PROBLEMS OF CURRENT DEMOGRAPHIC DATA IN INDIA

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Introduction

I have considered it advisable to give a brief factual summary as an intro-
duction to problems of current demographic data in India.

Indian Census, 1881-1941

History and general information: The first attempt to take a general census
was made between the years 1867 and 1872 but the enumeration was not synchronous
and was rough and imperfect. Regular decennial censuses were subsequently carried
out on 17 February 1881, 26 February 1891, 1 March 1901, 19 March 1911, 18 March
1921 and 24 February 1931. In 1941 the one-night system was abandoned.

India (excluding Burma which was separated in 1937) covers about 1,581 million
square miles of which 0.865 million sq. miles comprise 11 provinces (with their own
legislatures) and 5 centrally administered areas. The remaining 0.716 million
sq. miles consist of a very large number of Indian States varying widely in size.
The census unit is the 'district' (covering roughly 4,000 sq. miles in the provinces
on an average) divided into charges, circles and blocks consisting of 30 to 40
houses. Each Indian State forms a separate unit, but larger States are divided into
districts as in the provinces. No payment is made to the primary enumerators and
a good deal of inspection and supervision is also done by honorary workers. In the
Indian States the cost is borne usually by the States themselves. In British India
the cost was between Rs. 5 and Rs. 6 per thousand in 1941, Rs. 14 in 1921, and about
Rs. 13 per thousand persons in 1931.

Information is collected about sex; age; civil condition (unmarried, married and
widowed but not divorced); birthplace; education (literacy); language; religion;
caste; tribe or community; occupation; infirmities (insanity, leprosy, blindness,
deaf-muteness), but this item was dropped in 1941.

Much additional information has been collected from time to time. A good deal
of information of anthropological interest has been gathered and special enquiries
relating to physical anthropometry, fertility, or economic conditions have been car-
ried out in selected areas.

In 1921 difficulties were caused by the political non-cooperation movement,
and in 1931 there was a boycott of the Census by many Hindus which is believed to
have caused under-counting in certain areas.

In 1941 the situation was entirely different. A large measure of popular rep-
resentation in different provincial legislatures came into force from 1937. The
seats were segregated on communal lines, a number of seats being reserved for
Muslims, and a number for non-Muslims; the total number in each category is also
determined to a large extent on the communal Muslim and non-Muslim (which in prac-
tice means mainly Hindu) proportion in the province. The voting also is communal
so that Muslim representatives are elected entirely by Muslim voters and non-Muslim
representatives by exclusively non-Muslim voters. Such communal basis of election
naturally focussed attention on the relative proportion of Hindus and Muslims es-
pecially in Bengal and the Punjab where the two communities are rather evenly bal-
anced. Both communities carried on propaganda to ensure full returns in the census.
There was a very large increase in the total population in Bengal which may have

arisen either (a) from the taking up of the slack left in 1931, or (b) over-counting due to the desire of both communities to increase their respective numbers or a combination of both factors.

In 1941 the tabulation was cut down very drastically. Even age, civil condition, and occupation were not tabulated owing to financial retrenchment.

Growth of population. A condensed summary of basic data is given in table (1). Owing to inclusion of new areas and improvements in enumeration it is difficult to make accurate calculations of growth in earlier years. The real increase between 1881-1891 is believed to be about 9.8% and between 1891-1901 about 1.5%. The increase was small in 1901 which was probably due to widespread famine which affected about a fifth of the whole population and caused a large number of deaths shortly before the census. The increase was also small in 1921 which was certainly due to a large extent to the deaths (estimated at over 8 millions) caused by the influenza epidemic of 1918-19 and also possibly to some extent to the adverse effect of the non-cooperation movement.

(here tables 1(A) and 1(B))

Sex. In every census there has been an excess of males. The number of females per thousand males was 958 in 1891, 963 in 1901, 953 in 1911, 945 in 1921, 940 in 1931 and 935 in 1941 showing practically a steady decline. The sex proportion in 1931 by religion is shown in table (2).

(here table 2)

It is worth noting however that up to the age of 5 as also in the age group 20 to 25 there is an excess of females.

Age: The age figures in the Indian census have always been known to be somewhat unreliable and various procedures were adopted from time to time for actuarial purposes. The age-distribution of 10,000 of each sex in 1931 is shown in table (3). (Age was not tabulated in 1941.)

(here table 3)

The distribution in age-groups of 0-15, 15-50, and above 50 is shown in table (4).

(here table 4)

Expectation of life. Up to 1931 actuarial reports including life tables were prepared. The expectation of life at birth in India (inclusive of Burma) is shown in table (4.1).

Table (4.1). Expectation of life at birth in India

	1881	1891	1901	1911	1931
Male	23.67	24.59	23.63	22.59	26.91
Female	25.58	25.54	23.96	23.31	26.56

It will be noticed that the change has been very small. No actuarial tables were prepared in 1941.

Civil condition. The most striking feature is the universality of marriage among practically all communities. Widow re-marriage is however restricted among the bulk of the Hindus and also to a small extent among Muslims and other communities. The distribution by age periods and civil condition of 10,000 of each sex in 1931 is shown in table (5).

(here table 5)

Early marriage is also another characteristic feature as shown in table (6). It will be noticed however that there was on the whole a gradual decrease in the proportion of early marriage.

(here table 6)

Marriage below the age of 14 years was prohibited by an all-India Act passed in 1930. There was however a large increase just before this Act came into force which caused a sudden increase in the number of early marriages in the 1931 census as can be easily seen from the bottom line of table (6). Civil condition was not tabulated in 1941.

Birthplace. Immigration and emigration, when India is taken as a whole, influence the population very little. Migration also on the whole is not important as the principal occupation throughout India is agriculture. In fact in 1931, 90% of the population were enumerated where they were born. There is a certain amount of migration into special areas like Assam or Coorg owing to the attraction of plantation labourers for tea and coffee respectively, and also in large industrial centres like Calcutta or Bombay.

The proportion living in urban areas has been on the whole increasing from 95 per thousand in 1891 to 99 in 1901, 94 in 1911, 102 in 1921, 110 in 1931, and 128 in 1941.

In 1941 the definition of urban areas at a minimum of 5,000 persons was strictly enforced. The number of cities with 100,000 inhabitants or more increased to 58 in 1941 from 35 in 1931. The population living in cities of this size increased over the decade from 9.1 to 16.5 million, a rise of 81% in contrast with 15% increase over the whole country. The rate of growth was almost certainly higher in the larger cities. City life is thus having an increasing appeal, and industrialization is naturally an important factor.

Community and religion. The importance of communal (particularly Hindu and Muslim) statistics has increased very much owing to the political implications. The distribution of main communities is shown in table (7).

(here table 7)

It would be noticed that in British India in 1941 out of every 100 persons, there were 64.50 Hindus, 26.84 Muslims, 1.19 Christians, 1.4 Sikhs and 5.7 tribes. The tribal proportion is somewhat ambiguous as there are many tribes which have more or less assimilated Hinduism. In 1941 an attempt was made to distinguish between religion and community.

Castes and tribes. The Indian census up to 1931 devoted a good deal of attention to caste and tribal distributions and origins, and extensive caste tables have been given. (These were, however, not tabulated in 1941.) A great deal of valuable

anthropometrical material has been collected, and there were special surveys of physical anthropometry in 1931, as well as in 1941, in selected areas.

Literacy. The literacy rate was 9.5% of persons in 1931 against 18.2% in 1921. For males the rates were 15.6% in 1931, and 13.9% in 1921; while for females these were ·2.9% in 1931 and 2.1% in 1921. Literacy figures were not tabulated in 1941.

Language. The distribution of important vernacular languages per 10,000 of population in 1931 is shown in table (8).

(here table 8)

It will be noticed that four languages account for more than 51%, 10 languages for nearly 78%, and 15 for more than 90· of the total population. Thus although a large number of languages are spoken in India the number of principal languages is not large.

The number of persons speaking languages belonging to different families is shown in table (9).

(here table 9)

Occupation. The occupational distribution of workers in 1921 and 1931 is shown in table (10).

(here table 10)

Information about occupation was first tabulated in 1881 when only the occupation of workers was returned. In 1891 this was changed into means of subsistence (rather than of occupation), and no distinction was made between workers and dependents. The practice of distinguishing workers and dependent was introduced in 1901. Workers included not only persons who work for their living but those who live on rent or on income from investments, pensions or annuities. Dependents are the women, children, and the old and infirm, who rely on others for their support, and whose occupation, if any, is not sufficiently important materially to augment the family income. In 1881 the English scheme of occupational classification was adopted but proved unsuitable and a new scheme was devised and substituted in 1891 consisting of 478 groups. This was expanded to 520 groups in 1901. In 1911 a complete revision was made based on the system approved by the International Statistical Institute consisting of four classes, 12 sub-classes, 50 orders and 169 groups. This was more or less adhered to in 1921, and in 1931 with some modification. Further changes were made in 1941 but the material was not tabulated.

Infirmities. As already noted, up to 1931 enumerators were instructed to record the fact for each individual who was found to be insane, deaf and dumb, blind of both eyes, or suffering from corrosive leprosy. The material collected has however always been considered to be of doubtful value.

Vital Statistics

Brief reference may now be made to Indian vital statistics. Registration of births and deaths is supposed to be country-wide but known to be extremely unreliable. In 1931 for example, increases in population of the decade in the provinces of Delhi, Assam, and Bengal, traced through vital records, were nearly 84%, 61% and 57% respectively in defect of the increases revealed by the census enumeration.

North West Frontier Provinces had a deficiency of 45%, Bombay 35%, and the United Provinces a large excess of 29%. As this is an emigrating province the only explanation is that in this province records of deaths were more inaccurate than the records of births. C.P. and Berar had a deficiency of 11% while Madras alone showed remarkable agreement, the deficiency being only one-half of one per cent.

The position was much the same in 1941. The Population Data Committee (the work of which is described in a later section) in 1944-45 made a close study of one of the better areas of registration, and reached the conclusion "that the lowest figure of under-estimation of birth is 40% and that a more likely one is over 50%. For under-estimation of deaths the range is even greater, from 35% to 55%, with probabilities again nearer 50%." The distribution of average birthrates for the period of three years 1937 to 1939 by provinces showed a very wide scatter. Even the provincial averages varied from about 46 per thousand in the Punjab to about 16 per thousand in Sind. Such wide variation is almost certainly due to the widely differing quality of registration.

Birth, death, infantile mortality as well as death rates from certain diseases as obtained from registration records are shown in table (11).

(here table 11)

It must be emphasized that the above figures are based on registration records, and are known to be under-estimates possibly by 33 1/3% or more. It is believed that the actual birth-rate has been probably something like 48 and the death rate of the order of 36 per thousand during the period covered by the above table.

Malaria is universal and it is believed that one million die every year directly from malaria and possibly another million due to its indirect effects.

The Public Health Commissioner for India in 1941 summed up the position in the following way, "A little changing but high birthrate, a falling death rate and a markedly dropping infantile death rate accompany a downward trend in the deathrate from cholera and the continued diminution of plague as a cause of mortality." All these tendencies taken together point in one direction, namely, a substantial growth rate in the population.

Registration of maternal mortality is extremely limited. Special enquiries were made in 1933 by medical men in Madras, Calcutta and Bombay which showed death rates respectively of 16.6, 24.4 and 8.9 per thousand total births. The Public Health Commissioner thinks that maternal mortality for India as a whole is probably something like 20 per thousand total births.

Fertility. Some attempt was made in 1931 to obtain information about fertility. The total number of families for which returns of some kind were obtained was about 900,000 from different parts of India. The material although quite large was of an extremely mixed character and it is impossible to draw any valid conclusions. Also in 1941 certain special studies of fertility were undertaken but the work was not properly planned. A special report was published on the fertility of married women in Mysore in which the average number of children born per family was found to be 3.99 and the average number surviving 2.77. These results referred to marriages of all durations. The number of children born was 6.16 per family in completed marriages and the maximum number of children born was reported to be 26 each for two mothers.

The Indian Census of 1941

I shall now very briefly make a few observations on the 1941 Census. The synchronous one-night final enumeration was given up, and the census was carried out on the basis of house-lists prepared beforehand and checked in March 1941. There was a very large increase of population in 1941 which the Census Commissioner thinks was "due to under-enumeration in 1931 being overtaken now". The quality of individual answers regarding language or script is considered doubtful so far as Urdu or Hindi is concerned; language returns in other cases are believed to be reliable. Certain auxiliary economic and anthropometric surveys were taken, and reports have been or are being published.

One very important innovation in 1941 was the arrangement made to preserve every 50th individual slip constituting a 2% sample which may be referred to as the Y-sample. Owing to financial retrenchment, tabulation in 1941 was drastically reduced. Even age, civil condition, or occupational tables were not formed.

Population Data Committee (India): 1944-45.

In 1944 the Government of India realized that no planning was possible without reliable population statistics. A Population Data Committee consisting of five members with the Census Commissioner Mr. M. W. M. Yeatts as Chairman was set up in May 1944 to report on available population data. Prof. K. B. Madhava, an actuary, and I were members. The work of the Committee was located in the Indian Statistical Institute and a number of exploratory technical studies (such as population forecasts, fertility and net reproductive rates, and especially the agreement between results based on the sample count and the complete enumeration) were undertaken. The Committee submitted its final report in June 1945 in which various recommendations were made relating to future programme of work.

Population forecasts. Certain population forecasts prepared under the guidance of Prof. K. B. Madhava had been presented before the Statistical Conference in 1940. It was found that the logistic curve and the biostatistical method gave fairly reasonable results. For India as a whole, the forecasts fell short of the 1941 count by less than 3% or 4% respectively. For a number of provinces and regions the estimates were within less than half of one per cent of the sample count in 1941, and in most cases differences were less than 5%. The worst case easily was Bengal with about 60 millions (Census) and about 52 or 53 millions (forecasts) with a discrepancy of about 16%. The bio-statistical methods which gave reasonably good results for 85% of the population was badly out in Bengal showing an over-counting of about 8 millions.

Net reproduction rates. No information is available regarding age at delivery of (married, or all) mothers giving birth to female children, or the age distribution of deaths of (married, or all) women. Even the age distribution of (married, or all) women is not available for 1941. This holds true for the general population in various provinces and States of India. Some information is, however, available for selected localities. For example, the Mysore Government had collected necessary material for the calculation of the net reproduction rate for a number of places for the years 1939 to 1942. The net reproduction rates for 3 places Bangalore city, Mysore city, and Kolar Gold Fields are greater than unity and lie between 1.05 and 1.37 for all women and between 1.21 and 1.72 for married women. An over-all picture is supplied by a net reproduction rate of 1.40 for the 3 cities for the period 1939-42 which is intermediate between the figures of 1.68 for Ukraine (1926-27) and 1.32 for Australia (1920-22). The real weakness in India is higher mortality.

Australian women have 30 years of exposure to the risk of maternity during the span of 35 years between 15 and 50; Ukraine women have 23.2 years, and Mysore women no more than 18.4 years of such risk.

Possibilities of using the sample material. In certain areas tabulation had been carried out on the complete material. A comparison could thus be made between results based on the complete count and those based on the 2% Y-sample in such areas. On the whole, the agreement between estimates based on the Y-sample and the complete count was quite satisfactory. In certain cases, however, statistically significant divergencies were observed which had probably arisen from either (a) the 2% samples not having been drawn in strict accordance with instructions, or (b) the figures based on the complete enumeration themselves not being perfectly accurate. There was evidence in support of both (a) and (b). Observed differences between estimates based on the Y-sample and complete enumeration were usually small in magnitude even when these were statistically significant. Experimental tabulations and population projections showed that in every case Y-samples gave results adequate for all practical purposes. The Committee therefore was of opinion that it should be possible to obtain satisfactory age and life tables and population projections on the basis of the Y-samples. Prof. R. A. Fisher, who visited India when this work was being done, examined the material and agreed with the above finding.

On the recommendation of the Committee about 6.7 million individual slips belonging to the 2% Y-sample were collected in the Indian Statistical Institute and the information on such slips are being now transferred to Hollerith punched cards. As soon as the information is transferred to Hollerith cards it is proposed to prepare age and other tables to fill the gaps left in the 1941 reports. It is also proposed to take up the preparation of life tables and population projections as soon as possible.

For one particular province, namely, Bihar, about 40 millions of original slips are still available. It is proposed to take up experimental sampling studies on this material to develop an efficient sampling technique for population counts.

Owing to the difficulties likely to be caused by political sentiments, the Committee was doubtful how far it would be possible to conduct the census on the usual lines in the future, and recommended the development of sampling methods which can "accompany, check, and if necessary, replace the complete enumeration". The Committee thought that some system of continuing samples should ultimately replace the countrywide count. The Committee recommended that house-lists should be prepared and maintained as a regular feature of administration all over India. As soon as the house-list is ready in Bengal and elsewhere random sample surveys should be conducted.

Other recommendations. The Committee made a survey of possible information bearing on population growth but found practically nothing of general usefulness. A few enquiries on a small scale had been conducted in particular localities but much of this work was not properly planned. Information relating to fertility for about 30,000 families collected by the Indian Statistical Institute on a random sample basis is, however, likely to yield useful results, and the Committee recommended that this work should be taken up at an early date.

While the Committee was sitting, information reached it showing that there was a sharp fall in the birthrate in Bengal and elsewhere. It was not known whether this was simply due to greater laxity in registration under war conditions or whether there was anything real in the downward movement. The Committee thought that this deserved immediate study, but unfortunately no action was taken in this matter.

The Committee had recommended the creation of a permanent Bureau or Department of the Central Government for the census and vital statistics field, and this proposal has been recently approved by Government in principle.

Problems of current demographic data

Against the historical and factual background described above I may now briefly indicate a few outstanding problems of current demographic data in India.

(1) <u>Growth of population</u>: From the purely demographic point of view the problem of the greatest importance in every way is the correct assessment of the growth of population in India. Not only plans for development but basic economic policies would have to be necessarily settled by the rate and type of growth of population. In view of the growing pressure of population on the means of subsistence in India the outstanding problem is whether an increase in family income is likely to lead to an increase or a limitation of the biological size of the family. Available evidence, although meagre, suggests that the size of the family increases with increasing family income. This is possibly due to the fact that most families are too poor to give proper nourishment or medical care to their children; a rise in family income therefore usually means a little more food and possibly a little more of medical care leading to a higher rate of survival.

The existence of the caste system is a complicating factor as it eliminates, at least in theory, possibilities of change in social status. Owing to the impact of industrialization and the influence of money, the desire for elevation in social status is, however, probably coming into operation at least in urban areas. It is possible, of course, that when the average level of living is raised above a certain minimum, the usual factors leading to a limitation of the number of children in other countries would also begin to operate in India.

The effect of changing social conditions on the growth of population requires careful study. For example, age at marriage is increasing and the prohibition against widow re-marriage is slowly, but gradually, relaxing. In 1931 out of 25.50 millions of widows no less than 10.66 millions were in the reproductive age group of 15-45 years. Possibly about 9 millions were subject to restrictions against widow remarriage; the effect of a part or whole of the socially sterilized women re-entering the reproductive group is bound to have a large effect.

Infantile and maternal mortality as well as mortality from epidemic diseases are decreasing, and are likely to decrease further with the wider provision for medical care. As already mentioned, maternal mortality is believed to be something like 20 per thousand. If the maternal mortality rate is reduced to half, that is, to 10 per thousand then possibly about 6 millions of female life in the reproductive period would be saved each decade. Even a reduction of 1 per thousand in the maternal mortality rate would probably add to the population 600,000 women in a decade. Any reduction in the death rate from malaria would also necessarily add large numbers to the population.

As regards the calculation of the net reproduction rate, even age tables are not available for 1941, but it may be possible to reconstruct these as also to prepare life tables on the basis of the 2% sample. But even then the absence of reliable vital statistics and lack of information about age-specific rates of fertility would make a direct calculation of the net reproductive rate quite impossible. In this situation the only possible line of advance is to carry out properly designed random sample surveys in selected areas.

It is important to remember in this connexion that population in India is
widely differentiated by differences in ethnic composition, geographical and clim-
atic conditions, social and cultural stratification, as well as by differences in
economic status. Differential fertility therefore assumes a far more complex
picture in India than any where else in the world. Ethnic, geographical, socio-
cultural, and economic differences give a four-fold patterning with many compli-
cated interactions. It is essential therefore to study different population groups
separately. A complete coverage is out of question. The most fruitful plan would
probably be to take up for study a number of well contrasted groups to obtain a
broad idea of the basic situation in the first instance.

It is also essential to take necessary action for the systematic collection
in future of statistics required for the scientific study of the growth of popula-
tion in the future.

(2) Use of sampling methods: From the operational or technical point of view
the outstanding problem is the need of using sample surveys for census purposes in
India. Political sentiment adversely affected census operations in 1921 and to a
much greater extent in 1931 leading to appreciable under-counting in many areas. In
1941 the pendulum had swung to the other side and there was an excess of zeal on the
part of the two great communities Hindus and Muslims leading most likely to over-
counting in a province like Bengal where the two communities are more or less evenly
balanced. So long as representation in legislature continues to depend on communal
votes, it is inevitable that both Hindus and Muslims would try to have as large a
showing as possible in the census count. In this situation it would be extremely
difficult, or even practically impossible, to secure accurate population counts by
the usual method of complete enumeration. This is why the Population Data Committee
had unanimously recommended the use of sampling methods at the earliest opportunity.
A continuing census from year to year would appear to be the most promising line of
advance. The population count should not be the only or even the chief item, but
population figures should be collected (almost as a bye-product) in the course of
more widely based socio-economic enquiries.

(3) Improvement of vital statistics. This is definitely a long range problem.
An essential condition for improving the quality of vital statistics is the build-
ing up of a sound organization for the collection of primary material in rural areas.
With the establishment of a Bureau for Vital Statistics and Census by the Central
Government this subject should receive that continuing attention without which no
progress is possible. Here also, an experimental approach would be useful. Differ-
ent types of human agency should be tried out in the field, and the accuracy of the
records should be examined in relation to the total cost incurred and the general
convenience and flexibility of organization.

Improvement of the registration of births and deaths must be given first prior-
ity. The age of the mother at the time of birth of the child and the serial number
of the birth should be comparatively easy to collect and would supply valuable in-
formation.

Classification of diseases (cause of death) is a far more difficult matter.
This would necessarily depend on the better organization of medical care, and the
availability of a trained medical personnel with ability to make a correct diag-
nosis. To assess the relative importance of different diseases, some progress may
possibly be made by special enquiries under proper supervision in selected areas.

Table 1(A). Indian Census 1881 - 1941: Basic Information

Census year	area in million sq.miles	population in millions	rate of increase in per cent based on population in					persons per sq.mile	persons per 1000 houses	houses per 1000 sq.miles	persons in urban areas per 1000 population	females per 1000 males
			1891	1901	1911	1921	1931					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1881	1.2954	250.16	-	-	-	-	-	193	5850	3660	90	954
1891	1.3887	279.45	(9.8)	-	-	-	-	201	5430	3700	95	958
1901	1.5299	283.87	1.5	-	-	-	-	186	5200	3523	99	963
1911	1.5718	303.01	8.4	6.7	-	-	-	193	4900	3943	94	953
1921	1.5716	305.69	9.4	7.7	0.9	-	-	195	4884	3987	102	945
1931	1.5752	338.12	21.0	19.1	11.6	10.6	-	215	4965	3930	110	940
1941	1.5814	389.00	39.2	37.0	28.4	27.3	15.1	246	5716	4808	128	935

Table 1(B). Indian Census 1941: Basic Information by Provinces, States and Agencies

Number of	India (1,581,410 sq. miles)			Provinces (855,446 sq. miles)			States & Agencies (715,964 sq.miles)		
	rural	urban	total	rural	urban	total	rural	urban	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
towns	-	2,703	2,703	-	1,724	1,724	-	979	979
villages	655,892	-	655,892	459,391	-	459,391	196,501	-	196,501
houses	56,436,094.	9,599,251	76,035,345	50,564,512	7,091,203	57,655,715	15,871,582	2,508,048	18,379,630
persons	339,301,902	49,696,053	388,997,955	258,261,892	37,545,830	295,808,722	81,040,000	12,149,223	93,189,233
males	173,638,089	27,387,637	201,025,726	131,984,526	21,035,640	153,020,166	41,653,563	6,351,997	48,005,560
females	165,563,813	22,308,416	187,972,229	126,277,366	16,511,190	142,788,556	39,385,447	5,797,226	45,183,673

Table (2). India (excluding Burma) 1931: Number of
females per 1,000 males at different age
periods by religion.

age	all religions	Hindu	Muslim	Christian	Tribal
(1)	(2)	(3)	(4)	(5)	(6)
0 - 1	1012	1017	999	1022	1045
1 - 2	1044	1051	1030	1006	1078
2 - 3	1058	1063	1040	1005	1090
3 - 4	1018	1024	1003	1003	1057
4 - 5	980	992	955	988	1013
total 0 - 5	1022	1029	1005	1001	1056
5 - 10	910	919	880	959	957
10 - 15	880	864	864	949	948
15 - 20	999	983	1012	1003	1139
20 - 25	1023	1026	1024	1001	1145
25 - 30	955	973	906	945	1026
total 0 - 30	961	967	945	977	1033
30 - 40	891	912	824	903	957
40 - 50	866	886	793	871	891
50 - 60	910	940	915	902	967
60 and over	994	1055	825	947	1124
total 30 & over	899	925	815		957
total all ages	941	953	904	952	1009

Table (3). India (excluding Burma) 1931: Age distribution of
10,000 of each sex.

age group	males	females	age group	males	females	age group	males	females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
total	10000	10000	5 - 10	1325	1282	40 - 45	547	505
0 - 1	299	321	10 - 15	1200	1124	45 - 50	424	389
1 - 2	273	303	15 - 20	288	935	50 - 55	334	314
2 - 3	296	334	20 - 25	904	984	55 - 60	229	230
3 - 4	305	330	25 - 30	856	869	60 - 65	182	191
4 - 5	300	313	30 - 35	787	756	65 - 70	87	90
total 0 - 5	1473	1601	35 - 40	640	596	70 & over	124	134
						mean age	22.3	22.8

Table (4). Distribution in broad age groups
by communities: 1931.

community	percentage of population aged		
	0 - 15 years	15 - 50 years	50 and over
(1)	(2)	(3)	(4)
India	39.9	50.5	9.6
Tribal	43.9	47.8	8.3
Muslim	42.2	49.3	8.5
Christian	41.7	49.2	9.1
Jew	37.7	53.6	8.7
Hindu	39.2	50.9	9.9
Sikh	39.5	48.2	12.3
Jain	36.7	51.7	11.6
Parsi	27.2	56.7	16.1

Table (5). India 1931: Distribution by main age
periods and civil condition of 10,000
of each sex.

age	males			females		
	unmarried	married	widowed	unmarried	married	widowed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0 - 5	9833	162	5	9692	297	11
5 - 10	9189	792	19	8017	1935	48
10 - 15	8472	1492	36	6089	3814	97
15 - 20	5527	4337	136	1485	8180	335
20 - 40	1739	7782	479	328	8327	1345
40 - 60	397	8067	1536	113	4816	4071
60 and over	319	6464	3217	100	1877	8023
all ages	4791	4673	536	3521	4931	1548

Table (6). Married persons per 1,000 of population up to 15 years

Census of	married persons per 1,000 of the population aged													
	0 to 1		1 to 2		2 to 3		3 to 4		4 to 5		5 to 10		10 to 15	
	m	f	m	f	m	f	m	f	m	f	m	f	m	f
1881	(0 - 10, males 24 and females 75)												151	500
1891	(0 - 5, males 5 and females 13)										36	123	154	494
1901	2	3	3	6	5	9	8	16	13	27	36	102	134	423
1911	2	3	4	7	6	11	9	17	14	30	37	105	129	430
1921	1	2	3	5	4	8	7	13	12	23	32	88	116	382
1931	7	8	8	12	12	20	22	42	31	66	79	193	149	381

Table (7). Distribution of main communities by Provinces and
States per 10,000 of the population.

year	Hindus	Tribes	Sikhs	Muslims	Christians	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)

India

1901	7034	292	75	2122	99	378
1911	6931	328	96	2126	124	393
1921	6841	309	103	2174	150	423
1931	6824	236	124	2216	179	421
1941	6593	653	147	2381	163	57

Provinces

1901	6935	250	68	2324	82	441
1911	6688	301	89	2351	102	469
1921	6589	280	96	2407	123	505
1931	6548	213	118	2469	142	510
1941	6450	565	141	2684	119	41

States and Agencies

1901	7769	445	99	1376	162	149
1911	7778	425	122	1351	200	134
1921	7742	415	126	1343	250	124
1931	7771	316	141	1347	307	118
1941	7057	961	138	1393	312	109

Table (8). India 1931: Distribution of mother tongue -
number of speakers per 10,000 of population.

language	number per 10,000	accumulated total	language	number per 10,000	accumulated total
(1)	(2)	(3)	(1)	(2)	(3)
1. Western Hindi	2041	-	13. Malayalam	261	8605
2. Bengali	1525	3566	14. Lahnda or Western Panjab	244	8849
3. Bihari	797	4363	15. Eastern Hindi	224	9073
4. Telugu	752	5115	16. Kherwari	115	9188
5. Marathi	596	5711	17. Sindhi	114	9302
6. Tamil	582	6293	18. Bhili	63	9365
7. Panjabi	452	6745	19. Assamese	57	9422
8. Rajasthani	397	7142	20. Western Pahari	66	9488
9. Kanarese	320	7462	21. Gondai	53	9541
10. Gujarati	310	7772	22. Pashto	47	9588
11. Oriya	319	8091	23. Kashmiri	41	9629
12. Burmese	253	8344	24. Other languages	371	10,000

Table (9). India 1931: Distribution of speakers by families
of languages.

language groups	no. of languages spoken	no. of speakers as mother-tongue and subsidiary 1931 (bilinguals shown twice)	no. of speakers mother-tongue only 1931
1)	(2)	(3)	(4)
A. Languages of India and Burma	225	366,430,537	349,887,527
(i) Austric languages –			
1. Indonesian languages	2	6,542	6,542
2. Mon-Khmer languages	10	734,204	726,578
3. Munda languages	7	4,710,685	4,609,588
(ii) Tibeto-Chinese languages –			
1. Tibeto-Burman languages	128	14,167,611	12,982,840
2. Tai-Chinese languages	11	1,150,220	1,027,656
3. Man and Karen languages (a)	17	1,351,291	1,342,278
(iii) Dravidian languages			
1. Dravida languages	7	47,032,874	41,454,593
2. Intermediate languages	5	3,661,277	3,609,418
3. Andhra language	1	29,195,824	26,373,727
4. N. W. language	1	231,581	207,049
(iv) Indo-European languages –			
1. Eranian languages	3	2,457,134	2,270,466
2. Dardic languages	5	1,543,031	1,522,936
3. Indo-Aryan languages	19	261,105,909	253,699,403
(v) Unclassed languages –			
1. Andamanese	2	466	466
2. Burushaski	1	26,076	26,076
3. Gipsy dialects (b)	6	25,999	25,999
4. Languages not returned & unspecified	..	29,813 (c)	1,912
B. Languages of other Asiatic countries and Africa	17	305,336	302,324
C. Languages of Europe	20	452,099	339,705

(a) The correct classification of these two languages is doubtful.
Przyluski treate them as Tai (Meillet and Cohen, Langues du Monde 330)
but it is probable they have Austric affinities.

(b) These dialects are drawn from various Indian languages and contain such
diverse elements that they cannot fairly be allotted to one family
rather than another.

(c) Includes Hill and aboriginal subsidiary languages (27,841).

Table (10). Indian Census 1931: Occupational Distribution

class or sub-class	means of subsistence	distribution of 10,000 workers in	
		1921	1931
(1)	(2)	(3)	(4)
(A)	Production of Raw Material	7,241	6,734
I·	Exploitation of Animals and Vegetation	7,217	6,711
II	Exploitation of Minerals	24	23
(B)	Preparation and Supply of Material Substances	1,759	1,665
III	Industry ··	1,075	997
IV	Transport ··	134	153
V	Trade ··	550	515
(C)	Public Administration and Liberal Arts	283	269
VI	Public Force	71	55
VII	Public Administration	69	64
VIII	Professions and Liberal Arts	143	150
(D)	Miscellaneous	717	1,332
IX	Persons living on their income	13	14
X	Domestic Service	173	708
XI	Insufficiently described occupations	406	505
XII	Unproductive	125	105

Table (11). Birth, death and infantile mortality rates (calculated from registration records as given in Census 1941, Vol. 1, p. 36)

year	birth	death	infantile mortality	death rate for		
				cholera	small-pox	plague
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1920	33	31	195	0.6	0.4	0.4
1921	32	31	198	1.9	0.2	0.3
1922	32	24	175	0.5	0.2	0.3
1923	34	25	176	0.3	0.2	0.9
1924	33	28	189	1.2	0.2	1.5
1925	32	24	174	0.5	0.3	0.5
1926	33	25	189	0.5	0.5	0.8
1927	33	23	167	1.2	0.5	0.2
1928	34	24	173	1.4	0.4	0.5
1929	33	24	178	1.2	0.3	0.3
1930	33	25	178	1.3	0.3	0.3
1931	35	25	179	0.9	0.1	0.2
1932	34	22	169	0.3	0.2	0.2
1933	36	23	171	0.3	0.4	0.2
1934	34	25	187	0.8	0.3	0.3
1935	35	24	164	0.8	0.3	0.1
1936	36	23	162	0.6	0.4	0.04
1937	35	22	162	0.4	0.2	0.1
1938	34	24	167	0.9	0.1	0.06
1939	34	22	156	0.4	0.2	0.1
1940	33	22	160	0.3	0.3	0.7

N.B. Rates (British India) have been calculated on estimated populations for between-census years excluding Burma.