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THE DEMOGRAPHIC SITUATION OF LATIN AMERICA AS EVALUATED IN 1983: ESTIMATES FOR 1960-1980 AND PROJECTIONS FOR 1980-2025

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CONTENTS

/Introduction

Introduction

This document is an updated version of a similar publication issued in February 1981, containing comments on the results of the estimates and projections of the demographic situation in 20 countries of the region 1/ as revised during 1980, which were given in Boletín Demográfico No. 27. On the present occasion, new population estimates and projections are available for 10 of those 20 Latin American countries. The results were already published in Boletín Demográfico No. 32, in January 1983. The values corresponding to Chile and Venezuela mentioned in the present document do not coincide with those given in that issue of the Boletín, since they were revised after its publication. For the purpose of making this revision, use has been made of new information derived, in a few cases, from censuses carried out as from 1980; in others, from registers of vital statistics, and in some cases from survey data. Naturally, for each country whose demographic estimates and projections were revised, all the available sources of information were examined and estimation and adjustment procedures were used which permit us to say that these results are the best that could be obtained with the data so far available. The population of the ten countries whose projections were revised represents 78% of the total population of Latin America in 1980.

We are not yet in a position to present estimates and projections for the English-speaking Caribbean countries. Work continues on these, however, and it is hoped that a Boletín Demográfico devoted to these countries can be published soon.2/

The comments made refer mainly to the demographic situation of the 20 countries of the region considered as a whole. It would be vain to try to sum up in a short document the situation of each particular country, but when necessary observations will be made regarding some situations especially worthy of note because of their departure from the average for the region.

Emphasis must be placed right from the beginning, however, on the enormous heterogeneity of the demographic situations currently existing in Latin America, which reflect the great differences in social, economic, cultural and political situations in the region. Furthermore, it is important to bear in mind that the reliability of the estimates varies considerably from one country to another, and although demographic indicators are presented for all the countries, caution should be exercised in their interpretation, since in the case of some countries these indicators are rather shaky and subject to significant errors.

This document, which may be considered as being of a very global and descriptive nature, is a complement to the set of Fascículos de Población (Population Booklets). A booklet has been prepared or is in preparation for each country, its main purpose being to disseminate within the respective country the demographic projections which have generally been prepared jointly with national bodies. Thus, the results published are the estimates and projections which have been officially adopted both by the corresponding countries and by the United Nations. Each of these booklets includes a brief methodological summary.

/So far

So far, the booklets corresponding to Argentina, Mexico, Peru, Costa Rica ans Panama have been published, while those corresponding to Brazil, Chile, Paraguay and Venezuela are in the press.

Finally, it should be noted that the ongoing revision of the estimates of demographic variables, especially through the inclusion of new information or methodological advances which make it possible to improve the estimates, leads to changes in the results given. For some practical purposes, these changes may be of little importance, but in our opinion every change needs to be introduced into the figures, no matter how small it is, so that the estimates may be the most realistic possible.

Section I deals with population growth. Sections II and III analyse the situation of the main variables determining population changes, that is to say, fertility and mortality. Chapter IV deals with the age structure of the population, and finally chapter V sums up and comments on the main conclusions.

The tables provide figures for the region as a whole, for the four subregions -Andean area, Atlantic area, Central America, and Mexico and the Caribbean- and for each of the twenty Latin American countries considered.

I. POPULATION GROWTH

Population growth is analysed through three demographic indicators: total number of inhabitants, annual growth in absolute terms over selected five-year periods, and annual growth rate over the same periods.

The period analysed extends from 1960 to 2025 and is divided into three parts: one corresponding to the recent past (1960-1980), a second on the near future (1980-2000), and a third part dealing with the more distant future (2000-2025).

1. Growth in the number of inhabitants

The total population of the region, which was estimated at 209 million in mid-1960, rose to 352 million by 1980. By the year 2000 it is estimated that it could amount to between 505 and 557 million, but the value accepted as most plausible is that corresponding to the medium hypothesis on the future evolution of fertility, namely, 551 million. For the final year of the projections, the figure estimated is between 665 and 876 million, but once again, the figure considered most plausible is that of the medium projections, amounting to 765 million. Table 1 shows these figures both for the region as a whole and for each subregion and country.

2. Annual growth in absolute terms

Table 2 gives figures on annual growth for the five-year periods 1960-1965, 1980-1985, 2000-2005 and 2020-2025, representing the recent past, the present, the near future and the more distant future, respectively. This table also includes the relative values, that is to say, the annual growth rate. As in table 1 and in

/Table 1

Table 1

LATIN AMERICA: POPULATION BY COUNTRIES AND SUBREGIONS, ESTIMATED FOR 1960 AND 1980 AND PROJECTED FOR 2000 AND 2025 ACCORDING TO THREE FERTILITY HYPOTHESES

(Millions of inhabitants)

	Estimates		Projections					
			2000			2025		
	1960	1980	High	Medium	Low	High	Medium	Low
Bolivia	3.4	5.6	10.0	9.7	9.2	21.7	18.3	14.1
Colombia	15.5	25.8	39.5	38.0	35.9	57.6	51.7	45.1
Chile	7.6	11.1	14.8	14.7	14.3	18.5	18.1	17.0
Ecuador	4.4	8.0	15.0	14.6	14.0	28.6	25.7	22.5
Peru	9.9	17.3	28.9	28.0	26.9	46.3	41.0	37.1
Venezuela	7.5	15.0	25.4	24.7	24.0	40.8	38.0	35.2
Andean area	48.3	82.8	133.6	129.7	124.3	213.5	192.8	171.0
Argentina	20.6	28.2	37.9	37.2	36.1	51.7	47.4	43.8
Brazil	72.6	121.3	186.0	179.5	171.0	276.6	245.8	216.9
Paraguay	1.8	3.2	5.6	5.4	5.1	10.0	8.6	7.2
Uruguay	2.5	2.9	3.5	3.4	3.3	4.4	4.1	3.7
Atlantic area	97.5	155.6	237.0	225.5	215.5	342.7	305.9	271.6
Costa Rica	1.2	2.3	3.7	3.6	3.5	5.5	5.1	4.8
El Salvador	2.6	4.8	9.4	8.7	7.9	18.9	15.0	11.6
Guatemala	4.0	7.3	13.8	12.7	11.4	27.3	21.7	17.1
Honduras	1.9	3.7	7.6	7.0	6.6	17.0	13.3	10.6
Nicaragua	1.5	2.8	5.4	5.3	5.1	10.5	9.2	8.3
Panama	1.1	2.0	3.0	2.9	2.8	4.2	3.9	3.6
Central America	12.3	22.9	42.9	40.2	37.3	83.4	68.2	56.0
Cuba	7.0	9.7	11.9	11.7	11.3	14.0	13.6	12.7
Haiti	3.7	5.8	10.1	9.9	9.6	20.3	18.3	16.0
Mexico	37.1	69.4	116.7	109.2	99.6	188.3	154.1	127.4
Dominican Republic	3.2	5.6	8.8	8.4	7.8	13.5	12.2	10.3
Mexico and the Caribbean	51.0	90.5	147.5	139.2	128.3	236.1	198.2	166.4
Total Latin America	209.1	351.8	557.0	534.6	505.4	875.7	765.1	665.0

/Table 2

Table 2

LATIN AMERICA: ANNUAL INCREASE AND GROWTH RATES IN SELECTED FIVE-YEAR PERIODS, BY COUNTRIES AND SUBREGIONS

	Annual increase (thousands)				Annual growth rates (per thousand)			
	1960 1965	1980 1985	2000 2005	2020 2025	1960 1965	1980 1985	2000 2005	2020 2025
Bolivia	83	160	294	379	23	27	28	22
Colombia	516	584	593	492	31	21	15	10
Chile	192	182	158	110	24	16	10	6
Ecuador	143	272	401	479	30	31	26	20
Peru	307	480	559	472	29	26	19	12
Venezuela	294	459	521	521	36	28	20	14
Andean area	1 535	2 137	2 526	2 453	30	24	19	13
Argentina	333	465	430	371	16	16	11	8
Brazil	2 340	2 856	2 823	2 398	30	22	15	10
Paraguay	48	103	123	124	25	30	22	15
Uruguay	31	21	22	19	12	7	6	5
Atlantic area	2 752	3 445	3 398	2 912	26	21	15	10
Costa Rica	49	64	65	52	36	26	17	11
El Salvador	86	151	244	256	31	29	26	18
Guatemala	130	228	331	380	30	29	24	18
Honduras	72	136	238	264	34	34	31	21
Nicaragua	52	100	153	157	32	33	27	18
Panama	36	45	45	32	30	22	15	9
Central America	4 251	724	1 071	1 141	32	30	25	17
Cuba	157	62	91	54	21	6	8	4
Haiti	83	155	285	375	21	25	27	22
Mexico	1 287	1 921	1 940	1 626	32	26	17	11
Dominica Republic	101	137	153	138	29	23	17	12
Mexico and the Caribbean	1 628	2 275	2 469	2 193	30	24	17	11
Total Latin America	6 340	8 581	9 464	8 699	28	23	17	12

/all the

all the following tables, the estimates are given for all the twenty Latin American countries considered as a whole, for the subregions, and for each of the countries individually.

It may be seen from the table that the annual growth rate for the region, in absolute terms, is very high and continues rising until the beginning of the twenty-first century; it is estimated that it will only begin to go down in absolute terms in the last five-year period considered (2020-2025). In selecting the five-year periods, however, it must be borne in mind that this decline could occur before the period in question. The statements regarding the region as a whole are also valid for the subregions, except in the case of the Atlantic area, where maximum growth would be achieved in the five-year period 1980-1985.

The individual countries, for their part, show different types of behaviour in the four five-year periods selected. Only one country, Chile, shows decreasing figures throughout the entire period. In nine countries, in contrast, growth tends to increase (Bolivia, Ecuador, Venezuela, Paraguay, El Salvador, Guatemala, Honduras, Nicaragua and Haiti), although in the case of Venezuela and the figures for the five-year periods 2000-2005 and 2020-2025 are equal. In two countries, Argentina and Brazil, the annual population increase tends to slacken as from the five-year period 1980-1985. The remaining eight countries show varying situations.

When we look at the annual growth rates, in contrast, it may be noted that they show a clear downward tendency. These rates go down from 28 per thousand in the period 1960-1965 to 23 per thousand at present, and the decline is more accentuated thereafter, culminating in a figure of 17 per thousand at the beginning of the twenty-first century. On the basis of the medium projection hypothesis, it is assumed that an annual growth rate of 12 per thousand will be reached in the five-year period 2020-2025.

As a complement to table 2 and with the aim of illustrating more clearly what was stated above, table 3 classifies the countries according to their growth rates. It may be seen from this table that in the period 1960-1965 73% of the population of Latin America was growing at growth rates of over 30 per thousand, while only 20% was doing so at growth rates of less than 25 per thousand. At present (1980-1985), the situation has changed considerably. Only 5% of the population still displays growth rates over 30 per thousand, while 58% shows rates below 25 per thousand and the remaining 37% registers rates of between 25 and 30 per thousand.

By the beginning of the next century, it is expected that 82% of the population will have growth rates below 20 per thousand, while by the final five-year period of the projections it is expected that 83% of the population of Latin America will attain rates below 15 per thousand.

3. Comparison between the estimates and projections prepared in 1980 and those prepared in 1983

Comparison of these two sets of projections is of interest for two reasons: on the one hand, the fact of having revised the estimates and projections for ten countries with new data provides elements of judgement for evaluating the reliability of

/Table 3

Table 3

LATIN AMERICA: COUNTRIES ORDERED BY ANNUAL POPULATION GROWTH RATES IN SELECTED FIVE-YEAR PERIODS

Annual population growth rates (per thousand)	1960-1965	1980-1985	2000-2005	2020-2025
30 or more	Colombia, Ecuador, Venezuela, Brazil Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Mexico	Ecuador, Paraguay, Honduras, Nicaragua	Honduras	
Number of countries	11	4	1	
Total regional population (%)	73	5	1	
25-29.9	Peru, Paraguay, Dominican Republic	Bolivia, Peru, Venezuela Costa Rica, El Salvador, Guatemala, Haiti, Mexico	Bolivia, Ecuador, El Salvador, Nicaragua, Haiti	
Number of countries	3	8	5	
Total regional population (%)	7	37	9	
20-24.9	Chile, Bolivia, Cuba, Haiti	Colombia, Brazil, Panama, Dominican Republic	Venezuela, Paraguay, Guatemala	Bolivia, Ecuador, Honduras, Haiti
Number of countries	4	4	3	4
Total regional population (%)	10	44	8	10
15-19.9	Argentina, Uruguay	Chile, Argentina	Colombia, Peru, Brazil, Costa Rica, Panama, Mexico, Dominican Republic	Paraguay, El Salvador, Guatemala, Nicaragua
Number of countries	2	2	7	4
Total regional population (%)	10	11	70	7
Less than 15	–	Uruguay, Cuba	Chile, Argentina, Uruguay, Cuba	Colombia, Chile, Peru, Venezuela, Argentina, Brazil, Uruguay, Costa Rica, Panama, Cuba, Mexico, Dominican Republic
Number of countries		2	4	12
Total regional population (%)		3	12	83

the estimates and projections prepared, and there are cases where the new information has meant making changes in the estimates for the recent past. On the other hand, the sometimes unexpected change in the behaviour of some variables, especially fertility and infant mortality, gives advance notice of events which could take place in other countries and consequently obliges us to improve the hypotheses on the future evolution of demographic variables.

Table 4 presents comparisons, for the years 1960, 1980, 2000 and 2025, between the estimates and projections prepared in 1980 and those revised during 1982-1983 which are the subject of Boletín Demográfico No. 32. We shall limit our comments to the differences observed from 1980 onwards; the changes made in the estimates for the recent past are also important, but in order to simplify the document they will not be commented upon here.

The projections prepared in 1980 for the ten countries whose estimates and projections were revised in 1983 (Chile, Peru, Venezuela, Argentina, Brazil, Costa Rica, Nicaragua, Panama, Mexico and the Dominican Republic) gave figures lower than the subsequent revised versions in four cases (Argentina, Costa Rica, Nicaragua and Panama), equal to them in one case (Chile), and higher than them in the other five (Peru, Venezuela, Brazil, Mexico and the Dominican Republic). In total, the 1983 projections show 1.1 million persons less than the 1980 figures. Over the course of time, the difference maintains the same trend except in the case of Nicaragua in the year 2025. Overall, the difference becomes larger, rising from 1.1 million for the region as a whole in 1980 to 16.4 million in the year 2000 and 80.3 million in the year 2025.

We feel that it would be interesting to examine the reasons for these differences, although it may be anticipated right from the start that the predominant cause is likely to be changes in fertility. Since this variable is more complex in its behaviour, it displays trends which are difficult to predict. This is precisely the reason why three hypotheses are put forward on the future behaviour of fertility, the aim being to establish a range which will include with some degree of security the real number of births which will actually take place.

The analysis of the differences between the two sets of projections is carried out in terms of differences in births, deaths and annual balances of migration for the five-year periods 1975-1980, 1995-2000 and 2020-2025 (see table 5).

As regards annual births (see table 5, section A), there are 220 000 fewer births in the first five-year period, and this difference increases to 1.3 million by the end of the century and 3.7 million in the period 2020-2025. In all the ten countries considered, except for Argentina and, in certain years, Costa Rica, fertility dropped more than expected, causing substantial differences over the whole period from the previously forecast annual birth figures.

The case of Argentina is very special and worthy of note: in the five-year period 1975-1980 annual births were 120 000 more than the figure forecast in 1973, which was when the previous projection was revised; this difference increases with time to 182 000 annual births more than the previously forecast figures for

/Table 4

Table 4

LATIN AMERICA: COMPARISON OF POPULATION NOW ESTIMATED (1983) WITH THAT PREVIOUSLY PROJECTED (1980) FOR SELECTED YEARS, BY COUNTRIES AND SUBREGIONS

(Millions of inhabitants)

	1960			1980			2000			2025		
	Now (1)	Previously (2)	Difference (1-2)	Now (3)	Previously (4)	Difference (3-4)	Now (5)	Previously (6)	Difference (5-6)	Now (7)	Previously (8)	Difference (7-8)
Bolivia	3.4	3.4	0.0	5.6	5.6	0.0	9.7	9.7	0.0	18.3	18.3	0.0
Colombia	15.5	15.5	0.0	25.8	25.8	0.0	38.0	38.0	0.0	51.7	51.7	0.0
Chile	7.6	7.6	0.0	11.1	11.1	0.0	14.7	14.9	-0.2	18.1	18.8	-0.7
Ecuador	4.4	4.4	0.0	8.0	8.0	0.0	14.6	14.6	0.0	25.7	25.7	0.0
Peru	9.9	10.2	-0.3	17.3	17.6	-0.3	28.0	30.7	-2.7	41.0	56.0	-15.0
Venezuela	7.5	7.6	-0.1	15.0	15.6	-0.6	24.7	27.2	-2.5	38.0	42.8	-4.8
Andean area	48.3	48.7	-0.4	82.8	83.7	-0.9	129.7	135.1	-5.4	192.8	213.3	-20.5
Argentina	20.6	20.6	0.0	28.2	27.0	1.2	37.2	33.2	4.0	47.4	39.1	8.3
Brazil	72.6	71.5	1.1	121.3	122.3	-1.0	179.5	187.5	-8.0	245.8	291.3	-45.5
Paraguay	1.8	1.8	0.0	3.2	3.2	0.0	5.4	5.4	0.0	8.6	8.6	0.0
Uruguay	2.5	2.5	0.0	2.9	2.9	0.0	3.4	3.4	0.0	3.9	3.9	0.0
Atlantic area	97.5	96.4	1.1	155.6	155.4	0.2	225.5	229.5	-4.0	305.7	342.7	-37.2
Costa Rica	1.2	1.2	0.0	2.3	2.2	0.1	3.6	3.4	0.2	5.1	4.9	0.2
El Salvador	2.6	2.6	0.0	4.8	4.8	0.0	8.7	8.7	0.0	15.0	15.0	0.0
Guatemala	4.0	4.0	0.0	7.3	7.3	0.0	12.7	12.7	0.0	21.7	21.7	0.0
Honduras	1.9	1.9	0.0	3.7	3.7	0.0	7.0	7.0	0.0	13.3	13.3	0.0
Nicaragua	1.5	1.5	0.0	2.8	2.7	0.1	5.3	5.2	0.1	9.2	9.8	-0.6
Panama	1.1	1.1	0.0	2.0	1.9	0.1	2.9	2.8	0.1	3.9	3.9	0.0
Central America	12.3	12.3	0.0	22.9	22.6	0.3	40.2	39.8	0.4	68.2	68.6	-0.4
Cuba	7.0	7.0	0.0	9.7	9.7	0.0	11.7	11.7	0.0	13.6	13.6	0.0
Haiti	3.7	3.7	0.0	5.8	5.8	0.0	9.9	9.9	0.0	18.3	18.3	0.0
Mexico	37.1	36.9	0.2	69.4	69.8	-0.4	109.2	115.7	-6.5	154.1	174.0	-19.9
Dominican Republic	3.2	3.3	-0.1	5.6	5.9	-0.3	8.4	9.3	-0.9	12.2	14.5	-2.3
Mexico and the Caribbean	51.0	50.9	0.1	90.5	91.2	-0.7	139.2	146.6	-7.4	198.1	220.3	-22.2
Total Latin America	209.1	208.3	0.8	351.8	353.9	-1.1	534.6	551.1	-16.4	764.8	845.1	-80.3

/Table 5

Table 5

LATIN AMERICA (10 COUNTRIES): CAUSES OF DIFFERENCES BETWEEN 1980 POPULATION PROJECTIONS AND 1983 ESTIMATES, FOR SELECTED FIVE-YEAR PERIODS

(Thousands)

	1975-1980			1995-2000			2020-2025		
	Now (1)	Previously (2)	Difference (1-2)	Now (3)	Previously (4)	Difference (3-4)	Now (5)	Previously (6)	Difference (5-6)
A. Differences in annual births									
Chile	241	271	-30	275	290	-15	278	298	-20
Peru	617	637	-20	743	989	-246	727	1 461	-734
Venezuela	470	530	-54	611	695	-84	737	827	-90
lean area	1 334	1 438	-104	1 629	1 974	-345	1 742	2 586	-844
Argentina	677	557	120	730	589	141	772	590	182
Brazil	3 671	3 837	-166	4 121	4 810	-689	4 222	6 536	-2 314
lantic area	4 348	4 394	-46	4 851	5 399	-548	4 994	7 126	-2 132
Costa Rica	65	61	4	80	77	3	84	90	-6
Nicaragua	118	118	0	174	182	-8	202	248	-46
Panama	56	56	-	63	64	-1	61	70	-9
ntral America	239	235	4	317	323	-6	347	408	-61
Mexico	2 433	2 484	-51	2 668	2 995	-327	2 658	3 221	-563
Dominican Republic	182	205	-23	200	248	-48	215	275	-60
xico and the Caribbean	2 615	2 689	-74	2 868	3 243	-375	2 873	3 496	-623
Total Latin America	8 536	8 756	-220	9 665	10 939	-1 274	9 956	13 616	-3 660
B. Differences in annual deaths									
Chile	76	86	-10	101	104	-3	165	171	-6
Peru	190	191	-1	178	217	-39	255	290	-35
Venezuela	82	89	-7	125	124	1	231	234	-3
dean area	348	366	-18	404	445	-41	651	695	-44
Argentina	240	232	8	305	309	-4	400	405	-5
Brazil	1 020	1 053	-33	1 241	1 291	-50	1 824	1 933	-109
lantic area	1 260	1 285	-25	1 546	1 600	-54	2 224	2 338	-114
Costa Rica	10	11	-1	15	16	-1	32	33	-1
Nicaragua	30	31	-1	28	32	-4	45	48	-3
Panama	11	11	0	15	15	0	27	27	0
ntral America	51	53	-2	58	63	-5	104	108	-4
Mexico	515	504	11	595	576	19	962	1 016	-54
Dominican Republic	48	50	-2	48	53	-5	77	84	-7
xico and the Caribbean	563	554	9	643	629	14	1 039	1 100	-61
Total Latin America	2 222	2 258	-36	2 651	2 737	-86	4 018	4 241	-223
C. Differences in balance of migration									
Chile	-7	-3	-4	-3	-3	0	-3	-3	0
Peru	-	-	-	-	-	-	-	-	-
Venezuela	77	60	17	15	25	-10	15	25	-10
ndean area	70	57	13	12	22	-10	12	22	-10
Argentina	-	7	-7	-	7	-7	-	7	-7
Brazil	-	-	-	-	-	-	-	-	-
tlantic area	-	7	-7	-	7	-7	0	7	-7
Costa Rica	7	0	7	0	0	0	0	0	0
Nicaragua	-15	-4	-11	-1	-4	3	0	-4	4
Panama	-2	-2	0	-2	-2	0	-2	-2	0
entral America	-10	-6	-4	-3	-6	3	-2	-6	4
Mexico	-70	-50	-20	-70	-50	-20	-70	-50	-20
Dominican Republic	-11	-12	1	-11	-12	1	-	-	-
exico and the Caribbean	-81	-62	-19	-81	-62	-19	-70	-50	-20
Total Latin America	-21	-4	-17	-72	-39	-33	-60	-27	-33

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the period 2020-2025. The lower fertility in Brazil for its part, also produces very substantial differences in the annual births. Of course, in relative terms the increase in births in Argentina is much greater: around 18% in 1975-1980 and 24% in 2020-2025.

The differences in mortality are generally of negative sign: that is to say, lower mortality is now estimated than that previously projected. The exceptions are Argentina for the five-year period 1975-1980, and Mexico for the periods 1975-1980 and 1995-2000.

The differences in annual births and those in annual deaths work in opposite directions, but the effect of the lower fertility is greater than that of the lower mortality.

Finally, the balances of migration estimated in 1983 are larger, but by such small amounts as to have no practical importance. It should be noted, however, that this is a variable which we are not yet in a position to measure satisfactorily although efforts are being made to overcome this situation.

4. The population growth potential of Latin America

Even if conditions prevailed whereby the fertility and mortality rates cancelled each other out, that is to say, gave an intrinsic growth rate equal to zero in a particular year, the population of Latin America would still keep on growing, because it still has a very young age structure, as we shall see later on. The size it would reach when the population stops growing, that is to say, when it reaches the moment of numerical stabilization, would be much higher than the present one and it would be all the greater in proportion to the distance still to go before a zero intrinsic growth rate is reached.

We have carried out an exercise in order to illustrate this point: a zero intrinsic growth rate in 1980 would mean that the Latin American population of 352 million estimated for that year would amount to 631 million by the end of the period. In contrast, if the zero rate were assumed to occur in the year 2000, then the 535 million inhabitants projected for that year would grow to a stable figure of 859 million. Finally, if this phenomenon occurred only in 2025, the population of 768 million estimated for that year would grow to a stable level of 1 016 million.

II. FERTILITY

Three indicators of fertility will be examined: the annual number of births, the annual birth rate, and the total fertility rate, that is to say, the average number of children a woman will have had by the time she reaches the end of her reproductive period. Figures are presented for four selected five-year periods: 1960-1965 (recent past), 1980-1985 (present), 2000-2005 (near future) and 2020-2025 (more distant future).

/As already

As already noted in the previous section, in recent revisions of the population of 10 countries, the fertility showed a larger decline than had been forecast in previous projections, with the important exception of Argentina.

1. Annual number of births

Table 6 shows the annual number of births estimated for 1960-1965 and projections for selected five-year periods on the basis of high, medium and low fertility hypotheses. In preparing population projections, the extreme assumptions on the future evolution of fertility are designed to define a broad range within which the real value of fertility is bound to come. As in all projections, the longer the period covered, the greater the uncertainty, so that the range covered by the projections increases with time.

The comments will concentrate on the number of births which it is estimated will take place in line with the medium hypothesis, also referred to as the "recommended hypothesis", because this is considered the most plausible. For the twenty countries of the region as a whole the number of births increases throughout the period covered by the projection: from 9.3 million per year estimated for the five-year period 1960-1965, the values rise to 11.9 million (1980-1985), 13.3 million (2000-2005), and finally 14.0 million in the last five-year period covered by the projection (2020-2025).

The same tendency is observed in all the subregions.

In contrast, the individual countries display different trends, especially if we examine what takes place between 1960-1965 and 1980-1985. There are two countries, Chile and Cuba, which display a sharp drop in fertility over this period, reflected in a substantial drop in the annual number of births. Another two countries, Argentina and Brazil, display a considerable increase in the annual number of births, but they nevertheless show different evolutions as regards fertility (see table 6), for whereas this increases in Argentina, it declines considerably in Brazil. What must be borne in mind is that the number of births depends both on the level of fertility and on the female population subject to this level of fertility. As already noted, the high and low hypotheses define a range within which the true number of births in the future can be expected to fall.

2. The annual birth rate and the total fertility rate (TFR)

Table 7 shows the other two indicators: the annual birth rate and the total fertility rate.

The figures are self-explanatory, but it is worth noting that the projections show a constant decline in the annual birth rate in Latin America, as well as in the subregions and the individual countries. What was stated with regard to the tendencies registered in the period 1960-1965 to 1980-1985 also holds good in respect of the annual birth rate (see the cases of Chile, Cuba, Argentina and Brazil).

The same is true of the total fertility rate (see table 7).

/Table 6

Table 6

LATIN AMERICA: ANNUAL BIRTHS ESTIMATED FOR 1960-1965 AND PROJECTED FOR 1980-1985, 2000-2005 AND 2020-2025, ACCORDING TO THREE ASSUMPTIONS REGARDING FUTURE EVOLUTION OF FERTILITY, BY COUNTRIES AND SUBREGIONS

(Thousands)

	Estimated	Projections								
	1960-1965	1980-1985			2000-2005			2020-2025		
		High	Medium	Low	High	Medium	Low	High	Medium	Low
Bolivia	167	266	263	255	443	393	298	736	495	285
Colombia	750	881	845	787	1 027	884	722	1 119	895	679
Chile	294	265	262	251	280	272	245	293	278	241
Ecuador	220	359	353	343	548	487	417	763	615	464
Peru	495	686	679	670	873	739	624	958	727	592
Venezuela	364	546	533	519	712	647	583	855	737	627
Andean area	2 290	3 003	2 935	2 825	3 883	3 422	2 889	4 724	3 747	2 888
Argentina	498	727	722	700	858	754	679	958	772	651
Brazil	3 301	4 058	3 929	3 725	4 840	4 144	3 420	5 557	4 222	3 201
Paraguay	80	127	123	118	186	157	124	245	174	124
Uruguay	57	62	59	55	72	65	54	75	64	53
Atlantic area	3 936	4 974	4 833	4 598	5 956	5 120	4 277	6 835	5 232	4 029
Costa Rica	62	75	74	74	89	82	75	102	84	70
El Salvador	132	221	208	191	372	289	206	517	330	194
Guatemala	204	332	301	270	540	411	308	730	498	319
Honduras	108	184	177	174	348	276	219	524	326	197
Nicaragua	82	137	134	130	210	183	163	272	202	156
Panama	49	60	58	55	70	63	56	76	61	49
Central America	637	1 009	952	894	1 629	1 304	1 027	2 221	1 501	985
Cuba	262	179	167	167	189	180	166	195	187	166
Haiti	175	262	256	248	433	394	348	633	501	375
Mexico	1 810	2 608	2 516	2 415	3 490	2 647	1 993	4 064	2 658	1 81
Dominican Rep.	166	203	195	176	235	204	163	267	215	15
Mexico and the Caribbean	2 413	3 252	3 134	3 006	4 347	3 425	2 670	5 159	3 561	2 50
Total Latin America	9 276	12 238	11 854	11 323	15 815	13 271	10 863	18 939	14 041	10 40

/Table 7

Table 7

LATIN AMERICA: ANNUAL BIRTH RATES AND TOTAL FERTILITY RATES ESTIMATED FOR 1960-1965 AND PROJECTED (MEDIUM HYPOTHESIS) FOR 1980-1985, 2000-2005 AND 2020-2025, BY COUNTRIES AND SUBREGIONS

	Annual birth rate (per thousand)				Total fertility rate			
	Estimated	Projected			Estimated	Projected		
	1960-1965	1980-1985	2000-2005	2020-2025	1960-1965	1980-1985	2000-2005	2020-2025
Bolivia	46	44	38	29	6.63	6.25	5.14	3.50
Colombia	45	31	22	18	6.72	3.93	2.78	2.31
Chile	36	23	18	16	5.10	2.59	2.32	2.18
Ecuador	46	41	31	25	7.00	6.00	4.26	3.18
Peru	46	37	25	18	6.85	5.00	3.10	2.26
Venezuela	44	33	25	20	6.46	4.37	3.05	2.60
Andean area	44	33	25	20	6.47	4.37	3.20	2.57
Argentina	23	25	20	17	3.09	3.37	2.56	2.22
Brazil	42	31	22	18	6.15	3.81	2.71	2.28
Paraguay	42	36	27	21	6.62	4.85	3.42	2.56
Uruguay	22	20	18	16	2.93	2.79	2.50	2.15
Atlantic area	38	29	22	18	5.39	3.74	2.70	2.28
Costa Rica	45	31	22	17	6.95	3.50	2.68	2.21
El Salvador	47	40	31	23	6.85	5.56	3.97	2.80
Guatemala	48	38	30	24	6.85	5.17	3.85	2.97
Honduras	51	44	36	26	7.35	6.50	4.73	3.20
Nicaragua	50	44	32	23	7.33	5.94	4.01	2.68
Panama	41	28	21	16	5.92	3.46	2.48	2.12
Central America	47	39	30	23	6.91	5.21	3.84	2.83
Cuba	35	17	15	14	4.67	1.97	2.08	2.09
Haiti	44	41	37	29	6.15	5.74	4.86	3.49
Mexico	45	34	23	18	6.75	4.61	2.70	2.26
Dominican Rep.	48	33	23	18	7.32	4.18	2.68	2.35
Mexico and the Caribbean	44	33	24	18	6.43	4.36	2.79	2.36
Total Latin America	41	32	24	19	5.99	4.15	2.93	2.42

/As a

As a complement to table 7, a summary table has been prepared in which the countries of Latin America are listed according to their total fertility rates (see table 8). This table shows the number of countries which have a particular TFR and the percentage of the total population of the region represented by them. In the five-year period 1960-1965, 83% of the population, concentrated in sixteen countries, registered total fertility rates of over 5.5 children per woman, while two countries representing 10% of the population of the region registered rates of less than 3.5, which is still a relatively high level. At present (1980-1985), the situation has changed significantly: only 9% of the population of Latin America has a TFR of 5.5 or more, while at the other extreme 15% of the population (five countries) display a TFR of 3.5 or fewer children per woman. The great majority of the population of the region (76%), concentrated in only nine countries, displays a TFR of 3.5 to 5.5 children per woman. In the five-year period at the beginning of the next century, 87% of the population (thirteen countries) will have achieved a TFR of 3.5 or less, while 13% (seven countries) will have a TFR of 3.5 to 5.5. Finally, in the last five-year period of the projection it is expected, in line with the medium hypothesis on the evolution of fertility, that 78% of the population (eleven countries) will have a TFR of less than 2.5, 20% (eight countries) will register a TFR of between 2.5 and 3.5, and the remainder (one country representing only 2% of the population of the region) will have a TFR of 3.5 to 4.5.

In short, the projected figures show that the great diversity of situations currently existing among the countries as regards fertility will go down considerably and there will be a trend towards great homogeneity by the final five-year period of the projections.

III. MORTALITY

Three indicators will be used to examine mortality trends: the annual mortality rate, the expectation of life at birth, and infant mortality.

In contrast with fertility, when preparing population projections only one hypothesis on the future evolution of mortality is usually formulated for each country. The reason is that mortality has less effect -especially when moderately low levels have already been achieved- on the size and structure of the population.

1. Annual mortality rate

Table 9 shows the annual mortality rates and expectations of life at birth for the region as a whole, the subregions, and each of the twenty Latin American countries considered.

The annual rate is not a good indicator of mortality. It is the quotient of the annual average number of deaths occurring over a period of time and the average population estimated for the same period. Consequently, the age structure of the population has an important effect on its magnitude. Nevertheless, its calculation and use are so generalized that it is frequently presented in studies on mortality.

/Table 8

Table 8

LATIN AMERICA: COUNTRIES ORDERED ACCORDING TO THEIR TOTAL FERTILITY RATES IN SELECTED PERIODS

Total fertility rates (TFR)	1960-1965	1980-1985	2000-2005	2020-2025
6.5 or more	Bolivia, Colombia, Ecuador, Peru, Paraguay, El Salvador, Costa Rica, Guatemala, Honduras, Nicaragua, Mexico, Dominican Republic	Honduras		
Number of countries	12	1		
Total regional population (%)	42	1		
5.5-6.49	Panama, Venezuela, Brazil, Haiti	Bolivia, Ecuador, El Salvador, Nicaragua, Haiti		
Number of countries	4	5		
Total regional population (%)	41	8		
4.5-5.49	Chile, Cuba	Peru, Paraguay, Guatemala, Mexico	Bolivia, Honduras Haiti	
Number of countries	2	4	3	
Total regional population (%)	7	28	5	
3.5-4.49		Colombia, Venezuela, Brazil, Costa Rica, Dominican Republic	Ecuador, El Salvador, Guatemala, Nicaragua	Bolivia
Number of countries		5	4	1
Total regional population (%)		48	8	2
2.5-3.49	Argentina, Uruguay	Chile, Argentina, Uruguay, Panama	Colombia, Peru, Venezuela, Argentina, Brazil, Paraguay, Uruguay, Costa Rica, Mexico, Dominican Republic	Ecuador, Paraguay, El Salvador, Guatemala, Honduras, Nicaragua, Haiti, Venezuela
Number of countries	2	4	10	8
Total regional population (%)	10	12	82	20
Less than 2.5		Cuba	Chile, Panama, Cuba	Colombia, Chile, Peru, Argentina, Uruguay, Costa Rica, Panama, Brazil, Cuba, Mexico, Dominican Republic
Number of countries		1	3	11
Total regional population (%)		3	5	78

/Table 9

Table 9

LATIN AMERICA: ANNUAL MORTALITY RATES AND LIFE EXPECTANCIES AT BIRTH (BOTH SEXES), ESTIMATED FOR 1960-1965 AND PROJECTED FOR 1980-1985, 2000-2005 AND 2020-2025, BY COUNTRIES AND SUBREGIONS

	Annual mortality rates (per thousand)				Life expectancy at birth (years)			
	Estimated	Projected			Estimated	Projected		
	1960 1965	1980 1985	2000 2005	2020 2025	1960 1965	1980 1985	2000 2005	2020 2025
Bolivia	21	16	9	6	43.5	50.7	61.6	67.2
Colombia	12	8	7	7	56.2	63.6	67.9	71.4
Chile	12	7	7	9	58.0	69.7	71.6	73.2
Ecuador	16	9	5	5	51.9	62.6	69.6	71.5
Peru	18	11	6	6	49.1	58.6	68.8	72.0
Venezuela	9	6	5	6	61.0	69.0	71.6	73.7
Andean area	14	9	6	6	54.5	63.4	68.9	71.8
Argentina	9	9	8	9	65.5	69.7	72.6	74.0
Brazil	12	8	7	8	55.9	63.4	68.6	72.1
Paraguay	12	7	6	6	56.6	65.1	68.7	71.7
Uruguay	9	10	10	10	68.3	70.3	73.0	73.6
Atlantic area	11	8	7	8	58.2	64.7	69.3	72.4
Costa Rica	9	4	5	6	63.0	73.7	74.7	75.2
El Salvaldor	15	8	5	5	52.3	64.8	72.1	73.1
Guatemala	17	9	6	6	48.2	60.7	69.1	72.2
Honduras	18	10	6	5	47.9	59.9	69.4	72.2
Nicaragua	15	9	5	5	51.6	59.8	70.1	72.6
Panama	10	5	5	7	62.0	71.0	73.7	74.3
Central America	15	8	5	5	51.8	63.4	70.8	72.8
Cuba	9	6	7	10	65.1	73.5	74.9	75.1
Haiti	22	14	9	7	43.6	52.7	60.3	66.0
Mexico	11	7	5	6	58.6	65.7	70.5	73.2
Dominican Rep.	15	8	6	6	52.6	62.6	69.2	72.4
Mexico and the Caribbean	12	8	6	7	58.0	65.5	70.1	72.7
Total Latin America	12	8	6	7	56.9	64.5	69.5	72.4

/This indicator

This indicator shows a decline for the region as a whole from 1960-1965 to the beginning of the twenty-first century, but afterwards shows a slight increase. The latter does not indicate a deterioration in the health conditions of the population, but rather changes in the age structure of the population due to the expected decline in fertility.

A similar tendency is observed in the subregions. In the Andean area and Central America this indicator remains constant in the last two five-year periods analysed, while in the Atlantic area and Mexico and the Caribbean the tendency is the same as that shown by Latin America as a whole.

2. Expectation of life at birth

This synthetic indicator of mortality expresses the average number of years which a newly born baby would live if all the years of life which the components of the cohort to which it belongs are expected to live were divided equally among all the components. The figures given here refer to a hypothetical cohort exposed to age-specific mortality risks in selected five-year periods: 1960-1965, 1980-1985, 2000-2005 and 2020-2025.

Mortality, when expressed in terms of expectation of life at birth, shows a very clear downward trend in the region: the figure estimated for the five-year period 1960-1965 was almost 57 years, whereas now (1980-1985) it is 64.5 years. The projections indicate that it will amount to almost 70 years in the period 2000-2005 and 72.4 years in the last five-year period. The subregions show similar tendencies. It should be noted, however, that the rate of increase in expectation of life varies between the subregions and over the course of time. In preparing the mortality projections it has been assumed that in proportion as the expectation of life at birth increases, the annual increase in this indicator will be smaller. This is a reasonable assumption, because the expectation of life is also associated with the structures by cause of death, and it may be assumed that when life expectancies at birth of around, say, 70 years are achieved, the predominant causes of death will generally be those of a degenerative nature (tumors, cardiovascular problems, etc.), for which there are not yet sufficient medical advances available to the whole population. On the other hand, when a country shows relatively low life expectancy, reflecting high mortality, the possibilities of reducing the risks of death are very considerable, since the most frequent causes of death in these conditions are those of an infectious or contagious nature, which can be relatively easily controlled.

As in the case of the examinations made of growth rates and total fertility rates, a summary table is given (see table 10) which shows the mortality situation of the Latin American countries over the course of time. The countries are set out in accordance with groups of life expectancy at birth in the selected five-year periods. In the recent past (1960-1965), only 18% of the population (six countries) registered life expectancies of between 60 and 70 years. The remaining 82% of the population (fourteen countries) had a life expectancy at birth of less than 60 years, and among this section five countries representing 11% of the total population had life expectancies at birth of less than 50 years.

/Table 10

Table 10

LATIN AMERICA: DISTRIBUTION OF COUNTRIES BY LIFE EXPECTANCY AT BIRTH (BOTH SEXES), FOR SELECTED PERIODS

Life expectancy at birth (years)	1960-1965	1980-1985	2000-2005	2020-2025
Less than 50	Bolivia, Peru, Guatemala, Honduras, Haiti			
Number of countries	5			
Total regional population (%)	11			
50-54.9	Ecuador, El Salvador, Nicaragua, Dominican Republic	Bolivia, Haiti		
Number of countries	4	2		
Total regional population (%)	6	3		
55-59.9	Colombia, Chile, Brazil, Paraguay, Mexico	Peru, Honduras, Nicaragua		
Number of countries	5	3		
Total regional population (%)	65	7		
60-64.9	Venezuela, Costa Rica, Panama	Colombia, Ecuador, Brazil, El Salvador, Guatemala, Dominican Republic	Bolivia, Haiti	
Number of countries	3	6	2	
Total regional population (%)	5	49	4	
65-69.9	Argentina, Uruguay, Cuba	Chile, Venezuela, Argentina, Paraguay, Mexico	Colombia, Ecuador, Peru, Brazil, Paraguay, Guatemala, Honduras, Dominican Republic	Bolivia, Haiti
Number of countries	3	5	8	2
Total regional population (%)	13	36	55	5
70-74.9		Uruguay, Costa Rica, Panama, Cuba	Chile, Venezuela, Argentina, Uruguay, Costa Rica, El Salvador, Nicaragua, Panama, Cuba, Mexico	Colombia, Chile, Peru, Ecuador, Venezuela, Argentina, Brazil, Paraguay, Uruguay, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Mexico, Dominican Republic
Number of countries		4	10	16
Total regional population (%)		5	41	93
75 and over				Costa Rica, Cuba
Number of countries				2
Total regional population (%)				2

/At present

At present (1980-1985), the picture is completely different: 90% of the population (fifteen countries) has an expectation of life at birth of 60 years or more. Among these countries, four countries representing 5% of the population of Latin America have achieved values of this indicator between 70 and 75 years, while a further five countries representing 36% of the total population show values between 65 and 70 years.

It is assumed that the situation will continue to improve and that in the five-year period 2000-2005 ten countries representing 41% of the population of Latin America will register life expectancies at birth of between 70 and 75 years; eight countries representing 55% of the total population will register expectancies of between 65 and 70 years, and only in two countries representing 4% of the population will life expectancy be between 60 and 65 years. The tendency towards longer life will continue, and it has been estimated that in the five-year period 2020-2025, eighteen countries representing 95% of the total population will have reached life expectancies at birth of over 70 years (with two countries exceeding 75 years), while the other two will have values between 65 and 70 years. In short, as in the case of fertility great heterogeneity is observed in the recent past and at present, but there will be a tendency towards great homogeneity by the five-year period 2020-2025.

3. Infant mortality

The infant mortality rate measures the risk that a newly-born baby will die before reaching the age of one year. In practice, it is calculated as the quotient of the annual average number of deaths taking place in a given period among children under one year, divided into the annual average number of births taking place during the same period. It is an indicator which has very significant weight in the level of mortality expressed in terms of expectation of life at birth. Its calculation, which is apparently very simple, however, gives very dubious results in the great majority of Latin American countries because of the quality of the data which have to be used. In many countries, recourse is had to indirect procedures for estimating infant mortality, even though the methods were originally designed for measuring child mortality, that is to say mortality between the birth of a child and the age of 2, 3 or 5 years. Consequently, infant mortality as calculated by indirect procedures is really an extrapolation of the estimated child mortality as described above.

These considerations should be borne in mind when examining the infant mortality figures given in table 11.3/ It can be seen there that the region as a whole has registered in the past and, according to the projections, will also register in the future, decreasing rates of infant mortality: 99.0 per thousand births in 1960-1965, 61.0 in 1980-1985, 38.7 in 2000-2005 and 27.1 in 2020-2025. In relative terms, the decline up to the end of the century from one five-year period to another is quite regular (around 63%), while a decline of 70% is expected between the periods 2000-2005 and 2020-2025.

The subregions show similar tendencies. In contrast, the individual countries show a variety of situations, especially between the periods 1960-1965 and 1980-1985. Particularly noteworthy cases are those of Chile, which reduced its

/Table 11

Table 11

LATIN AMERICA: ANNUAL INFANT MORTALITY RATES ESTIMATED FOR 1960-1965 AND PROJECTED FOR 1980-1985, 2000-2005 AND 2020-2025

(Per thousand births)

	Estimated	Projected		
	1960-1965	1980-1985	2000-2005	2020-2025
Bolivia	163.6	124.4	63.7	39.9
Colombia	84.5	53.3	37.0	25.8
Chile	109.4	27.9	21.9	17.1
Ecuador	132.3	68.9	35.9	28.8
Peru	136.1	98.6	59.7	47.3
Venezuela	72.8	38.7	28.3	20.2
Andean area	107.0	63.1	40.5	30.2
Argentina	59.7	36.0	23.8	17.7
Brazil	109.4	70.7	45.4	29.8
Paraguay	80.6	45.0	33.0	24.3
Uruguay	47.9	37.6	27.0	23.1
Atlantic area	97.1	63.4	41.3	27.7
Costa Rica	70.6 a/	20.2	15.7	14.2
El Salvador b/	128.0	71.0	37.8	27.2
Guatemala	128.1 a/	67.7 b/	36.6 b/	26.6 b/
Honduras b/	136.8	81.5	40.0	29.3
Nicaragua	130.9	76.4	35.5	27.0
Panama	62.7	25.6	18.6	16.8
Central America	118.1	63.5	34.2	25.8
Cuba b/	59.6	20.4	14.6	11.5
Haiti	170.5	108.2	67.5	43.0
Mexico	86.3	53.0	32.7	22.2
Dominican Rep. b/	110.0	63.5	37.8	26.2
Mexico & the Caribbean	90.2	53.9	34.1	23.6
Total Latin America	99.0	60.9	38.7	27.1

a/ Estimates prepared by method described in Feeney's mimeographed document "Mortalidad al comienzo de la vida", presented at the Latin American Panel Meeting held in Santiago, Chile, July 1979.

b/ Estimates prepared by the United Nations Population Division.

/infant mortality

infant mortality over this period from 109.4 to 27.9: that is to say, by almost three-quarters; Costa Rica, where infant mortality in 1960-1965 was three and a half times higher than that registered at present; that of Cuba, where infant mortality in the recent past was practically three times the present level and finally that of Venezuela, where infant mortality has been reduced by half. It may be noted that the registers of both deaths and births may be considered as very good in Cuba and Costa Rica and of an acceptable level of quality in Chile and Venezuela. Lack of space prevents further examination of the figures in table 11, but mention must be made of the enormous heterogeneity displayed by this indicator at the present time: the highest value is that registered in Bolivia with 124.4, while the lowest is that of Costa Rica, with 20.2: in other words, infant mortality in Bolivia is more than six times higher than that observed in Costa Rica.

IV. AGE STRUCTURE

As a result of the levels and trends of fertility and mortality in the Latin American countries, age structures are also very different. In order to keep the amount of figures included in this document within suitable limits, we shall refer to only two age distribution parameters, namely, the proportions of persons under 15 years of age and over 65 years in the population of Latin America as a whole, together with the maximum and minimum proportions attained in particular countries, every five years from 1960 up to the year 2025 (see table 12).

1. Aging of the population

As was to be anticipated when we examined fertility, the important changes in this variable in the countries with the largest populations originated around 1965 and can be said to have become more accentuated after 1970. This tendency explains why up to 1980 the population of Latin America had a very high concentration (over 40%) of persons under 15 years of age. At the other extreme of the age scale, the population 65 years of age and older increased slightly from 3% to 4% during this period.

In line with the medium hypothesis on the future evolution of fertility, together with that of mortality, it is expected that the process of aging will continue in the region, with the proportion of the population under 15 years of age going down and that over 65 years of age increasing, the final figures in the year 2025 being 26.2% and 8.2%, respectively.

It is interesting to examine the deviations from this mean which have taken place in the past (1960-1980), and those expected in the future. In 1960, the highest proportion of population under 15 years of age was 48% (in Nicaragua) and the lowest was 27.9% (in Uruguay), the difference between them being 20.1%. It is expected that in the year 2025 the maximum and minimum proportions of the population under the age of 15 will amount to 37.2% (Haiti) and 20.2% (Cuba), respectively, representing a difference of 17%.

/Table 12

Table 12

LATIN AMERICA: PERCENTAGE OF POPULATION AGED UNDER 15 YEARS AND 65 OR MORE. REGIONAL AVERAGE AND MAXIMUM AND MINIMUM ESTIMATED VALUES FOR THE COUNTRIES, 1960-2025

Year	Under 15 years					Over 65 years				
	Maximum value (1)	Regional average (2)	Minimum value (3)	Differences (1-2) (4)	Differences (2-3) (5)	Maximum value (6)	Regional average (7)	Minimum value (8)	Differences (6-7) (9)	Differences (7-8) (10)
1960	48.0	42.5	27.9	5.5	14.6	8.1	3.1	2.1	5.0	1.0
1965	48.8	43.1	28.1	5.7	15.0	8.4	3.7	2.3	4.7	1.4
1970	48.4	42.4	27.9	6.0	14.5	8.9	3.9	2.4	5.0	1.5
1975	48.1	41.4	27.7	6.9	13.5	9.6	4.0	2.4	5.0	1.6
1980	47.8	39.4	27.1	8.4	12.3	10.4	4.2	2.4	6.2	1.8
1985	46.9	38.0	26.4	8.9	12.6	10.7	4.4	2.5	6.3	1.9
1990	45.8	36.7	23.5	9.1	13.2	11.2	4.6	2.7	6.6	1.9
1995	44.6	35.2	24.0	9.4	11.2	11.8	4.9	2.9	6.9	2.0
2000	43.6	33.4	24.1	10.2	9.3	12.2	5.2	3.1	7.0	2.1
2005	42.9	31.6	23.0	11.3	8.0	12.1	5.5	3.1	6.6	2.4
2010	41.8	30.0	21.0	11.8	8.5	11.8	5.8	3.0	6.0	2.8
2015	40.5	28.6	20.5	11.9	8.1	11.9	6.4	3.1	5.5	3.3
2020	39.0	27.3	20.2	11.7	7.0	12.7	7.2	3.2	5.5	4.0
2025	37.2	26.2	20.2	11.0	6.0	13.3	8.2	3.5	5.1	4.7

/The maximum

The maximum and minimum deviations of the proportions of persons under 15 years of age with respect to the average for the region are widely different over time. When the maximum value is compared with the average for the region, a relatively small difference (5.5%) is observed for 1960, tending to increase with time to 11% in 2025. When the minimum values are compared with the average for the region, it is observed that the difference is larger at the beginning (14.6%) but tends to go down with time (6.0% en 2025).

When we examine the proportion of the population 65 years of age or more we see that there is a difference of 6% between the maximum value of 8.1% (Uruguay) and the minimum of 2.1% (Honduras). It is anticipated that by the end of the projection, in 2025, this difference will increase to 9.8%, representing the difference between the values for Cuba (13.3%) and Haiti (3.5%).

If we compare the maximum and minimum values for the proportion of the population aged 65 or more, we see that the deviation of the maximum values does not display any clear tendency, while the deviation of the minimum values, which is smaller than that for persons under 15, tends to increase with time from 1% in 1960 to 4.7% in 2025.

It may be stated, to sum up, that Latin America will continue to be a continent with a young population. Even the country which currently has the oldest population in the region still registers relatively high proportions of young people in its population compared with developed countries, as we shall see in the following section.

2. Some comments on the age structure of the population

The preceding sections on fertility and mortality emphasized the wide range of situations displayed by the countries of the region at present with regard to these two variables and the fact that different forms of future evolution are foreseen. This diversity is even more clearly displayed in the case of age structures, both at present and as regards what is foreseen for the future.

In 1960-1965, 18 countries of the region accounting for 90% of its total population had 35% or more of their population under 15 years of age, and among them 16 countries accounting for 83% of the total population had over 40% of their population in this age group (see table 13).

The situation has not changed substantially. At present, 16 countries accounting for 86% of the total population of the region register figures over 35% for the proportion of the population under 15, and in 12 of these countries accounting for 43% of the regional population the proportions are over 40%. At the beginning of the twenty-first century there will still be eight countries with very young populations (35% or more of the population under 15 years of age). In the two selected five-year periods of the twenty-first century, in contrast, greater variation in the proportion of inhabitants under 15 years of age is observed.

/Table 13

Table 13

LATIN AMERICA: DISTRIBUTION OF COUNTRIES BY PERCENTAGE OF POPULATION UNDER AGE OF 15 IN SELECTED FIVE-YEAR PERIODS

Population under 15 (%)	1960-1965	1980-1985	2000-2005	2020-2025
40 or more	Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Venezuela, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Haiti, Mexico, Dominican Republic	Bolivia, Ecuador, Paraguay, Peru, Venezuela, El Salvador, Guatemala, Honduras, Nicaragua, Haiti, Mexico, Dominican Republic	Bolivia, Ecuador, Honduras Nicaragua, Haiti	
Number of countries	16	12	5	
Total regional population (%)	83	43	9	
35-39.9	Cuba, Chile	Brazil, Colombia, Costa Rica, Panama	Paraguay, El Salvador, Guatemala	Bolivia, Honduras, Haiti
Number of countries	2	4	3	3
Total regional population (%)	7	43	5	6
30-34.9	Argentina	Argentina, Chile	Brazil, Colombia, Peru, Venezuela, Costa Rica, Panama, Mexico, Dominican Republic	Ecuador, El Salvador, Guatemala, Nicaragua
Number of countries	1	2	8	4
Total regional population (%)	9	11	74	9
25-29.9	Uruguay	Uruguay, Cuba	Argentina, Chile	Brazil, Colombia, Paraguay, Peru, Venezuela, Costa Rica, Panama, Mexico, Dominican Republic
Number of countries	1	2	2	9
Total regional population (%)	1	3	9	74
-25			Uruguay, Cuba	Argentina, Uruguay, Cuba, Chile
Number of countries			2	4
Total regional population (%)			3	11

/As regards

As regards aging, the situation has not varied notably from 1960 up to the present (see table 14). The great majority of the countries (18 in 1960-1965, accounting for 90% of the population, and sixteen in 1980-1985, accounting for 86% of the population) registered a proportion of less than 5% of persons over 65. In the case of this indicator, too, it is noted that in the two selected five-year periods in the twenty-first century, the situation among the countries becomes more heterogeneous. It is interesting to note that in the last five-year period of the projection it is anticipated that seven countries accounting for 44% of the regional population will have proportions of inhabitants over 65 years of age of over 8%. At present, however, there are developed countries which register figures more than double this level, thus showing once again that Latin America is a continent with a young population and will continue to be so in the future.

V. CONCLUSIONS AND COMMENTS

As noted in the introduction, this document is similar to that which accompanied Boletín Demográfico No. 27 presenting the population projections for 20 Latin American countries as revised around 1980. It may be considered as a complement to Boletín Demográfico No. 32, except that the projections for Venezuela and Chile commented upon here are different from those published in that Boletín because they were revised after its pullication.

In the foregoing sections, a description has been given of the demographic situation of the region in the recent past (1960-1965), the present (1980-1985), the near future (2000-2005) and the more distant future (2020-2025). The fundamental purpose has been to present estimates and projections of the variables determining population changes. Some of the indicators used in this description reflect a series of problems of direct interest to economic and social development planners in the countries. The high rates of infant mortality which still persist in many countries of the region, for example, are a challenge to those responsible for planning health policies. The very young age structure of the region, for its part, makes it likely that the current pressure on the labour market will continue in the future. In a document of this nature, however, our work as demographers is limited to a description of the current demographic situation and its possible future evolution in the countries of the region.

We shall now sum up the main conclusions arrived at, adding some comparisons with the demographic situation displayed by developed countries in other regions.

a) The total population of Latin America, estimated at 352 million in 1980, has been growing vigorously over the last 20 years. As noted earlier, from the figure of 209 million estimated in 1960 it grew to 352 million by 1980 (an increase of 68%). It is anticipated that its growth rate will slacken in the next 20 years, so that it will amount to 535 million in the year 2000 (an increase of 52%), and that it will continue to increase more slowly in the following 25 years, arriving at a total of some 765 million in 2025.

/Table 14

Table 14.

LATIN AMERICA: DISTRIBUTION OF COUNTRIES BY PERCENTAGE OF POPULATION AGED 65 OR MORE, IN SELECTED FIVE-YEAR PERIODS

Population aged 65 or more (%)	1960-1965	1980-1985	2000-2005	2020-2025
2-3.49	Bolivia, Brazil, Colombia, Paraguay, Peru, Honduras, Guatemala, El Salvador, Costa Rica, Venezuela, Mexico, Nicaragua	Bolivia, Ecuador, Honduras, Guatemala, El Salvador, Venezuela, Dominican Republic, Nicaragua	Bolivia, Honduras, Haiti, Nicaragua	Haiti
Number of countries	12	8	4	1
Total regional population (%)	77	15	6	2
3.5-4.99	Chile, Ecuador, Dominican Republic, Haiti, Cuba, Panama	Brazil, Colombia, Paraguay, Peru, Costa Rica, Mexico, Haiti, Panama	Colombia, Ecuador, Paraguay, Peru, Guatemala, El Salvador, Venezuela, Dominican Republic	Bolivia, Ecuador, Honduras, Nicaragua
Number of countries	6	8	9	4
Total regional population (%)	13	71	47	9
5-6.49	Argentina	Chile	Brazil, Costa Rica, Panama	Paraguay, Guatemala, El Salvador
Number of countries	1	1	3	3
Total regional population (%)	9	3	34	6
6.5-7.99		Cuba	Chile	Colombia, Peru, Venezuela, Dominican Republic, Mexico
Number of countries		1	1	5
Total regional population (%)		2	3	39
8 or more	Uruguay	Argentina, Uruguay	Argentina, Uruguay, Cuba	Argentina, Brazil, Chile, Costa Rica, Uruguay, Cuba, Panama
Number of countries	1	2	3	7
Total regional population (%)	1	9	10	44

b) Population growth varies from one country to another and over the course of time. At present, 42% of the population of the region is growing at the rate of over 25 per thousand, while the rate for the region as a whole is 23 per thousand. In contrast with this growth rate, there are currently regions such as Western Europe which have growth rates of only 0.2 per thousand but which registered rates of the order of 7 per thousand in the recent past (1960-1965), when the Latin American rate was 28 per thousand. By the last five-year period of the projections, it is anticipated that the population of Latin America could be growing at rates around 12 per thousand.

c) On comparing the population estimates and projections given in Boletín Demográfico No. 27 with those presented in the present document, it will be seen that the difference between them is of negative sign: that is to say, smaller populations and projected values are estimated now than before. The reason for this is that there has been a larger decline in fertility than was previously foreseen. This lower fertility means a smaller annual number of births, representing a large amount in absolute terms in the case of some countries, and population policies (especially those concerned with health) must take account of these new trends, which it was not possible to anticipate as accurately as might have been desired because fertility is a highly complex variable which is difficult to forecast.

d) Fertility, which was very high in the recent past, shows a clear downward trend, but this varies considerably from one country to another, especially between the five-year periods 1960-1965 and 1980-1985. The projections of this variable were established on the assumption that in the more distant future it will display greater homogeneity from one country to another. The country currently showing the lowest total fertility rate is Cuba, with 1.97, which is very close to the figures for developed countries such as those of Western Europe, where the rate is around 1.6.

e) Mortality shows a marked downward trend, especially over the last 20 years; as in the case of fertility, its rate of decrease varies greatly from one country to another. It is anticipated that in the future the situation will gradually become more homogeneous, as the countries with higher mortality will register bigger drops than those likely to occur in countries where mortality has already reached quite low levels. At present, the expectation of life at birth in the region as a whole is around 64 years for both sexes: this seems quite a high figure when compared either with the previously mentioned Western European countries, which register life expectancies of the order of 74 years, or countries in the region itself, such as Cuba and Costa Rica, where this indicator has already reached levels of over 73 years.

f) Infant mortality, the measurement of which is very unreliable in most of our countries, shows very high values at present in almost all of them. Exceptions are the cases of Cuba, Costa Rica, Panama and Chile, with rates of between 20 and 28 per thousand live births. It should be noted that the statistics backing up these estimates are very good in Cuba and Costa Rica and reasonably good in Panama and Chile. The region as a whole currently registers the high level of infant mortality of 61 per thousand, but there are big differences from one country to another. Compared with the developed countries, this situation appears very unfavourable, as most of them have infant mortality rates below 10 per thousand.

/g) Because

g) Because of the still-high rates of fertility in many countries, combined with mortality rates which are also still high in a number of them, the age structure of the population shows the features typical of a young population: a high percentage of inhabitants under the age of 15 and only a small proportion aged 65 or more. Latin America's population growth potential is therefore very high. If a zero growth rate had been assumed for 1980, for example, when the population was 352 million, the number of inhabitants in the region would still have kept on growing until it reached a stable figure of some 631 million. At present, some 39% of the population are under 15 years of age, while 4.3% are over 65. In contrast, the countries making up Western Europe have 19.4% of their population under the age of 15, while 12.7% are aged 65 or more. It is anticipated that by the year 2025, 26% of the population of Latin America will be under 15, while 8% will be 65 or over. These figures show once again how young Latin America's population is compared with that of the developed countries.

Notes

1/ Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

2/ For a set of tables on the population of the English-speaking Caribbean countries, see document E/CEPAL/CEGAN/POB.2/L.2/Add.1.

3/ In the document "Mortality and health policies" (E/CEPAL/CELADE/L.3), detailed comments are made on the quality of the data used, so these observations will not be repeated here. At all events, it is worth noting that the poor quality of information, especially that from registers of vital statistics such as deaths and births, is in line with the conditions of socio-economic and cultural underdevelopment of the countries.