

HISTORY OF CENSUS

Introduction

The tremendous pace of population growth and the consequent population explosion have promoted scientific population studies almost all round the globe. The present is a period of extraordinary activity in the study of population. Coverage and quality of information, now being thrown up, on population, are greater than ever before; the number of scholars engaged in the analysis, interpretation and dissemination of population statistics too has increased if measured by any historical standard. The growth of the field in these respects has been accompanied by a clearer differentiation between studies of population and other investigations of human problems. The study of population, however, remains closely related to and dependent on a wide variety of scientific and practical specialities.

In the literal sense the term 'population census' is primarily an official enumeration through a direct visit of all the people either physically present or regularly residing in a country or any of its sub-divisions at a given point of time. An enumeration of all persons physically present is a *de facto* census. A natural extension of the enumeration makes it include the collection of various aspects concerning the persons enumerated, such as, race, religion, sex, age, marital conditions, etc. By extension in another direction the unit observed has been changed from one of "person" to that of "activities" resulting in the "census of agriculture" or to one "manufacturing establishments", of that of "other activities engaged in" and so on. Thus the study of population covers not only the "number of people" and its relation to current and potential resources but also the characteristics of the population and their relations to the society and economy of the region.

History

The word "Census" is derived from the latin word "Censere" meaning "to assess" or "to rate". It dates back to the first or second century B. C. when the magistrates in Rome were required to prepare population registers for the purpose of imposing taxes and also to determine the liability of adult males for compulsory military service.

Evidences of some earlier censuses in the form of cadastral surveys are available much before the founding of Roman empire. Ancient Babylonia, China and Egypt had such enumeration 30 centuries before Christ. Herodotus told of such undertakings in the valley of Nile and in ancient Persia. Some accounts of census record are also available in the volume of numbers in the old testament. At the time of Exodus (1500 B. C.) Moses carried out the census of the fighting men of Israel.

The fall of Roman empire and the growth of feudal system brought to an end the first phase of periodical censuses. The Breviary of Charlemagne (808 A. D.) was one of the medieval efforts to the revival of such accounting. However, William, the Conqueror (1086 A. D.) conducted a sort of account of English proprietors with a view to determine their land extent, value and liabilities. Such accounts are available in Domes Day Book.

Chenghis Khan carried out the census of the people of his conquered territory with a view to determine their capacity for taxation during the later part of 12th century and early 13th century A. D. Some traces of detailed plans of census in China are available in the 14th century A. D.

One of the earliest completed census involving inhabitants of all ages was taken in German city of Nuremberg in 1449. Other provincial or municipal censuses were reported to be taken in Switzerland in the 15th and 16th centuries A. D.

First census in North America of Spanish American possession was taken in 1576 by King Philip II, of Spain. The job was performed by the natives and the report made by them is now available in the university of Texas.

Some records are also available which show that the ancient Peruvians made a register of men for military purposes and reported their number to the Inca emperor, Sinchi Roca as two lakhs fighting men.

Long before Columbus voyage and conquest of Peru by Pizarro, the Inca rulers established organisation devoted to the statistical information about their subjects. Having no system of writing, the ancient Peruvians used the 'Quipus' to record census information. This consisted of a main chord from which hung at certain distances smaller chords of various colours, each having a special meaning such as red for soldier, yellow for gold, white for silver and green for corn etc. Knots were tied in the smaller chords representing definite numbers.

The first post Columbian census in America had Peru as its base of operation. This census was conducted in 1548 by the Spanish viceroy Don Pedro De La Faza. This was followed by a second census also in 1606. A. D.

Virginia* was the first North American Colony where the census was taken in 1624-1625. The second census was also taken in the same colony in 1634-1635. The next colonial census was that of New York in 1698. Between 1700-1790 when the first United States Census was taken, there were 36 additional colonial censuses. Maryland took its first colonial census in 1712 and another in 1755. Census was also taken in New Jersey in 1726. First census of the inhabitants of Connecticut was taken in 1764.

New Hemisphere first colonial census was taken in 1767. Thereafter three more censuses were taken in the same colony.

There is no such thing as the 'First Census' because early enumerations covered one or more modern of features, but none can claim to have covered all the characteristics. The modern idea of a population census by covering the entire population of a nation with important demographic characteristics arose in the 17th & 18th Century A.D.

Canada

Canada claims to have conducted a very early census in the modern sense with the enumeration in 1666 of the colony of New France. In this

*Encyclopa dia America

census the information was collected for each person by name on a fixed date showing the age, sex, residence, occupation, etc. Thirty seven complete and nine partial censuses were taken during the French regime. Canada began taking its regular decennial censuses since 1851.

Scandinavian Countries

In Scandinavian countries the earliest of the modern census was taken in Iceland in 1703. But its results were delayed. For this reason the Swedish Census of 1750 is regarded as the first regular census which published the population data. The first modern census in Prussia was taken in 1810, Norway in 1815, Austria in 1818, Greece in 1836, Belgium in 1846, Italy in 1861 and Russia in 1897. In Russia, census had been ordered every twenty years after 1722. This continued till 1782. Another census was taken in 1796 but it was not until 1802 that a Central Bureau was established after which censuses in Russia were taken in various years prior to 1897.

Great Britain

The scientific study of population in Great Britain began in the second half of the seventeenth century with the publication of John Graunt's "Natural and Political observations on the Bills of Mortality". Graunt investigated the registers of baptisms and burials which had been kept in London since the beginning of the seventeenth century. These records were regular and he recognised the excess mortality of males over females which, coupled with the excess number of boys born, nearly equalized the numbers of the sexes at marriageable age. He also commented on the under reporting of deaths from syphilis and was the first to construct life table. He made a number of population estimates, using different assumptions. He stated that the number of women of child bearing age was equal to twice the number of annual births, that there were twice as many families as women of child bearing age and that the average number of persons per family was eight. Another estimate was based on observations which determined the ratio of deaths to the number of families in a local population. This ratio was then applied in reverse to the deaths in the bills of mortality in order to estimate the population as a whole. After Graunt, interest in population studies continued to grow. Graunt's contemporary Sir William Petty was another contributor to the subject. Some parts of his work were highly speculative, for example, he tried to estimate the population at the time of the great flood-but others, such as the estimation of war losses in Ireland and his computation of the money value of a man, were highly practical. He proposed the establishment of a statistical office which would deal with marriages and burials, the number of houses, the number of persons in different age groups and their marital status, etc. Petty also produced estimates of population of London obtained by multiplying the number of houses by a figure purporting to be the average number of persons per house and another one based upon the ratio of deaths from the plague to those who were supposed to have escaped the disease. The third name which deserves to be mentioned is that of Edmund Halley. Halley published a life table on the basis of the recorded statistics of the city of Breslau. Though his table was constructed from burial figures only, he recognised the principles upon which a correct life table had to be built and was aware of the fact that a life table based on deaths alone assumed that there was a stationary population.

The works of Graunt, Halley and Petty provided the theoretical foundation for the study of population data during the eighteenth century. There was no radical improvement in technique, but the methods employed by the political mathematicians were used more widely. In 1753, census bill was passed through the House of Commons, but was thrown out by the House of Lords. Regular modern census began since 1801 but this census was preceded in 1798 by the publication of T. R. Malthus' "First Essay on Population" where he advocated that numbers are capable of being doubled within a short period—25 years and this is faster than the rate of means of subsistence. The Census Act of 1800 authorised the first census, and since that time a census has been taken every ten years with the exception of 1941. The General Register office was founded in 1837, when registration of births and deaths became compulsory in England and Wales, and the Registrar General was given responsibility for taking population censuses, as well as for vital registration. A great many of the advances made in demographic techniques during the 19th century were due to the official statisticians in General Register office, and in particular to William Farr. Farr created the British system of census taking and vital statistics, and under his guidance both census enumerations and vital registration became more and more complete.

France

France also took her first general census in 1801 and another in 1806, but it was not until 1836 that reliable census taking methods were adopted in that country.

The office of 'Statistique Generale' was established in 1833 with the responsibility for census enumerations and current vital statistics. However, detailed information on the distribution of the population by ages did not become available until 1851.

United States of America

In U.S.A. Census was initiated because of certain political necessities of the Government. A provision was made in the Constitution of the United States of America that an enumeration of population shall be made within three years after the first meeting of the Congress and thereafter, the population shall be counted every ten years in such manner as Congress may direct for the purpose of allocation of representation in Congress.

The constitution was ratified in 1789, and the first census was taken in 1790. It is thus the oldest continuing census based on enumeration in the field and it has possibly had more scientific influence than any others. In the first census of 1790, information was collected on schedules designed to show the names of the head of family with the number of persons classified into four or five groups. Subsequent censuses have been gradually expanded by adding other subjects also such as manufacturing, agriculture etc. Without lapse population census has been taken at 10 year intervals since 1790.

American census, before 1850, made family as the unit and reported only a few details, such as, number of persons of each sex falling within specified age-groups. Beginning with 1850 the individual became the unit and additional details such as name, sex, age, race, birth-place and occupation of each person were reported. This great change in procedure, perhaps

the most important in the whole history of census, was made almost simultaneously on both sides of the Atlantic. This had revolutionised the census procedure. It furnished, far more effectively than had earlier methods, guarantee of the accuracy of the enumeration and means of detecting inaccuracies. The material thus obtained also permitted more detailed and complicated tabulations.

The census was not made a permanent bureau until 1902, first in the Department of the Interior and finally in its permanent home, the Department of Commerce, in 1913. Previous to 1902 the census had an uncertain existence, for all work stopped and the whole organisation was disbanded between enumerations. The Director of the census was engaged only for a year or two, had no continuity in office and often saw his position abolished before the census figures were fully tabulated and published.

In fact the rise in census taking after 1850 was remarkable as can be seen from the following table* :—

<i>Decade</i>	<i>Number of National Censuses</i>
1855—1864	42
1865—1874	39
1875—1884	55
1885—1894	53
1895—1904	61
1905—1914	63
1915—1924	64
1925—1934	75
1935—1944	66
1945—1954	88

In addition to the national censuses additional ones were taken in Colonial territories, parts of countries, cities etc. It is estimated that in the decade after World War II atleast 150 countries or areas took censuses collecting individual data on more than 2,000,000,000 persons. The large number of countries having censuses in 1950s was partly due to the United Nations Programme, World Census of 1950. A similar programme in 1960 proved equally successful.

History of Indian Census

The Harappa and Mohan-jo-daro excavations reveal that "as far back as the 3rd or 4th millennium B.C. and probably much earlier still, India was in possession of a highly developed civilization with large and populous cities, well built houses, temples and public buildings of brick and many other amenities enjoyed at that period by the peoples of Mesopotamia and Egypt."¹ The other source of advanced culture was the Aryans, who came into India from the north-west around 2000 B.C. They were mostly agricultural and pastoral people who understood the principles of irrigation and manuring and used the animal-drawn plough. After arriving in India they made additional acquisitions, the most important of which was alphabetic writing borrowed from Semitic sources about 800 B.C. and iron,

*Encyclopaedia Britannica Volume 5.

¹ The Indian Year Book, 1944-45 (Bombay and Calcutta : Bennet & Coleman).

acquired even earlier¹. So in India some three to seven thousand years ago there were people possessing a technology sufficiently advanced to support a dense population; and they encountered in the soil and climate of India favourable conditions for the application of this technology.

The earliest literature, the Rigveda, makes it 'clear that population was scanty and spread over wide areas' in small villages, the Brahmana literature around 800—600 B.C. reveals that some of the villages had grown into towns and capitals with an urban mode of life.

The Buddhist literature indicates that between the 7th & 4th centuries B.C. the economy of India was comparable to that of the later middle ages in Europe. Crafts and commerce were flourishing and were highly organised. In an ordinary town there used to live 30 to 1000 families and about 20 such cities existed in northern India.

The existence of dense population was confirmed by Alexander's army which invaded India in 327-26 B.C. The records of Chandra Gupta (321—297 B.C.) show that there was a standing army of 700,000 men, the maintenance of which must have required a substantial population.² Under Ashoka (274—236 B.C.) the Indian civilization reached to a very high point, based on efficient administration, the use of written commands, and abundant commerce etc.

From the above it can safely be concluded that before the Christian era India had a substantial population. Attempts were also made to collect the population data from very early times. The celebrated 'Arthashastra', the Principles of Government, evolved by one of the greatest geniuses of political administration, Kautilya during the days of Mauryas in the third B.C., prescribed the collection of population statistics as a measure of state policy for the purpose of taxation. It contains a detailed description of methods of conducting population, economic and agricultural censuses. During the Moghul period extensive records were used to be maintained of land, production, population, famines, etc. During the time of Akbar the Great, another bright period in Indian history, the administration report known as the Ain-i-Akbari included comprehensive data pertaining to population, industry, wealth, and many other characteristics.

However the population counts, the importance of which was so well recognised in the ancient days of good government was neglected during the medieval period when the history of the country was also somewhat disturbed. But again with the system of modern government developing, the need for a fairly accurate account of the population was felt.

For obvious reasons, such as defence, collection of revenues and taxes and employment of population in profitable trades and services, the East India Company was anxious, soon after the Restoration in England, to obtain reliable estimates of population in its Indian settlements. Moreland, the famous historian estimated the total number of Indians in 1600. For numerical basis of calculation he based his studies, in the south, on the strength of the armed forces and in the north on the land under cultivation, on both of which subjects contemporary figures were available. Indirect estimates had been made, for example, of Fort St. George, Madras, for

¹ The Cambridge History of India (Cambridge : Cambridge University Press, 1922), Vol. 1, Ancient India.

²Ibid. p. 223.

1639 and 1648 by comparing revenues in 1639 and 1648 and for 1646 by adding reported famine deaths of 1647 to the estimate of 1648. Captain Thomas Bowrey who arrived in Madras in 1669 made an estimate of the Fort in 1670. A Dr. John Fryer was appointed surgeon for duty at Bombay at the end of 1672 shortly after he had taken the degree of M.B. at Cambridge. He was evidently expected to make statistical enquiries, for his estimates of Masulipattam, Fort St. George, Madras and Bombay. Inquiries in the 17th century like Sir William Langhorn's, Captain Willshaw's or Elihu Yale's were in the nature of deductions based on items like revenue or quit-rent. A census is mentioned having been taken in 1716 of Bombay, probably embracing only the Fort and a portion of the Island. The unsettled condition of the country, following the disintegration of the Moghul empire, did not offer favourable conditions for systematic estimates of population. An estimate made of the company's possessions as late as the 1780's was discounted by H. T. Colebrooke. In 1789 the Collectors of Bengal and Bihar districts furnished grounds for estimating 22 millions, but Sir William Jones, the great Orientalist, in his preface to the translation of *Al Sirajiyah*, hinted at a higher figure. H. T. Colebrooke, in Chapter II devoted to 'population' of his *Remarks on the Husbandry and Internal Commerce of Bengal* (1794) has gone on record as a pioneer in the application of sample surveys when he observed. "First—An actual assessment (the result of an official enquiry in the province of Puriniya) found 80,914 husbandmen holding leases, and 22,324 artificers paying ground rent, in 2,784 villages (mauzas) upon 2,531 square miles. Allowing five to a family this gives more than 203 to a square mile; and for the whole of the Dewani provinces, at that proportion, it gives a population of 30,291,051; or including Benares, 32,987,500; since the area of Bengal and Bihar is 149,217 square miles, and, with Benares, not less than 162,500. But it must be remembered....." with which he goes on to make meticulous reservations, for and against both lower and higher figures, which set up his methodology as a model for Dr. Francis Buchanan-Hamilton to copy in 1808, when he began his celebrated statistical survey of districts of Bengal and Bihar.

Sir James Rennell had in the meantime completed his stupendous surveys which helped to relate population to defined territories. Regretting that 'in India, no bills of mortality, nor registers of births, marriages and burials afford data for calculation', H. T. Colebrooke built up an ingenious system of self-checking inferences based variously on area, density, sample counts, persons per household leases, ground rent, land under cultivation, area under each tillage, rent-rolls, and the yield and consumption of articles like cereals, pulses and salt. Buchanan-Hamilton applied Colebrooke's method and in several cases improved upon it by resorting to extensive sample counts—his empirical way of discriminating between samples is most instructive—and his accounts of the northern districts of Bengal and Bihar contain some of the most reliable population estimates for the first two decades of the nineteenth century. Equally penetrating and valid are his comments "On the population of the district and the causes which operate on its increase or diminution."

Meanwhile, England had begun her census series in 1801 and the Parliament was anxious to ascertain the population of dependencies. It took some time to plan and carry out systematic censuses, but the counts taken between 1820 and 1830, even though they do not satisfy the requirements of a modern census, were some of the best estimates that any country could have under comparable circumstances. Some of the finest are Ward

and Conner's *Memoir of the Survey of the Travancore and Cochin States* (1816-20), Richard Jenkins's *Report on the Territories of the Rajah of Nagpore* (1820-21), Sir John Malcolm's *Report on the Province of Malwa and Adjoining Districts* (1822), Thomas Marshall's *Pergunnahs of Southern Mahratta Country* (1822), W. H. Sykes's returns on the collectorate of Khandesh (1827), D. A. Blane's statistical reports on the districts of the province of Kattywar (1831), and R. Montgomery Martin's compilation, *Statistics of the colonies of the British Empire* (1839). It may be mentioned in passing that Montgomery Martin obtained corroboration of the estimate made in 1822 by Henry Shakespeare of the Lower Provinces of Bengal Presidency from Dwarakanaut Tagore, Rabindranath Tagore's grandfather:

'I obtained it in India from Dwarakanaut Tagore, a Hindoo of an enlarged mind, a most generous disposition, and a truly British spirit. Dwarakanaut Tagore was then at the head of the salt and opium department at Calcutta, and had perhaps the best means of judging as to its correctness of any man in India; he considered it as a fair estimate for 1820 or 1822.'

Of the greatest technical and methodological interest by far of this period are 'the censuses' made of the town of Allahabad (1824) and the city of Benaras (1827-28) by the great James Prinsep, FRS, and of the city of Dacca (1830) by Henry Walters. Walters' census was perhaps the first complete census of an Indian city, which classified the population by Sex and broad-age-groups, the houses and structures by building characteristics, storeys, other amenities, lodgers and inmates, and the population again by as many as 132 caste-occupations.

'The second census of Fort St. George Presidency was taken in 1836-37 and it was not until a decade later, that is, in 1849 that the Government of India asked the local governments to establish, by means of their revenue officials, quinquennial returns of population. This "inaugurated (in Madras) a system of periodical stock-taking of the people, which continued down to the time when the Imperial Census was ordered. The first of these returns was taken during the official year 1851-52, the second in 1856-57, the third in 1861-62 and the fourth and last in 1866-67. The quinquennial Census of 1871-72 was merged in the Imperial Census of 1871." "Thus", continues Dr. W. R. Cornish, FRCS, Superintendent of Census Operations, Madras, 1871 in page 3 of volume I of his Report, "It will be seen that within a period of twenty years the population of this Presidency has been counted, more or less efficiently on five occasions, and it becomes no cause for surprise that the fifth counting should have involved no more political anxiety to the government than any of the former enumerations. As remarked by the Madras Government, "There is nothing novel in the idea of a Census in this Presidency, and there is no reason to anticipate any difficulty in carrying out the wishes of the Government of India.'

The northern provinces were not so fortunate. The North-Western provinces took their census in 1852 under G. J. Christian, and it is interesting to note that J. D. Sim's scheme of quinquennial censuses for Madras was based on the North-Western Provinces' scheme of 1850. The N.W.P. census of 1852 'was a regular house to house numbering of all the people in the Province at one fixed time—viz., the night of the 31st December, 1852'.

Under Statistical Despatch No. 2 of 23rd July, received from the Home Government, in the year 1856, the Government of India had entered upon a consideration of the means by which a general Census of the population of India might be taken in 1861. But the undertaking was postponed in 1859 in consequence of the Mutinies. In the North-Western Provinces, however, a census was conducted on 10 January, 1865 by W. C. Plowden on 'the principle that the population should be determined by an actual house to house enumeration to be made on the same day throughout the province, distinguishing the sexes, the two great creeds, and classifying the people according as they followed agricultural or non-agricultural occupations, the different occupations and trades of the people, and their various castes'. The census was also required to collect information on 'the settlement of the several prevailing castes in the different parts of the country, their origin, and the manner in which the subsidiary castes had separated themselves from the parent stock'. It was also the first census to attempt a detailed age classification of the population. A similar census of the Central Provinces was taken in November, 1866 followed by one of Berar in 1867. A census of the population of the Punjab territories taken in January, 1855 was followed by another in January, 1868, while a census of Oudh was taken in 1869. Census of the cities of Madras, Bombay and Calcutta had, in the meantime been taken in 1863, 1864 and 1866 respectively.

Statistical organisation moved fast at the close of this decade under the leadership of Lord Mayo, Governor General. W. W. Hunter was appointed Director General of Statistical Survey in 1869. An experimental census of the Lower Provinces of Bengal was organised in 1869 by H. Beverley, Registrar General. In 1865 the Government of India and the Home Government had agreed upon the principle that a general population census would be taken in 1871. Model census schedules and questionnaires had already been patiently worked out by W. C. Plowden in 1865. The years 1867-72 were spent in taking a census by the actual counting of heads in as much of the country as was practicable. This series, commonly known as the Census of 1872, was not a synchronous project, nor did it cover all territory possessed or controlled by the British. Though based on uniform schedules it was not centrally supervised, moderated or compiled. But it was inspired by modern concepts, marked an auspicious beginning, and contained the rudiments of all basic demographic, social and economic tables. The undertaking stimulated the introduction into the Statute Book of the Bengal, births and deaths registration Act of 1873, to be followed later by the births, deaths and marriages registration Act of 1886 which would henceforth provide "data for calculation", the lack of which H. T. Colebrooke had regretted in 1794.

The problems of coverage and cartography that the 1872 group of censuses had presented were ably followed up by W. W. Hunter's Statistical Survey and the Survey of India, so that the Census of 1881 taken by W. C. Plowden, Census Commissioner for India, was a great step forward towards a modern synchronous and comprehensive operation, in which much effort was spent not only on more complete coverage but on classification of demographic, economic and social characteristics. The census stimulated for over eighty years one of the most thorough-going inquiries into social structure ever to be conducted in any part of the world, while, it was responsible for the great Linguistic Survey of India, another unique inquiry, again, for any part of the world.

The first complete census of population was, however, conducted in 1881, on a uniform basis throughout India providing the most complete and continuous demographic record for any comparable population. Since then the Census is being regularly conducted after every ten years. These censuses have collected information on the distribution of population, with respect to its density, physical groups, urban and rural distribution, housing condition, migration, occupation, racial distribution, literacy, religion, physical deformities, sex, civil condition etc.

Contrary to uninformed opinion, which seems to imagine that the early Censuses were little concerned with economic information, the 1872 census of Bombay Presidency made an alphabetical classification of 376 occupations. The 1881 All India census adopted 6 classes, 18 orders, 75 sub-orders and 480 groups of occupations, while 1891 adopted 478 occupations divided into 7 classes, 24 orders and 77 sub-orders. Even this was improved upon in 1901 by 521 occupations divided into 8 classes, 24 orders and 79 sub-orders, which can still serve as a model for countries with insufficiently developed economies and preponderance of rural skills. The 1901 classification also made an exhaustive analysis of caste-occupations. In fact, the classification developed in 1901 was overshadowed, not without some loss of definition of local realities, by the requirements of international comparability in 1911.

Much has been made of the Indian Census's preoccupation with castes and tribes and cognate anthropological inquiries over the decades. While indeed a very large and valuable body of anthropological literature has grown round the Indian census, it needs to be emphasised that the Indian census has always been primarily concerned with its legitimate tasks of demographic analysis and economic classification, of 'mathematical manipulation' and even 'statistical ingenuity', the apparent lack of which was the subject of a regret expressed by Kingslay Davis, a modern demographic scholar of India and Pakistan. For early work on age in India, such efforts as J. A. Baines's *Age Distribution* in his report of Bombay and Sind 1881, L. McIver's dissertation on the same theme in his report for Madras, 1881, Gabriel Stokes's *Native Life Tables* for the Madras Presidency, 1881; W. W. Drew's note on age distribution in his Report on Bombay, 1891; G. H. Stuart's *Life Table* for the City of Madras, 1891; M. M. Khan's *Life Tables* for the Nizam's Dominions, 1891; V. N. Narasimmiyengar's note on age statistics and sex ratio in his report of Mysore, 1891, not to speak of a host of other works in later censuses, would do honour to demographic analysis in any country. What is more, they brought to the world of mathematical manipulation, much broad understanding and empirical knowledge. One is liable to ignore the fact that in the preparation of age and life tables, India has always been fortunate in securing the services of eminent actuaries, beginning with Sir George F. Hardy, and this long line of actuarial investigations since 1881 has presented the world with valuable devices for the construction of age and life tables out of inadequate and often very unsatisfactory material. A third important feature of past censuses is also insufficiently appreciated. The Indian census has never been bound hand-and-foot to tradition, never taken shelter 'behind an official wall of infallibility', but has broken new ground at every census without losing comparability with previous censuses. Thus the Indian census has always paid a good deal of attention to the changing scene and the requirements of government while trying to keep pace with contemporary, and advanced census quests. In short, it has never rested on its oars, but represents 'the most fruitful single source of information about the country'.

The Government emphasised the importance of population data and set up a Population Data Committee in 1944 to examine and advise the Government of India on the available data relating to growth of population. This committee comprised of Mr. W. M. Yeatts, the Census Commissioner of India in 1941 as Chairman and Sir Theodore Gregory, Professor P. C. Mahalanobis, Professor K. B. Madhava and Dr. K. C. K. E. Raja as members. The Committee paid special emphasis to the statistical problems relating to the age tabulation of the 1941 census which could not be completed because of financial stringency caused by the Second World War, and also made recommendations for the use of sampling methods for the estimation of vital statistics rates. In particular, they pointed out the use which could be made of the household lists prepared at the census as a sampling frame for obtaining demographic data and recommended their safe keeping.

The Health Survey and Development Committee popularly referred to as the Bhole Committee constituted for making plans for post-war developments in the health fields made a comprehensive review of the field of population from the quantitative and qualitative points of view. It suggested the appointment of Registrar General of Vital and Population Statistics at the centre and Provincial Superintendents in the Provinces with a view to improve the quality of population statistics. One of its chief recommendations was that "the population problem should be the subject of continuous study."

Census Act was passed in 1948 and was placed on the Statute Book. Text of the Act is given in an annexure at the end of this chapter.

In 1949, the Government of India decided to initiate steps for improvement of Registration of Vital Statistics and further decided to establish a single organisation at the Centre in the Ministry of Home Affairs under the Registrar General and *ex-officio* Census Commissioner for India to deal with Vital Statistics and Census.

Till 1951 the Census Organisation in India was functioning like the phoenix, that is the Organisation came into being just on the eve of the census and wound up as soon as census operations were over within two or three years of its creation. With the establishing of a permanent nucleus at the centre, it has been possible to have continuing Census Organisation during the inter-censal period. Concentrated steps were taken to improve registration of births and deaths in the country to yield reliable vital rates which are so essential for present day planning.

The first census after Independence was taken in 1951. The report of 1951 census by the Census Commissioner for India was a complete departure from the pattern of previous census reports. This report attempted to interpret the past changes in the size and structure of India's population and to point out their implications for the level of living of the population. The report also made a plea for a reduction in the birth rate of the country. The 1951 census also attempted for the first time in the history of Indian census to make an assessment of the accuracy of the census count by a re-check in the field.

The demands of the various Government Departments, Planning Commission and various Demographic Bodies for the collection of the detailed statistics on population necessitated the enlargement of the 1961 census questionnaire and a number of cross tabulations of data. As many

as 1400 publications were planned and printed. A novel feature of 1961 census was the undertaking of a large number of ancillary studies relating to rural crafts, fairs and festivals and ethnographic surveys. The Census Organisation, therefore, became the repository of a wealth of sociological information relating to the country. Special socio-economic surveys were undertaken in a large number of villages. For the first time in the history of census of India, a Census Atlas was planned at the state level as well as at India level. An attempt was also made for the mechanical tabulation of some of the data and consequently a moderate complement of mechanical data equipments like, key punches, verifiers, sorters, tabulators, reproducers were obtained and household schedules of the 1961 census were tabulated on the mechanical equipments.

The schedules of 1971 Census were further modified to suit the needs of the Government, Planning Commission, various Demographic Bodies and scholars. The new features of 1971 Census were (i) an attempt was made to collect data on current fertility, (ii) migrational particulars with reference to place of last residence were collected which yielded valuable and realistic data on internal migration, (iii) considerable departure was made in respect of economic questions. The main activity of a person was ascertained according as he spent his time basically as a worker producing goods and services or as non-worker. A new concept of 'Standard urban area' was developed for the tabulation of certain urban data. Encouraged with the experience of 1961 census it was again proposed to have a number of studies ancillary to 1971 Census. It was proposed to have a restudy of a number of villages and also to have intensive studies of about 200 towns and ethnographic studies of selected communities. Besides there would be one special study at the choice of the Director of Census Operations in each State.

The results of each census have been published in great detail. The general reports which summarise and analyse the results have often been exceptionally scholarly. It was only in 1941 that the census publications could not be as complete as usual because of the limitations imposed by the second world war. The Indian censuses are remarkable not only for the information they reveal but for the special obstacles they had had to overcome. Imagine a massive, diversified sub-continent with hundreds of millions of people nearly all of whom are illiterate, most of them rural and some isolated in jungles or mountains, some harbouring superstitions inimical to census co-operation, some split by political and religious rift and some pure savages of stone age. One can imagine all this and the difficulty of taking a census becomes apparent.

Modern techniques of postal enumeration cannot be used and the time-tested slow but sure method of each individual being enumerated separately is all that is possible. This involves the recruitment and training of a vast army of enumerators whose number can only be reckoned in thousands. The social and cultural complexities create special problems.

The Indian census has not been a mere statistical operation. Demographic data have not been presented in a dry form but interpreted and analysed in an interesting manner. The General Reports of the census, whether that of the country as a whole or of the States, have been products of scholarship. A large number of experts have been associated with the census and their analysis of data has often been the only authentic material on socio-economic conditions.

The Indian census has been fortunate in having had at its helm extremely devoted civil servants and scholars. Sir William W. Hunter, historian directed the gigantic statistical survey of India made in 1869—1881 and published among other books, the famous Annals of Rural Bengal (three Volumes) and a History of British India (two Volumes). Sir George Grierson, who wrote the chapter on Indian languages for the 1901 census report, directed the monumental Linguistic Survey of India; Sir Herbert Risley, who was Census Commissioner for India in 1901, wrote the treatise "The People of India"; Sir Edward Gait, who was in charge of the Census in 1901, was an authority on caste; L. S. S. O'Malley and J. H. Hutton, both of whom wrote fine studies of Indian administration and castes, were closely associated with the census. The general report of 1951 by R. A. Gopalaswamy was a landmark in that it was a forthright plea for a population policy, while the "Levels of Regional Development" of 1961 by A. Mitra was an excellent regional analysis for planning.

From census to census, the techniques have been gradually changing with a view to improve the accuracy and quality of the data without losing comparability from one census to the other. The following Chart shows how the census questionnaire, the primary tool of census operations had been developed from census to census taking into account the changing needs of the country.

CHART COMPARING THE CENSUS QUESTIONNAIRES PRESCRIBED FOR ENUMERATION IN INDIAN CENSUSES FROM 1872 TO 1971

(1872) (House Register)	(1881) (Census Schedule)
1. Number of houses, whether terraced, tiled or thatched	1. Serial no. of each inmate
2. Name of males	2. Name
3. Age	3. Condition <i>i. e.</i> whether married, unmarried, widow or widower
4. Religion	4. Sex
5. Caste or class	5. Age last birthday
6. Race or nationality or country of birth	6. & 7. Religion
7. Occupation	6. Religion
8. Youths upto age 20 attending school, college or under private tuition	7. Caste, if Hindu, sect, if of other religion
9. Able to read and write	8. Mother tongue
10. Name or designation of females	9. Place of birth
11. Age	10. Occupation of men; also of boys and females who may do work.
12. Religion	11. Education
13. Caste or class	1. Under instruction
14. Race or nationality or country of birth	2. Not under instruction but able to read and write
15. Youths upto age 20 attending school, college or under private tuition	3. Not under instruction and not able to read and write
16. Able to read and write	12. Infirmities
17. Remarks showing number of males and females, blind, deaf, dumb, insane, idiots or lepers	1. Unsound mind
	2. Deaf-mutes from birth
	3. Blind
	4. Lepers

(1891)
(Census Schedule)

1. Serial no. and name
2. Main religion
3. Sect of religion
4. Caste or race—Main caste & c
5. Sub-division of caste or race
6. Male or female
7. Age
8. Married, single or widowed
9. Parent tongue
10. Birth district or country
11. Occupation or means of subsistence
12. Learning, knowing, illiterate
13. Foreign language known (if any)
14. If any, be blind, insane, deaf-mute or a leper, enter the infirmity below.

(1911)
(Census Schedule)

1. Census number painted on the house
2. Serial number of persons enumerated
3. Name
4. Religion (and sect of Christians)
5. Male or female
6. Married, unmarried or widowed
7. Age completed last birthday
8. Caste of Hindu and Jains, tribe or race of those of other religions
- 9 & 10. Occupation or means of subsistence of actual workers
9. Principal occupation
10. Subsidiary occupation, if any
11. If dependant, principal occupation or means of subsistence of actual worker on whom dependent
12. District, province or country in which born
13. Language ordinarily spoken in the household
14. Literate or Illiterate
15. Whether literate in English
16. If the person be insane or totally blind or suffering from corrosive leprosy or both deaf and dumb from birth, enter as such here.

(1901)
(Census Schedule)

1. House number
2. Serial number
3. Name
4. Religion
5. Male or female
6. Married, unmarried or widowed
7. age.
8. Caste of Hindus & Jains, tribe, or race of others
- 9 & 10. Occupation or means of subsistence of actual workers
9. Principal
10. Subsidiary
11. Means of subsistence of dependants on actual workers
12. Birth place
13. Language ordinarily used
14. Literate or Illiterate
15. Know or does not know English
16. Insane, deaf-mute from birth, totally blind or leper.

(1921)
(Census Schedule)

1. House no.
2. Serial number of persons
3. Name
4. Religion
5. Male or female
6. Married, unmarried or widowed
7. Age
8. Caste, tribe or race
- 9 & 10. Occupation or means of subsistence of actual workers
9. Principal
10. Subsidiary
11. For dependants, the occupation of the worker by whom supported
12. Birth district
13. Language ordinarily used
14. Literate or Illiterate
15. Whether literate in English.
16. Insane, totally blind, leper or deaf mute.

(1931)

(Census Schedule)

1. Serial no. of house or tenement
2. Serial no. of person
3. Name
4. Religion and sect
5. Male or female (enter M or F)
6. Married, unmarried, or widowed (enter divorced persons as widowed)
7. Age (in years to nearest birthday)
8. Race, tribe or caste
9. Earner or dependant
10. Principal occupation (this will be blank for dependant)
11. Subsidiary occupation (occupation of dependants may be given)
12. Industry in which employed for organized employees only)
13. Birth district (or country)
14. Mother tongue.
15. Other language in common use
16. Whether literate (*i.e.* able to write and read a letter)
17. Whether able to read and write English
18. Insane, totally blind, deaf-mute or leper

(1951)

(Individual Slip)

1. Name and relationship to the head of the household

(1941)

(Individual Slip)

1. Name
2. Sex
3. Race, tribe or caste
4. Religion
5. Married, unmarried, widowed or divorced
6. Age
7. Number of children born to a married woman and number surviving
8. Her age at birth of first child
9. Are you wholly or partly dependent on any one else?
10. If so, means of livelihood of persons on whom dependent
11. Do you employ (a) paid assistants, (b) members of household? If so, how many?
12. Are you in employment now?
13. (Only to those who reply in the negative to question 12) Are you in search of employment? To those who reply in the affirmative the further question will be put—How long have you been in search of it?
14. Means of livelihood in order of importance
15. (Only to be asked in regard to means of livelihood of a person shown as partly dependent against question 9 or any subsidiary means of livelihood returned by other persons against question 14), Does this means of livelihood exist throughout the year? If not, for what part of the year?
16. If you are employed by someone else what is his business?
17. Were you born in this district? If not, in what district?
18. Mother tongue
19. Other Indian languages in common use.
20. Can you both read and write? If so, what script do you write? Can you only read?
21. How far have you read? Give any examination passed
22. Are you literate in English?

(1961)

(Individual Slip)

1. (a) Name
(b) Relationship to Head

(1951)—Contd.

2. Nationality, religion and special group
 - Part (a) Nationality
 - Part (b) Religion
 - Part (c) Special groups
3. Civil condition
4. Age
5. Birth place
6. Displaced persons
7. Mother tongue
8. Bilingualism
9. Economic status—
 - Part one : Dependency
 - Part two : Employment
10. Principal means of livelihood
11. Secondary means of livelihood
12. Literacy and Education
13. (Optional to state governments)*
14. Sex

STATE

Assam, Manipur & Tripura

Bihar

Bombay, Saurashtra & Kutch

Mahya Pradesh

Vindhya Pradesh

Mysore

Orissa

(1961)—Contd

2. Age last birthday
3. Marital status
4. (a) Birth place
 - (b) Born R/U
 - (c) Duration of residence, if born elsewhere
5. (a) Nationality
 - (b) Religion
 - (c) S. C./S. T.
6. Literacy & education
 7. (a) Mother tongue
 - (b) Any other language(s)
8. Working as cultivator
9. Working as agricultural labourer
10. Working at household industry
 - (a) Nature of work
 - (b) Nature of household industry
 - (c) If Employee
11. Doing work other than 8, 9 or 10
 - (a) Nature of work
 - (b) Nature of industry, profession, trade or service
 - (c) Class of worker
 - (d) Name of establishment
12. Activity, if not working
13. Sex

NATURE OF QUESTION NO. 13
OF 1951 CENSUS (OPTIONAL)

Indigenous persons—

- (a) Are you an indigenous person of Assam ?
- (b) If so, state in the nearest bigha,
 - (i) the land you own
 - (ii) the land you have rented in cash or in kind from others

Fertility

Unemployment

Number of children born to a married woman and age at birth of the first child

Unemployment

Unemployment

Area of land owned and cultivated by the household

Punjab, PEPSU, Bijnaspur, Delhi & Himachal Pradesh	Are you unemployed since 9th Feb. 1951? If so, give reason
Rajasthan & Ajmer	Infirmities
Uttar Pradesh	Unemployment
West Bengal & Sikkim	Do you cultivate land for which you pay rent? If so, (a) how much do you cultivate yourself and or through hired labourers and (b) how much do you cultivate through bargadars, bhagdar or adhiyars?
Hyderabad	Are you unemployed and in search of employment? If so, since when?
Travancore-Cochin	Duration of marriage and size of family (a) Completed years of married life (b) Age of mother at first maternity (c) Number of children born (d) Number now alive

(1971)
(Individual Slip)

1. Name
2. Relationship to head
3. Sex
4. Age
5. Marital status
6. For currently married women only
 - (a) Age at marriage
 - (b) Any child born in the last one year
7. BIRTH PLACE
 - (a) Place of birth
 - (b) Rural/urban
 - (c) District
 - (d) State/country
8. LAST RESIDENCE
 - (a) Place of last residence
 - (b) Rural/urban
 - (c) District
 - (d) State/country
9. Duration of Residence at the village or town of enumeration
10. Religion
11. S. C. or S. T.
12. Literacy (L or O)
13. Educational level
14. Mother tongue
15. Other languages
16. MAIN ACTIVITY
 - (a) Broad category
 - (i) Worker (C, AL, HHI, OW)
 - (ii) Non-worker (H, S, T, R, D, B, I, O)

(1971)—Contd.

- (b) Place of work (Name of Village/Town)
- (c) Name of Establishment
- (d) Nature of industry, trade, profession or service
- (e) Description of work
- (f) Class of worker

17. SECONDARY WORK

- (a) Broad category (C, AL, HHI, OW)
- (b) Place of work (Name of Village/Town)
- (c) Name of establishment
- (d) Nature of industry, trade, profession or service
- (e) Description of work
- (f) Class of worker

It may be useful to have a comparative picture of the questionnaires and concepts adopted at the Indian censuses with those of other countries of the world. Comparable charts as listed below showing different questions used in the Housing and Population censuses of India and different countries together with the varied concepts used by them in these censuses have also been furnished at the end of this monograph:

Table I—Comparative statement of different concepts with their explanation used in the census schedules or census questionnaires prescribed for enumeration in Indian censuses 1872—1971.

Table II—Comparative statement of questions included in various countries in their respective housing censuses.

Table III—Comparative statement of concepts adopted by various countries in their respective housing censuses.

Table IV—Comparative statement of questions included in various countries in their respective population censuses.

Table V—Comparative statement of concepts adopted by various countries in their respective population censuses.

Source:

Census of India 1971 "Indian Census in Perspective" by S.C. Srivastava. P.1-18