

BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS
NATIONAL CENSUS COMMISSION

A GLIMPSE INTO THE
COMING FIFTH CENSUS OF BRAZIL
(September 1st-1940)

PRESENTED AT
THE EIGHT AMERICAN SCIENTIFIC CONGRESS
WASHINGTON, D. C., MAY 10-18, 1940

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SUMMARY

1. Preliminary note about the previous estimates and censuses of the population of Brazil. The colonial period. — 2. The imperial period. The population census of 1872. — 3. The republican period. The population censuses of 1890 and 1900. — 4. The demographic and economic census of 1920. — 5. The preparation of the census of 1940. — 6. The three simultaneous censuses. — 7. The demographic census. Its instruments. Its questions. — 8. The economic census and its sections. — 9. Agriculture. — 10. Industry. — 11. Commerce. — 12. Transportation and communication. — 13. Services. — 14. The social census. — 15. Final remarks.

A GLIMPSE INTO THE FIFTH CENSUS OF BRAZIL

1. — The history of the Brazilian censuses is a relatively recent one, for the first of them was taken in 1872.

In the colonial period, neither real censuses were carried out, nor reliable population estimates were ever made available.

The estimate of Abbe Corrêa da Serra, who attributed to Brazil 1.900.000 inhabitants in 1776, seems to have been only a summary of incomplete information gathered by ecclesiastical authorities, excluding the greater parte of the Indian population.

The order of magnitude of the population of this country by the beginning of the nineteenth century was probably better indicated by the result of an inquiry carried out in 1808 by the War Department, which led to the rounded number of 4.000.000. Evidently this was intended to be only an approximate count, but it appeared to be consistent with the result of a survey conducted ten years later, after the elevation of the colony to kingdom, by Counsellor Velloso de Oliveira, who estimated the total population at about 4.400.000 in 1818.

Taking into account the uncertainty of the above quoted estimates, it may be assumed that at the time of the Declaration of Independence (1822) Brazil had from 4.500.000 to 5.000.000 inhabitants.

2. — In the imperial period, the need for a reliable quantitative and qualitative information on the population very soon appeared as important and urgent, but material difficulties connected

with the immensity of the national area and the deficiencies of the transportation and communications, obstacles deriving from inadequacy and laxity of the administrative organization, and last, not least, oppositions arising from popular ignorance and prejudices, concurred to determine the failure of many plans and of some attempts at a regular census.

An estimate by the Department of the Interior, supervised by Counsellor *Pedreira do Couto Ferraz* (lately Baron of Bom Retiro), placed the Brazilian population at about 7.700.000 in 1854.

The undertaking of a true and complete census became possible only after the creation, in 1870, of the General Bureau of Statistics. The census taken on Aug. 1, 1872, under the technical supervision of Dr. *J. M. do Couto*, found a population of about 10.100.000 and produced reliable information on its composition by sex, nationality, marital condition, color, freedom or slavery status, etc.

3. — The weakening of the political and administrative structure of the empire reflected upon the field of the official statistical organization, so that only after the revolution of 1889, which culminated in the substitution of the republican for the monarchic regime, the General Bureau of Statistics was able to proceed to the preparation and execution of the second Brazilian census, which was taken on Dec. 31, 1890.

The total population at this date had reached about 14.300.000; among the special results of the second Brazilian census, an age classification less imperfect than that of 1872 may be mentioned.

According to the republican legislation, the population census had to be repeated every ten years. Consequently, in 1900 the third Brazilian census was punctually carried out; but, owing to some deficiencies of organization, it did not meet with a full success. Its general result — a number of about 17.300.000 inhabitants — appeared inferior to the presumably true figure, after ten years of high natural increase and very active immigration. For the Federal District (Rio de Janeiro City and surroundings), the results of this

census were cancelled as untrustworthy, and a new census was taken in 1906; but for the 20 federated States the problem of the correction of the third census remained unsolved.

The planned and partly prepared census of 1910, from which the removal of the uncertainties derived from the above exposed circumstances was expected, was first delayed and later suspended owing to the political agitation which perturbed the nation at that time.

4. — The fourth Brazilian census, taken on Sept. 1, 1920, could be carefully prepared, successfully executed and rapidly tabulated, thanks to the improvement of social conditions and to the capacity and energy of its director, Dr. J. L. S. de Bulhões Carvalho. The ascertained number of about 30.600.000 inhabitants indicated an exceptionally great increase of the population; but it has to be remarked that such an increase appeared greater than it really was. in consequence of the deficiencies of the third census, which constituted the latest reference for comparison.

The 1920 census gave ample and detailed information on the composition of the population by sex, age, marital condition, nationality, occupation, education, and so on.

In 1920, for the first time, the population census was accompanied by an economic one. Although restricted to agriculture and industry (with exclusion of the minor farms and industrial plants and of some whole branch of industry), this latter census brought copious and useful data about the main aspects of Brazilian economic life.

5. — The preparation of the census which had to be realized in 1930 was very advanced, when its execution was suspended, owing to various circumstances.

With the consolidation of the new order, after the 1930 revolution, it became evident that, to be lasting and effective, the reorganization of the official statistics required, as a first step, a better co-ordination between the various existing federal, State and municipal organs. Having dealt with this co-ordination through the creation of the Brazilian Institute of Geography and Statistics, the Federal Government proceeded to the legislative regulation of the censuses, determining that a general census should be taken on

Sept. 1, at intervals of ten years (beginning from 1940), and providing for the organization of the forthcoming fifth Brazilian census.

A National Census Commission was appointed in 1938; its presidency and the supervision of the National Census Service were entrusted to Prof. J. Carneiro Felipe, of the University of Brazil. These newly created organs are working within the frame of the B. I. G. S., the President of which is H. E. the Ambassador J. C. de Macedo Soares and the Secretary General the well-known statistician M. A. Teixeira de Freitas.

The preparatory work is now well advanced; the central service has already fixed the scope, criteria and modalities of the census; the local (State and municipal) services have been organized and are actively co-operating with the central service for the preparation of the executive work.

The extension and the aims of the forthcoming census will be briefly explained in the following pages.

6. — The census operations of Sept. 1, 1940, will comprise three simultaneous but separate enumerations, that is a demographic, an economic and a social census.

7. — The demographic census aims to ascertain the quantitative and qualitative composition of the population and its living conditions. Its units are the family (or the collective domicile) and the individual.

The fundamental instruments of the demographic census are :

1) *The note-book of the census agent*, intended to collect not only preliminary information on the number of families and individuals, but also data on the inhabited buildings, which will allow the compilation of a housing census, with particular reference to the relations between the number of inhabitants and the available room accommodation, and to the water supply, electric and sanitary installations:

2) *The family schedule*, which will gather information on the largest part of the population, living in family groups;

3) *The list for collective domiciles*; the individual characters of the persons living in such domiciles will be described in family

schedules if they constitute family groups (as in the case of a family residing in an hotel) and otherwise (as in the case of a college, hospital, etc.) in *individual schedules*.

The questions posed are identical in the family schedule and in the individual one, with the sole exception of the one referring to the "relationship to the head of the household," appearing in the former, which is replaced by a question about the "condition in the collective domicile", in the latter.

The 45 questions of the demographic bulletins cover a wide field. Beyond the customary questions regarding name, sex, age, marital condition, birthplace, citizenship, religion, education, employment status, eventual temporariness in the residence or absence from same, chronic infirmities, they include many other queries which will enlarge our still scanty knowledge of the demographic, social and the economic aspects of Brazilian life.

In the demographic field, the results of the research on fertility will be especially important. Each person who had children is bound to declare the total number of them (separately live-born and still-born), the number surviving at the census date, and the mother's or father's age when the first child was born. Lacking complete birth statistics, Brazil expects to obtain some light on the birthrate and prolificness of its population, from this new inquiry. The family schedule will add to said elements another one, interesting for the study of the composition of the household, i. e., the number of children who are living with their parents.

Among other information, particularly important from a social point of view, there may be quoted the data on color, aiming to determine the numbers of components of the relatively pure racial groups (white, negro and yellow populations), and thence, by deduction of them from the whole population, the total number of components of the mixed racial groups, which form a considerable part of the Brazilian-born population.

Light will also be thrown on the origin of the components of the present population of Brazil by the questions on their birthplace and on the birthplaces of their parents. Educational and administrative reasons make desirable the knowledge of other circumstances

relating to foreign-born inhabitants, such as the date of their coming to Brazil, their ability to speak Portuguese and the language they use at home.

A whole series of questions are made to obtain full information on education. The kind and the degree of the education already received, of the education being received, or of the interrupted education, are covered; the practical learning of professional activities is the object of a separate question.

Among the questions relating to profession or condition, those concerning the principal occupation are completed by a parallel series concerning the eventual secondary occupation. For both, principal and secondary, inquiries are made as to whether they are remunerated, or not.

Other questions of economic interest are those about the ownership of urban or rural real estate, the participation in the benefits or burdens of social insurance, the contribution to private life (or other personal) insurance.

The answers to the questions of the population schedules will be translated into two types of cards for mechanical tabulation: individual cards and family cards. The former will allow the classification of the population by isolated or combined individual characters, to be made separately for each municipality (or even section of same, as a district, quarter, block of houses, urban or rural zone). The latter will allow the classification of families, to be made according to the number and the quality of their components.

The foreseen tabulation of the demographic census elements comprises many combined classifications (for instance: by country of birth, sex, age, marital condition; by sex, age, principal occupation, secondary occupation; by number of children born and number of children surviving), which will throw light on the relations existing between the various individual characters and between the corresponding social phenomena.

The richness of the question list and the multiplicity of the predisposed elaborations will co-operate to make of the next census a nearly inexhaustible source of information about the population of Brazil, its composition and activities.

The age classification of the Brazilian-born population will be utilized for the approximate reconstruction of the natural movement of the population between 1920 and 1940, in prosecution of the work already accomplished on the ground of the previous censuses, which succeeded in the corresponding reconstruction for the 1870-1890 and 1890-1920 periods, reaching as far as to the calculation of life tables for both periods.

8. — The economic census is divided into five sections: agriculture, industry, commerce, transportation and communication, and services.

There is a *note-book for the enumerator of the agricultural census* and a *note-book for the enumerator of the other economic censuses*, for the purpose of collecting preliminary data about the number and kinds of the undertakings and establishments which are the units of the economic census.

There are separate and different schedules for the various sections of this census.

A general criterion followed in the preparation of the economic census is that of requiring, besides the data expressed in economic units (money), which allow comparison to be made between the different kinds of activities simultaneously observed, data expressed in physical units (weight, area volume, etc.), which are more suitable for the comparison of the same branch in different periods.

9. — The agricultural census, the unit of which is the agricultural establishment, or farm, has as its principal instrument a *general schedule*, containing 61 groups of questions.

A first series of questions concerns the farm and its various component elements: the manager; the workers and their families; the buildings; machinery, power plants, and other installations; agricultural implements; means of transportation; cultural and breeding systems.

A second series of questions constitutes a detailed census of livestock, poultry and other domestic animals.

A third and last series has as its object the investigation of the various aspects of farm activities and production in 1939. The agricultural and other vegetable production; the cultivated area and (for

arboreous cultures) the number of existing trees; the meat and dairy production; the industrial production of the farm obtained by the transformation of its original products, will be registered.

For some classes of agricultural, zootechnical and agricultural-industrial specialized establishments (such as those for floriculture, horticulture, dairy produce, cotton-ginning, coffee-shelling, etc.) the general schedule was not adequate; therefore *special schedules* have been prepared.

The elaboration of the collected data has been planned with a view to obtaining a complete panorama of Brazilian agricultural, breeding and forestal resources and activities, showing the whole of the country, as well as its different administrative units and geographic zones.

10. — The industrial census has two units; its economic unit is the undertaking, its technical unit, the establishment.

The main instrument of this census is its *general schedule*, which is to be used for the collection of data about most of the industries. Some particular industries, characterized by peculiar technical means or activities, such as mining, power production, building, publishing industries, etc., have *special schedules*.

A brief illustration of the general schedule will show the principal aims of the industrial census. This schedule contains 48 groups of questions.

The first part of it is intended to collect information, referring to the census date, on the general juridical and economical features of the undertaking and on the characteristics of the establishment; there are also to be indicated the principal investments of capital, the composition of the staff, the technical means available (mechanical power; machinery, apparatus, other installations; means of transportation).

The second part deals with the industrial activities of the establishment in 1939. It comprises data on consumption and stocks of raw materials; consumption of fuel, lubricating oils and electric energy; production and stocks of products; wages, salaries and other production costs; sales; monthly variations in workmen's occupation and wages. These data will enable the calculation of the industrial

transformation cost (as the difference between the value of the production and the cost of raw materials, fuel, lubricating oils and electric power) to be made.

Being extended to all existing industrial units, from the great mechanized factory to the little artisan's workshop, this census will give a thorough documentation of the potentiality and activity of Brazilian industry. The predisposed elaboration of the collected data aims to extract from them the maximum of useful information.

11. — The commercial census has the same units as the industrial one: the undertaking and the establishment.

Its *general schedule* is intended to cover the field of strictly commercial activities: wholesale, retail and mixed trade.

Special schedules will be used for other classes of activities which are comprised in this section of the economic census, such as those of trade auxiliaries (brokers and commission, etc.); banks and other savings and credit institutions; other agencies connected with the money market, private insurance companies, etc.

The general schedule of the commercial census contains 40 groups of questions, some of which are identical or similar to those of the industrial census. Among the others, the most peculiar groups of questions are those concerning goods purchased in 1939 (classified according to the type of the seller: national producer, national wholesale dealer, national auctioneer, foreign exporter), and goods sold in the same year (classified according to the type of the buyer: national retail seller, national consumer, foreign importer). There are, also, questions on the payment conditions of the goods sold, stocks of merchandise on hand, main purchase and sale markets, etc.

Among the aims of the commercial census, which will be pursued through the proposed elaboration of its data, there is the determination of the cost of the commercial intermediation (as represented by the difference between sale price and purchase cost).

12. — Owing to the deep technical differences existing between land, water and air transportation, it was impossible to adopt a general schedule for the transportation and communication census.

There are *special schedules* for railroads, street railways, motor car and omnibus services and concerns, animal traction undertakings,

navigation and airways. Besides, there is a *special schedule* for private communication services (telegraph, telephone and radio), the State services being the object of a separate inquiry conducted with the aid of the Post Department.

In this census, the statistical unit is generally the undertaking, since it often happens that the particular establishments (such as railway stations) can not, even hypothetically, be operated separately from the organization to which they belong. The substance of the information is similar to that of the industrial census, a first part of the schedules being devoted to the description of the undertaking, of the establishments, of other technical installations (such as railway lines, etc.), and of other personal, material and financial factors of potentiality, at the census date, and a second part dealing with the traffic and other activities and with the financial aspects of administration in 1939.

13. — The census of services may be considered as a supplement to the industrial and commercial censuses, since it comprises activities of a mixed character, such as those of the hotels, boarding-houses, coffee-houses, inns, etc., theaters, movies and other shows; of the maintenance, mending and repair undertakings; of the services of personal hygiene (hairdressing, bathing establishments, etc.). The heterogeneous nature of these services having made impossible the inclusion of them in a general schedule, a *special schedule* has been prepared for each of aforesaid categories.

The composition criteria followed in these schedules are identical to those which we have already detailed with reference to the industrial census: i. e. a first series of data aims to represent the situation of the undertaking or establishment (both units being here taken under consideration) at the census date, while a second series refers to the activity developed by said unit in the year 1939 and to the financial and other results of this activity. The synthesis and the reciprocal co-ordination of the information supplied by the five above mentioned sections of the economic census will present an exceptionally abundant and rationally organized documentation on Brazilian economy.

14. — The social census will be extended to a great variety of institutions, the economic scope of which is mostly subordinated to civil, sanitary or cultural aims.

Special schedules, adequate to the characters of the various categories, are to be employed, the statistical units being the institution and the establishment.

Among the institutions comprised in the field of this census, we find the following main groups:

1) those having cultural aims, such as schools and other teaching institutions, libraries, museums, laboratories and other scientific-technical institutions; academies and cultural societies;

2) those having administrative aims, such as services of water supply, sewerage, road maintenance and cleansing, refuse collection and disposal, fire extinction, etc.

3) those having aims of sanitary, hygienic or social assistance or protection, such as hospitals, asylums, workhouses, dispensaries, maternity-hospitals and public nurseries, health surveying organs, etc.;

4) those aiming at crime repression or prevention, such as jails, houses of correction, etc;

5) those having associational aims, such as trade-unions and other professional organizations, mutual-aid associations, sporting and other clubs.

The fundamental criterion of this census is the same of that of the economic census. A first part of the schedule is intended to represent the situation of the institution, or establishment, at the census date; a second part is intended to describe its activities and attainments in 1939.

15. — It can be observed that the three censuses will be reciprocally completing themselves.

The demographic census will disclose many facts of economic and social interest; the economic census will contribute to the knowledge of some demographic and social sides of Brazilian life; the social census will throw light on some aspects of the economic and demographic fields.