

## ATUALIZAÇÕES / CURRENT COMMENTS

### THE POPULATION OF BRAZIL \*

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**SUMMARY:** In 1970 the population of Brazil with 94,508,554 inhabitants was extreme youth, since 42.67% was composed of children under 14 years old. In that year the proportion of female was 50.2%. The population density increased from 1.17 inhabitants/km<sup>2</sup> in 1872 to 11.18 in 1970, and in this last year the range was 1.03 in the North region and 43.90 in the South-East region. The urban population increased from 31.24% in 1940 to 55.98% in 1970 and for the first time the rural population was smaller than the urban population. In 1950 concerning with marital status 39% of the population 15 years old and over was single and 54% married. In 1970 this rate was respectively 35.4% and 56.6%. The population economically inactive increased from 49.17% in 1940 to 52.24% in 1970. The literacy ratio increased from 43% in 1940, to 48% in 1950 and 68.04% in 1970. The crude birth rate was 43/1000 live births in 1950 and fell to 37.7/1000 in 1970. The fertility rate decreased from 179.3/1000 women (15-49 years old) to 156.7/1000 in 1960/70. The crude death rate decreased from 20.60/1000 inhabitants in 1940/50 to 9.4/1000 in 1960/70. The infant mortality rate still remains high: 171/1000 live births in 1940/50 and 170/1000 in 1971. Concerning with the size of the cities, 8 in 1940 had 100,000 or more inhabitants and in 1970 this number increased to 94 cities. The population growth increased from 2.38% in 1940/50, to 2.99% in

1950/60 and 2.83% in 1960/70. Brazil is the first country in population size in Latin America and the eighth in the world. Concerning his area, Brazil is the fifth country in size.

UNITERMS: Population\*; Brazil\*.

#### 1 — INTRODUCTION

This study will present the outstanding demographic data up to 1971. The method to be employed in the analysis of the data will be the demographic technics.

#### 2 — BRAZILIAN POPULATION'S STRUCTURE 2.1 — Sex and Age

The basic structure of a population is represented by the population pyramid, a graphic which shows us the total sex and age distribution of a given population. In underdeveloped countries such as Brazil, the base of the pyramid is wide because of high fertility, and it narrows rapidly because of high mortality.

One of the main characteristics of Brazilian population<sup>1</sup> is its extreme youth: 42.67% of its population is composed of children under 14 years old, while only 4.89% are over 60. Over half of the population is less than 20 years old, according to Table 1. Concerning with the census of 1970, 50.2% of the population is female.

\* This paper was presented at the United Nations Meeting: Inter-Regional Seminar on Application of Demographic Data and Studies to Development Planning, Kiev, 1969 — In this work the data were up to date.

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## 2.2 — Ethnic composition

The ethnic composition is summarized according to Table 2.

Between 1940 and 1950 the rate of both races white and black declined, while that of the called "pardos", increased, suggesting a higher rate of natural increase or that miscegenation is continuing. Since the Figures are based on individual declarations, the number of white may be exaggerated, and a lighter number blacks may also swell the reported mulattoes<sup>7</sup>. In 1970 the Census of the racial composition was not included and there are no published results on the Census of 1960.

## 2.3 — Territorial Distribution

Brazilian population density increased from 4.88 inhabitants per square kilometer (sq. km.) in 1940 to 6.14 in 1950, and from 8.39 in 1960 to 11.18 in 1970. Due to economical, historical and geo-

graphical factors, the population is irregularly distributed. According to Table 3 since 1872 the demographic density increased from 1.17 to 11.18 in 1970.

The major concentration of the population is along the coast, with one-third of the territory containing 93% of the population. Variation by states is also considerable. The highest density in 1960 was present in the state, of Guanabara, practically a city state, containing Rio de Janeiro, with 2,824 persons per sq. km, and 3,685 inhabitants per sq. km. in 1970.

The lowest was that of Roraima, with 0,13 persons per sq. km in 1960 and 0,18 in 1970.

The Regional density is showed in Table 4.

The trend in Brazilian urbanization over the past four decades is seen in Table 5. The urbanization was accelerated especially in the Central-West region.

TABLE 1  
Percentual Composition of the Population — Brazil: 1950/1970

Age Group	Present Population %		
	July 1st. 1950	Sept. 1st. 1960	Sept., 1st. 1970
Total	100.00	100.00	100.00
0 — 4	16.12	15.97	14.91
5 — 9	13.51	14.48	14.27
10 — 14	12.14	12.22	12.51
	41.77	42.67	41.79
15 — 19	10.59	10.19	10.95
20 — 24	9.61	8.79	9.04
25 — 29	7.96	7.43	7.02
30 — 39	12.11	12.12	11.57
40 — 49	8.40	8.50	8.68
50 — 59	5.10	5.40	5.75
	53.77	52.44	52.91
60 — 69	2.79	3.12	3.29
70 e +	1.67	1.77	1.82
Unknown	—	—	0.19
	4.46	4.89	5.11

Source: IBGE<sup>2</sup>

Suburban populations are included in the urban category. For the first time the Census in Brazil showed a urban population bigger than a rural one.

#### 2.4 — Nationality

According to NEIVA<sup>7</sup> "in 1920, 5% of the total population were foreigners and naturalized Brazilians; by 1950, the figure had declined to 2%. These figures show the effect of declining migration and the small demographic influence of the foreign-born. In absolute numbers, the foreign-born and naturalized declined from 1,565,961, in 1920, to 1,406,568, in 1940 and 1,214,184 in 1950. In the latter year, 867,118 lived in the South, and 296,870 in the East. Twenty-eight per cent were Portuguese, 20% Italian, 11% Spaniards, 11% Japanese, 7% Germans and Austrians, 4% Poles, 4% Russians and Balts and 4% Syrians and Lebanese". Figures for 1960 and 1970 was not available.

#### 2.5 — Marital Status

According to NEIVA<sup>7</sup> "in 1950, 39% of the population had 15 years of age and over was classified as single, 54% married, and 7% widowed. However, because of defects in registration these figures reveal only part of the situation. Moreover, since there is no divorce in Brazil, many married people live separately, and others declare themselves married when living in common law unions. This is apparent from the different number of men and women who declared themselves ever married and with a living spouse". In 1970, 35.4% of the population over 15 years old was classified as single, 56.6% married, and 5.3% widowed according to Table 6.

#### 2.6 — Economic Activity

The economically Brazilian population is defined as those who take part into the production of economic goods and service. (Housewives, students, retired workers and children under ten years

old are excluded). The active population is divided into three basic sectors of economic activity: the *primary sector* (agriculture, animal husbandry, forestry and extractive industries such as mining, fishing, etc.); the *secondary sector* (industries of transformation); and the *tertiary sector* (trade services, public administration, defense and the professions).

Between 1940 and 1970 the decrease in primary sector activities and the other sectors, mainly the tertiary, indicates the trend towards the development in Brazil (Table 7). The increase of the population economically inactive can indicate a higher proportion of persons in schools that follow urbanization system. Consequently it indicates a lower proportion of persons working.

#### 2.7 — Literacy

In 1940<sup>7</sup>, 43% of the population over ten years old was literate (43% for males and 38% for females). By 1950<sup>8</sup>, the rate increased to 48%, with males at 53% and females at 44%. Urban areas were 79% literate, as opposed to 62% in the suburban areas and 32% in the rural. In 1960 the ratio of literacy was 60.63% and 68.04% in 1970.

The most interesting difference is by state. In Guanabara, the literacy rate was 85% in 1950. In the South, Rio Grande do Sul, São Paulo, Santa Catarina and Paraná States had rates of 66%, 65%, 64% and 53% respectively. On the other hand the figures for the States Paraíba is 29%; Piauí 26%; Maranhão 25% and Alagoas 24%, all in the Northeast. The other three states of this region (Ceará, Rio Grande do Norte and Pernambuco) each of them having rates of about 32%<sup>7</sup>.

Table 8 gives the figure for 1970 by regions. Comparing with the previous data, it can be observed that the proportion of literacy increased.

**TABLE 2**  
Racial Composition — Brazil 1940 and 1950

Color	1940 %	1950 %
White	63	62
Black	15	11
"Pardos" (mixed)	21	26
Yellow	1	1

Source: NEIVA <sup>7</sup>

**TABLE 3**  
Demographic Density — Brazil 1872/1970

Year	Inhabitants/km <sup>2</sup>
1872	1.17
1890	1.70
1900	2.06
1920	3.62
1940	4.88
1950	6.14
1960	8.39
1970	11.18

Source: IBGE <sup>1</sup>

**TABLE 4**  
Regional Population Density — Brazil 1940/1970

Regions	Density (Inhabitants per sq.km)			
	1940	1950	1960	1970
North	0.41	0.52	0.73	1.03
Northeast	9.36	11.65	14.54	18.59
Southeast	19.97	24.54	33.81	43.90
South	10.20	13.95	21.16	29.68
Central — West	0.67	0.92	1.60	2.75
Total Brazil	4.88	6.14	8.39	11.18

Source: IBGE

**TABLE 5**  
Urban Area Population by Region — Brazil 1940/1970

Regions	1940 %	1950 %	1960 %	1970 %
North	27.75	31.49	37.80	45.18
Northeast	23.42	26.40	34.24	41.78
Southeast	39.42	47.55	57.36	72.76
South	27.73	29.50	37.53	44.56
Central — West	21.52	24.38	35.02	48.25
Total Brazil	31.24	36.16	45.02	55.98

Source: IBGE <sup>1</sup>

3 — POPULATION DYNAMICS

3.1 — *Birthrate*

Brazil's high fertility is characteristic of countries with very young populations, and which are generally underdeveloped social and economically. Unfortunately, the registration of births in Brazil is woefully incomplete, so that exact birth rates cannot be computed. However, according to Mortara's estimates<sup>6</sup> the crude birth rate was 43 in 1950, and 37.7 in the period 1960/1970<sup>3</sup>. Expressed otherwise, 174 children were born to every 1,000 women aged 15-49 years in Brazil in 1950 and 156.7 in the period 1960/1970<sup>3</sup>.

T A B L E 6

Marital Status — Brazil 1960/1970

Marital Status	Persons 15 years old	
	9/1st/1960	9/1st/1970
Single	34.2	35.4
Married	57.4	56.5
Separated	2.5	2.5
Widowed	5.4	5.3
Without declaration	0.5	0.2
Total:	100.0	100.0

Source: IBGE<sup>1</sup>

T A B L E 7

Population distribution by type of activity Brazil — 1940/1970 (percentage)

Activity	1940	1950	1960	1970
Economically active	50.83	46.82	46.45	44.76
Primary Sector	33.49	28.04	24.94	19.80
Secondary Sector	5.23	6.42	6.08	7.97
Tertiary Sector	12.11	12.36	15.43	16.99
Economically inactive	49.17	53.18	53.55	55.24

Source: IBCE<sup>2</sup>

Table 9 describe this trend by age.

In summary, Brazil's high fertility patterns are due to women who begin their reproduction activities early and continue them intensively during their childbearing period. Also, they may reflect the traditional attitude and the socio-cultural values toward childbearing.

3.2 — *Mortality*

The registration of deaths is very deficient in Brazil. For this reason, it is

impossible accurately to determine the death rate, life expectancy, infant mortality and many other mortality rates affecting population. Indirect methods for computation have to be employed and Mortara in 1962 made a preliminary estimate of 17 deaths per 1,000 population quoted by NEIVA<sup>7</sup>. This rate conceals great variation. Thus, there is a lower mortality in the South than in the North and Northeast and especially in the great urban or metropolitan areas. Life expectancy at birth between 1940 and

1950, as estimated by Mortara<sup>5</sup>, was 43.7 years (41.5 for men and 46.0 for women) for the whole of Brazil, while it was 54.2 (52.4 and 56.0 for men and women) in the state of São Paulo in 1949-51. To this same state capital, the

TABLE 8  
Literacy by regions Brazil — 1970

Regions	State or Territory	% of literate (population over 10 years old)
I	Territ. Rondônia, Acre, Amazonas, Roraima, Pará, Territ. Amapá	64.33
II	Maranhão e Piauí	39.75
III	Rio Grande do Norte, Paraíba, Pernambuco, Alagoas e Territory Fernando de Noronha	46.29
IV	Sergipe, Bahia	49.39
V	Minas Gerais, Espírito Santo	67.62
84.9	Rio de Janeiro Guanabara	VI
VII	São Paulo	83.04
VIII	Paraná	70.50
IX	Santa Catarina Rio Grande do Sul	82.93
X	Mato Grosso, Goiás, Distrito Federal	66.31
Brazil	—	68.04%

Source: IBGE<sup>2</sup>

life expectancy at birth in 1963 was 60.84 years<sup>9</sup>. In 1970 in Brazil, the life expectancy was 61.10 years for women and 57.01 for men and in the state of São Paulo was 65.0 years for women and 51.2 for men<sup>8</sup>. In 1970 the estimation of death rate was 9.4/1000 (10.5 for men and 8.3 for women).

Death and birth registration had been improving in Brazil. Data are broken down in fashion similar to fertility breakdowns, but in addition there are breakdowns by cause of deaths.

Because of the dependence on adequate registration of births and deaths of infant mortality have to be interpreted with care. Almost all that can be said is that it is so high as to constitute a national scandal. For 1940/50, MORTARA<sup>5</sup> estimated it to be about 171. But, he also indicated that it was declining perhaps coming down to 160 in the early Fifties. To 1960 the Infant Mortality in Brazil was estimated in 120‰. As noted earlier, however, this average rate is misleading. In 1971 this ratio was estimated in 170/1000, while the 1968 infant mortality rate was 72 in the state of São Paulo and 67 in Rio de Janeiro in the South, 246.3 in the county of Teresina in the Northeast.

The data available pointed out some

figures described before according to the Table 10 and 11.

### 3.3 — *Natality*

The crude birth rate in Brazil is high and the rate remains high with a very small decrease. This factor is the main responsible for the population growth. From 1940 to 1950 the birth rate was 43.2‰ and from 1960 to 1970 this rate fell to 37.73‰.

TABLE 9

Fertility rate according to the age — Brazil  
1940/1970

Age	Average per year of live births per 1000 women 15 - 49 years old		
	1940	1950	1960/1970
15 — 20	79.2	78.9	57.3
20 — 25	243.6	250.6	227.4
25 — 30	286.6	271.8	264.7
30 — 35	245.5	222.4	—
35 — 40	182.3	165.2	200.5
40 — 45	109.4	109.7	—
45 — 50	33.8	46.8	60.6
15 — 50	179.3	174.1	156.7

Source: MADEIRA<sup>3</sup>

TABLE 10

Death Rate — Brazil: 1940/1970

Years	Death Rate per 1,000 persons		
	Crude Death Rate	Men	Women
1940/50	20.60	22.12	19.11
1950/60	11.7	—	—
1960/70 *	9.4	10.5	8.3

\* Source: MADEIRA<sup>3</sup>

Table 12 compares the Crude Birth Rate with Crude Death Rate, since 1940 to 1970.

4 — GROWTH

According to NEIVA<sup>8</sup> "Brazilian population growth has been conditioned by the rambling path of its history. When discovered in 1500, Brazil was inhabited by about a million Indians. For three centuries after 1559, African slaves were imported in large numbers. Estimates of the number range from 2,300,000 to

1550; around 57,600 by 1585; perhaps 100,000 by 1600; and by 1690 — the year of the discovery of the first gold placers—close to 300,000. In the eighteenth century, with the gold rush, the population grew twelve-fold. This was due not only to migration, but to increased area of settlement which included considerable numbers of Indians.

These factors speeded up the process of miscegenation and acculturation. MORTARA estimates Brazil's population as 2,500,000 in 1770-1771, and 3,660,000 by 1800-01. Almost certainly these figures should be revised downward, since, when they were computed, the 1920 census data had not been corrected. But even if the population increase in the eighteenth century was ten-fold rather than twelve-fold, this was certainly the take-off century for Brazilian population growth. Half a century later, 1851, the population is estimated to have been 7,340,000. In 1872 the first Brazilian census was taken<sup>7</sup>.

TABLE 11  
Infant Mortality Rate — Brazil: 1940/1971

Years	Infant Mortality Rate (death rate per 1,000 live births)
1940/50	171.00
1960	120.00
1971 *	170.00

Source \*: Population Reference Bureau. Quadro Demográfico Mundial — 1971.

a highly exaggerated 16,000,000 a reasonable approximation being about . . . 4,700,000 for the three centuries. Peopling of the country was initially very slow; current estimates suggest 15,000 Europeans and their slaves by

The results of the succeeding censuses are given in Table 13.

The census of 1900, and 1950 were underestimated, and the remaining three overestimated population size. The mean annual rate of population growth in Brazil between 1940 and 1950 had been 2.38. Due to continuing declines on mor-

TABLE 12  
Birth Rate and Death Rate — Brazil: 1940/1970

Years	Rate per 1,000 persons	
	Birth rate	Death rate
1940/50	43.2	20.6
1950/60	41.7	11.7
1960/70 *	37.73	10.5

Source \*: MADEIRA<sup>3</sup>



T A B L E 13  
Size-of cities — Brazil: 1940/1970

Years	Census Results	Corrected Results
1872	9,930,473	10,099,000
1890	14,333,915	14,199,000
1900	17,438,434	17,984,000
1920	30,635,605	24,404,000
1940	41,236,315	41,114,000
1950	51,944,397	51,976,000
1960	70,967,185	—
1970	94,508,554	—

Sources: For census results Table 1, pp 2-3, of: *Sinopse Preliminar do Censo Demográfico*, Rio de Janeiro, IBGE 1962. For corrected results, Table p. 29 of *Anuário Estatístico do Brasil*, Rio de Janeiro, IBGE 1961.

T A B L E 14  
Size-of cities — Brazil: 1940/70

Number of inhabitants	1940	1950	1960	1970
25,000 — 50,000	13	44	80	826
50,000 — 100,000	12	19	42	157
100,000 or more	8	12	29	94

Source: IBGE <sup>1</sup>

tality, this rate was 2.99% in 1950/60 and 2.83% in 1960/70. Whereas the population had increased by 26% between 1940 and 1950, it increased by 37% between 1950 and 1960 and 23.7% between 1960 and 1970.

However rapid the increase in total population, urban growth has been also greater in recent years. "From 1940 to 1950 the urban (including suburban) population increased 46% or over 5,900,000 persons, while the rural only

increased about 17% or 3,800,000 people. From 1950 to 1960, the urban increase was 13,208,047, or 70% and the rural 5,814,741 or 18%. The urban increase was thus 69% of the total. This enormously enhanced the number and importance cities" 7. For instance, Rio de Janeiro and São Paulo in 1920 had some 1,250,000 and 579,000 inhabitants respectively, and in 1970 was 5,978,977 and 4,315,746 respectively. The metropolitan area of each one today have more than five million inhabitants.

T A B L E 15  
Population Growth — Brazil: 1940/1970

Great Regions	Annual Incremental Geometric mean rate (Percentage)		
	1940/50	1950/60	1960/70
North	2.29	3.35	3.29
Northeast	2.26	2.11	2.34
South East	2.12	3.07	2.61
South	3.25	4.00	3.44
Central West	3.38	5.21	5.67
Total Brazil:	2.38	2.99	2.83

Source: MARTINS <sup>4</sup>

T A B L E 16

Situation of some demographic data of Brazil in relation to the countries of South America that present the highest and smallest population growth — 1971

Demographic data	Brazil	Colombia	Uruguay
Population estimates mid — 1965 (millions)	95.7	22.1	2.9
Annual rate of increase from 1958/1963 (%)	2.8	3.4	1.2
Number of years to double population	25	21	58
Birth rate per 1,000 population	38	44	21
Death rate per 1,000 population	10	11	9
Infant mortality rate (deaths under one year per 1,000 live births)	170	78	50
Per capita gross national product 1963 (in US \$)	250	310	520

Source: Population Reference Bureau. *Quadro Demográfico Mundial* — 1971

T A B L E 17  
Countries that present size of population bigger than Brazil in 1971

Country	Population (millions)
China	772,9
India	569,5
USSR	245,0
USA	207,1
Paquistan	141,6
Indonésia	124,9
Japan	104,7
Brazil	94,5

Source: Population Reference Bureau. Quadro Demográfico Mundial — 1971.

The number of cities of all sizes has grown markedly in the past three decades. For instance in 1940 there were only 18 cities with the population size between 25,000 to 50,000 inhabitants, and in 1970 there were 826.

Table 14 illustrates this phenomenal growth.

Now we will present some data, that are going to show the population growth rate in Brazil since 1940 in the table 15; table 16 shows Brazil between the highest birth rate of South America (Colombia) and the smallest (Uruguay). Table 17 shows that Brazil is the eighth country in population size and table 18 that Brazil is the fifth country in area size.

T A B L E 18  
Countries that present areas higher than Brazil — 1970

Country	Area (1,000 Km <sup>2</sup> )	Population (1,000 inhabitants)	Population Density (inhab./Km <sup>2</sup> )
USSR	22,402	243,000	11
Canadá	9,976	21,406	2
China	9,561	75,9619	79
USA	9,363	205,395	22
Brazil *	8,457	94,506	11

Sources: Demographic yearbook (United Nations). New York, 1970.

\* IBGE <sup>1</sup>

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YUNES, J. — [População do Brasil] *Rev. Saúde públ.*, S. Paulo, 6:393-404, 1972.

**RESUMO:** A população do Brasil em 1970 com 94.508.554 habitantes pode ser considerada jovem, uma vez que 42,67% têm menos de 14 anos de idade. A proporção de mulheres no ano censitário foi de 50,2%. A densidade populacional aumentou de 1,17 habitantes/km<sup>2</sup> em 1872 para 11,18 em 1970 e a variação foi de 1,03 para a Região Norte para 43,90 na Região Sudeste. A população urbana aumentou de 31,29% em 1940 para 55,98% em 1970 e pela primeira vez a população rural foi menor que a urbana. Em relação ao estado civil 39% da população com mais de 15 anos de idade era solteira e 54% casada em 1950. Em 1970 esta proporção economicamente inativa aumentou de 49,17% em 1940 para 52,24% em 1970. A taxa de alfabetização aumentou de 43% em 1940, para 48% em 1950 e 68,04% em 1970. A natalidade foi de 43/1000 em 1950 e caiu para 37,7/1000 em 1970. A taxa de fertilidade descreveu de 179,3/1000 mulheres (-15-49 anos) para 156,7/1000 em 1960/70. A mortalidade geral decresceu de 20,60/1000 habitantes no decênio de 1940/50 para 9,4/1000 em 1960/70. A mortalidade infantil permanece ainda alta: 171/1000 nascidos vivos em 1940/50 para 170/1000 em 1971. Em relação ao tamanho da população por município, 8 cidades em 1940 tinham 100.000 habitantes ou mais e em 1970 este número aumentou para 94 municípios. A taxa de crescimento populacional aumentou de 2,38% no decênio de 1940/50 para 2,99% em 1950/60 e 2,83% em 1960/70. O Brasil é o primeiro país em tamanho populacional na América Latina e o oitavo do mundo. Em relação à área é o quinto país em tamanho.

UNITERMOS: População \*; Brasil \*.

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