus easing this potential pressure factor. Globalization has put them back in the centre, given their widely recognized capacity for centralizing control and management functions, modern services, and the broad spectrum of low-cost, labour-intensive support services. They still face serious problems (including unsafety, pollution, poverty and segregation), but their future is now more open than suggested by the obituaries written in the late 1980s.

Perhaps the most complex segment is that of small cities. This study has clearly demonstrated their relative disadvantages and persistent challenges when it comes to drawing migrants from other cities. More research into the specifics of each national case is required, to identify the production and sociopolitical processes behind this situation and plan for probable future scenarios for this segment within the system of cities.

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<sup>9</sup> Nonetheless, in some countries, particularly those that experienced internal armed conflict (Colombia and Peru, but also El Salvador and Nicaragua), the large metropolises became a refuge, thus reinforcing their draw for migrants.

## **F. MIGRATION DRAW, SOCIODEMOGRAPHIC CHARACTERISTICS AND STANDARD OF LIVING**

Most public initiatives having to do with the system of cities operate within the logic of population size categories. Policies and programmes are therefore designed to promote medium-sized cities, reduce the pull of large ones and redirect migration flows to small cities, among other things (Rodríguez and Busso, 2009). The study in the previous section offers new evidence on the relationship between migration draw and city size. Migration draw varies within each category, undermining the prevailing simplistic tendency to assume homogeneity within each segment (large cities = problematic = migrant senders, versus small and medium-sized cities = friendly = attractive).

The next section introduces more variables to explore this relationship in greater detail, using statistical techniques to synthesize information and gain an understanding of the overall relationship between standard of living, city size and migration draw.

The intercorrelation matrix in Table IX.7 is a first step in that direction. It was calculated on the basis of all the cities for which socioeconomic (Millennium Development Goal proxies) and migration data are available, which, as mentioned above, includes more than 1,439 cities in 14 countries. The relevant coefficients for this purpose are in rows 18 and 19, which quantify the simple linear correlation between the volume of total net internal migration and migration within the urban system, on the one hand, and the demographic and socioeconomic attributes of the cities, on the other hand.

The main conclusions arising from total net migration coefficients are set out below.

- (i) Cities offering better living standards tend to have a stronger draw, particularly those offering more services and better information and communication technology infrastructure and coverage. This supports the classic hypothesis that people move from places of origin with inferior living conditions to destinations where they are better. Since the subject is total net migration, the draw for a rural population might play an important role without this being reflected in the coefficients, which only refer to standards of living in cities.<sup>10</sup>
- (ii) The relationship between city population size and migration draw (total or within the urban system) that can be deduced from the tables with city-size segments fades into statistical insignificance. This suggests that the “size effect” in the tables does not operate alone, but rather through the relationships between size and living conditions that, as discussed in section D, are still positive.
- (iii) One dimension of the standard of living that does not have a statistically significant relationship with total migration draw is unemployment. This collides with traditional theories that put the search for work in the centre of the decision to migrate. Nonetheless, as briefly discussed above, many factors may explain this apparent unrelatedness. These include wages and income, since levels that rise with city size could be a stronger pull factor than the availability of work. Problems of endogeneity are also evident, since unemployment can be explained, at least partly, by migration (particularly, higher unemployment rates in areas

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<sup>10</sup> This reflects the mismatch between territories where the issue is migration (municipalities or comunas making up a city or where there is a city with a population of 20,000 or more) and the territories referred to by standard-of-living indices, which are the urban areas within these municipalities.

that draw migrants, due precisely to the arrival of migrants in search of work). Thus, these coefficients do not seek to capture a causal relationship, but rather identify empirical concomitance.

- (iv) The standard-of-living dimension most highly correlated with migration draw is access to information and communication technologies.<sup>11</sup> Although it is difficult to attribute higher migration draw to the availability of telephones, mobile telephones, computers and Internet, these probably reflect a modern setting, at least superficially, associated with other social, cultural and economic factors that together form an attractive package. Cutting-edge cities might well be attractive, in view of the wide-ranging debate about technological change and job requirements. The data suggest that the new digital economy could generate many “users” (students, apprentices, technical experts, workers), taking its draw well beyond the direct jobs, or even the indirect ones, that are created. This is a hypothesis that should be evaluated using disaggregation methodologies, especially by migrant age and education levels.

A simple correlation study for all of the cities comes up against three problems. From a statistical perspective, bivariate relationships may be spurious due to the presence of other concomitant variables that may be the real explanation behind the relationship. From a substantive perspective, very different national realities are mixed together inappropriately, generating theoretical inconsistency in the findings. Finally, in terms of numbers, Brazil and Mexico contribute so many cities that they decisively influence coefficients, masking specific and, possibly, unusual relationships other countries. To deal with these problems at least partially, table IX.11 identifies the significant coefficients for 28 multiple regression equations. There are two per country, one in which the conditional variable is the relative intensity of total net migration and the other in which the conditional variable is the relative intensity of total net intraurban migration. For both equations, the set of conditional variables was population size; average education level for the population aged 30 to 60; unemployment among young persons (aged 15 to 24) and total unemployment (aged 15 and over); and access to drinking water, sanitation and electricity.

Generally speaking, the number of statistically significant variables is low: four countries posted none and only one country (Brazil) posted three (less than half the set). In most cases, the statistical significance of a variable is tested for both types of migration; when this happens, the sign always coincides. Youth unemployment is the significant variable in most countries (four), with three<sup>12</sup> posting a negative sign, indicating that higher levels of unemployment tend to be associated with lower migration pull (probably negative rates, that is, they are migrant senders).

Overall, countries vary enormously, in terms of the regression adjustment and in terms of the statistically significant coefficients and their sign. Mexico is an extreme case, since the regression explains less than 6% of the variance in net migration among cities and no conditional variable in the model is significant. In contrast, for some countries the model explains more than 90% of the variance in net migration (Panama and Paraguay), although in both the number of significant conditional variables was very low (null in the case of Panama).

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<sup>11</sup> This finding cannot be considered representative of the whole set of countries, because few countries include questions on the availability of information and communication technologies at home. Thus, these findings reflect the reality of those countries alone.

<sup>12</sup> Paraguay has a statistically significant positive coefficient.

It is interesting to note that countries with the most cities post the regressions with the least adjustments, which, aside from having the most potential for statistical explanation (number of cases), also have a major substantive determinant with key methodological implications. Countries with the most cities have more complex and diverse urban systems. For this reason, in these countries the kinds of migration flows between cities are more complex and include migration due to suburbanization. As discussed in the theoretical framework, the purpose of these emerging kinds of internal migration is primarily residential and therefore explained by factors other than those driving traditional interurban migration (to the big city). Thus, there is nothing strange about the fact that the variability in net migration in Panama can be almost completely explained by the few conditional variables used. In fact, Panama City brings together all the dynamics (population, economic, social and cultural) and is a primacy city in demographic terms. It is easy to explain why it acts as a migration magnet in line with the traditional model of migration from small and medium-sized cities to large ones.

Comparisons also reveal the importance of national characteristics, another blow to models with universal ambitions. In the Plurinational State of Bolivia, the draw of one city (Santa Cruz) helps reverse the expected coefficient signs, while cities with historically higher levels of education and service coverage (Cochabamba, Oruro and Potosí, for example) posted significant negative migration flows. Something similar occurs in the Dominican Republic, but for a different reason. There, the two main cities with the best socioeconomic indicators (Santo Domingo and Santiago de los Caballeros) are still significant migration draws. But the highest levels of migration draw are in the mid-sized cities with thriving tourism and construction industries but mediocre standard of living indicators. This is the case, for example, with Higuey, the main city in the global tourist area of Punta Cana.<sup>13</sup> In contrast, the main migrant sending cities have a sluggish labour market, particularly for women, but a longer history in terms of settlement and investment and, therefore, above average living conditions.<sup>14</sup> In the case of Chile or Costa Rica, meanwhile, suburbanization combines with trends toward deconcentration in the urban system, inverting some of the expected signs, particularly for coefficients related to education and basic services. For both cases, this model cannot distinguish between suburbanizing movement and movement towards dynamic emerging cities.

In short, these findings represent progress in that they shed some light on this growing, and still largely unstudied, phenomenon of migration between cities. But they also reveal many challenges in both theory and methodology in need of further research, as discussed in the next section.

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<sup>13</sup> A more dynamic labour market is not reflected in the unemployment rate, just slightly under the urban average. Moreover, in the national regression the coefficient for the two variables for unemployment in the equation is negative but statistically insignificant (with a significance level of 95%).

<sup>14</sup> Particularly, Barahona and San Juan de la Maguana, both essentially agricultural areas in the west, with unemployment rates much higher than the urban average for the country.

Table IX.10

**LATIN AMERICA AND THE CARIBBEAN (14 COUNTRIES): SIMPLE CORRELATION MATRIX BETWEEN TOTAL NET INTERNAL  
MIGRATION, WITH OTHER CITIES AND WITH THE REST OF THE SYSTEM OF HUMAN SETTLEMENTS,  
AND SOCIOECONOMIC INDICATORS (EMPLOYMENT, EDUCATION, AND LIVING CONDITIONS)<sup>a,b</sup>**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Population (1)	1 000																			
Average years of schooling (2)	0.156	1 000																		
Net primary education enrolment ratio (3)	0.018	0.124	1 000																	
Primary education completion rate (4)	0.065	0.579	0.222	1 000																
Literacy rate among 15- to 24-year-olds (5)	0.068	0.577	0.365	0.766	1 000															
Youth unemployment rate (15- to 24-year-olds) (6)	0.016	-0.072	0.362	-0.305	-0.169	1 000														
Percentage of population with access to drinking water at home (7)	0.046	0.229	0.371	0.374	0.379	0.038	1 000													
Percentage of population with access to sanitation at home (8)	0.061	0.393	0.060	0.471	0.370	-0.235	0.424	1 000												
Percentage of population with access to electricity at home (9)	0.051	-0.021	0.426	0.113	0.106	0.235	0.470	0.144	1 000											
Percentage of households (persons) with access to a telephone (10)	0.163	0.493	0.404	0.443	0.543	0.003	0.481	0.416	0.349	1 000										
Percentage of households (persons) with access to mobile telephone (11)	0.047	0.075	0.495	-0.418	0.070	0.243	0.423	0.382	0.382	0.508	1 000									
Percentage of households (persons) with computer access (12)	0.204	0.773	0.195	0.472	0.545	-0.027	0.463	0.443	0.130	0.693	0.404	1 000								
Percentage of households (persons) with Internet access (13)	0.357	0.619	-0.007	0.280	0.377	0.171	0.480	0.521	0.286	0.620	0.276	0.829	1 000							
Total unemployment rate (persons aged 15 or over) (14)	0.010	-0.128	0.296	-0.361	-0.222	0.981	-0.017	-0.260	0.209	-0.045	0.301	-0.077	0.062	1 000						
Total net migration (15)	0.061	0.110	0.005	0.063	0.086	-0.004	0.054	0.027	0.051	0.139	0.035	0.161	0.202	-0.004	1 000					
Net migration with the rest of the system of cities (16)	-0.346	0.015	-0.002	0.030	0.050	-0.024	0.042	0.006	0.038	0.070	0.069	0.064	0.191	-0.019	0.865	1 000				
Net migration with "the rest" of municipalities (17)	0.659	0.194	0.012	0.076	0.092	0.029	0.042	0.044	0.040	0.165	-0.001	0.217	0.202	0.022	0.621	0.144	1 000			
Total net migration (R) (18)	0.020	0.032	<b>0.119</b>	<b>0.100</b>	<b>0.161</b>	<b>0.007</b>	<b>0.147</b>	<b>0.032</b>	<b>0.116</b>	<b>0.173</b>	<b>0.228</b>	<b>0.185</b>	<b>0.229</b>	0.015	<b>0.349</b>	<b>0.315</b>	<b>0.196</b>	1 000		
Net migration with the rest of the system of cities (R) (19)	0.023	-0.001	<b>0.099</b>	<b>0.091</b>	<b>0.149</b>	-0.009	<b>0.171</b>	<b>0.042</b>	<b>0.132</b>	<b>0.199</b>	<b>0.275</b>	<b>0.192</b>	<b>0.221</b>	0.003	<b>0.340</b>	<b>0.335</b>	<b>0.148</b>	<b>0.955</b>	1 000	
Net migration with "the rest" of municipalities (R) (20)	0.005	0.092	0.125	0.086	0.133	0.039	0.047	-0.001	0.043	0.062	-0.025	0.111	0.145	0.037	0.253	0.170	0.234	0.770	0.546	1 000

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of information from Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

<sup>a</sup> The 14 countries are Brazil, Chile, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia; includes 1,439 cities with 20,000 or more inhabitants.

<sup>b</sup> Coefficients significant at 99% in bold.





## Chapter X

**TRENDS, MUTATIONS AND CHALLENGES IN LARGE CITIES****A. METROPOLITANIZATION, A HALLMARK OF LATIN AMERICA**

Latin America's urbanization process has a defining characteristic: it has been a process of "metropolitanization". In other words, a heavy concentration of the population has come to reside in vast cities, which can be classified as "large cities" (over 1 million inhabitants), "metropolises" (over 5 million inhabitants), and "megalopolises" (over 10 million inhabitants).<sup>1</sup> Indeed, the region stands out globally for its number of metropolises. According to the United Nations Population Division, in 2010 there were four megalopolises in Latin America: São Paulo, Brazil; Mexico City, Mexico; Buenos Aires, Argentina; and Río de Janeiro, Brazil. These were among the 14 largest megalopolises in the world, ranking third, fifth, eleventh, and fourteenth, respectively, by number of inhabitants (United Nations, 2009). As shown in table X.1, the region was home to 8.6% and 13.2% of the global total population and the global urban population, respectively. In numerical terms, the region's four megalopolises accounted for 28% of the 14 largest megalopolises in the world and 19% of the 21 megalopolises in the world in 2010.

Table X.1  
**LATIN AMERICA AND THE CARIBBEAN: PERCENTAGES OF GLOBAL TOTAL,  
RURAL AND URBAN POPULATION**

<b>Region</b>	<b>Variable</b>	<b>Number of inhabitants</b>	<b>Percentage corresponding to Latin America and the Caribbean</b>
World	Total population (thousands)	6 895 889	
World	Urban population (thousands)	3 558 578	
World	Rural population (thousands)	3 337 311	
Latin America and the Caribbean	Total population (thousands)	590 082	8.6
Latin America and the Caribbean	Urban population (thousands)	465 246	13.1
Latin America and the Caribbean	Rural population (thousands)	124 836	3.7

**Source:** United Nations Population Division, *World Population Prospects: The 2010 Revision*, New York, Department of Economic and Social Affairs, 2011; and *World Urbanization Prospects: The 2011 Revision*, New York, Department of Economic and Social Affairs, 2012.

The population of the region's large cities represents around one third of the region's total population, a rate matched only by North America, the most urban and metropolitanized region in the world. Equally important is the fact that based on various economic and political indicators, the concentration of productive activities and power in these large cities is even greater than their demographic weight (see box X.1).

<sup>1</sup> Latin America and the Caribbean, the most urbanized region in the developing world, is characterized by a high degree of urban primacy: In 2000 in Latin America around 20% of the total population lived in cities with more than five million inhabitants which is more than in other regions of the world (Jordán, Rehner and Samaniego, 2010).

Metropolitanization and the preponderance of large cities are topics of intense academic and political debate that are examined in later sections of this chapter, but first, demographic trends in the major administrative divisions in which large cities are located will be presented as the foundation for analysing the demographic evolution of large cities based on the most current information available.

#### Box X.1

#### **METROPOLITAN CONCENTRATION: A PHENOMENON THAT IS NOT LIMITED TO POPULATION**

Fernanda Magalhães (2010) indicates that in 2007, nearly half of Brazil's population lived in metropolitan regions that generated 58% of GDP and were home to 80% of corporate headquarters. Garson and others (2010) assert that the municipios that make up Brazil's metropolitan regions play host to the head offices of 79.4% of the country's 500 largest companies and account for 73.7% of banking and financial operations, 67.2% of high-tech jobs, 52.4% of wages, 41.2% of bank agencies, 84.3% of airline passengers and 36.9% of the national population. A recent study by the Metropoly Observatory of Brazil finds that these urban agglomerations in Brazil continue to play a major role in wealth creation in the country and have since 2005 at sustained levels. While their share of economic activity has not returned to the levels observed at the beginning of the decade, in 2009 urban agglomerations that exhibited traits of metropolises, known collectively as "Metropolitan Brazil," contributed 52.2% of national GDP.

Sobrino (2011) discusses the idea of an "urban region," defined as a region containing a large metropolitan area and smaller adjacent urban areas within a radius generally understood to be no greater than 150 kilometres, or a number of urban areas with a population of more than 1 million inhabitants in which no single area predominates. The author concludes that in 2010 there were six urban regions in Mexico, while in 2030 there will be eight, which will be home to 45% of the country's population and will generate 65% of national GDP.

In a comparative analysis of six metropolises in the region, Jordán, Rehner and Samaniego (2010, p. 14) state, "In spite of the importance of extractive activities prevails an outstanding level of economic centrality. The main megacities of the region are the dominating economic centre in their respective national context and Buenos Aires, Mexico City, Sao Paulo and Santiago are the megacities with major importance regarding economic activities in Latin America and the highest level of interconnectivity being classified as global cities... Almost half of the economic activities is concentrated in the main city in the case of Chile and Peru, around one quarter in Argentina and Colombia".

**Source:** Fernanda Magalhães (ed.), *Regiões metropolitanas no Brasil: um paradoxo de desafios e oportunidades*, Inter-American Development Bank, (IDB), 2010; Jaime Sobrino, "La urbanización en el México contemporáneo", document of the meeting of experts "Población territorio y desarrollo sostenible", 2011, [online] [http://www.cepal.org/celade/noticias/paginas/5/44305/Jaime\\_Sobrino.pdf](http://www.cepal.org/celade/noticias/paginas/5/44305/Jaime_Sobrino.pdf); Marcelo Ribeiro and Filipe Corrêa, "Metropolização da riqueza", Metropoly Observatory of Brazil, 2011, [online] [http://www.observatoriodasmetropoles.net/boletim/www.observatorio-dasmetropoles.net/index.php?option=com\\_k2&view=item&id=120&Itemid=164&lang=pt](http://www.observatoriodasmetropoles.net/boletim/www.observatorio-dasmetropoles.net/index.php?option=com_k2&view=item&id=120&Itemid=164&lang=pt); Ricardo Jordán, Johannes Rehner and Joseluis Samaniego, "Regional Panorama Latin America: Megacities and Sustainability", *Project Document*, No 289 (LC/W.289), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC)/German Agency for Technical Cooperation (GTZ), 2010.

## **B. SITUATION OF MAJOR ADMINISTRATIVE DIVISIONS WITH LARGE CITIES**

An initial look at the major administrative divisions (MADs) that host the largest city in the respective country, known as "metropolitan MADs," is a necessary prelude to a study focusing specifically on large cities. In some countries, metropolitan MADs include more than one MAD, either because there are two or more large cities or because the capital city encompasses more than one MAD, with patterns varying in terms of demographic growth and the evolution of their share of the national population. Table X.2 presents this evolution, and the relevant information leads to a first conclusion on the process of concentration of population in metropolitan areas.

Table X.2  
**LATIN AMERICA: EVOLUTION OF THE RELATIVE WEIGHT OF THE POPULATION OF THE METROPOLITAN MADs OR CAPITAL CITIES IN THE NATIONAL POPULATION, 1950-2000**

Country	Major administrative division	1950	1960	1970	1980	1990	2000	2010
Argentina	Buenos Aires	45.6	48.6	50.3	49.3	47.7	45.8	
Bolivia (Plurinational State of)	La Paz	31.4		31.8		29.6	28.4	
	Rio de Janeiro	9.1	9.4	9.7	9.5	8.7	8.5	8.4
Brazil	São Paulo	17.7	18.3	19.1	21	21.5	21.8	21.6
Chile	Metropolitan Region (Santiago)	28.7	32.1	35.5	38.1	39.4	40.1	
Colombia	Cundinamarca (Bogota)	19.5	16.2	17.6	19.3	19.9	21.7	
Costa Rica	San José	35.2	36.5	37.1	36.8		35.3	
Cuba	Havana	27.8		27	25.9		26.1	
	Pichincha (Quito)	12.1	12.9	15.2	17	18.1	19.8	17.8
Ecuador	Guayas	18.2	21.5	23.2	25.0	25.9	27.4	25.2
El Salvador	San Salvador	16	18.4	20.6		29.5	27.3	
Guatemala	Guatemala City	15.7	18.9	21.5	21.7	21.8	22.6	
	Department of L'Ouest (Port-au-Prince)	21.1		27.9	30.7		37	
Honduras	Francisco Morazán (Tegucigalpa)	13.8	15.1	17.1	18.4		18.1	
	Federal District and State of Mexico	17.2	19.4	22.2	24.5	22.2	22.3	21.4
Nicaragua	Managua	15.3	20.8	25.9		25.1	24.6	
Panama	Panama City	30.8	34.6	40.4	44.8	46	48.9	50.3
Paraguay	Asunción	27.1	28.5	29.3	31.4	32.9	36.3	
Peru	Lima	14.6	22.7	28	30.5	31.9	34	
Dominican Republic	National District (Santo Domingo)	11.2	15.3	20.3	27.6	30.1	31.9	
Uruguay	Montevideo		56.3	56	56.7	56.5	55.9	
Venezuela (Bolivarian Republic of)	Capital District, Miranda, Vargas (Caracas)	19.6	23.3	25.3	24.1	22	19.4	

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

First, according to census data from the 2000s, levels of demographic concentration in these MADs were observed to remain high. In fact, four metropolitan MADs were home to over 40% of the population in their respective countries: Montevideo, Panama City, Buenos Aires and the Metropolitan Region of Santiago. Also high on the list were the Department of L'Ouest (Haiti), Asuncion, San Jose, Lima and the National District (Santo Domingo), which had 30% to 40% of the total national population. In contrast, Pichincha, the Capital District in Venezuela and Francisco Morazán were home to less than 20% of the population of their respective countries.

The main conclusion that can be drawn from table X.2 is that —with the exception of the MADs in which La Paz, Río de Janeiro, Havana, Montevideo and Caracas are located— the population in the vast majority of the metropolitan MADs came to represent a larger percentage of the total over the period between 1950 and the most recent census for which data is available. However, an analysis of the trend across the entire period points to a virtual tie between the metropolitan MADs that experienced sustained growth, which suggests that measures taken to reduce concentration, where such measures have been

taken, have had little effect, and those that reached a peak level of concentration during the period, but whose relative importance has now started to decline. This means that only some countries are showing signs of a gradual process of demographic deconcentration coupled with sharper growth in nonmetropolitan MADs. The results of the 2010 censuses bear out the unevenness of trends between countries. Panama is the country with the greatest degree of concentration, and the trend is persistent, with the province of Panamá now home, for the first time, to 50% of the country's population. Meanwhile, Mexico has resumed the process of deconcentration initiated in the 1980s, and for the first time the pattern of concentration in Ecuador has reversed, both in Pichincha and Guayas.

Of course, this picture of increasing concentration, no longer uniform according to the figures in table X.2, changes drastically when the relative weight of population of the MADs in the total urban population is analysed inasmuch as there are few metropolitan MADs in which this indicator increased in comparison with 1950 and none in which there was a sustained increase across the entire period. This reflects how geographically indiscriminate the urbanization process has been, extending to every MAD in the region's countries.

Table X.3  
**LATIN AMERICA: EVOLUTION OF THE RELATIVE WEIGHT OF THE POPULATION OF THE METROPOLITAN MADs OR CAPITAL CITIES IN THE TOTAL URBAN POPULATION OF THE COUNTRY, 1950-2000**

Country	Major administrative division (MAD)	1950	1960	1970	1980	1990	2000	2010
Argentina	Buenos Aires	73.0	65.9	63.7	59.5	54.7	50.6	
Bolivia (Plurinational State of)	La Paz	92.7		76.1		51.4	45.5	
	Río de Janeiro	24.9	21.1	17.3	14.0	11.5	10.4	9.9
Brazil	São Paulo	48.6	40.9	34.1	31.1	28.5	26.8	25.6
Chile	Metropolitan Region (Santiago)	47.3	47.1	47.3	46.4	47.2	46.3	
Colombia	Cundinamarca (Bogota)	45.5	31.0	29.8	28.7	28.1	28.6	
Costa Rica <sup>a</sup>	San José	105.1	105.9	91.5	82.8		59.8	
Cuba	Havana	50.5		44.4	37.5		34.4	
	Pichincha (Quito)	42.3	36.5	36.6	34.6	32.9	32.3	28.3
Ecuador	Guayas	63.7	60.7	56.0	51.0	47.0	44.7	40.1
El Salvador	San Salvador	43.8	47.9	52.2		58.6	43.5	
Guatemala	Guatemala City	63.0	56.2	59.0	66.2	62.2	49.0	
Haiti <sup>a</sup>	Department of L'Ouest (Port-au-Prince)	172.7		138.0	125.2		90.6	
Honduras	Francisco Morazán (Tegucigalpa)	44.7	49.6	45.8	47.5		39.7	
Mexico	Federal District and State of Mexico	40.5	38.2	37.8	37.0	31.1	29.8	27.8
Nicaragua	Managua	43.7	50.8	54.2		46.1	43.9	
Panama	Panama City	85.7	83.5	84.9	88.9	85.7	78.5	77.3
Paraguay	Asunción	78.3	79.5	79.0	73.5	65.5	64.0	
Peru	Lima	41.4	47.8	47.1	46.8	45.5	44.8	
Dominican Republic	National District (Santo Domingo)	46.9	50.0	51.1	53.2	53.6	50.1	
Uruguay	Montevideo		69.5	67.2	64.9	62.3	60.9	
Venezuela (Bolivarian Republic of)	Capital District, Miranda, Vargas (Caracas)	40.9	37.2	34.7	30.1	26.0	21.4	

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database.

<sup>a</sup> Percentages over 100% indicate that the total population of the metropolitan MAD is greater than the total urban population of the country.

### 1. Demographic evolution of large cities

A single figure suffices to illustrate the demographic importance of the metropolises and large cities of Latin America and the Caribbean: one of every three people in the region lives in a city of 1 million or more inhabitants (see table X.4).<sup>2</sup>

Table X.4  
**LATIN AMERICA AND THE CARIBBEAN: CONCENTRATION OF THE POPULATION  
 IN LARGE CITIES<sup>a</sup>**

	Cities of 1 million or more inhabitants							Cities of 5 million or more inhabitants						
	1950	1960	1970	1980	1990	2000	2010	1950	1960	1970	1980	1990	2000	2010
Number of cities	8	11	17	26	38	48	56	1	2	4	4	5	7	8
Population (in thousands of people)	17 981	30 070	53 965	86 003	119 737	156 623	186 185	5 098	11 610	31 131	43 104	56 033	76 518	89 495
Percentage of the total population	11.1	14.1	19.4	24.3	2.6	30.6	32.0	3.2	5.5	11.2	12.2	12.9	15.0	15.4
Percentage of the urban population	26.8	28.7	33.8	37.1	38.9	40.5	40.2	7.6	11.1	19.5	18.6	18.2	19.8	19.3
	Cities of 1 million or more inhabitants in 1950							Cities of 5 million or more inhabitants in 2010						
	1950	1960	1970	1980	1990	2000	2010	1950	1960	1970	1980	1990	2000	2010
Number of cities	8	8	8	8	8	8	8	56	56	56	56	56	56	56
Population (in thousands of people)	17 981	26 411	39 899	54 630	64 303	73 910	79 835	29 371	46 500	73 188	105 521	133 591	163 704	186 185
Percentage of the total population	11.1	12.4	14.3	15.4	14.8	14.5	13.7	18.2	21.9	26.2	29.8	30.8	32.0	32.0
Percentage of the urban population	26.8	25.2	25.0	23.6	20.9	19.1	17.3	43.8	44.4	45.8	45.6	43.4	42.4	40.2
	<b>1950-1960</b>	<b>1960-1970</b>	<b>1970-1980</b>	<b>1980-1990</b>	<b>1990-2000</b>	<b>2000-2010</b>	<b>1950-2010</b>	<b>1950-1960</b>	<b>1960-1970</b>	<b>1970-1980</b>	<b>1980-1990</b>	<b>1990-2000</b>	<b>2000-2010</b>	<b>1950-2010</b>
Average annual growth rate (per 100)	3.8	4.1	3.1	1.6	1.4	0.8	2.5	4.6	4.5	3.7	2.4	2.1	1.3	3.1

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of United Nations, World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2007 Revision [online] <http://esa.un.org/unup>.

<sup>a</sup> Transversal and longitudinal data.

<sup>2</sup> Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2007 Revision [online] <http://esa.un.org/unup>.

Rodríguez and Villa (1998) state that “in demographic terms, the increase in the share of national and urban population of metropolises seems only to have been possible by virtue of the high levels of positive migration seen in the cities that became metropolises.” Indeed, studies show that fertility rates first began to decline in the region’s large cities, which meant that natural population growth in these metropolises was slower than the national and urban rates. Accordingly, the high overall growth rates seen in the first three decades of the period of study can be attributed to the effects of migration (see table X.2). The authors comment that in the 1950s and 1960s, migration was a key driver of growth in cities like Bogota, Caracas and São Paulo (4%), Rio de Janeiro (2.6%), Buenos Aires and Mexico City (2%) and Santiago (1.7%). The migration effect eased in the 1970s and tapered further in the 1980s. The authors also point out that data for the 1990s show that net migration rates fell sharply in all metropolises.

More recent studies (Rodríguez, 2004 and 2009; Guzmán and others, 2006) show that the most populous urban agglomerations (Mexico City and São Paulo) sustained net emigration between 1980 and 1990. This factor, coupled with the demographic shift under way, resulted in a sharp decline in the growth rate of that class of city. This trend of waning strength as a magnet for migration and net negative migration was observed exclusively in the largest cities (Mexico City, Río de Janeiro, São Paulo and Santiago), which only partly validates the hypothesis that metropolises have lost their draw. However, data from the 2000 censuses confirm the hypothesis, showing that metropolises are more likely to lose population; indeed, the census data show that São Paulo, Mexico City and Santiago experienced net emigration. Thus, their loss of attractiveness would appear to be real, although not necessarily continuous.

An analysis of the Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database points up considerable diversity among large cities, and given the number of urban centres that fall under this category, it is hard to give an overview of their demographic characteristics (Rodríguez and Villa, 1998). However, in 2000 there were 39 metropolitan agglomerations with a population of between 1 and 4 million, comprising different types of cities (see table X.5): (i) capital cities (Caracas, Havana, Guatemala City, Santo Domingo, Port-au-Prince, Asunción, Montevideo, La Paz, Quito, Panama City, San Salvador and San José); (ii) large cities in border areas or regions with historically small populations (Porto Alegre, Brasília, Belém and Manaus in Brazil, and Ciudad Juárez and Tijuana in Mexico); and (iii) cities with strong economic growth (Curitiba, Guayaquil, Guadalajara, Monterrey, Puebla, Maracaibo, Porto Alegre, Recife, Salvador da Bahia and Fortaleza).

Table X.5  
**LATIN AMERICA: POPULATION AND GROWTH RATE OF CITIES WITH 1 MILLION TO 4 MILLION INHABITANTS, BY NUMBER OF CITIES, 1950-2000**

<b>Cities with 1 million-4 million inhabitants</b>	<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
Number of cities	1	3	11	18	29	39
Total population	1 223 899	3 764 344	15 741 378	29 525 217	48 789 940	73 268 132
	<b>1950-1960</b>	<b>1960-1970</b>	<b>1970-1980</b>	<b>1980-1990</b>	<b>1990-2000</b>	<b>1950-2000</b>
Growth rate	11.2%	14.3%	6.3%	5.0%	4.0%	8.2%

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2009.

As table X.4 shows, during the period of study, a large number of urban areas joined the ranks of cities with between 1 and 4 million inhabitants, compared with just one in 1950. In addition, these cities' populations have generally grown faster than those of in the metropolises, a phenomenon that Rodríguez and Villa had already attributed back in 1998 to heavy migration to these cities from the 1950s to the 1970s. Despite this phenomenon and as with the metropolises, natural population growth has been a progressively less important factor in the demographic growth of most large cities.

Population growth in most national capitals topped 2.5% during the last intercensal period, proof that these cities are still a migration magnet. Moreover, a recent study by Rodríguez (2009) states that "most of these cities continue to have net positive migration, which points to the continued preeminence and attractiveness of this superior segment of the region's urban systems." This phenomenon is plain to see in Guatemala City, Santo Domingo, Port-au-Prince, Asunción, La Paz, Panama City and San José.

Large cities in border areas or regions with historically low population presented high growth rates (over 3.8%) during virtually the entire period of study, and net positive migration is observed in all of them. In Mexico, Ciudad Juárez and Tijuana receive immigrants from every corner of the country and even from other countries in Central America, due to their location on the border with the United States. Brazil's large cities offer another example of net positive migration. Brasilia is a clear example of a large city experiencing population growth and inflows of migrants, while Belém and Manaus offer an alternate destination for the migratory flows to the country's large metropolises.

There are cities that have grown quickly during the period under consideration based on their power to attract migrants, which can be attributed to a number of factors, including a local economy driven by trade (Guayaquil and Maracaibo) or the presence of industrial conglomerates (Vitoria, Curitiba, Guadalajara and Monterrey). Growth in other cities has been driven by their proximity to a capital city (Campinas and Santos in Brazil, Puebla in Mexico).

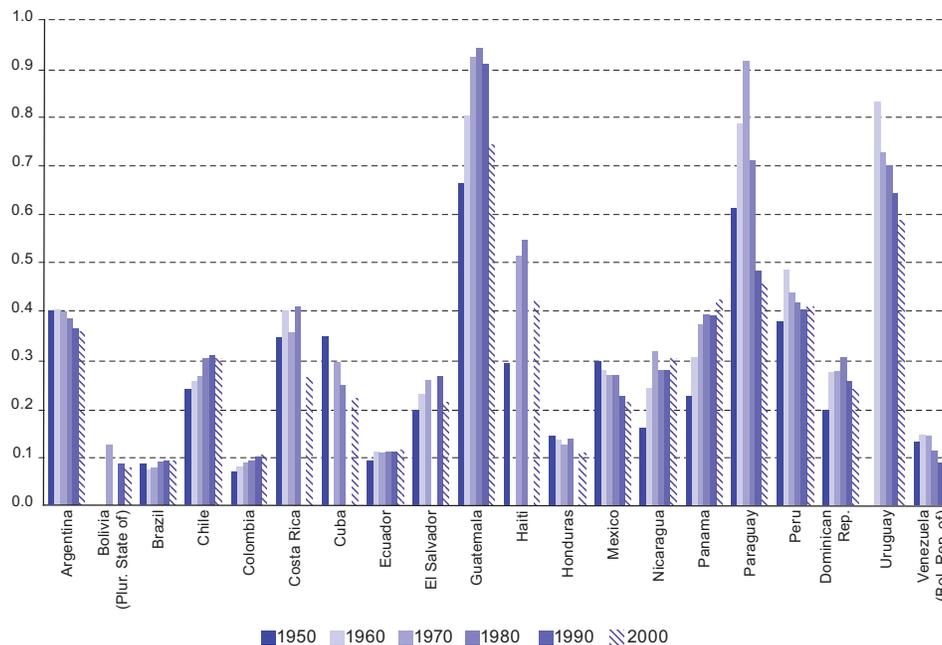
In short, although large cities are undeniably diverse in terms of demographic growth, generally speaking they all have above-average demographic growth rates. The fact that growth is much slower now than two or three decades ago reflects not a loss of attractiveness to migrants, but rather the progression of a demographic transition and a reduction in migratory flows. Metropolises and megalopolises are the exception. Aside from Lima, Bogota and perhaps Buenos Aires, population growth in these cities is not keeping pace with national averages, and in fact they are experiencing net out-migration.

## **2. Figures and debate on the primacy and development of large cities**

The hegemony of large cities has another manifestation: the existence in most of the region's countries of highly polarized ("high primacy") urban systems in which one or two cities far surpass the rest in terms of number of inhabitants and factors such as productive capacity, political power, key institutions and infrastructures.

Not all countries are in this situation, whether due to the prevalence of another territorial distribution model (simultaneous dominance of two cities in Ecuador, Brazil and the Plurinational State of Bolivia, and of four cities in Colombia) or the existence of an urban system with numerous interlinking nodes that counterbalance the importance of the capital city, such as in Mexico (CONAPO, 2001 and Tuirán, 2000). A comparison of primacy ratios illustrates this situation and indicates that the region stands apart in this regard from the rest of the world (see figure X.1). Indeed, ratios of greater than two are the exception in the rest of the world but the rule in Latin America and the Caribbean.

Figure X.1  
**LATIN AMERICA: PRIMACY INDEX, 1950-2000**



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2010.

It is natural to assume that this primacy correlates to underlying factors, and this logic leads to a virtually *prima facie* presumption of a relationship between the degree of urbanization and the level of primacy, whereby the more urbanized a country is, the greater the diversity of nodes will be in its system of cities and the less primacy its capital city will have. A review of the data compiled from the 2000 round of censuses indicates that any such correlation is not significant because high primacy ratios are seen both in very urbanized countries (Chile, Argentina and Uruguay) and in countries that are just beginning to urbanize (Guatemala and Panama) (see figure X.1). The correlation was stronger in the middle of the last century, although at 10%, was not significant, and furthermore it was counter to the cited hypothesis ( $r=0.34$ ), inasmuch as the two most urbanized countries (Uruguay and Argentina) had urban systems with high primacy ratios.

The evolution of urban primacy over the past 50 years has been dynamic and complex. Until 1970, the empirical evidence confirmed the validity of assertions of a sustainable upward trend. In truth, the figures corresponding to the period 1950-1970 already intimated that there were several exceptions to the trend, namely Buenos Aires, Rio de Janeiro and Montevideo. In the 1970s, and more plainly still in the 1980s, the turning points mentioned earlier were reached, which contributed to an impression of demographic deconcentration as inevitable. This was supported by several objective processes, which have been variously interpreted. The diversity and intensity of certain urban problems (unemployment, pollution, insecurity and overcrowding, among others) or a virtual urban crisis painted a disheartening picture of the traditional areas of concentration. Specifically, pollution, scarce basic services and increasing exposure to natural catastrophes due to displacement of the population to high-risk areas became powerful repulsive forces that discouraged potential immigrants and put pressure on national and metropolitan authorities; the counter-urbanization phenomenon in Europe was also considered for sake of

comparison. But the most convincing argument had to do with the territorial consequences of three lengthy processes that began in the 1990s: the change in the development model (open markets and liberalization); the expansion of the “postfordist” production model; and political and administrative decentralization. The assumption was that liberalization would benefit regions that produced a large volume of globally traded commodities and would rejuvenate rural life and economies (Daher, 1994, p. 64) inasmuch as productive restructuring would promote a spatial restructuring. Looking to the process of metropolitan deconcentration in the developed countries, the conjecture was that decentralization would strengthen local development and lead to a redistribution of resources and population.

However, the effects of these territorial processes have not been as clear or dramatic as expected. Moreover, since the 1990s, there has been a certain resurgence in the appeal of metropolises, as supported by new theoretical approaches, notably the “global cities” approach (De Mattos, 2001). The revitalization of these cities is reflected in objective indicators, such as declining poverty, less pollution and expanded coverage of basic services. This resurgence does not, however, mean a return to the era of large waves of urban migration, although the attractiveness of these cities is observed to be on the rise among certain groups (international immigrants, professionals, higher education students) and a complex configuration of migrant and commuter links is growing denser, characterized by a network of adjacent cities functionally integrated into a large city. These phenomena are addressed later in relation to “postindustrial metropolitan mutations” (Rodríguez, 2011; De Mattos, 2010).

Given this situation, although most urban evolution models (Sobrino, 2011) and the data on developed countries (Arroyo, 2001) indicate that deconcentration should be the prevailing trend, the future of the pattern of concentration in the region’s large cities remains uncertain.

The causes of this pattern of concentrated urbanization in large cities are complex and have been the subject of lengthy and inconclusive debate. While some authors focus on the historical roots of this phenomenon, tracing the causal chain back to the colonial era and subsequently to the formation of nation-states, others zero in on the development strategies implemented in the last century—particularly the import-substitution industrialization and State-driven industrialization strategies—as the main cause. Naturally, the latter tend to conclude that the adoption of a new development model, especially one in which greater investment drives the growth of productive sectors located outside the large cities, can only alter the relevance of large cities.

However, as seen in the primacy index, the available data point to considerable diversity in terms of the evolution of the demographic and socioeconomic concentration of large cities. In some countries, an intense process of deconcentration is under way in the capital city, with people moving to other cities, many of which are becoming large cities, as noted in chapter IX (Rodríguez, 2011). In others, not only has the level of concentration in the capital city not abated, it is rising. A special type of deconcentration, which has been described in the specialized literature, occurs within a relatively small radius and consists of the loss of the demographic and productive importance of a metropolis due to an increase in the population and economic activities of a cluster of nearby cities. Rather than a deconcentration process, what may be happening in these cases is an expansion in the scale and scope of the metropolis, or a “concentrated deconcentration.” This type of phenomenon has been observed primarily in Brazil (Pinto da Cunha and Rodríguez, 2009). In contrast, since 1980 Mexico’s capital city has been experiencing an undeniable process of deconcentration, both in demographic and economic terms, owing to the demographic and productive expansion of distant cities (Sobrino, 2011).

As for the effects of metropolitan concentration, specifically the strong primacy of the metropolis, that is, the degree of demographic concentration of a country's capital city, there is widespread consensus in political and academic circles as to the problems associated with this phenomenon (IDB, 2011). Among other areas of convergence, it is widely accepted that this degree of concentration would be an obstacle to economic growth once a certain threshold of development is reached (Williamson, 1965; Wheaton and Shishido, 1981; Henderson, 2000). With very little variance, these authors conclude in their studies that there is an inverted-U relationship between economic development and urban concentration that represents the most obvious expression of territorial disparities. According to this relationship, economic growth drives urban concentration until a saturation point is reached at intermediate per capita income levels, at which point urban concentration levels begin to fall.

There is further consensus on the "urban deficits" analysed in chapter VIII and their association with swift population growth and mass migration from the countryside, although these are no longer significant factors for many large cities, a topic that is examined later. As explained in chapter VIII, rural to urban migration dominated the attention of governments, analysts and public opinion during the second half of the twentieth century. This type of migration was studied much more than any other and was also the subject of the most drastic interventions, generally designed to discourage or redirect it.<sup>3</sup>

This interest can be attributed to a number of different factors, including evidence of the enormous number of immigrants who arrived in these cities, fuelling rapid and sustained population growth. However, even more significant were the obstacles, lack of capacity and even negligence on the part of metropolitan authorities in meeting the needs of this tidal wave of immigrants. People migrated in search of work and better living conditions, which supposedly could be had in the cities but most certainly could not in their places of origin, from which they were virtually expelled owing to lack of opportunities or even worse situations. Regarding access to employment, as explained in the description of the analysis of rural-to-urban migration, jobs became harder and harder to come by in the formal sector, propelling rapid growth in the informal sector, which despite the lack of job security offered better pay and prospects than did rural or small town economies. Until the 1980s, weak job creation in the formal sector was basically offset with low quality jobs in the informal sector. This changed, however, with the debt crisis and the "lost decade" because the economic collapse was so deep that not even the informal sector went unscathed. As a result, unemployment climbed into the double digits in several countries and national job creation capacity floundered for several years. In fact, not even the five-year boom between 2003 and 2008 was enough to get regional unemployment back under 7%.

In any event, practically since mass migration to the large cities began, there has been no doubt that the government's traditional role in providing public services, social protection and social services is crucial, given immigrants' impoverished living conditions and precarious tenure, whether in the city or on its outskirts, often as a result of invasions, takeovers, or squatting. However, structural deficiencies and weaknesses in the delivery of goods, services and protection have left an indelible mark on Latin America's cities. The clear manifestation of this holdover debt is the image of chaotic large cities; of aggressive large cities, especially metropolises and megalopolises; of poor and neglected peripheries; and of informal settlements with no services in high-risk areas. Despite the achievements made by these cities

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<sup>3</sup> Mexico's first population programme, which was launched under the General Population Act of 1973, introduced a demographic growth target of 1% for 2000 and established the first National Population Council (CONAPO) in the region. The slogan of this programme with respect to migration was known as "the three r's": retention of population, especially in the countryside and small cities; relocation of population, especially to coastal areas and along the northern border, including migration from large cities, and redirection of migration flows, in order to diversify them and prevent concentration in the capital.

in recent years, which are described and analysed later, there is still no question that they have real deficits. These are more apparent in large cities, in some cases because they are actually more serious and in others simply because they receive more attention from the public and the media. The urban deficits that tend to be exacerbated in large cities are sectoral —specifically, housing, transportation and infrastructure —environmental and related to citizen security. The large populations, extensive geography and intensity of productive activity characteristic of large cities conspire to make the situation worse, both directly through factors such as diseconomies of scale, concentration of networks and systems, generation of increasingly larger volumes of waste and the rising cost of territorial management, etc., and indirectly through factors such as rising prices for buildable land, higher unit costs and declining social capital.

There are other factors of equal or greater importance, such as scarcity of resources, lack of planning and failures in institutional coordination and strategic metropolitan governance (IDB, 2011; UN-Habitat, 2009).

Lastly, another aspect of the disadvantages of urban concentration that is universally recognized is the phenomenon of informality in labour, social security, housing and urban planning contexts. Traditionally, informality has been associated with low productivity, social vulnerability, disorder and insecurity, depending on the context. Given their size and area, Latin American metropolises have a “history of informality,” and any expectation that this will disappear in the short or medium term would be wishful thinking (Jordán, Rehner and Samaniego, 2010).

Yet, the notion that these disadvantages are insurmountable should be reexamined in light of the processes described in previous chapters and sections, in relation to the resurgent appeal of urban and metropolitan areas and the improvements and forward momentum seen in large cities, even taking into account the growth and vigour of the informal job sector, which will not likely disappear anytime soon. Moreover, the new demographic and migration patterns in these cities are less taxing than in the past, as growth and immigration have eased. Lastly, as explained later, “postindustrial metropolitan mutations” can modify the role and functioning of large cities.

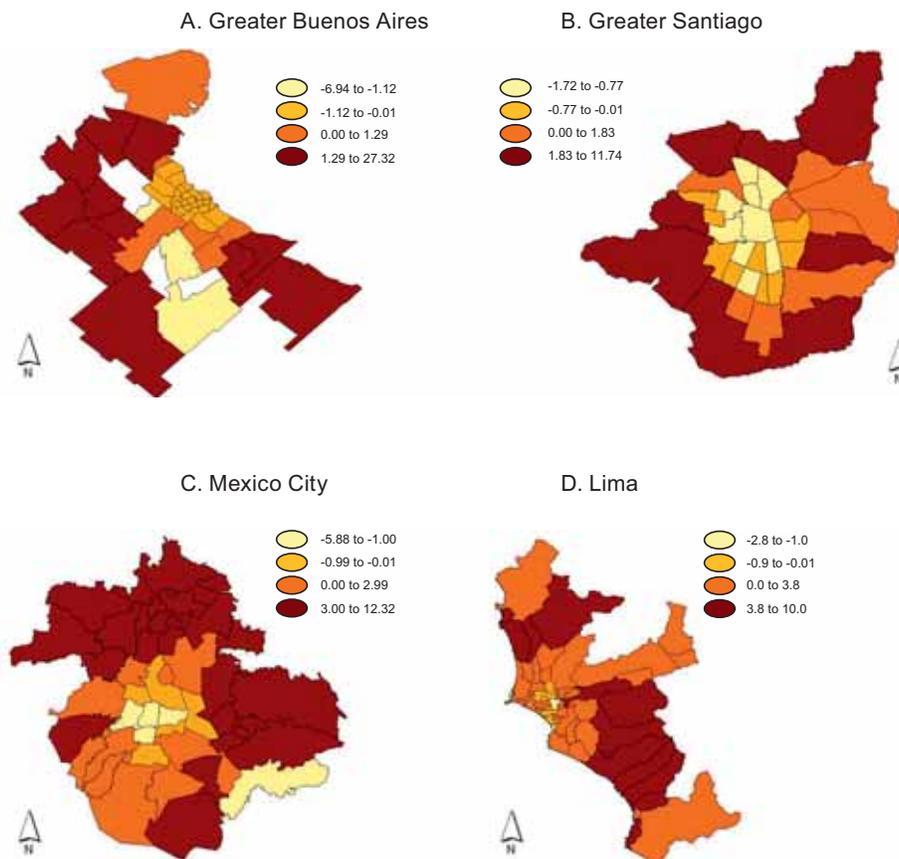
### **3. Informality and peri-urban growth**

Growth at the periphery of metropolises, characterized by the influx of poor people from the countryside and other cities, has been a distinctive trait of Latin American urban areas for the past 50 years (World Bank, 2008). This informal expansion on the outskirts of cities has continued in recent years, but in several countries, especially the most urbanized, it has essentially been the result of massive numbers of poor people moving from central and peri-central areas of cities to the periphery (Angel and others, 2011; Aguilar and Escanilla, 2011; Rodríguez and Busso, 2009; Polese, 1998; Ingram, 1998). Census data from the 2000s confirm that peri-urban expansion and depopulation of city centres are ongoing trends (see map X.1), although there are signs of demographic recovery in some city centres (see map X.2) (Abba and others, 2011; Sobrino, 2011).

This contrast between peri-urban growth and depopulation of city centres is critically important in analyses of the urban situation and interventions in the large cities of Latin America. In fact, it is among the most intensely debated topics in the region and beyond (UN-Habitat, 2009; UNFPA, 2007). Many experts have concluded that this type of growth is a net negative, taking into consideration its varied and high costs, both for the city as a whole and for its inhabitants (IDB, 2011). However, there are also specialists who look favourably upon this peri-urban expansion, on the basis of different arguments that

draw on a body of theory rooted in the experience of developed countries,<sup>4</sup> in individual preferences and freedoms, in the advantages of less urban density and the limitations and secondary effects of regulations and policies designed to curb growth on the urban periphery. There are also middle-ground positions, such as the one taken by the authors, who recognize the costs of urban sprawl but are opposed to measures to contain growth and densification, and instead propose the “making room” paradigm as an alternate strategy, especially for cities that are forecast to experience significant growth in the coming decades.<sup>5</sup>

Map X.1  
**LATIN AMERICA (SELECTED COUNTRIES): INTERCENSAL GROWTH RATES OF METROPOLITAN AREAS IN MINOR ADMINISTRATIVE DIVISIONS, 1990-2000**<sup>a b</sup>



**Source:** CELADE Population Division of ECLAC, “Urbanization prospects”, *Demographic Observatory*, No. 8 (LC/G.2422-P), Santiago, Chile, 2009, p. 45.

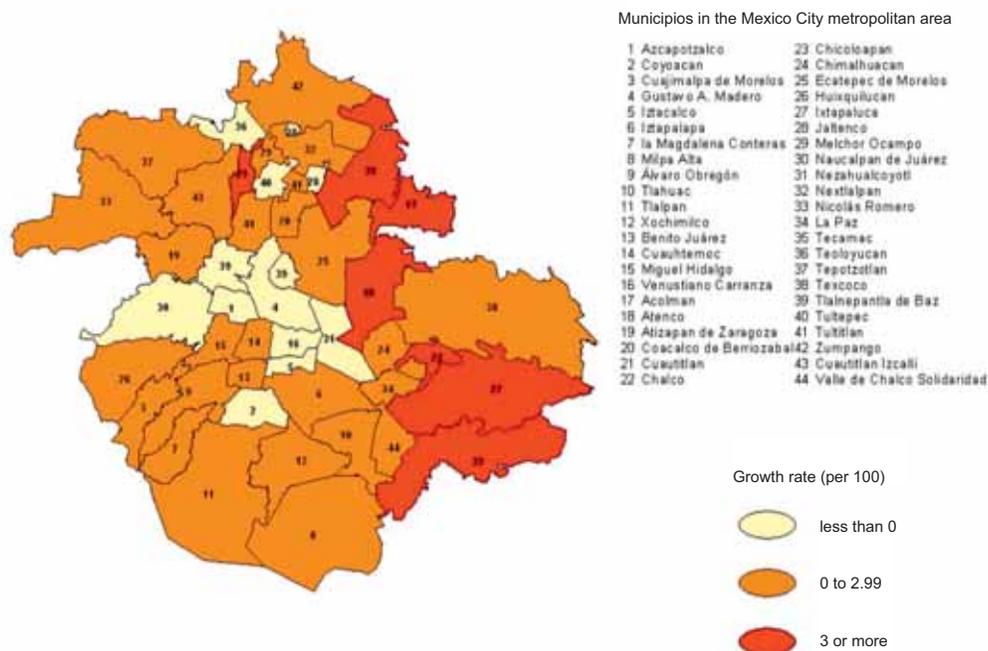
<sup>a</sup> Greater Buenos Aires, 1990-2001; Greater Santiago, 1992-2002; Mexico City, 1990-2000; Lima, 1993-2007.

<sup>b</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

<sup>4</sup> One example is the study by Ingram (1998), in which personal income gains are associated with demand for more space, which is sought in less populated areas that can be legally purchased, typically the suburbs, a shift that is facilitated by the road improvements associated with rising national income.

<sup>5</sup> This is the idea suggested by Angel and others (2001, p. 2), who state that the prevailing urban planning paradigm now guiding the expansion of cities and metropolitan areas is premised on the containment of urban sprawl, which is not appropriate in rapidly urbanizing countries, that is, countries that are seeing faster growth in the cities. An analysis of past, present, and future urban land cover suggests a different paradigm—the “making room” paradigm—as a more realistic strategy for cities and metropolitan regions that need to prepare for their inevitable expansion.

Map X.2  
**MEXICO: INTERCENSAL GROWTH RATES IN MINOR  
 ADMINISTRATIVE DIVISIONS, 2000-2010<sup>a</sup>**



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2012

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

#### Box X.2 VIEWS ON URBAN INFORMALITY IN LATIN AMERICA

There are different views concerning the factors that determine residential informality in the cities of Latin America. In one of its publications (ECLAC, 2010a), the Economic Commission for Latin America and the Caribbean (ECLAC) notes a combination of demographic factors (rapid growth with the arrival of immigrants in need of low-cost housing), economic factors (labour informality and scarce public resources to address the exponential increase in demand for housing following the aforesaid population growth) and institutional factors (poor national and local capacity to enforce rules and regulations in peri-urban areas). According to ECLAC, “Urban poverty and informal labour markets go hand in hand. [...] urban concentration in Latin America has been coupled with sluggish labour markets, especially since the start of the 1980s, which has left much of the working population concentrated in informal urban sectors with low productivity. This has combined with the phenomenon of urban marginalization observed in previous decades: the rapid expansion of precarious settlements on the outskirts of large cities (mainly as a result of intensive migration from rural to urban areas and the natural population growth in towns). The combined effect of urban marginalization and informal labour markets was the formation of a vicious cycle of spatial and productive exclusion.” Along these same lines, several specialized researchers who have collaborated with ECLAC draw attention to the structural factors associated with poverty and inequality in the region, which were particularly serious in the 1980s, and to the functioning of the urban land market: “The situation of poverty, on one side, and conditions in the legal land market, on the other, mean that a variable but large —and growing since the 1990s in some countries— percentage of people must live in illegal situations, which leaves them highly vulnerable in both legal and urban-environmental terms. At present, the percentage of the population in Latin America that is living illegally/informally on urban land approaches 40% in many cities and metropolitan areas. The regularization programmes that the region has been implementing for decades, but more aggressively since the 1970s, have not yet succeeded in altering the trend of rising numbers of urban dwellers living in illegal conditions” (Clichevsky, pp. 7-8).

## Box X.2 (concluded)

Other authors discuss the function of urban regulation, specifically its secondary effects, in counterpoint to the ECLAC assertion regarding institutional weakness. Proponents of this view fall into at least two camps. Authors in one camp regard urban regulations as distortions that affect the natural equilibrium created by market forces. This position is based on research conducted in developed countries and on the experience of these countries, in which regulations are reflected not in informality but rather in the cost of land. According to Pendall, Puentes and Martin (2006, p. 1), economists attribute a part of the high cost of housing to regulations that restrict supply and improve the quality of housing and neighborhoods. There are empirical studies on the situation in the region that have detected a relationship between urban regulation, the supply of buildable land and informality. Recent studies in Brazil (Ávila, 2007; Biderman, 2008) show that informality levels are higher in more regulated cities, which supports the hypothesis that regulating land use and imposing rules on building may reinforce other factors that contribute to irregular and informal occupation of urban areas (Rolnik, 2011), but in general this is little data to support this theory and other studies have been conducted in which this relationship was not observed. Based on what has happened in Latin America, authors in the other camp do not question regulation per se, inasmuch as they find, *inter alia*, that the land market in the region functions poorly, but rather the asymmetrical and unequal way in which it is applied. Specifically, they maintain that the exclusionary nature of metropolitan regulations incentivize peri-urban informality among the poor. According to Rolnik (2011), this situation leads to an exclusionary regulatory framework, restricting access to land among the low-income population and conditioning this access solely and exclusively for this “captive” market, or in the case of its absence or insufficient demand under the conditions offered, on informality (Rolnik, 2011).

Taking a still broader approach, other authors recognize the main determinant of informality as the high cost of urbanized land, which is in short supply not because land is scarce—in fact, it is abundant in the region—but rather due to a combination of market failures, regulatory problems, policy omissions and structural inequalities, which worsened during the era of rapid population growth in the cities. This would suggest that the main determinant factors of informality and residential precariousness, especially on the urban periphery, are failure to impose high tax penalties on undocumented urban income, negligence in the use of public land and partiality in the application of urban regulations (Smolka, 2011, p. 111 in Aguilar and Escanilla, 2011).

Lastly, some authors make an important distinction in analysing the link between regulations and informality, which has to do with the characteristics of regulations, which are neither unique or uniform (Rolnik, 2011; Pendall, Puentes and Martin, 2006). Accordingly, it is highly debatable whether a generic relationship can be established without considering the content of regulations. Smolka states it clearly in these terms: “The hypothesis should be not discarded that high prices (of urbanized land) can/should largely be attributed to the prevalence in Latin American cities of regulations that are excessive or very strict in places where they should be more poor friendly (rich areas) and lax where they should be stricter (poor areas). In other words: wealthy areas are inadequately regulated and poor areas are not adequately regulated” (Smolka, 2011, p. 111 in Aguilar and Escanilla, 2011).

**Source:** Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC.

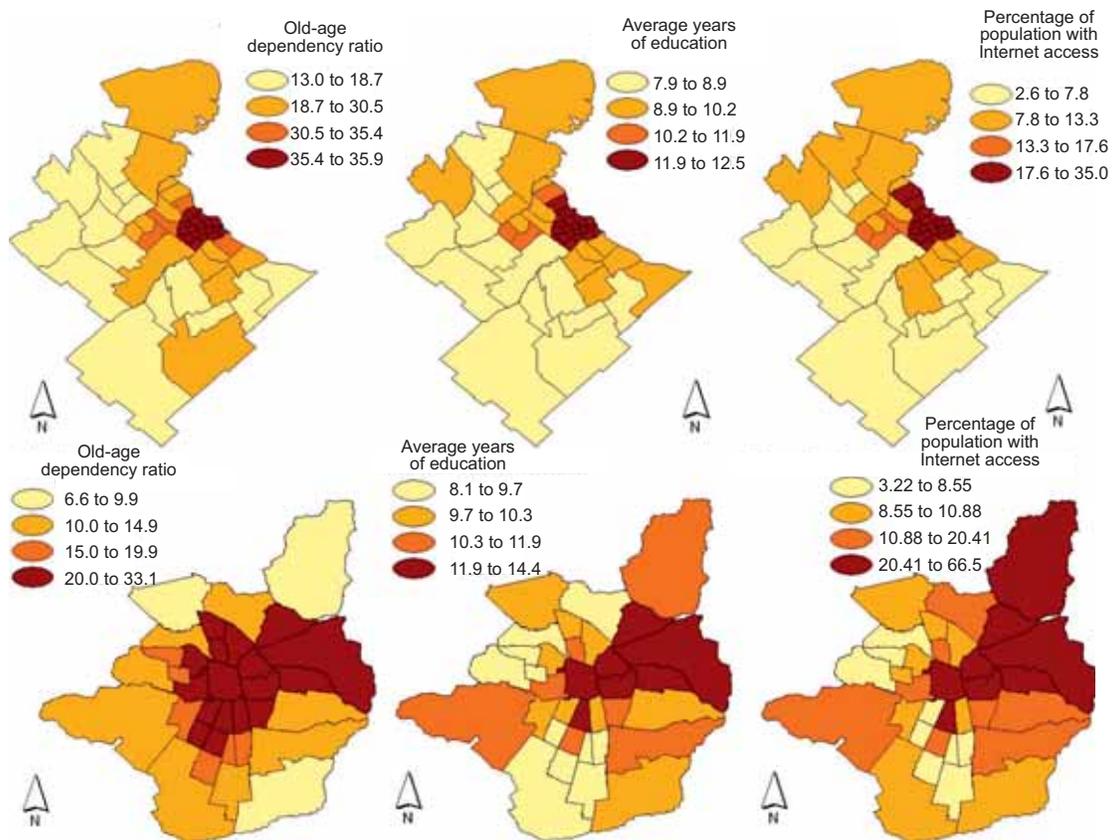
Peri-urban growth in Latin America has a structural relationship with informality, whether due to institutional weaknesses, which translate into a lack of preventive measures, or the precarious settlements that exist outside the official rules of operation of the city (see box X.1). Urban informality is linked to labour market informality, and both tend to be mutually reinforcing. It is also related to failures in urban processes, which can be attributed to inadequate infrastructure, equipment and roads. The most visible expression of residential informality in metropolises are precarious settlements, an issue addressed in chapter IX,<sup>6</sup> and these settlements tend to be concentrated in metropolises. For example, recently released data from Brazil’s 2010 census reveal that “... 88.6% of homes situated in subnormal agglomerations (the

<sup>6</sup> Informality is not limited to land invasions because there is also an informal market: “The urban poor do not fall into the category of ‘solvent demand.’ Accordingly, the various types of informality have been predominant in land occupations in the region’s countries. Historically, the poor had to choose to live between two basic types of urban informality: direct occupation and the illegal market” (Clichevsky, 2006, p. 8).

irregular settlements known as *favelas*) are located in 20 metropolitan regions in Brazil, but São Paulo, Rio de Janeiro and Belém are where nearly half (43.7%) of all homes situated in urban agglomerations in the country are located” (Metropolity Observatory of Brazil [online] [www.observatoriodasmetropoles.net/index.php?option=com\\_k2&view=item&id=119%3Amaioria-dos-aglomerados-subnormais-em-rms&Itemid=164&lang=pt](http://www.observatoriodasmetropoles.net/index.php?option=com_k2&view=item&id=119%3Amaioria-dos-aglomerados-subnormais-em-rms&Itemid=164&lang=pt)).

The phenomenon of informality is not limited to these settlements but rather affects the entirety of metropolises, such that a distinction tends to arise between the formal city and the informal city (UN-Habitat, 2009). Map X.3 clearly shows the socioeconomic disparities between central areas of metropolises (the centre of the formal city, which can also contain slums) and the periphery, where the deficits are typically more pronounced and widespread. Furthermore, the mere fact of living on the periphery of a metropolis can adversely affect the life trajectory of its inhabitants, who are more likely to remain poor or become unemployed if they continue living there (Roberts and Wilson, 2009).

Map X.3  
**GREATER BUENOS AIRES AND GREATER SANTIAGO: SELECTED SOCIOECONOMIC DISPARITIES BETWEEN CENTRAL AND PERIPHERAL MUNICIPIOS, 2000 ROUND OF CENSUSES<sup>a</sup>**



**Source:** CELADE-Population Division of ECLAC, “Urbanization prospects”, *Demographic Observatory*, No. 8 (LC/G.2422-P), Santiago, Chile, 2009.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

The characteristic informality of Latin American metropolises, particularly their peripheries, is a historic problem with lasting effects, but as with the debate surrounding precarious settlements, described above, there are authors who believe that informality has its upsides. In the economic arena, these positive aspects would be flexibility, lower production costs and entrepreneurship. In the social realm, the pluses are self-governance, solidarity and community initiative. With respect to housing, it would be the mobilization of personal income to build homes. In any event, it should be noted that most of these authors are not apologists for informality because they recognize that informality occurs against a backdrop of poverty, insecurity and disorganization.<sup>7</sup>

There are other arguments in this debate, which contribute to a new vision of the metropolitan periphery. The first is based on the experience of neighborhoods and families that have seen real progress. Living on the periphery, even in deplorable conditions at first, is not an eternal condemnation to poverty. Building on the hard work of families, on community organization and mobilization, on public action and on the economic and social development of each country, a not-insignificant percentage of precarious settlements have become established neighborhoods, joining the fabric of the formal city, or at least becoming established residential areas with full coverage of basic services, including transportation. This should certainly not be construed as evidence that informality and precariousness of peri-urban neighborhoods are problems that simply resolve with the passage of time, since there are numerous examples of areas that fail to shake off other problems, such as stigma, poverty, violence, and vulnerability.

The second argument has to do with the emerging trend of social diversification on the urban fringe, partly due to the residential consolidation described above but also to the construction of housing developments and neighborhoods for middle- and upper-class families. In some cases, this is a process of “colonization” in which the new neighborhood is not surrounded by older, typically poor settlements and is immediately incorporated into the formal city through expedited road connections and an elevated social status that clearly distinguishes it from the average peri-urban community (Angel and others, 2011; Graham and Marvin, 2001). In other cases, it is a process comparable to “gentrification,” with the sole exception being that it occurs on the outskirts of a city and the new neighborhood lies adjacent to older poor settlements, due to which it typically takes the form of a gated community or condominium. As to the factors driving this process, the delivery of connectivity, particularly through the construction of new roads, the business strategies of construction companies and the profit-seeking motives of real estate investors are key in raising the value of certain plots of land located in poor peri-urban areas (Da Silva and others, 2011; Aguilar and Escanilla, 2011; Cáceres and Sabatini, 2004). An intense debate is under way concerning the effects in terms of social integration and cohesion of this new social “blending” taking place in some areas on the urban periphery. The debate is polarized between those who believe it reduces socioeconomic residential segregation and facilitates social cohesion and those who believe that it breeds mistrust and conflict, due to the physical isolation and social differences between the various groups (Heinrichs and others, 2012; World Bank, 2008; Cáceres and Sabatini, 2004). There is not yet sufficient evidence to say who is right, but it is clear that in mathematical terms, this nascent out-migration of middle- and high-income groups to the periphery is reducing the traditional indices of socioeconomic residential segregation, which measure geographic distance only, not the frequency of social interaction or level of social cohesion.

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<sup>7</sup> One example of this viewpoint is the following assertion, made in response to the mistaken idea that the poor are a drain on the urban economy: “On the contrary, the urban poor are essential to the economy of cities and to national development. Many certainly work in the informal sector. But the informal sector is not just a messy mix of marginalized activities, as it tends to be viewed; much of it is competitive and highly dynamic, well integrated into the urban economy and even into the global economy (UNFPA, 2007, p. 37).

The third argument is based on a *fait accompli*: the conviction that peri-urban settlements are irreversible in the short and medium term and that policies should take the dual approach of discouraging and preventing poor urban sprawl while also seeking to address the existing needs of peri-urban communities. This two-pronged approach has economic as well as political costs. Specifically, it creates expectations of urbanization and regularization among potential newcomers to the urban periphery, whether “squatters” or individuals who resort to the informal market. However, to deny people access to basic services and refuse them the right to reside in the city just because they live on the informal periphery is unacceptable, while maintaining a division between the formal city and informal city, between the centre and the periphery, is politically and socioeconomically unsustainable (Aguilar and Escanilla, 2011; Torres, 2008; UNFPA, 2007; Clivchensky, 2006 and 2002).

The fourth argument is a defense of the advantages and strong points of informality and the periphery. This position has frequently been espoused by those who defend the informal sector as a strategic and lasting alternative for metropolitan economies,<sup>8</sup> but there are also specialists who recognize the appeal of informality in both the labour market and the residential sector. In the labour sector, there are studies that find a paradoxical preference for informality, whether based on an appreciation of its benefits, ignorance of other possible options or inability to make use of them. Linn (2010, p. 15) finds it very surprising that there is a widespread preference, borne out by Latin American survey data, for informal over formal sector employment, even though the former is generally less productive. In housing, informality has objective advantages not only in terms of purchase costs but also in terms of taxes, which informal residential units do not pay, and the free services, typically electricity, that are sometimes obtained through illegal connections to the city’s supply.<sup>9</sup> Furthermore, recent qualitative studies conducted as part of the *Minha Casa, Minha Vida* programme in Brazil have found in certain peri-urban areas an unanticipated appreciation of these pluses.<sup>10</sup>

In view of the foregoing, it makes no sense to adopt policies and programmes that exclude or impose penalties on peri-urban dwellers. On the contrary, the consolidation of areas on the periphery should be made a priority in all large cities because it is the only way of ending the vicious cycle of dual and divided cities. Of course, this can be coupled with policies to prevent further urban sprawl, but since demand for housing will continue to rise over the next several years,<sup>11</sup> control measures should be accompanied by densification policies and programmes that, among other things, facilitate high-rise construction, the use of vacant lots and the renovation of housing located in city centres.

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<sup>8</sup> The De Soto study (1986) is an emblematic example of this line of reasoning, as is its appreciation of the flexibility and entrepreneurial capacity of this sector and its proposal to grant property rights to this sector.

<sup>9</sup> This does not necessarily mean that informality has a lower individual cost in the long run, since it does have both direct and indirect costs. Conversely, the costs of formality should be considered in the design of residential formalization and regularization programmes, which very often fail because they did not consider the hardships that “regularized” families would face in covering these costs.

<sup>10</sup> See [online] [http://www.observatoriodasmetroles.net/index.php?option=com\\_content&view=article&id=1713%3Aminha-casa-minha-vida-experiencias-de-autogestao-coletiva&lang=pt](http://www.observatoriodasmetroles.net/index.php?option=com_content&view=article&id=1713%3Aminha-casa-minha-vida-experiencias-de-autogestao-coletiva&lang=pt).

<sup>11</sup> The increase in the number of homes, the indicator used to calculate demand for housing, is outpacing the increase in population due to a combination of factors, including demographic inertia, a decline in average family size and an increase in the divorce rate. It is also possible that large cities are seeing demand for second homes among foreigners or people who live in other areas of the country.

#### 4. Structural mutations in metropolises: restructuring and the public agenda

Large cities are undergoing structural changes, and the primary basis for systematization and comparison is the experience of cities in developed countries. The main conclusions of this analysis (Ingram, 1998) point to an economic and demographic deconcentration trend in metropolises, through growth at the periphery and the emergence of edgeless cities; the diversification of business districts, consistent with a transition from monocentrism to polycentrism; and the increasing service-oriented specialization of the historic business district (relocation of the financial centre). In more operational terms, the following constants have been identified (Ingram and Echeñique, 2006; Galetovic and Jordán, 2006): (i) a trend of declining density as distance from the centre increases; (ii) a trend of declining average density and a shrinking density gap between the city centre and the periphery resulting from an increase in national income; (iii) a concentration of jobs in city centres, which does not occur with housing, coupled with a deconcentration trend as income levels rise; (iv) along with the decentralization of sources of employment, a reduction in traffic along the main arteries leading into the city and shorter commute times, since people who work in the urban periphery tend to live closer to their place of employment.

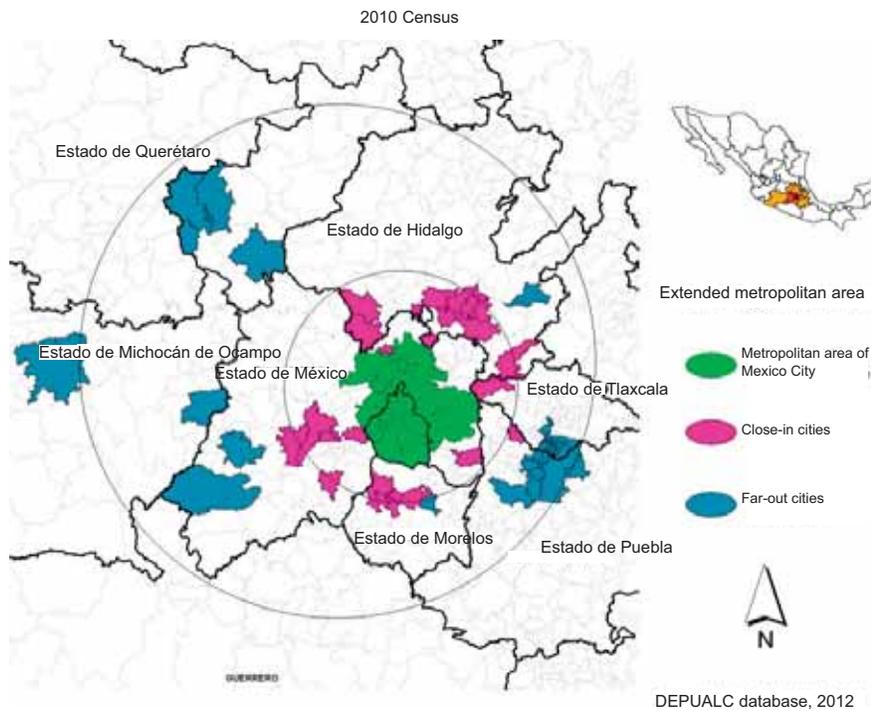
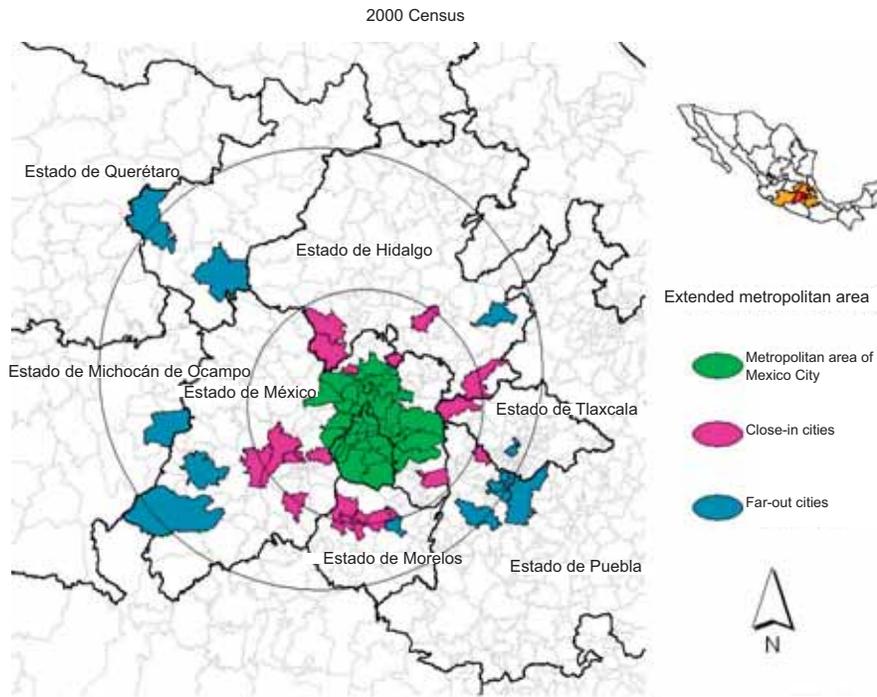
These conclusions are based on the experience of cities in developed countries where, notwithstanding the problems of recent years, the relevant markets (land and housing, among others) work and are subject to effective urban regulations. This is an important difference from cities in developing countries, a category that includes Latin American metropolises, where markets and regulations are weaker. Thus, the evolution of large cities in the region may diverge from these stylized patterns. Indeed, there is considerable debate as to whether these trends hold true for the region's cities. The previous section mentioned the gulf that exists between the suburban deconcentration trend seen among middle and upper classes in cities in developed countries (particularly the United States) and the sprawl seen in poor peri-urban areas until just recently in the cities of Latin America. Moreover, the hypothesized decrease in commute times would not yet seem to apply to the region's countries, where a large percentage of workers on the urban periphery must still travel great distances to get to work, using mass transit options that are frequently unsafe or traveling on heavily congested roads.<sup>12</sup> Regarding the idea concerning the transition from a monocentric city to a polycentric city, a recent study states, "... some authors have enthusiastically embraced the theory, others with greater caution, and in a good number of cases this had led to a thorough review of its components and the finding that it cannot be fully and unequivocally supported" (Cuervo, 2010, p. 18).

Regarding the configuration of sprawling metropolitan areas or urban regions (De Mattos, 2010; Sassen, 2007), studies done in the 1990s were already anticipating this process, which can be attributed to increasing interaction between the original metropolis and an array of cities located up to 200 kilometres from its centre (Gilbert, 1996). Map X.4 illustrates this situation in the case of Mexico City, based on 2000 and 2010 census data. Meanwhile, some studies, using 2010 census data, have already verified the existence of a São Paulo "macrometropolis" comprising 153 cities and 30 million inhabitants.<sup>13</sup> It is impossible to imagine what metropolises will look like in the future without taking into account this process of diffusion of population, facilities, infrastructure and the "artifacts of globalization" (De Mattos, 2010). The most important distinction to make, however, is that this is a discontinuous diffusion no longer based on growth at the edge, although this could change (Angel and others, 2011), but rather on interconnection with cities in the surrounding area.

<sup>12</sup> In Santiago, Bogota and Lima, the average commute time is 45 minutes, whereas in Mexico City and São Paulo, it is well above one hour (75 and 100 minutes, respectively), which reflects the more pressing congestion problems faced by those two metropolises (Jordán, Rehner and Samaniego, 2011, p. 55).

<sup>13</sup> See [online] <http://oglobo.globo.com/pais/macrometropole-paulista-ja-engloba-153-cidades-30-milhoes-de-pessoas-2870539>.

Map X.4  
**MEXICO CITY: EXTENDED METROPOLITAN AREA, 2000 AND 2010 CENSUSES<sup>a</sup>**



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), Spatial distribution and urbanization in Latin America and the Caribbean (DEPUALC) database, 2010 and 2012.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Another issue at the top of the urban public agenda, albeit one that manifests differently in each area, is socioeconomic residential segregation. ECLAC has addressed this issue in various publications, applying different lenses and perspectives, and has thus echoed the increasing importance given to this item on public agendas and in scholarly research and debate<sup>14</sup> (Pérez-Campuzano 2011; IDB, 2011; Roberts and Wilson, 2009; Rodríguez, 2009; Dureau and others, 2002). In the paper presented by ECLAC at its Thirty-third Session, held in Brasilia (Brazil), the Commission offered some guidance to facilitate greater understanding of this phenomenon and promote the adoption of measures to address it (ECLAC, 2010a).

The first contribution was a series of definitions. Specifically, it described the important distinction to be made between socioeconomic residential segregation and metropolitan poverty, with the former referring to the location of poor and rich, specifically homogeneous grouping along income lines and the absence or scarcity of socially blended spaces. In fact, metropolises with similar levels of poverty can have very different levels of segregation.

The paper's second contribution has to do with the specific characteristics of Latin American residential segregation and emerging trends. Regarding the former, the distinguishing marks of urban segregation in Latin America have been the concentration of poverty on the urban periphery and the location of high-income groups in clearly delineated, exclusive areas that tend to be connected by roads, infrastructure or mass transit, depending on the city, to the historic central business district. This notwithstanding, the socioeconomic diversification trend on the urban periphery and, in particular, the out-migration trend among high-income families to the periphery have given rise to new views regarding the form and intensity of current socioeconomic residential segregation (Rodríguez, 2009; Roberts and Wilson, 2009). The debate currently surrounding these issues can only be resolved with empirical evidence which, as explained later, is not easy to obtain. However, regardless of any future conclusions, the lack of social diversity in areas of concentration of high-income groups does seem to be a stable or worsening trend.<sup>15</sup> The main barrier to entry to those areas is the cost of land, but there are other factors too, both formal and informal, which impede access.

The third contribution offered by the ECLAC paper is related to identification of the causes underlying the urgency of this situation and the visibility that it has acquired. Contrary to what one would think, the main cause is not the quantitative trend of these phenomena, even though this argument is often made when claiming "a sustained increase in socioeconomic residential segregation." In reality, assessing the shape and magnitude of segregation, especially in terms of scale, is a complex task that requires processing relatively sophisticated census data for each city. This has not been done systematically in the region, and the few comparative studies that exist (Rodríguez, 2009; Roberts and Wilson, 2009) are insufficient to prove that there is a clear, prevailing trend in segregation levels. Furthermore, some of the participants in the current debate insist that there has been a reduction in the scale of segregation (Sabatini, Cáceres and Cerda, 2001). What nobody would dispute is the growing visibility of the situation in urban and metropolitan areas, which is simply the product of the rising number of people living in cities and metropolises. But the phenomenon that elicits the most concern these days are the effects of segregation, which some authors have described as a "spreading malignancy" (Sabatini, Cáceres and Cerda, 2001). ECLAC does not characterize it thusly but it has drawn attention to the mechanisms that have made segregation a key factor in the process by which intrametropolitan territorial inequalities exacerbate

<sup>14</sup> See ECLAC (2007), (2002) and (2000), and ECLAC/UN-Habitat (2001).

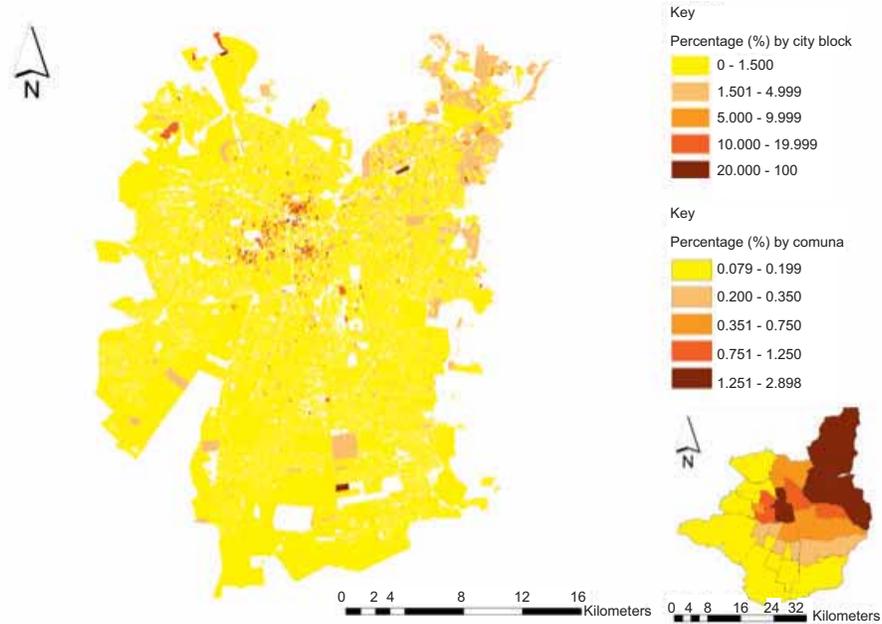
<sup>15</sup> The sole exception to this rule are a handful of cities in which precarious settlements have managed to survive for decades in wealthy areas despite the pressures placed on them, including the "urban surgeries" of the 1980s.

more general social inequalities. One of these mechanisms stems from the perverse relationship between peri-urban poverty and informality, on one hand, and metropolitan municipal decentralization, on the other (ECLAC, 2010a). Other authors would also cite the “stigma effect” of socioeconomic residential segregation on some poor neighborhoods. Among other things, this stigma has been found to increase the likelihood of unemployment even when all other factors remain constant (Solís and Puga, 2011; Ribeiro and others, 2009; Kaztman and Retamoso, 2005; Marpsat, 1999). Lastly, several authors, Rubén Kaztman notable among them, attribute current levels of segregation to the fact that public education and the formal labour market, which are the traditional means for interrupting the cycle of poverty, were hit very hard by the crisis of the 1980s and the economic challenges that ensued, which led to their social segmentation and stripped them of their function as spaces of inclusion and “levers” for social mobility (Kaztman, 2001).

Lastly, international immigration in several metropolises in Latin America is also associated with spatial grouping of migrants, which may lead to the residential segregation of foreigners. The settlement pattern of a given group of immigrants can be interpreted as an indicator of how it will integrate into the destination society (Hiebert and Ley, 2001). Generally, the residential concentration of immigrants reveals a level of differentiation from the local population and the possible existence of barriers to integration, despite which it tends to become the predominant pattern because it offers initial advantages to immigrants (Epstein, 2002 and 2008; Hein de Haas, 2008). It has been suggested that the spatial distribution of second and third generations of immigrants tends to be more indicative of their degree of integration into the destination society.

Some Latin American cities absorbed large number of international migrants, mostly from Europe, in the first half of the twentieth century. Initial spatial concentration occurred at that time too, after which the descendants of the first generation gradually spread through the city. Buenos Aires is a typical example in this regard. Today, Buenos Aires and other cities, such as Santiago and Panama City, receive large flows of immigrants from other Latin American countries and, unsurprisingly, have areas in which those immigrants are concentrated. However, these concentrated settlements are highly differentiated in terms of position within the city, as illustrated by the contrast between Santiago (2002) and Panama City (2010). Whereas Peruvian immigrants in Santiago tend to take up residence in city-centre neighbourhoods that, although precarious, have good connectivity and plenty of rental property available (map X.5), foreigners in Panama (many of them Colombian) settle in well-off neighbourhoods close to the financial and commercial centre (map X.6). Thus, in both cases territorially grouped settlement is a strategy for dealing with the complexities of adapting to the destination country. But the place chosen to settle depends crucially on the resources immigrants have, and on other factors that are more difficult to measure, such as acceptance and non-discrimination on the part of local residents.

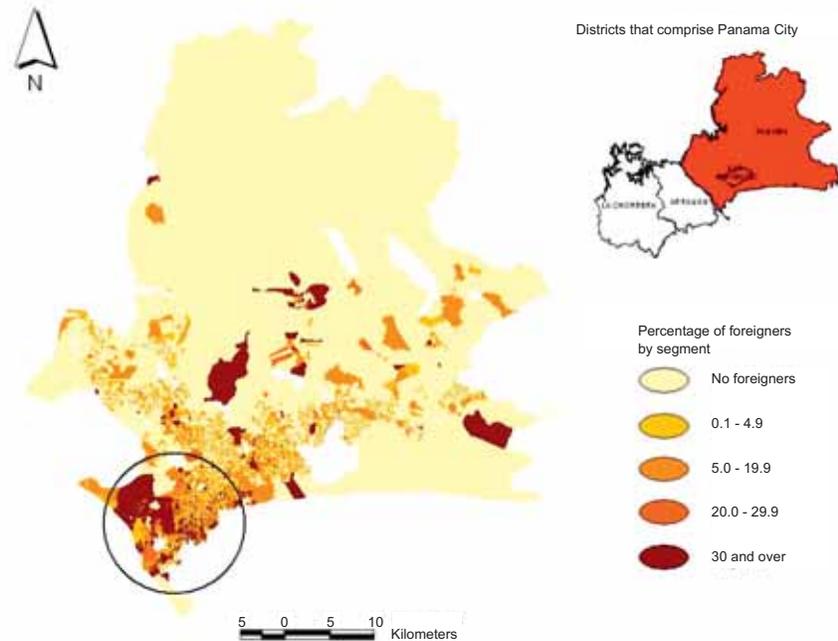
**Map X.5**  
**PERUVIAN MIGRANT POPULATION RESIDING IN GREATER SANTIAGO, 2002 CENSUS<sup>a</sup>**



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of processing of microdata from the Chilean census of 2002.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

**Map X.6**  
**FOREIGN POPULATION RESIDING IN PANAMA CITY, 2010 CENSUS**



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of processing of microdata from the Panamanian census of 2010.

<sup>a</sup> The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

### **5. Concluding remarks: the great importance of major cities in Latin America**

Latin America's large cities sustained a profound crisis in the final two decades of the twentieth century, the effects of which are still evident in a number of problems and shortfalls today. Nonetheless, the first decade of the new century brought many changes for the better. These big cities have developed their role as key arenas for national development and some of their worst problems have begun to recede, partly thanks to more active and robust public policy efforts at both national and local levels.

Population dynamics in these cities—which at one time tended to worsen their problems, especially through high immigration rates—have now changed. Both natural population growth and waves of immigration are steadily slowing, and this has significantly reduced the pressure on city infrastructure, resources and markets.

The demographic situation should remain favourable for a few years. This represents a unique opportunity to deal with backlogs of problems, take steps to even out the worrying levels of inequality and build more integrated, productive and environmentally-friendly cities. Chapter XI discusses policies for making progress in these directions.



## Chapter XI

**FINDINGS, MESSAGES AND POLICY DISCUSSION**

This chapter summarizes the main findings described in the foregoing ones, with a dual policy focus. First, it provides a summary of policy factors and other determinants that could be related to these findings. The analysis winding through the other chapters is set out more systematically here, along with other considerations. And second, it identifies options, suggestions and policy and research challenges emerging from the conclusions of the report, which are grounded in new evidence. The foregoing chapters avoided policy discussions to the extent possible because they are all set out in an orderly fashion in this chapter.

An initial finding set out in the report that is in line with regional and global comparative studies is that internal migration intensity is easing, as seen in chapter III.

The policy changes discussed in other chapters hold the key to explaining this trend. These changes include (i) government settlement programmes; (ii) official initiatives encouraging mass population transfers to subnational spaces defined by governments as “population expansion” areas; and (iii) wholesale relocation of precarious settlements, especially in big cities in the region. State interventions of this kind were frequent until the 1980s, but, as seen in this report, the trend since then has justifiably been away from them. Those interventions that do still take place are controversial even though they are more selective. One example is settlement eradication; this is, for one reason or another, still practiced. In some cases convincing arguments are put forward to justify such measures (most commonly, protecting lives), but in others the rationale is more debatable—especially where, in practice, the result is financial gain for private individuals or corporations. In several countries in the region, debate is swirling over (i) population relocation required for building roads, power plants and grids, factories and other major infrastructure items; (ii) settlement eradication to make way for urban renewal projects in the run-up to global mega-events such as the 2014 world soccer cup and the 2016 Olympics in Brazil; and (iii) forced resettlement following identification of environmental risks.

As migration intensity declines, so does its primary demographic impact (territorial redistribution of the population), at least at the level of major administrative divisions. If this trend holds, it is unlikely that migration will change population location patterns in the countries of the region as it did in the past. As a result, the relative stability of population distribution should be taken into consideration as countries weigh strategic scenarios for distributing the population among subnational spaces (a key input for sustainable development strategies). Other scenarios (such as international migration shifts triggered by the ups and downs of the global economy or sudden reversals in the push or pull of areas affected by climate change or natural disasters) should not be ruled out completely. In any event, a repeat of policies aimed directly at spatial redistribution of the population seems very unlikely because (i) following the International Conference on Population and Development (Cairo, 1994), the global political climate is rather unfavourable for such initiatives, for human rights reasons; (ii) it is costly; (iii) the outcome is far from guaranteed, at least from a development point of view; and (iv) according to the regular survey conducted by the United Nations, a growing number of countries report that they are satisfied with the current territorial distribution of their population (United Nations, 2010).

In view of lower internal migration intensity (which is due to a lower mobility rate because the absolute numbers are fairly stable), the principal policy message to take away from the report is the persistent relevance of population mobility. The pillars of relevance differ from the past, when evidence and the reasons for massive and steadily growing internal migration, the obvious redistributive impact on the area triggering migration, and the need to relocate the population in keeping with a country's development needs were enough to put internal migration high on government and academic agendas. The report highlights the emerging pillars that support the relevance of internal migration: (i) its growing diversity and new trends; (ii) its persistent qualitative impacts for sending and receiving areas; (iii) its enduring nature as a strategy for communities, families and individuals; and (iv) its reinforcement as an individual right.

The increasingly diverse kinds of movement pose conceptual and operational challenges because of the need to understand each kind and then devise targeted lines of intervention for each one. One of the policy conclusions and key research findings set out in the report is that constant revision of the conceptual approaches and methodological tools used for understanding population mobility and its impacts on sustainable development at both the country and the subnational level is a must.

Another key suggestion that emerges from this finding and is supported by further observations set out in other chapters of the report is that the market (whose forces strongly affect location and mobility choices made by the population and by the agents of production in general) usually breaks its promises of greater territorial balance and convergence. And it tends to leave to the mercy of circumstance the national spaces that have historically lagged farthest behind economically and socially. The market encourages the location of resources (including the population) that is best suited to the requirements of investors and aggregate economic growth and can thus benefit those who live in or migrate to the most flourishing or economically efficient subnational spaces. But the market also has insuperable limitations that make it impossible to predict the economic, social and environmental sustainability of such locations and the associated migrant flows. And the market excludes and, indirectly, punishes those who cannot, fail to or do not want to move according to market "signals" that, as explained, can be wrong. Moreover, the market is relatively blind to push factors (mostly economic, although there are political ones, too, especially in countries with armed internal conflicts) that drive displacement because of the lack of choices in the sending area and the resulting overvaluation of conditions in the receiving area. Movement because of push factors has a high tolerance threshold to "market signals" of congestion or collapse in these areas, leading people to move to and stay in the new location, at least for a while, even in times of stagnation and crisis.

Neither the market nor big government population relocation programmes have taken account of ethnic identity, cultural specificities or historical collective coexistence practices. All of these factors (taken out of the political picture for the sake of modernization or sidetracked in practice for the sake of profits) are increasingly the focus of public discourse and are now inescapable when designing interventions related to population location and mobility.

It comes as no surprise, then, that legislation and public policy are paying more attention to matters such as territorial equity, the rights of individuals regardless of where they live, stewardship of diversity and territorial biodiversity and respect for ancestral ties between indigenous peoples and their territories as defined by the concept of "good living". Recent research documents constitutional provisions for these ideas (Cuervo, 2011). As an illustration, box XI.1 shows how some of these issues have been written into Ecuador's new constitution.

## Box XI.1

**ECUADOR: ARTICLES OF THE 2008 CONSTITUTION CONCERNING DEVELOPMENT AND TERRITORIAL RIGHTS, INCLUDING THE CONCEPT OF “GOOD LIVING”**

Article 3. The State’s prime duties are

6. Promoting equitable and mutually supportive development throughout the territory by building up the process of autonomies and decentralization.

Article 238. Decentralized autonomous governments shall have political, administrative and financial autonomy and shall be governed by the principles of solidarity, subsidiarity, inter-territorial equity, integration and public participation. Under no circumstances shall the exercise of autonomy allow for secession from the national territory. Decentralized autonomous governments encompass rural parish boards, municipal councils, metropolitan councils, provincial councils and regional councils.

Article 239. The system of decentralized autonomous governments shall be governed by the respective law, which shall set forth a national system of competencies, of a mandatory and progressive nature, and shall define the policies and mechanisms for compensating territorial disparities in the development process.

Article 259. With the aim of safeguarding the biodiversity of the Amazon ecosystem, the central State and decentralized autonomous governments shall adopt sustainable development policies which shall also offset disparities in their development and consolidate sovereignty.

Article 275. The development structure is the organized, sustainable and dynamic group of economic, political, socio-cultural and environmental systems which underpin the achievement of the good way of living (*sumak kawsay*). The State shall plan the development of the country to assure the exercise of rights, the achievement of the objectives of the development structure and the principles enshrined in the Constitution. Planning shall aspire to social and territorial equity, promote cooperation, and be participatory, decentralized, deconcentrated and transparent. The good way of living shall require persons, communities, peoples and nationalities to effectively exercise their rights and fulfill their responsibilities within the framework of interculturalism, respect for their diversity, and harmonious coexistence with nature.

Article 276. The development structure shall have the following objectives:

6. To promote balanced, equitable land use planning, integrating and coordinating socio-cultural, administrative, economic and management activities and bolstering the unity of the State.

Article 284. The economic policy shall have the following objectives:

5. To achieve a balanced development of the national territory, integration among regions, in the rural sector, and between the countryside and the city, in economic, social and cultural terms.

**Source:** L. Cuervo, “Ética y política económica. Discusión de sus relaciones fundamentales a la luz de las políticas de desarrollo territorial”, presentation at the X Economic Policy Conference, entitled “Propuestas de política económica ante los desafíos actuales”, Málaga, Spain, 20 and 21 October 2011; and Government of Ecuador, Constitution of the Republic of Ecuador, 2008.

These findings, lessons from experience and new scenarios are behind the clear statement made here concerning government action in the sphere of population location and mobility. Such action will continue to be necessary, relevant and useful because States and governments will still try to promote specific subnational areas and spaces in keeping with their long-term objectives, political priorities and citizen feedback or pressure. States and governments, then, will have a desirable scenario for these matters that will guide their strategic decisions and policies in this regard. But such policies should be based on new premises. One is to steer clear of actions involving coercion, biased information and limits on movement. Another is indirect action, using incentives as the main way to encourage location and movement of the population (and of economic agents). Intersectoral coordination holds potential because of the powerful impacts (often indirect and unnoticed by the sectors) that sector-based policies have on population location and spatial movement. And there are the emerging factors discussed above that have to do with the ties that link population and communities to the land itself. While this is chiefly a consideration with indigenous peoples it is also valid for the rest of the population. Social networks and

familiarity with surroundings are assets for people and are lost in other territorial contexts because they are not transferable. For this very reason they should be protected by public policies and compensated if such policies lead to their loss.

As explained in chapter IV, the main finding concerning rural areas, their population dynamics and their relationship with sustainable development is persistent flight from the countryside that runs contrary to predictions of rural population recovery based on agricultural revitalization and macroeconomic evidence of burgeoning output in many primary sectors (most of which are in rural areas). A similar paradox was seen in the 1950s to 1970s, during the big government push for land reform and agricultural modernization in the region. Against original expectations that both processes would increase retention, emigration from the countryside continued, if not escalated.

Both this finding and the recurrent paradox suggest that public policy faces serious constraints in boosting population retention in rural areas. They also suggest that even market-driven restructuring of agriculture faces the same obstacles. The reasons lie in a complex mix of historical factors, especially land concentration and the low productivity of family farming, with the end result that gains from higher rural productivity only marginally reach or benefit most of the rural population.

On top of this, which is essentially a push factor, there is a marked and stubborn gap between living conditions and opportunities in rural and urban areas, always to the detriment of the former. Special processing of the few available censuses from 2010 confirms that these inequalities remain and still act as a magnet drawing inhabitants from the countryside to urban areas.

A third factor behind the minimal impact of efforts to retain population in the countryside is the increasing feasibility of working in primary activities while residing in an urban area. Better connectivity and transport are making this possible, with a profound effect on the nature of primary activities. Many such activities are strictly seasonal, run for a number of continuous weeks and are relatively well-paid. All of these factors favour residing in one place and working in another. Primary activities often use advanced technologies or require a certain degree of training, which is more frequently found in urban areas than in rural ones. There are also activities that require a good deal of space but are not labour-intensive (except at certain times), such as building, harvesting (soybeans, grain and fruit for export) and forest planting; these tend to drive out smallholders and lend themselves to irregular hiring of rural labour.

Soaring productivity in rural areas thus brings but small and occasional benefits for the inhabitants. In certain cases the gains are beyond the reach of the workforce residing in the countryside. Even so, the report cites examples of direct dividends of the primary sector boom, ranging from Paraguay's so-called "agro-cities" to extractive cities in the Andean countries. These tend to be located near the sites and open opportunities —though also risks, especially for the surrounding rural population. Programmes for sustainable urban development and for equipping these cities and providing them with infrastructure can become a powerful policy instrument for improving rural living standards.

Acknowledging the weaknesses of action to retain the rural population is not a call to refrain from such action, but intervention should not focus on net rural emigration per se but rather on how it impacts the rural population structure. The report provides direct estimates of these impacts, drawing on innovative methodologies in a few countries with suitable recent data (2010 censuses). Clearly, net emigration from the countryside is the demographic factor behind premature population ageing and gender imbalance (high male-female ratio) in rural areas. Besides, it tends to erode an already-low educational capital. These impacts are cause for concern because they can fuel poverty traps. All of the above is reason to take action against this chronic emigration. But what rural areas need more than

retention policies is interventions that simultaneously tackle their push factors and their asymmetries with urban areas so that rural areas can also draw population. Disjointed action in one direction or the other winds up encouraging migration towards urban areas.

The evidence systematized in the report shows that production growth can take place without a permanent migration pull, giving rise to policies targeting rural areas that are losing population to emigration but are short on relatively skilled labour and see seasonal shortages of unskilled labour. This scenario differs radically from the one that existed when the rural exodus began, which has come to be seen as an infinite supply of unskilled labour (for rural and urban areas alike). Today's scenario is more diverse; indeed, there are countries where labour shortages in rural areas are the norm. This is counter-intuitively concomitant with chronic rural emigration, which, moreover, mainly involves the working-age population. The response to this paradox has to do with the mismatch between skills and seasonality. In these conditions, policies addressing location and mobility in the countryside can no longer focus just on the rural population. There are increasing numbers of urban residents who work in primary activities in rural areas. The same is true (still on a small scale but much more visible in some countries) in the case of international migrants doing seasonal agricultural work. Specific measures are needed, ranging from operational aspects (such as feeding, housing and transporting this mobile workforce) to social protections and migrant rights, including access to health and childcare, formal contracts, unionization and prevention of abuse, mistreatment and discrimination.

This greater interaction between rural and urban settings calls into question the validity of policy distinctions within rural areas. Here, the conclusions of the report are mixed. Definitions based on gradients (which are open to various interpretations and are currently the subject of research and debate) are, technically, more suitable because they better capture the demographic, socioeconomic and even cultural diversity of rural areas. On the other hand, the dichotomous definition is still valid because it still sharply reflects social inequalities and differences among rural areas.

Diversity in rural areas is crucial because homogeneous policies usually fail in the face of heterogeneous situations, just as unequal conditions between rural areas call for actions that at least acknowledge and take account of the peculiarities of different territories. The report lists some key factors of rural diversity linked to territory and population mobility. One has to do with the debate over dispersion and definitions based on gradients. Rural areas that are close to cities or to regional or national transit corridors have production and social advantages and can be both a springboard and a benchmark for public action (especially, services) in rural areas. The other factor concerns non-agricultural rural employment (in a way, the flip side of primary-sector workers living in cities), which is on the rise and offers a significant economic alternative for the future of rural territories. The number of employed persons and the economic relevance of rural employment vary from one area to another. But in addition to diversifying the production base these activities usually require a certain level of skill; they can therefore help keep skilled workers in rural areas (or even draw them from urban areas, as is the case with non-agricultural employment linked to the green economy, rural tourism and information and communications technologies, among other sectors).

As for urban-rural asymmetries, the evidence systematized in the document concerning location and grouping of the rural population confirms that the rural population is still highly scattered and that this is usually linked to poor physical connectivity leading to isolation. With some exceptions, isolation is not a barrier to emigration because information about the rest of the world circulates even in the remotest places. However, isolation does significantly hamper the provision of basic services and access to opportunities that are available elsewhere. Among the ways to counteract isolation are (i) promote greater concentration of the rural population, typically in small nucleated settlements with good services and

connections; (ii) identify the population hubs (urban or rural) most accessible to a scattered populace and concentrate the supply of basic services there; (iii) use various procedures to serve a scattered population in situ; (iv) reach the population directly even if it is scattered —one example, while not free from problems or debate, is the conditional transfer programmes that started in rural areas and whose poverty reduction impact has been substantial; (v) facilitate commuting (daily or for longer periods) from urban centers for an array of reasons (employment, education, health and administrative, to name a few); (vi) improve connectivity via placement of roads and railways and other connection infrastructure; and (vii) facilitate virtual connectivity using information and communications technologies. In any event, all these measures speak to the core tenet that, regardless of place of residence, the population has rights, including access to basic services, and that the State should guarantee fulfilment of these rights.

Since the late 1990s and the early twenty-first century, the debate over the new rurality is coupled with a territorial approach to rural development. According to this approach, which has important repercussions for defining public policy (by making territory a policy matter), rural development is at the core of sectoral policies in territorial spaces and these policies should be applied differently depending on the context. Multidimensional space (economic, social, political, environmental and cultural) defines the territorial approach, so policies provide strategic guidance for traditional rural and sector development instruments and focus on the impact on redistribution, economic growth, preservation of social and natural resources and social and territorial integration. This approach has been considered in several countries of the region (Brazil, Ecuador, Guatemala and Mexico) because it has become a democratizing force by harnessing territory-based policies and programmes, effective participation by organized civil society, decentralization and the strengthening of local governments and the adoption of cultural identity as the glue that holds territories together.

Box XI.2 looks at the experience of Brazil, Guatemala and Mexico in implementing rural development policies with a territorial approach and cites examples of its being written into legislation or policies. Not all of the countries of the region have incorporated this approach, although many have promoted policies geared towards rural development and fighting poverty. Governments agree that sustainable development of rural areas and agriculture is essential for achieving their public policy goals and for successful modernization strategies. These policies complement economic growth and social development goals in each country and can boost efforts to achieve the Millennium Development Goals.

Chapter V deals with territories (often but not always rural) with marked historical, analytical and policy characteristics. These low population density areas make up a large part of the territory of the region and are crucial for sustainable development worldwide. The report classes them in several general groups that are related in very different ways to population dynamics and sustainable development: (i) rainforest, with an indigenous population and resources that have historically sparked the interest of an array of actors and been occupied gradually by spontaneous, disorganized advance parties or official settlement programmes (nowadays virtually nonexistent, as explained in chapter V); (ii) desert and steppe areas, by definition hostile to human settlement but populated on and off with the rise and fall of their natural resources, which are usually extractive; and (iii) coastal areas that until recently were barely inhabited but have been “discovered” by the global tourism industry, which is using them in different ways (invasive mega-projects, permanent urbanization, isolated and exclusive locations, and micro-projects based on local actors and ecotourism, among others).

## Box XI.2

**RECENT EXPERIENCES WITH TERRITORY-BASED RURAL DEVELOPMENT POLICIES**

Over the past decade several countries in the region have tried this new, territory-based approach, either in their constitutions, in new legislation or in rural development policies.

In 2001 Mexico enacted a law on sustainable rural development, using the territory-based approach as a conceptual and programmatic framework to guide development strategy for municipalities. This law is grounded in an array of decentralization, municipalization and federalization processes arising from the modernization of the State, and it has yielded significant institutional achievements such as the Special Concerted Rural Development Programme, systems and services for policy priority areas, territorial consortia, participatory territory-based planning and municipalization of territory management. Mexico's territory-based approach seeks common strategies for programming, planning and managing public investment in a coordinated, concurrent manner that fosters a functional, synergistic relationship between forms of public intervention at the territory level. A good example is how the Special Concerted Rural Development Programme is being used to apply federal, sector-based policies in municipalities, especially rural ones, with concurrent budgeting and an inter-institutional structure consisting of the Intersecretarial Commission comprising 13 state secretariats coordinated by the Office of the Undersecretary for Rural Development and structures for coordination at the state level. The territorial consortia proposed by the law provide an institutional structure for management, participation, negotiation and planning across the territories. The basic unit of these consortia are the municipal councils for sustainable rural development and the products system committees supporting production policy. The consortia gave rise to a robust process of participatory territorial planning aimed at channeling the demands of producers, organizations and communities through rural development plans that set prospective visions, strategic axes and territorial development projects based on local capacities. Mexico's experience puts the municipalization of territorial management front and centre by fostering agreements between the Federal Government and local governments and coordinating with state governments. These mechanisms have yielded streamlined programmes and decentralized rules of operation.

Brazil is taking a territory-based approach to rural development in order to fight poverty and reduce social inequality. It is doing so through the Citizen Territories programme rolled out in 2008. It is expected that by the end of 2009 the programme (which covers 120 areas) had invested US\$ 10 billion benefiting millions of poor families. The programme is the largest of its kind in Latin America; one of its main successes has been raising the profile of the rural world at the federal and municipal government level in Brazil. The core objective was to increase income and improve living standards for the most disadvantaged population segments in Brazil, those who face the greatest inequalities in the country's rural areas. Strategies for strengthening social networks for cooperation within territories, enhancing social management and capacity building are coupled with productive inclusion of recipient families. At least 7 million Brazilians were involved in the public policy development programme in 120 rural areas. In its second year, the programme drew in the private business sector; this was an important milestone because the Brazilian Government does not envision integral development without the contribution of all actors in society.

Guatemala has set up several mechanisms for promoting rural development with a territory-based approach. The country's management strategy is geared towards robust territorial planning, with rules grounded in decentralization as the guiding principle for policies aimed at devolving central State competencies to municipalities and intermediate territorial bodies. This institutional framework is based on the principle of autonomy, the creation of a system of development councils, a Rural Development Cabinet and the National System of Strategic Planning (SINPET). There is also a Rural Development Cabinet coordinated by the Secretariat of Planning and Programming (SEGEPLAN) under the direct leadership of the Vice President of the Republic and involving national agencies responsible for sector policies. Having such a cabinet puts responsibility for rural development (and the rural development plan) in the hands of a national agency instead of a sectoral one, as can be seen in the new power structure. The National System of Strategic Territorial Planning encompasses regional and territorial planning as a framework for the strategic territorial plans designed, agreed and managed with a high degree of participation in the territorial council model. These are integral, multisector long-term plans. The National Comprehensive Rural Development Policy put in place in 2009 was designed with feedback from spaces for dialogue between the Government and social organizations on integral rural development and the resolution of agricultural labour and environmental conflicts. The core policy goal is to steadily advance towards permanently improving the quality of life for policy subjects and for inhabitants of rural areas as a whole by ensuring equitable access to and sustainable use of productive resources, means of production, natural resources and environmental services to achieve sustainable integral human development in rural areas.

**Source:** Rafael Echeverri and Octavio Sotomayor, 2010 [online]; <http://www.reflejosocial.com/politicas-sociales/territorios-de-ciudadania-una-apuesta-de-brasil-por-el-desarrollo-rural>.

The report casts light on an issue that might seem symbolic but does reveal how these areas have been seen: referring to these areas as “empty spaces” turned them into a tabula rasa despite the indigenous peoples, spontaneous settlers and flora and fauna living there. This seems obvious now but went unnoticed (or was intentionally ignored) until just a few decades ago. In any event, these territories have acquired new meaning that is giving them more public agenda and media space. One of the mainstays of this new status is the value being attached to life in these areas.

The main finding as to these territories is that their current demographic scenario differs from the situation and expectations of the century past. Each country and region has its own reality, but the system of human settlements is fairly consolidated, there is infrastructure and a production network, connectivity is improving, a territorial identity has taken shape and government and social institutions have been established. In all of these spheres there are weaknesses that in some regions can still be substantial. But the demographic and socioeconomic base can no longer be referred to as negligible. As a result, how the existing population and settlements are treated is just as important as planning for and managing future scenarios. Settlers and migrants make up part of the population; many of them were encouraged to move by the government programmes and policies described earlier. Their descendants make up another part of the population, and their relationship with the territory and the State may differ from that of their forebears. And there is a third group, historically forgotten or even subjugated: the original inhabitants, often indigenous peoples or outsiders who settled there long before mass settlement programmes or processes began.

This emerging situation, in which low-density areas still account for a small part of the total national population but have a much larger population than in the past, a much more complex and diverse network of human settlements, metropolises and middle-sized cities, presents public policy with a new scenario. These communities still depend substantially on support from the State. Other communities have based their progress, or at least their expansion, on government incentives (subsidies, royalties, tax breaks and concessions, to name a few) that, if withdrawn, could lead to their collapse. Even those areas whose draw is based on private investment and profitable industries (like tourism) need active State involvement to address a set of externalities (among them, the environment and public safety) and to provide public goods and services that are vital for successful industry.<sup>1</sup>

Experiences along these lines suggest that the population living in these areas is the most aware of how important central government support is. Recent episodes have shown that despite low population figures and physical and political remoteness, unified response has changed the plans of the central power or exogenous actors. One example is what happened in the summer of 2011 in Magallanes (Chile’s twelfth region and its southernmost, whose capital city, Punta Arenas, is 2,000 kilometres south of Santiago). A popular uprising against the central government’s decision to reduce the subsidy for natural gas (which is widely used there, especially for heating, and is extracted from fields in the area) forced the government to backtrack and negotiate an agreement that generally upheld the gas subsidy.

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<sup>1</sup> This does not mean that the State has regulated this industry, which has in fact expanded outside the bounds of any government strategy for sustainable development. A recent assessment of a booming tourist hotspot (in the Dominican Republic) concludes that government declarations turning natural areas into tourist hubs without an integral national land management plan have had considerable impact on biodiversity, land use and communities. Moreover, governments have systematically failed to enforce master plans for the use of coastal space, postponing the bringing of basic infrastructure services to communities linked to tourist hubs” (UNDP, 2005, p. 88). The State has been involved as an actor and ultimately supported the expansion of the tourist industry in these areas but with few exceptions (such as Cuba) has neither guided nor controlled expansion.

Indigenous peoples of these areas are redefining the options for settling these areas and demanding specific rights and attention from the nation State. These communities were ignored and looked down on during State-driven settlement processes. Often, they were at the receiving end of violence and deception at the hands of actors interested in the natural riches of their territories. Now, just being organized makes these peoples relevant stakeholders. And treatment by the State is changing, driven by actors and mechanisms at the international level, such as International Labour Organization (ILO) Convention No. 169 and the United Nations declaration of collective rights. In Latin America, good examples of the new stance taken by States in recognizing the heritage and historical rights of indigenous peoples vis-à-vis their territories are Ecuador's new constitution<sup>2</sup> and recent Basic Zoning, Autonomy and Decentralization Code acknowledging the collective rights of Amazonian peoples over the Amazon ecosystem. Since this is being done in the framework of yet-to-be-drafted legislation, the scope of such recognition cannot be gauged until the final wording is in place.

As mentioned when discussing the Magallanes region in Chile to illustrate the pressure that local communities can exert for continuation of special treatment for peripheral areas that were settled with encouragement from the State, there are several examples of the more forceful role that indigenous communities are taking on in shaping the destiny of territories they have inhabited since distant times. The most recent is opposition in the Plurinational State of Bolivia to a government highway project through the Isiboro Sécure National Park and Indigenous Territory (TIPNIS). This space is situated between Bolivia's Beni and Cochabamba departments and is doubly protected as a national park and as indigenous Moxo, Yukaré and Chimane lands. As in Magallanes, the local indigenous community seems to be winning the battle (at least as of the date of this report); the Government decided to put the project on hold and negotiate with the community as to its eventual redesign. Similar conflicts are ongoing in other parts of the region. The reasons for these conflicts are varied (dams, power plants, mines, dump sites, plantations, roads and other facilities), but they are all driven by reaction at the local community level when people feel they are not being heard or that their rights are being violated. This is key, because such operations often mean jobs and income for the local population (except for compensations paid, which usually do not feed back into community development) and so might be welcomed by the inhabitants and work in favour of sustainable development in these areas. However, experience to date has been of disturbing arrogance on the part of investors and central decision makers clinging to abstract discourse on huge profits and the needs of the country to justify projects, forgetting that the local populace suffers the consequences and often does not share in the benefits.

The purpose of these examples is not to downplay the duty of the central power to ensure national development, but just to spotlight an emerging scenario that rejects measures that do not take account of the opinion, interests and worldview of communities in low-density areas.

The new approach to these territories attaches considerable importance to preserving them, citing their role in biodiversity and global ecosystem balance, as seen in box XI.3. This means that at least at the formal level there is specific concern as to the environmental effects of settling and exploiting these areas—a far cry from previous settlement programmes that ran roughshod over these issues. It thus comes as no surprise that the institutions created and the programmes and policies deployed for safeguarding, compensating and restoring ecosystems are high on the list of good practices in the region identified during national and international discussions leading up to the United Nations Conference on Environment and Development Rio+20 (see box XI.4). The fact that in the Brazilian Amazon these achievements coexist with situations where environmental damage and expulsion or exclusion of the local population is the norm is proof of the fractal nature of the relationship between population and development. Government initiatives that have been successful at the national level should therefore be enhanced locally where for a variety of reasons they have fallen short.

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<sup>2</sup> Article 57 in particular.

## Box XI.3

**PROTECTING THE ECOSYSTEM AND ETHNICITY IN AMAZONIA: THE EXAMPLE OF ECUADOR'S BASIC ZONING, AUTONOMY AND DECENTRALIZATION CODE**

**Article 11.- Amazon ecosystem.-** The territory of the Amazonian provinces is part of an ecosystem that is necessary for the environmental equilibrium of the planet. Said territory shall be a special territorial district governed by a special law in keeping with integral, participatory planning that shall group social, education, economic, environmental and cultural issues in a territorial code safeguarding the conservation and protection of its ecosystems and the principle of *sumak kawsay*.

Persons, communities, peoples, nationalities and urban and rural groups shall participate in the drafting of the ad hoc law on Amazonia. The territories of Amazonian communities, peoples and nationalities, their collective rights and international instruments shall be respected in their entirety.

**Article 12.- Amazon biodiversity.-** In order to safeguard the biodiversity of the Amazonian territory, the central government and the decentralized autonomous governments shall concurrently adopt policies for sustainable development and compensation to redress inequalities. Environmental management shall be governed by preservation, conservation and remediation policies in accordance with the ecological diversity of the territory.

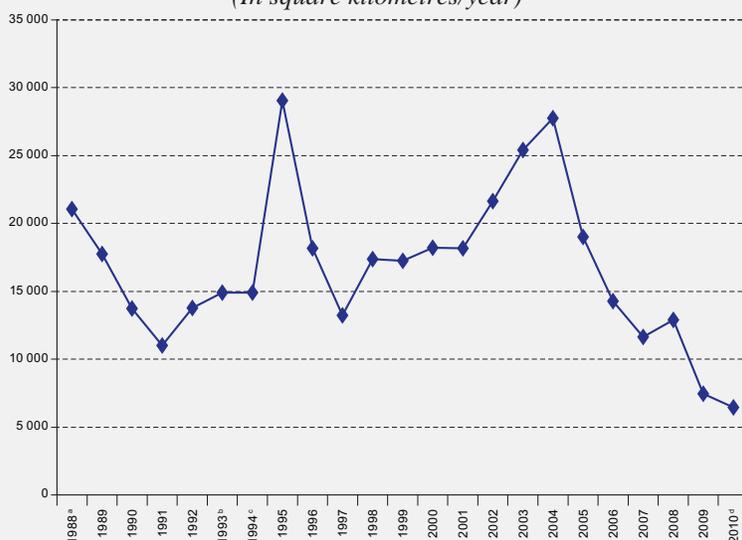
**Source:** Government of Ecuador, Código orgánico de organización territorial, autonomías y descentralización [online] <http://asambleanacional.gob.ec/leyes-asamblea-nacional.html>.

## Box XI.4

**ACTION PLAN FOR PREVENTION AND CONTROL OF DEFORESTATION IN THE LEGAL AMAZON REGION OF BRAZIL**

Beyond its contribution to emissions and its potential for mitigation, the Amazon rainforest plays a key role in the region's climate system. High deforestation rates in the Amazon led the Government of Brazil to establish the Action Plan for Prevention and Control of Deforestation in the Legal Amazon (PPCDAM) in 2003. This action plan is an unprecedented initiative in terms of institutional coordination between government sectors (ministries) and levels (federal, state, municipal). The complexity of the deforestation issue required the plan to be implemented jointly by 13 ministries, under the coordination of the Civil House of the Presidency of the Republic. PPCDAM has three main components: land use and issues relating to land ownership; environmental monitoring and control; and promotion of production activities. Since 2005, there has been a marked decline in deforestation rates (see the following figure).

**BRAZIL: ANNUAL DEFORESTATION RATE IN THE LEGAL AMAZON**  
(In square kilometres/year)



**Source:** Instituto Nacional de Pesquisas Espaciais (INPE), “Taxas anuais do desmatamento - 1988 até 2010” [online] [www.obt.inpe.br/prodes/prodes\\_1988\\_2010.htm](http://www.obt.inpe.br/prodes/prodes_1988_2010.htm).

<sup>a</sup> Average, 1977 to 1988.

<sup>b</sup> Average, 1993 to 1994.

<sup>c</sup> Consolidated annual rate.

<sup>d</sup> Estimate.

## Box XI.4 (concluded)

Some of the key measures have been audits, the dissemination of lists of municipalities where deforestation has reached critical levels and a decree barring public-sector financial institutions from lending to economic agents with activities in deforested areas. Added to this has been growing market pressure to obtain guarantees concerning the legal provenance of products (such as meat) and action by the private sector and civil society (such as a moratorium on buying soy produced in deforested areas). The action plan has been re-evaluated and readjusted periodically in response to lessons learned and changes in deforestation patterns and causal factors. Despite all these efforts, cumulative deforestation in Brazilian Amazonia is substantial, at more than 17% of the original forest area.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), *Sustainable development in Latin America and the Caribbean 20 years on from the Earth Summit: progress, gaps and strategic guidelines (preliminary version)* (LC/L.3346), 2011.

Policy recommendations for border areas, as discussed in chapter VI, are directly related to the spaces examined. There are significant differences between these spaces, ranging from those where there is a true cross-border space and migration and population mobility are a mechanism for regional integration (between Ecuador and Colombia, for example) to those where the border marks off and separates two nations between which the migrant exchange (typically, asymmetric) has national impacts (as with Haiti and the Dominican Republic). Despite this diversity, though, there is a common set of problems and deficits calling for targeted policies.

Policies concerning health (particularly, sexual and reproductive health) are crucial, because health services in border areas fall so short of meeting demand, even of the native population. The main policy recommendation here is to bring local governments into the effort to match supply to the real needs of the border-area population, both local and migrant. And it is crucial to involve civil society organizations; they can contribute a wealth of experience in migrant health services.

As for inequalities among regions, which are examined as inequalities among major administrative divisions in chapter VII, the focus is on policies related to location and, above all, mobility and internal migration. The main policy messages are set out in the review of the findings of chapters III and IV.

There is recognition of the right to migrate and the benefits that migration from poor areas to rich ones yields for migrants, for the national economy and for growing regions. In its orthodox version, this take on reality leads to laissez-faire policies because it is market forces that will guide choices at the individual level and migrant flows at the economic system level. Besides, this approach sees migration as an arbiter between regional inequalities and, thus, as a force that contributes to interregional convergence over the long run.

And there is evidence that push factors prevail in areas of chronic poverty in Latin America, making the decision to migrate a rational one. The same is true of premature population ageing and the loss of young and relatively skilled human resources caused by net migration away from areas of chronic poverty; migration thus creates poverty traps. Moreover, current data do not support the hypothesis that socioeconomic convergence of subnational spaces is taking place in many of the countries of the region.

In view of the above, the primary policy message in the report is that internal migration (especially, free circulation within national spaces) for whatever reason is among the inalienable rights of individuals. There is, therefore, no political or legal justification for policies or programmes aimed at keeping the population in areas where there is chronic poverty. All the same, emigration is not without its downsides for poor regions, and acting on it or on flow in the other direction (i.e., immigration) can indeed become a public policy goal. In any event, such initiatives should not restrict the free movement of persons and should operate essentially on the basis of incentives.

The report picks up on proposals drafted by the Latin American and Caribbean Institute for Economic and Social Planning (ILPES) over the past few years, aimed at returning to regional development policies while recognizing the importance of globalization and market forces. A set of central concepts goes back to government initiatives in the region but takes a tack that differs from the sweeping plans of the 1960s and 1970s. Among the concepts are competitiveness, leadership and regional planning, aimed at enhancing the ability of regions to enter and compete in national and international markets.

This calls for support in the form of central policies and programmes to the extent that competitiveness requires investment, infrastructure, services and skilled human resources, among other factors. But, as discussed above, there is also a need for endogenous capacity to guide and manage all of the objective components of competitiveness. Earlier versions of regional development policies do not mention the importance of drive and strategic vision coming out of the regions themselves. The timeliness of these interventions is based on the shared assessment that the main drivers of territorial competitiveness are “system complexity, speed of organizational decision-making, innovativeness, flexibility, the urban connection, infrastructure (heavy and light), government autonomy, culture and so on” (Silva, 2005, page 95).

Also emerging as pivotal concepts are equity and respect for rights, regardless of the geographic location of individuals. This does not immediately make conditions equal throughout the territory, because there are cumulative economic and social inequalities, competitiveness contexts vary among regions, and geographic conditions have objective impacts on the provision of certain services. Even so, these concepts set a new goal for regional policies concerning the observance of rights throughout the territory. They also seek to ensure, at least, territorial equity in access to resources and public services.

Among the instruments proposed for implementing such policies are funds for redistributing financial resources among regions, because they combine the flow of resources from the action of market forces with the desire to reduce regional inequalities and guarantee equal respect for rights. Consensus-based regional strategies and representative leadership on the regional level contribute substantially to sustainable regional development. There is another strategy based on mechanisms for coordination and joint action at the regional level that seek to identify long-term projects and guide the region in that direction with the support of stakeholders. Also proposed as key tools for regional development are models for multiple actors to partner in local production activities (Rodríguez and Busso, 2009). These models, referred to as “clusters” in the technical literature, resemble networks of local actors, resources (human, natural and infrastructure resources), economic activities (productive, trade, technical, financial and welfare) and their relationships (interdependence and exchange). The linkages between these spheres allow the commercial exchange of products and services —and of technology and regulations— and there is a need to gradually build frameworks of trust.

There are so many components (production, social and political) and new instruments on top of historical regional policy instruments that the focus is now on families of regional policies rather than a single regional policy (see box XI.5). An important point of this proposal and of the general discussion of territorial policies in the region is the difference between “regional” and “local”. The local sphere has been the focus of what has been called decentralization, with local (municipal) governments expanding their functions, competencies and resources (at times with imbalances between new tasks and resources). But regionalization has been a less well defined process with marked national specificities because in federal countries the rationale is far more political.

#### Box XI.5

#### **FOCUSING ON THE FAMILY OF TERRITORIAL POLICIES**

Territorial issues are now so heterogeneous and broad (unlike the strategies deployed in the twentieth century) that discussion centres on a “family of territorial policies” encompassing, “in addition to decentralization/federalism, local development and territorial competitiveness, land-use planning and the regionalization of cross-cutting and sector-based policies (promoting production and business development)” (ILPES, 2007). Although these policies are diverse, they may be grouped according to the common denominator of the challenges they involve: the need to make strides towards greater, more consolidated decentralization that amplifies the positive impacts and seeks to extend them beyond a sector-based, functional perspective in a participatory process that brings all relevant local actors together.

This new concept (families of territorial policies in Latin America) has, moreover, shown that rising regional exports have not necessarily boosted regional development. Hence the need for sound political and institutional coordination between central and regional levels to reconcile and boost the benefits of economic growth on several scales. Such coordination has been enhanced recently by the new strategies for fighting poverty, with national programmes that also have decentralized functions and local programmes with national functions as well. The challenge then becomes how to coordinate different levels of government.

There is, therefore, renewed emphasis on regional development policy design and implementation—undertaken by the State but aimed at goals on several scales—and their coordination with social, decentralization and land-use planning policies.

**Source:** J.C. Ramírez, I. Silva and L.M. Cuervo, “Economía y territorio en América Latina y el Caribe: Desigualdades y políticas”, *Libros de la CEPAL*, No. 99 (LC/G.2385-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

As a rule, territorial development policies favour both processes, which, in principle, empower subnational spaces. But after 20 years of decentralization current expectations are more tempered, above all because the resource base, which varies widely from one location to another, is decisive for local capacities and budgets:

“In Latin America, decentralization is extremely difficult, given the high level of regional productive disparity that seriously limits the functioning and financing of decentralized services (especially where their provision affects equity) [...]. This is why the result of reforms will depend on the accompanying system of financial transfers and the compensatory role played by central governments [...]. However, even when the required financial resources are to hand, disparities will also affect the availability of human resources and, in general, the capacities for interjurisdictional management. This implies that the transfer of monetary resources must be combined with training and capacity transfer [...]. The debate on decentralization has highlighted the role of subnational governments. Nevertheless, refocusing on the need to ensure a basic level of rights in relation to decentralized sectoral policies leads to the conclusion that much needs to be done to redefine the role of central governments in decentralized countries, while also consolidating fiscal sustainability. This also emphasizes the need to avoid the

overlap of functions and allocations among the various levels. This appears to be the ideal opportunity to analyse the combined impact on social cohesion and fiscal sustainability, taking account of the tensions between the above-mentioned policy objectives” (ECLAC, 2010a, p.145).

This does not mean a return to centralized, vertical models but rather a broadening of the decentralization strategy so that it effectively empowers local governments and communities and compensates for baseline inequalities among municipalities.

Population (and socioeconomic) urbanization continues, as chapter VIII of the report shows with population projections and the first findings of censuses conducted in the 2010s. Advancing urbanization is due exclusively to net transfer from the countryside; absent this, the region would ruralize because natural population growth in urban areas is slower. Because this process held even in times that were especially bad for cities (the 1980s and the early stages of the model based on openness, privatization and deregulation) the most likely medium-run scenario is that urbanization will go on despite the current high ratios that make Latin America the most urbanized developing region in the world. Policies aimed at curbing urbanization are debatable not only on technical and rights-based grounds but on practical ones as well because they would almost certainly fail. The key policy implication of this trend is that social demands and needs will not only concentrate in cities but will also raise their urban profile.

Slowing urban population growth in the 2000s was coupled with a favourable combination of increased fiscal resources, a new appreciation of the urban setting and of cities in general and stronger political will to take action on cities. This was seen in public policies targeting the “urban deficits” that had been accumulating for decades (owing, among other reasons, to the urban population explosion between the 1940s and 1970s) in spheres such as housing, basic services, mass transit and community facilities. These initiatives have produced results; some of the deficits are receding, albeit at a modest pace and with variations among countries and at the subnational level. These policies are starting to incorporate new approaches to recognizing the rights of the population, the social function of urban property, integrated building and operating of a city, environmental sustainability and stewardship, citizen involvement in decision-making (including budgeting) and valuing diversity. A clear expression of this emerging urban policy spirit was The City Statute and the subsequent creation of the Ministry of Cities in Brazil. Article 2, paragraph I of the Statute provides that the purpose of urban policy shall be as set out in the following paragraph:

The right to sustainable cities is understood as the right to urban land, housing, environmental sanitation, urban infrastructure, transportation and public services, to work and leisure for current and future generations.<sup>3</sup>

All in all, this experience shows that moving from intent to effective change in how things are done is complicated, especially when there are many interests at stake (see box XI.6).

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<sup>3</sup> See [online] [www.planalto.gov.br/ccivil\\_03/leis/LEIS\\_2001/L10257.htm](http://www.planalto.gov.br/ccivil_03/leis/LEIS_2001/L10257.htm).

## Box XI.6

**BRAZIL'S CITY STATUTE: CONTRIBUTIONS, LIMITATIONS AND CHALLENGES**

The City Statute (Law 10.257 enacted by the Federative Republic of Brazil on 10 July 2001) was a ground-breaking legal, institutional, policy and urban planning development in Latin America in the 2000s. It was preceded by a broader social movement culminating in the 1988 constitution. This new magna carta, called the “citizen’s constitution” because of its focus on individual rights, contains a section on urban policy (articles 182 and 183) that gives constitutional ranking to local land-use codes.

The core objective of the City Statute was to lay out general urban policy guidelines and issue regulations fleshing out articles 182 and 183 of the Constitution concerning, broadly speaking, mandatory master plans for cities with more than 20,000 inhabitants, the belief that urban property has a social function, and procedures for preventing speculation and promoting access to urban land (Urani, 2010).

Noteworthy among the urban policy guidelines are those providing for democratic management based on public participation, cooperation between Government, private initiative and other sectors to consolidate urbanization, establishing the master plan as the basic tool for urban planning, development and expansion, and planning for metropolitan areas, built-up areas and microregions. In addition to master plans and formal arrangements for community participation, it established mechanisms such as special social interest zones (ZEIS) for regularizing irregular settlements and making it viable to build social-interest housing (VIS) through instruments such as affordable housing quotas (Rodrigues, 2011; Urani, 2010). Other measures and instruments were put in place to prevent real estate speculation and regularize tenure. From an institutional viewpoint, the statute was enhanced by the creation of the Ministry of Cities in 2003 and the validation of “the right to the city” and “the right to housing” as enshrined in the citizens’ constitution.

Despite its formal contributions and concrete achievements, which included widespread use of master plans, spaces and mechanisms for participation, networks of basic services, programmes for situating, regularizing and improving informal settlements and building social-interest housing (Rodrigues, 2011), its material impact was less than expected and varies depending, inter alia, on the type of city (generally speaking, smaller cities have lagged farther behind in implementing the statute) and will and capacity on the part of governments at the local and state level. Some researchers hold that Brazil’s urban development model has not been steered in a fully sustainable and inclusive direction. Criticism concerning this last point includes the persistence of modalities for expanding and building in cities that are short-term, not very transparent, speculative and informal, with emphasis on housing as a commodity instead of on the right to adequate housing. In the words of one of the main proponents of the Statute who is now critical of its implementation and results:

From the viewpoint of territorial management, despite approval, in 2001, of a new regulatory framework —The City Statute— that would, in theory, give municipalities greater power over urbanization, the prevailing forms of regulation —land division and zoning— did not change much, and political consensus as to the social function of tenure did not take shape. The same can be said regarding mechanisms for participating in urban development —even where institutions were set up for this purpose, they did not take hold to the point of reversing the trend in urban development decision-making in the country. It is beyond the scope of this article to analyze the obstacles to implementing this agenda, or its innovations and the resistance they sparked. For the purpose of our hypothesis, instead of the supposed “political will” to implement participatory master plans or strengthen mechanisms for participation, governments clearly lack incentives for doing so since, as we shall see below, decision-making on the future of cities or investing in them is, under Brazil’s current federative model and political system, based on another rationale (Rolnik and Klink, 2011, p. 14).

Further along, it adds:

What prevails is the idea that housing is a commodity or even a financial asset in a context in which the most important thing is to mass-produce houses. Obviously, this does not necessarily have a relationship with adequate housing (Rolnik, 2011, p. 41).

**Source:** André Urani, “O papel do setor privado e da sociedade civil nas novas governanças metropolitanas brasileiras”, *Regiões metropolitanas no Brasil. Um paradoxo de desafios e oportunidades*, Fernanda Magalhães (ed.), Inter-American Development Bank (IDB), 2010; Fabíola Rodrigues, “Os novos desafios da urbanização brasileira: uma avaliação do direito à cidade na década de 2000”, *RELAP*, year 5, No. 8, January-June 2011; R. Rolnik and Jeroen Klink, “Crescimento econômico e desenvolvimento urbano: por que nossas cidades continuam tão precárias?”, paper presented at the XIV Encuentro nacional de la ANPUR, Rio de Janeiro, 2011 [online] [www.observatoriodasmegapoles.net/download/raquel\\_rolnik.pdf](http://www.observatoriodasmegapoles.net/download/raquel_rolnik.pdf); and R. Rolnik, “Entrevista, Moradia é mais que um objeto físico de quarto paredes”, *Revista electronica e-metropolis*, No. 5, year 2, June 2011.

Many of the programmes developed to address urban deficits incorporated new approaches associated with an emerging paradigm that puts a premium on intervention and government regulation combined with citizen participation, respect for individual rights and integral democratic city governance. This stands in contrast to the old urban management model that not only had a less interventionist and regulatory stance but was more technocratic, vertical and focused. That said, there was no paradigm shift but a sometimes rather uneasy coexistence of two approaches. Programmes for reducing the housing shortage are a good example. Their main component is still massive building in the periphery. This is progress compared with some periods, like the 1980s, when there was little in the way of building. But such projects usually have negative impacts in terms of city governance and livability and in terms of labour insertion and access to cities for the poor population. What is new is the addition of other lines of action, such as affordable housing in areas where the beneficiaries of these programmes live, location and improvement of low-income neighbourhoods and reclamation of inner city or pericentral areas for residential use. Something similar is taking place in the transport sector, where chaos drove several cities in the region to deploy restructuring and regulation programmes. Most of them involved transferring organization and supervision of the system to centralized authorities or entities and operation to various actors. Some cities in the region embarked on projects for building subway systems or expanding existing ones, thereby enhancing the role of the public sector and central control over the transport system. While these initiatives are costly and their success is not guaranteed, there are encouraging examples that clearly involve a fresh look at cities. Transport is strategic for functional, liveable cities; experiments with near-complete liberalization soon backfired and sparked this return to greater government control in the sector (see box XI.7).

The new reality in Latin America becomes clear when, instead of viewing the urban population as an undifferentiated whole, the focus is turned to the portion of the population living in cities (localities with 20,000 or more inhabitants). Doing so reveals systems of cities with many more hubs. The term “system of cities” is used here in its most basic sense: a simple grouping of all cities or a group of cities on the basis of a shared feature, such as population size. This definition differs from another, more complex one referring to a network of functionally integrated cities that could not be systematically used for the purposes of this report.

This diversity of localities is promising because it offers far more alternatives than before for locating the population and social and economic actors. However, as will be seen below, increasing the number and diversity of cities does not automatically yield a robust, efficient network of settlements because many inequalities remain between these hubs.

Chapter IX of the report looks at nearly 2,000 cities (localities with 20,000 or more inhabitants) in the region in a half dozen groups based on population size. Population growth rates vary widely; in some cities the population is growing by more than 5%, and in others it is shrinking in absolute terms. Nevertheless, slowing population growth is widespread and is occurring in almost all the cities examined, regardless of population size. It is therefore to be expected that most cities will see a sustained slowing of population growth.

## Box XI.7

**INITIATIVES FOR IMPROVING PUBLIC TRANSPORTATION SYSTEMS IN THE REGION**

Various cities in the region have made changes in their urban transport systems in the past few decades in an effort to improve air quality and reduce traffic congestion, with varying degrees of success.

A few examples are outlined below.

**Curitiba:** The rapid transit bus system of Curitiba was introduced in 1972. The system covers routes totalling 64.6 kilometres and a demand of 560,000 trips per day. Provision is being made for exclusive bus lanes, ticket payments at designated stations and larger-capacity vehicles.

**Quito:** Using Curitiba's experience as a model, Quito developed a similar, but smaller, system. In 1995, it began to construct a network of three main rapid transit routes. This system now encompasses 37 kilometres of privately and publicly operated bus routes and transports 400,000 passengers each day. One of the system's drawbacks is the lack of operational or fee-based integration of the three major routes.

**Bogota:** The TransMilenio rapid transit system, which was launched in 2000, has 84 kilometres of routes and transports around 1.4 million passengers per day. Bogota's system boasts a number of major innovations that support its claim to being the most robust transit system in the world. It has express buses that do not stop at every station, which has reduced transit times and increased the transit system's capacity, measured on a per hour and per direction basis. This system has also recently been integrated with non-motorized transport (bicycle parking facilities at stations), which has considerably increased the system's reach and reduced the pressure on feeder systems. The introduction of the TransMilenio system has reduced the city's greenhouse gas emissions by an estimated 134,000 tons per year (UNEP, 2010). In view of the success of TransMilenio in Bogota, Colombia plans to introduce similar systems in another seven cities in the country.

**Mexico City:** The Metrobús system was built in order to supplement the city's extensive subway system. The Federal District has constructed three major lines covering a total of 60 kilometres that serves a demand of 260,000 trips per day. While the project's explicit objectives do not include the reduction of greenhouse gas emissions, it has nevertheless cut traffic-related emissions by 10% (50,000 tons per year). This is equivalent to nearly 0.25% of total transport emissions in Mexico City and thus points to a quite significant achievement for a small-scale project of this sort (Schipper and others, 2009).

**Santiago, Chile:** The introduction of the Transantiago system has overhauled the entire public transit system in Santiago, Chile. Although the system was plagued with difficulties in its early days, at this point, three years after its launch, it has reduced traffic congestion and travel times. The annual savings in terms of travel times are estimated at 194,304,000 Chilean pesos, while the savings in terms of the reduction of emissions are estimated at 18,815,000 pesos. The State subsidy for the system is substantial, but its sustainability is not guaranteed. The programme's social and environmental dividends have been substantial but are not always clearly perceived by the public. Indeed, the system still bears the stigma of its rough start-up and still has its weaknesses. The authorities are still working on improving and consolidating the system. Reforms are under way; more time is needed to assess them.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), *Sustainable development in Latin America and the Caribbean 20 years on from the Earth Summit: progress, gaps and strategic guidelines (Preliminary version)* (LC/L.3346), Santiago, 2011.

The report estimates for the first time the net internal migration rate for nearly 1,500 cities based on censuses from the first 10 years of the 2000s and some 950 cities with census data from the 1990s. The findings can be surprising, because more than half of the cities experienced net emigration. The estimates make it possible to distinguish between exchanges with other cities and exchanges with the rest of the system of human settlements (rural areas and small cities, i.e., with less than 20,000 inhabitants) and show that this loss is almost always due to exchange with other cities and not to a "return to the countryside". These figures partially cloud the optimistic interpretation of slower population growth in cities. A decline due to net emigration suggests that sending cities are inferior to receiving cities in some way, meaning that the former might encounter difficulties in taking advantage of slower population growth. Worse yet, since migration is age-selective, sending cities can experience negative impacts similar to those identified in rural areas: premature population ageing, high dependency ratios and a smaller demographic dividend or none at all.

A breakdown of net migration by population size clearly shows that this finding can be attributed to small cities (20,000 to 50,000 inhabitants) because it is the group with the highest number of cities (863) and most of them are sending cities. This situation is concomitant with living standards (measured using indicators that are proxies for those used to track the Millennium Development Goals) that are almost always worse for small cities than for larger ones. Therefore, the systematized evidence in the report does not support the idea that small cities are better served and more attractive. In fact, this segment of the system of cities has been shrinking over the past few decades. Such findings are a warning against idealizing the functioning of and the standard of living in small cities. However, the data used in this report (from censuses) do not cover some aspects where such cities might have advantages (quality of life, public safety and traffic congestion, among others). Besides, small cities can rapidly harness expansion opportunities provided by some information and communications technologies (particularly, cellular telephony and the Internet). And this broad group of 863 small cities is a heterogeneous one. Despite these caveats, there is room for the cautious conclusion that the potential for these cities to compete successfully with the rest hinges on buttressing their infrastructure and basic services, their connectivity and functional integration with the other localities and the availability of human and financial resources.

Middle-sized cities (roughly, those with 50,000 to less than 1 million inhabitants) do tend to have social indicators that match or better the urban average for the country involved. Moreover, they are a population pull, which is indicative of economic growth and boosts the demographic dividend. That is why this group of cities accounts for a growing share within the system of cities. Once again, any generalization is limited by heterogeneity, but there seem to be solid grounds for regarding this component of the system of cities as being on a functional par with larger ones and even rivaling them in certain spheres. There is considerable policy space for guiding efforts at deconcentration and diversification for governments that are interested in this while encouraging economic growth on a national scale.

Policies for strengthening the network of middle-sized cities should make it a priority to avoid reproducing the complications and problems found in larger cities. Unlike in the past, in few cases will rapid population growth be the main reason. Other factors will be responsible, including lack of planning; technical weaknesses in management; lack of or insufficient public investment; lack of resources because of insufficient central transfers or limited local funding; outmoded or sloppy environmental protection regulations; complications in forging public-private partnerships or attracting private investment; and inability to face the new challenges posed by growing citizen participation.

Scenarios with increases in built-up area and population growth are a city-planning must for designing policies and programmes at the local level (cities, in this case) and for medium- and long-term decision-making. These are familiar exercises for big cities, which have more resources and technical capacity for conducting them. But they are not yet widespread in middle-sized and smaller cities, and they are even harder to implement in the latter for technical and financial reasons. That said, technological advances and the growing availability of information at the local level are making it easier to design such scenarios and thus target public and local investment, lay out central and local transport grids and estimate future demand for private actors (Martine and others, 2008).

Big cities (those with 1 million or more inhabitants) still account for a significant portion of the population of the region (a third of the total) and are the segment of the system of cities with the most inhabitants, according to the categories used in the report. In economic, political and cultural terms the trend towards concentration in these cities is even stronger. The main finding set out in the report is the subjective and objective turnaround experienced by these cities since the apparently irreversible crisis of the 1980s and 1990s, including recovery in areas such as attaching new value to their contribution to national development and as a life space (although this might not be obvious in some cases). Most of

these cities stand out at the national level because they have better socioeconomic indicators and are still a draw for migrants from the rest of the country. In short, following a complicated period for the region's big cities, they are re-emerging as economic engines, points of reference for global exchanges, leaders in innovation and technology, education and culture, and models of growing social and ethnic diversity.

Now, then, some policy considerations make it advisable to view these promising prospects with a certain degree of caution. This segment of the urban system is heterogeneous, too. Population size does not automatically ensure economic growth, progress in technology and education or broad service coverage. Migration pull is not a sure thing, either: several cities, including but not limited to the largest, experienced net emigration (as is the case with Guayaquil according to Ecuador's 2010 census). In some of these cities, some of the urban deficits examined in the report (in particular, pollution, congestion, informality and public safety) are worsening and becoming more noticeable. The sheer size of some of these cities and the fact that the countries of the region are still in the medium stages of development (with limited investment and management budgets, although larger than in the past) are serious obstacles to functioning well. This, on top of historical difficulties in setting up metropolitan governments (see box XI.8), leads to the conclusion that there are also major challenges in developing, planning and managing big cities.

#### Box XI.8

#### **METROPOLITAN GOVERNMENTS: NEEDS, CHALLENGES AND OPTIONS**

Metropolitan areas are usually home to a mix of governments of different sorts and jurisdictions. They tend to be made up of several minor political and administrative divisions (typically, municipalities), each with its own local government. The result is layer upon layer of governments with different interests, political orientation, financial resources and environmental conditions. These areas are often part of a major political and administrative division whose government has a broader jurisdiction but not enough authority to run the metropolitan area as a whole. Exceptionally, there may be a consolidated mayor's office or metropolitan government. This group does not include cities that are wholly or partially contained in a special jurisdiction (like the Capital District of Bogotá, which is both the capital of Colombia and the capital of the Department of Cundinamarca). These are run by a kind of metropolitan government.

The uncommonness of metropolitan governments might seem paradoxical in the face of the need for an overarching vision and integral management in any metropolitan area. The literature identifies several factors that contribute to this apparent inconsistency. Among them are reluctance at higher levels of government to transfer competencies and, at lower levels, rejection of new governments as too far removed from the citizens and fear of the power that such a metropolitan government would acquire. A recent study concludes that:

Although good governance of metropolitan areas is crucial for the economy and for the well-being of much of the population, most central and state governments in Latin America are reluctant to set up single- or supra-metropolitan entities. Governments prefer dualistic, voluntary cooperation structures aimed at improving management of the metropolitan area. Ironically, if the need for better governance is rooted in the economic and political importance of metropolitan areas, that very economic and political weight will keep the higher levels of government from setting up single supra-municipal entities (Magalhães, 2010, p.14).

Given this difficulty in installing metropolitan governments per se, there are alternatives that, while they might be inferior in terms of theoretical governance, could perhaps be more viable politically. One involves functional technocratic arrangements for managing sector-based issues with a metropolitan jurisdiction and approach. Some examples would be metropolitan transit and utilities authorities. Another example is technocratic bodies charged with the integral running of the city as city managers. But technocracy does not address the main issue of government, which is political and has to do with representativeness and the capacity to negotiate with higher and lower (geographically speaking) elected authorities. Along these lines, a recent study based on comparative analysis holds that:

## Box XI.8 (concluded)

Case studies show that the best medium-and long-term option is to set up functional arrangements for city governance involving all levels of government (local, state and central). This necessitates governance structures that offset the economic, demographic and fiscal dominance of central city councils while maintaining enough influence to ensure participation. Governance arrangements with voting powers based on qualified shares can do this, and they can also be used to create public enterprises, boards or commissions to operate infrastructures and essential services such as water and sanitation, health, education, transport, land-use management, environmental protection and affordable housing. These structures should provide for involvement by all stakeholders in the decision-making process; being sector-based, they should even prevent the concentration of fiscal and decision-making power that is inherent to a single national entity.

Another recent study drawing on experience in six federal countries in America (including Canada and the United States), reaches the following conclusions.

When we started the study we thought that the future lay in acknowledging that a third or fourth level of metropolitan federal government would be the solution providing the planning and vision needed for the integrated, equitable development of large urban hubs spanning several jurisdictions and cities... To a certain extent, we were hostage to one of the views of “metropolitan” that we began to question from the outset, i.e., that metropolitan invariably means more centralized, larger-scale organization) built around a hub despite our preference for local over regional. Along the way we began to think that metropolitan governance can (and should) be built from the bottom up and from the inside out instead of being based on an umbrella structure imposed, top down, on an existing political and socioeconomic reality... In short, the cases we have examined suggest that the solution does not lie in waiting for action on the part of federal leadership, constitutional amendments or just expecting that the goal will be achieved without much coordination but rather by supporting or enhancing metropolitan governance based on federations of local entities. This finding is, clearly, not limited to federal arrangements but can also apply to single governments and to areas where there are several levels of state and regional administrative jurisdictions. All of our case studies, except for one country, highlight the role that state governments can and often do play... We conclude that (i) it is regional governments that provide the best basis for starting to build a metropolitan administration that is capable of efficiently providing urban services, but this is not the only route; (ii) some level of participatory governance structure for metropolitan areas is necessary for designing appropriate policies that will improve the quality of life in an equitable fashion (Wilson, Spink and Ward, 2011).

**Source:** A. Orellana, “La gobernabilidad metropolitana de Santiago: la dispar relación de poder de los municipios”, *Revista Eure*, vol. XXXV, No. 104, April 2009; R. Wilson, P. Spink and P. Ward, “Governança metropolitana nas Américas”, *Cadernos Metr pole*, vol. 13, No. 25, January-June 2011.

Despite this interplay of strengths and weaknesses in the region’s big cities, the report suggests that from a policy viewpoint the wind is in their favor. Their population dynamics have helped in this regard: migrants are no longer streaming into the big cities even though most of them are still net migrant receivers. This amplifies and extends their demographic dividend and delays the inevitable process of population ageing. Policies and programmes for forcefully addressing urban deficits have been rolled out in big cities, and in some cases there are significant signs of progress. The biggest challenges have to do with deficits that public policy cannot fully address because their structural determinants are still intact. One of these is public unsafety, rooted in, among other factors, poverty, inequality and mistrust of the institutions charged with this issue. The same is true of traffic congestion, where infrastructure constraints and complex geography and topography work against certain solutions in many big cities while the market pushes and consolidates the automobile culture to the detriment, at least in part, of efforts to improve mass transit and increase ridership. It is also difficult to tackle issues like residential segregation, in which the countries of the region have little policy experience and few operative instruments for intervention. But the difficulty of addressing these issues does not make them intractable. Inequalities within cities merit special attention. For instance, poor neighbourhoods often have adolescent fertility rates five times higher than better-off neighbourhoods, a situation that cries out for government schemes to broaden access to sexual and reproductive health care for

teenagers in poor areas. Here, sharing relevant policy experiences with agencies in other countries —better yet, other Latin American countries (South-South cooperation)— can be very useful even though each country or city will ultimately need to tailor interventions to its own circumstances.

Urban environment stewardship and protection policies will be high on the Latin American agenda in the coming decades. Internationally, some of the rural areas of the region are taking a leading role in global ecosystem balance. But in international forums the cities of Latin America are also mentioned as glaring examples of environmental degradation. The evidence set out in the report and in other recent studies substantially tempers this perception: initiatives deployed in recent years have curbed environmental degradation in several cities in the region. The vast network of basic services affords some degree of control over the management of water resources and waste disposal. In any event, there is no question that the cities of the region need stricter environmental protection standards. Waste treatment and recycling is a priority if cities are to be kept from becoming vectors of environmental damage as they transfer waste to other ecosystems. Eco-efficiency should be a guiding principle for city growth and renewal, and it should be promoted by laws and regulations and encouraged by mechanisms such as subsidies, tax benefits and soft loans. But this is not enough. Ultimately, urban production and consumption patterns determine much of the environmental impact of cities, so households and individuals alike should build the idea of sustainability and environmental stewardship into their behaviour. Advocacy, awareness and education are essential for this change in behaviour. Citizen involvement is usually a good tool for monitoring, reporting, tracking and even punishing companies and individuals doing environmental damage. Institutional frameworks play a key role, too, as a source of standards and sanctions as well as incentives. Promoting environmentally responsible behaviour, penalizing offenders and internalizing the cost of overconsumption is a powerful policy threesome for fostering sustainable urban development in Latin America.



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